# Official Year Book New South Wales.

No. 51.

1947-48

This page was added on 11 January 20	013 to include the Disclaimer below.
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No other amendments were made to this product.

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The Official Year Book of New South Wales, Nº 51, 1947-48. E S U E N D 0 THOM CANNA TONGOWOKO POOLE 4 saure lake VANTABA OG. The Sail Lake EVELYN 1. muller YUNGNULGRA YANDA KILLARA. (A) MOOTHINGER FARNELL. BANKIN ROBINSON YOUNG MICHNIA 4 WERCHDA BOOMOONDARE TANCOWINNA TANDORA HOORE MATTINGETONE 圈. MENINDEE MOSSGIEL BLAXLAND MANARA PERRY TARA PONT ACKSON KILFERA B DIAGRAM MAP OF NEW SOUTH WALFS AUSTRALIA SCALE OF MILES sers danse filmak nandelskipnye (in panye kindelski In dismidiansa 1 ayimbers nayo ex **169** giya silm ALPHABETICAL INDEX TO SHIRES AND SECURITY OF CARRIEDOL INSA INAKESO UNILLY ASSULY KOOLAH MARSLEY AND MACCHARIT COGLAMON TINTEMBAR MARDONA MARDONA MANNOC WASCOOLA SUTHERLAND WHOOLS TALKSHOOL WINDOOR CHICARR JENGLOGRIE COMACO HILDOURA TENTERFIE TENANIA HINGADIE HINGEGEARD WILLIAMORE TYMBOID. TURBOUND. BLACKTON STATISTICAL DIVISIONS SUTHERLUND LIMEPOOL PIA BILLINGEA BUATLAND MOLLONDOLLY HAMBUCEA MAÇUAY HASTINGS CUSCHOWN MUNICIPALITY AND A STATE OF THE PROPERTY AND A STATE OF TH TITLE AND THE TOP THE PROCOBLES COREEN BERRIGAN MURRAY BOGAN CHICANN JENDERE JENDERE JENDERE Central Western Stops
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THE

# OFFICIAL YEAR BOOK

OF

# NEW SOUTH WALES.

No. 51.

1947-48.



S. R. CARVER,
GOVERNMENT STATISTICIAN.

PUBLISHED BY AUTHORITY OF THE GOVERNMENT OF NEW SOUTH WALES.

Registered at the General Post Office, Sydney, for transmission by post as a book.

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## **PREFACE**

THIS is the fifty-first issue of the Official Year Book of New South Wales, which, from the first issue in 1886 to 1904, was known as the "Wealth and Progress of New South Wales."

As with the preceding issue (No. 50, 1945-46), there have been unavoidable delays in publishing this edition. The chapters, which were published separately as soon as possible after preparation, contain statistical data relating mostly to the year 1947-48 and the calendar year 1948 and earlier years, with the textual matter revised to the middle months of 1949.

Every care has been taken to keep the work free from errors, but if any be observed by readers, notification regarding them would be appreciated.

The "Statistical Register of New South Wales," published annually by this Bureau, will prove of service to those seeking more details regarding the matters treated generally in this Year Book. The "Monthly Summary of Business Statistics," published monthly, contains a summary of the latest available statistics of the State.

My thanks are tendered to the responsible officers of the various State and Commonwealth Departments and to others who have supplied information, often at considerable trouble. In particular I wish to thank Mr. A. E. Seymour (Editor of Publications), Mr. K. Davison, Mr. W. Willcocks, Mr. R. B. Phibbs, and other Officers of the Bureau upon whom the great bulk of the work in preparing this volume devolved. Special acknowledgment is due also to the Government Printer and his staff.

S. R. CARVER, Government Statistician.

Bureau of Statistics and Economics, Sydney, September, 1950.

# **ERRATA**

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- 105 In third line from bottom, for "1,315,043" read "1,311,959."
- 170 In/Table 121, 5th column, last line, for " 13:56" read " 1:36."
- 230 In Table 182, last column, 2nd line, for "1.602" read "61.02."
- 251 In Table 206, Males, last column, 10th line, for "37-73" read "97/73."
- 299 In last line from bottom, for "12,430,000,000" read 12,430,000."
- 324° Third<sup>3</sup> line, för "25<sup>33</sup> read "5" and in tabulär statement föllowing 4th line, under "Sugar Cane," for "25 acres" read "5 acres."
- 395 At end of 9th line from bottom, for "4,285" read "3,285."
- 431 In Table 386, particulars of Calves, Slaughtered shown opposite years 1943 to 1948 inclusive are those for the years 1944 to 1949. The number in 1948 was 379,146.

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# **GEOGRAPHY**

NEW SOUTH WALES is situated entirely in the temperate zone of the Southern Hemisphere, and is on the opposite side of the world from the seat of the British Empire, of which it forms a part. It is distant from London 11,200 miles by the Suez Canal—the shortest shipping route. By regular air mail services, the flying time (including refuelling) from Sydney to London is sixty-two and three-quarter hours.

The name "New South Wales" was given to the eastern part of Australia (then known as New Holland) on its discovery by Captain Cook in 1770, and for fifty-seven years all Australian territory east of longitude 135° east was known by that name. In 1825, shortly after the separation of Tasmania (Van Diemen's Land), the western boundary was moved to longitude 129°. The steps by which the territory of the State assumed its present boundaries and dimensions are shown below:—

Table 1.—Territorial Adjustments of New South Wales since 1788.

Date.	Nature of Territorial Adjustment.	Area involved in adjustment.	Area of New South Wales after adjustment	Population of Territory known as New South Wales at end of year.
1788	New South Wales defined as whole of Australasia east of longitude 135° east.*	sq. miles.	sq. miles. 1,584,389	1,024 (26th Jan.)
1825	Tasmania practically separated from New South Wales.	26,215	1,558,174	33,500
1825	Western boundary of New South Wales moved to longitude 129° east.	518,134	2,076,308	]
1836	South Australia founded as a separate colony.	309,850	1,766,458	78,929
1841	New Zealand proclaimed a separate colony	103,862	1,662,596	145 <b>,303</b> **
1851	Victoria proclaimed a separate colony	87,884	1,574,712	197,265
1859	Queensland proclaimed a separate colony	554,300	1,020,412	327,459
1861-3	Northern Territory and territory between longitude 129° and 132° east separated.	710,040	310,372	377,712
1911	Australian Capital Territory ceded to Com- monwealth.	911	309,461	1,701,736
1915	Territory at Jervis Bay ceded to Commonwealth.	28	309,433	1,895,603

<sup>\*</sup>Literally interpreted, the boundaries defined included Fiji, Samoa, and some neighbouring islands.

† Approximate. ‡ Exclusive of area of Pacific Islands, except New Zealand.

The area of New South in the years 1788 to 1841, as shown above, is approximate only.

#### Boundaries and Dimensions.

The present boundaries of New South Wales are as follows:—On the east, the South Pacific Ocean from Point Danger to Cape Howe; on the west, the 141st meridian of east longitude; on the north, the 29th parallel of south \*97299—1

latitude, proceeding east to the Barwon River, and thereafter along the Macintyre and Dumaresq Rivers to the junction with Tenterfield Creek; thence along the crest of a spur of the Great Dividing Range, the crest of that range north to the Macpherson Range, and along the crest of the Macpherson Range east to the sea; on the South, the southern bank of the Murray River to its source at the head of the River Indi, and thence by a direct marked line to Cape Howe.

The greatest dimension of the State is along a diagonal line from Point Danger to the south-west corner of the State a distance of 850 miles. The shortest dimension, along the western boundary, is about 340 miles. The length of coast, measured direct from Point Danger to Cape Howe, is 683 miles, the actual length of seaboard being 907 miles. The greatest breadth, measured along the 29th parallel of latitude, is 756 miles.

#### AREA

The total area of New South Wales, including Lord Howe Island, but excluding the Federal Territory, is 309,433 square miles, or 198,037,000 acres, being rather more than one-tenth of the area of Australia. About 4,639 square miles, or 2,969,080 acres, of the total surface are covered by water, including 176 square miles, or 112,750 acres, by the principal harbours. The area of Lord Howe Island is 5 square miles.

The area of New South Wales in relation to the total area of Australia is shown in the following statement:—

State or Territory.		Area,	Per cent. of total Area.	Ratio of Area to Area of New South Wales.
New South Wales		sq. miles. 309,433	10.40	1.000
Viotoria		87,884	2.96	•284
Queensland		670,500	22.54	2.167
South Australia		380,070	12.78	1.228
Western Australia		975,920	32.81	3.154
Tasmania	•••	26,215	•88	0.085
Northern Territory		<b>523,620</b>	17.60	1.692
Australian Capital Territory		911	•03	.003
Federal Territory at Jervis Bay		28	.00	.000
Commonwealth		2,974,581	100.00	9.613

Table 2.—Area of Australian States and Territories.

New South Wales is approximately three and a half times as large as Victoria, nearly twelve times as large as Tasmania, and one-fifth smaller than South Australia. Queensland is more than twice and Western Australia three times as large as New South Wales.

The following table shows the extent of the State of New South Wales and of the Commonwealth of Australia in comparison with the total area of all countries of the world, the British Empire, and certain individual countries:—

Table 3.—Area	of New	South	Wales	and	other	Countries.
---------------	--------	-------	-------	-----	-------	------------

Country.	Area.	Ratio of Area to Area of New South Wales.	Ratio of Area to Area of Australia.
	sq. miles.	1	
New South Wales	309,433	1.000	·104
Commonwealth	2,974,581	9.613	1.000
Great Britain	89,041	•288	.030
Canada	3,729,665	12.053	1.254
Argentina	1,153,119	3.729	·38 <b>8</b>
United States	3,022,387	9.768	1.016
British Empire	13,353,952	43.156	4.489
The World	52,055,879	168-231	17.500

#### LORD HOWE ISLAND.

Lord Howe Island is a dependency of New South Wales, and, for the purpose of representation in the State Parliament, is included in King, a metropolitan electorate. It is situated about 300 miles east of Port Macquarie and 436 miles north-east of Sydney. The island was discovered in 1788. It is of volcanic origin, and Mount Gower, the highest point, reaches an altitude of 2,840 feet. The climate and soil are favourable for the growth of subtropical products, but on account of the rocky formation of the greater part of the surface of 3,220 acres, only about 300 acres are arable. The land has not been alienated, and is occupied rent free on sufferance, being utilised mainly for the production of Kentia palm seed. A Board of Control at Sydney manages the affairs of the island and supervises the palm seed industry. At the census of 30th June, 1947 the population numbered 179 persons.

#### PHYSICAL FEATURES.

The physiographical characteristics of New South Wales, in particular its coastline, geological structure, mountains, rivers and lakes, were outlined on page 3 of the Official Year Book, 1929-30. For particulars of the distribution of industries and settlement throughout the State, reference may be made to the chapter "Rural Industries" of this volume and in previous editions of the Year Book.

The general configuration of New South Wales and the distribution of rainfall are illustrated by a diagrammatic map on page 9. Another map, on page 10, indicates the principal agricultural, pastoral, dairying and mining regions of the State.

New South Wales is divided naturally into four main divisions, which are strips of territory extending from north to south, viz. the coastal division; the tablelands, which form the Great Dividing Range between the coastal districts and the plains; the western slopes of the Dividing Range; and the western plains.

The coastal division is a narrow fertile plain. Its average width is 50 miles in the north and 20 miles in the south—the widest portion being 150 miles in the valley of the Hunter River. The coastline is regular with

numerous sandy beaches, inlets and river estuaries, and, at intervals, there are lakes, partly marine and partly estuarine, which provide extensive fishing grounds and tourist and holiday resorts.

There are two tablelands—the northern and the southern—forming an extensive plateau region varying in width from 30 to 100 miles. The average height of the northern tableland is 2,500 feet, and a large portion in the New England Range has an altitude greater than 4,000 feet. The average height of the Southern Tableland is slightly less than the northern, though the Kosciusko Plateau which it contains is the most elevated part of the State, rising at Mount Kosciusko, Australia's highest peak, to an elevation of 7,328 feet. The Jenolan and other caves occur in the limestone belt in the central portion of the tablelands division.

To the westward the tablelands slope gradually to the great plain district which covers nearly two-thirds of the area of New South Wales. On the slopes there is generally an adequate rainfall. On the plains the surface consists of fertile red and black soils, but the rainfall is scanty, particularly in the far western section. These divisions are watered by the rivers of the Murray-Darling system and large storage dams have been constructed on the upper courses of the Murray, Murrumbidgee and Lachlan Rivers to maintain the supply in periods of scarce rainfall. The Darling and its tributaries are liable to shrinkage in dry weather, but when heavy rains occur in their upper basius they overflow their banks and spread over the surrounding country for miles, producing a luxuriant growth of grasses. The Broken Hill mining field is located near the western boundary of New South Wales.

#### PRINCIPAL RIVERS.

The length of the principal rivers has been computed by the Lands Department of New South Wales on a uniform basis. Considerable data were obtained from the results of surveys of the greater part of the Murray, Darling, Murrumbidgee and Lachlan Rivers, and where such information was not available the length was measured on the standard parish maps. In every case the starting point was the furthest source of the river. The lengths as determined are as follows:—

Coastal Rivers, Let	ngth.
Wollomba Hunter Hawkesbury ! Shoalhaven Clyde Moruya Tuross Bega	iles. 46 287 293 206 67 97 91 53
	Tuross

Table 4.- Length of Principal Rivers.

<sup>\* 1,203</sup> miles within New South Wales. † 1,626 miles within New South Wales. ‡ And main tributary.

The relative magnitude of some of the more important rivers as shown by the average annual volume of water which they carry has been ascertained from the records of river gaugings.

The following comparison is based on the records of the period 1905 to 1947. An acre-foot of water is the quantity which would cover an acre of land to a uniform depth of one foot:—

River.		Gauging; S	tation.	 Distance from Source of River,	Drainage Area.	Average Annual Run off of Water.
Murray Murrumbidgee Darling Macquarie Lachlan Namoi Hunter Lachlan		Narromine Condobolin	 ga   	 miles. 435 396 1,383 318 380 302 198 253	sq. miles, 10,160 10,700 221,700 10,090 10,420 9,820 6,580 6,775	acre-feet. 4,762,080 2,704,300 1,383,000 606,480 415,780 460,400 538,900 563,130

Table 5.—Drainage Area and Volume of Principal Rivers.

The operation of the Hume Reservoir has affected the Tocumwal run-off since 1929, Burrinjuck has affected Wagga Wagga since 1914, and Wyangala Dam has affected Condoboliu and Forbes since 1935.

#### TOURIST RESORTS.

Throughout the tablelands and coastal districts of New South Wales there are many pleasure resorts, centres of scenic beauty, and some remarkable examples of natural phenomena.

Port Jackson, the harbour of the metropolis, has great natural beauty as well as shipping facilities for a large volume of trade. The Sydney Harbour Bridge, spanning one of its many arms, is one of the worldgreat engineering achievements.

Along the sea-board, scalloped coastline and sandy beaches contrast with the wooded and fern-strewn mountain-sides fringing the coast, and from numerous points there are extensive panoramas of coast, coastal plain and mountains. Near the metropolis, the National Park and Kuring-gai Chase are extensive reserves for recreation, intersected by waterways. The natural fauna and flora have been preserved and the scenery is typical of the Australian bush. The Hawkesbury River, within 50 miles of Sydney, possesses unusual grandeur and natural beauty.

The Blue Mountains (50 to 80 miles west of Sydney) contain many popular tourist resorts with scenery of rugged grandeur. Among the huge wooded valleys there are waterfalls, cascades and fern groves. There is a remarkable series of limestone caves at Jenolan in the central tableland, about 120 miles from Sydney. These caves contain dripstone formations, with stalactites and stalagmites of great delicacy and beauty. There are caves containing similar geological phenomena at Wombeyan and Yarrangobilly, also in the tablelands. Around Kosciusko, Australia's highest mountain peak, there is a large national park, and facilities have been proyided for tourists and for snow sports.

Canberra, the capital city of the Commonwealth of Australia, is situated in the hills fringing the Monaro Plains. Further inland, at a distance of 150 to 250 miles from the coast, are the fertile hills of the sheep and wheat districts and, beyond them, stretching westward for hundreds of miles, are the great plains utilised mainly for sheep and cattle grazing.

A separate department of the State under the administration of a Minister of the Crown was organised in August, 1946 to deal with tourist activities and immigration in New South Wales.

The Government Tourist Bureau freely issues literature and detailed information concerning resorts and travel throughout the State and arranges itineraries and accommodation for tourists.

## **CLIMATE**

N EW SOUTH WALES is situated entirely in the temperate zone. Its climate is generally mild and equable and mostly free from extremes of heat and cold, but occasionally very high temperatures are experienced in the north-west and very cold temperatures on the southern tablelands. Abundant sunshine is experienced in all seasons. On an average the capital city is without sunshine only twenty-three days per year, and the average range of temperature between the hottest and coldest month is not more than 19° Fahr. In the hinterland there is even more sunshine and the range of temperature is greater, but observations with the wet bulb thermometer show that the temperature is not maintained in any part of the State at a level so high as to be determined to the health and physique of persons engaged in outdoor labour.

Practically the whole of New South Wales is subject to the bracing influence of frosts during five or more months of the year. Snow has been known to fall over nearly two-thirds of the State, but its occurrence is comparatively rare except in the tableland districts. Perennial snow is found only on the highest peaks of the southern tableland.

The seasons are not so well defined in the western interior as on the coast. They are generally as follows:—spring, during September, October and November; summer during December, January and February; autumn during March, April and May; winter during June, July and August.

#### METEOROLOGICAL OBSERVATIONS.

Meteorological services are administered by a Bureau, a branch of the Commonwealth Department of the Interior. A Deputy Director in Sydney directs observations throughout the State of New South Wales. Climatological stations are established at a number of representative towns, and there are rainfall recording stations at most centres.

Weather observations are telegraphed daily from many stations to the Weather Bureau, Sydney, where bulletins, rain maps and isobaric charts are prepared and issued for public information. Weather forecasts and forecasts of conditions over the ocean and for aviation purposes are prepared. When occasion warrants, flood and storm warnings are issued to the press, broadcasting stations and to public departments.

Particulars of meteorological observations at various stations in New South Wales are published annually in the Statistical Register of New South Wales.

#### WINDS.

The weather in New South Wales is determined chiefly by anticyclones, or areas of high barometric pressure, with their attendant tropical and southern depressions. The anticyclones pass almost continually across the face of the continent of Australia from west to east. A general surging movement occasionally takes place in the atmosphere, sometimes towards, and sometimes from, the equator. The movement causes sudden changes in the weather—heat when the surge is to the south, and cold weather when it moves towards the equator.

New South Wales is fairly free from cyclonic disturbances, although occasionally a cyclone may result from an inland depression, or may reach the State from the north-east tropics or from the southern lowpressure belt which lies to the south of Australia. In the summer months the prevailing winds on the coast are north-easterly, mainly on account of the consistency of the sea breezes, and they extend inland to the high-West of the Great Divide, however, the winds are variable, being dependent on the control of the various atmospheric systems; they have a marked northerly component in the northern half of the State and a pronounced southerly component in the southern areas. Southerly changes age characteristic of the summer weather on the coast. These winds, which blow from the higher southern latitudes, cause a rapid fall in the temperature and sometimes are accompanied by thunderstorms. During winter, the prevailing direction of the wind is westerly. In the southern areas of the State the winds are almost due west, but proceeding northwards there is a southerly tendency. Australia lies directly in the great high-pressure belt during the cold months of the year.

#### RAINFALL.

Rainfall in New South Wales is associated mainly with two types of depression—tropical and southern. The amount of rainfall varies very greatly over the wide expanse of territory, the average decreasing from about 80 inches per annum in the north-eastern corner to less than 7 inches in the north-western corner. Rainfall exerts a very powerful influence in determining the character of settlement, but its effects can be gauged only in a general way from annual averages as to quantity because consideration must be given also to other important factors such as seasonal distribution and reliability.

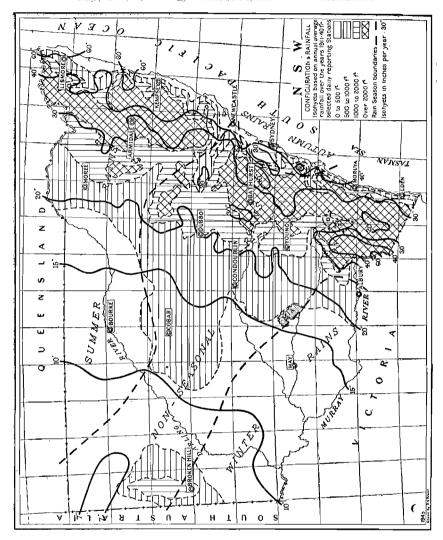
The coastal districts receive the largest annual falls, ranging from an average of 30 inches in the south to about 80 inches in the extreme north. Despite their proximity to the sea, the mountain chains are not of sufficient elevation to cause any great condensation, so that, with slight irregularities, the average rainfall gradually diminishes towards the north-western limits of the State.

An approximate classification of areas in New South Wales (including the Australian Capital Territory) according to average annual rainfall is as follows:—

Annual	-	Area.	Propor- tion of	Annual		Proportion of total Area.	
Rainfall.	Sq. Miles.	Acres.	Area.	total Rainfall. Sq. Miles.	Acres.		
inches,			per cent.	inghes.			per cent
Over 70	549	351,360	•2	20 to 30	72,317	46,282,880:	23.3
60 to 70	2,098	1,342,720	•7	15 to 20	54,315	34,761,600	17/5
<b>50</b> to 60	5,046	3,229,440	1.6	10 to 15	72,937	46,679,680	23.5
<b>4</b> 0 to 50	11,240	7,193,600	3.6	Under 10	61,143	39,131,520	19.7
30 to 40	30,727	19,665,280,	9.9				
, , ,	*			Total	310,372	198,638,080	100.0

Table 6.—Areas in New South Wales according to Annual Rainfall.

#### NEW SOUTH WALES-CONFIGURATION AND RAINFALL.



Approximately 39 per cent, of the area of the State receives rains exceeding on the average 20 inches per year. Over the greater part of the State the annual rainfall varies on the average between 20 per cent, and 35 per cent, from the mean, but in the south-eastern corner the degree of variation is less and in the north-western quarter it is more. Protracted periods of dry weather in one part or another are not uncommon, but simultaneous drought over the whole territory of the State has been experienced only very rarely.

The seasonal distribution of rainfall may be described as follows. A winter rain region, which includes the southern portion of the western plains and about two-thirds of the Riverina, is bounded on the north by a line from Broken Hill to Wagga Wagga with a curve around Albury. A

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#### NEW SOUTH WALES-PRIMARY PRODUCTION REGIONS.

summer rain region, including the whole of the northern subdivision, is bounded on the south by a line which waves regularly, first south and then north of a direct line from the north-western corner of the State to Newcastle. Between these there extends a region, including the central and south-eastern portions of the State where the rains are distributed fairly evenly throughout the year, but a narrow coastal strip between Nowra and Broken Bay receives its heaviest rains in the autumn.

n

Southern depressions are the main cause of good winter rains in the Riverina and on the southern highlands. A seasonal prevalence of this type of weather would cause a low rainfall on the coast, and over that portion of the inland district north of the Lachlan River. A tropical prevalence ensures a good season inland north of the Lachlan, but not

necessarily in southern areas. An anti-cyclonic prevalence results in good rains over coastal and tableland districts, but causes dryness west of the mountains.

The distribution of rainfall is dependent on three factors—the energy present in, and the rate of movement of, the atmospheric stream, and the prevailing latitudes in which the anti-cylones are moving.

A diagrammatic map published on page 9 of this Year Book shows the seasonal rainfall regions and the distribution of rainfall in relation to the configuration of New South Wales.

#### RAINFALL IN DIVISIONS.

Records of monthly rainfall at individual stations are published annually in the Statistical Register of New South Wales. The mean annual rainfall registered at recording stations in the main divisions of the State during each of the ten years 1938 to 1947 is shown below in comparison with the normal annual rainfall calculated over the period of thirty years, 1911-1940. In a few instances where records are not available for the full period, averages are stated for the period of record. The divisions (see frontispiece of this Year Book) are subdivided for purposes of the table into northern and southern or eastern and western sections, as indicated by the letters N., S., E., W.

Table 7.—Annual Rainfall.

		1 41	16 7		iuai i	· alilla					
	nal fall:	Year.									
Division.	Normal Rainfall	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
						Inches.					
Coast—											
North	N 55.43		58.47	44.51	45.19	54.17	53.42	48.43	63.06	47.72	66.94
Truster on 1 Manuals	S 55.37	59·82 52·13	50·46 43·96	39·54 40·11	38.88	51.53 51.68	54.24	47.79	64·24 47·97	43.68 42.74	60·83
Hunter and Manning	N 53.50 S 34.63	29.93	28.18	24.03	23,49	35.44	35.48	37·03 21·08	34.84	32.65	34.24
Metropolitan Area	42.38	38.16	32.67	34.70	25.28	46.82	49.44	29.20	40.32	35.22	37.42
Balance of Cumberla		29.76	21.84	20.32	16.74	31.15	39.69	12.67	31.55	25.91	31.65
South	N 42.90	38.62	31.14	24.26	26.02	33.82	50.61	22.47	38-87	29.49	37.00
	S 36.28	30.67	34.22	22.92	24.40	32.35	35.45	22.77	38.91	30.44	35.27
Tablelands				i				i			
North	E 39.72	36.28	40.73	23.15	33.96	39.97	34.38	27.99	48.66	37.28	58.04
2.01011	W 30.45	28.51	28.32	21.84	30.03	36.20	30.48	25.68	34.16	28.57	38.77
Central	N 23·10	18.27	23.58	16.43	21.78	28.76	23.89	16.48	28.34	18.25	32.61
a	S 33.50	28.06	31.03	22.01	25.39	37.53	37.02	15.75	33.23	27.17	41.46
South	S 25.79	22·29 22·24	26·48 36·72	18·26 27·05	23·21 27·06	26.53 38.24	31.28	14·84 23·70	23·51 31·99	24.30	26·15 38·65
Kosciusko Plateau	33-38	22.24	30.72	27.00	27.00	30.74	32.12	23.10	91.99	42.48	30.00
Western Slopes—											
North	N 26.06 S 24.34	22.95	20.77	18.91	23.95	27.64	$25 \cdot 21$	17.18	24.85	21.38	31.63
	S 24.34	20.77	19.75	17.07	27.40	27.42	24.37	18.91	25.19	14.33	30.20
Central	N 22.85	17.49	22.87	13.42	25.78	25.97	20.22	15.31	26.82	13.98	35 02
G11	S 21.93	16.36	21.91	14·25 14·52	20·46 21·66	26·84 27·59	22.56	10.69 11.33	23.64	16.53	28·76 30·44
South	N 23·27 S 33·37	18·20 19·03	$31.97 \\ 44.85$	20.11	26.08	35.24	24.44	14.64	$20.53 \\ 24.53$	22·85 29·08	33.14
	99.91	19.09	44.00	20.11	20.00	00.24	20.10	14.04	24.00	29.00	33 74
Plains			l			[					
North	E 21.83	21.95	21.23	13.68	21.92	28.24	20.52	14.07	21.57	15.97	28.06
	W 18·41	17.05	21.28	13.06	18.44	24.77	15.37	9.14	17.78	17.37	28.63
Central	N 17·13	14.14	21.13	9.49	17.08	20.84	14.84	11.02	18.74	11.02	24·27 25·12
Riverina	S 17.44 E 18.47	15.36 10.82	18·73 30·23	10·70 9·68	15.66 15.79	18·29 18·31	16·70 14·27	7·87 9·62	16·00 14·06	$12.94 \\ 17.31$	19.91
	W 13.71	8.57	22.17	5.83	11.68	13.44	10.36	7.03	10.59	14.36	16.43
	10 11							- 00			10 40
Western Division→											
Eastern half	N 12.83	9.63	18.39	7.73	13.08	16.17	9.65	7.24	10.78	8.56	20.45
W b-16	S 12.87	7.66	21.34	5.91	10.35	12.33	9.55	7.61	10.16	13.55	18:35
Western half	N 8.29 S 9.67	4.09 5.28	13·14 13·73	2·75 3·19	5·49 8·47	9·56 9·85	6.44 5.18	4·98 4·39	6.89	9.96 11.64	12·14 13·54
	D 9.01	0.70	19,19	0.19	0.41	8.00	0.10	7.08	6.78	11.04	10.04
	1	I					l L			ı 1	

In relation to the rural industries, the seasonal distribution and reliability of the rainfall, rather than the annual aggregate, is the important consideration. In wheat farming, for instance, sufficient moisture is required (1) to enable the soil to be prepared for planting, which takes place usually in May or June; (2) to promote germination of the seed and steady growth; (3) for the filling of the grain (about August or September for early crops) until harvesting, in November or December. Heavy rains may delay ploughing and sowing, or later in the season may cause disease or rank growth, or beat down the crops. For dairy farming, conducted mainly in the coastal areas, a more even distribution of rainfall is desirable to maintain the pastures in a satisfactory condition throughout the year. For sheep, spring and autumn rains are needed to ensure supplies of water and herbage, and summer rains of sufficient quantity to mitigate the effect of warm sunshine on the pastures. Too much rain is likely to cause disease in the flocks.

The relationship between rainfall and the principal rural activities is indicated in the diagrammatic maps on pages 9 and 10.

Monthly indexes of the rainfall in the wheat, sheep, and dairying districts respectively, are shown on page 21.

The normal monthly rainfall in each of the divisions is shown in the following table. The averages are based on records of rainfall at various stations during the years 1911 to 1940, or in a few instances on the years of this period for which records are available.

Table 8.-Normal Monthly Rainfall.

Divl	sion.			Jan.	Feb.	Mar.	Apr.	Мау.	Jun.	July.	Aug.	Sept.	Oct.	Nov.	Dec
			_ 	_					Inche	3,					
Coast—			-,1												
North.	***	•••	N	6:44	5·90.	7 18	5·94 6·21	5 74 4 60	4.02. 3:87	3.93	$\begin{bmatrix} 2.14 \\ 1.90 \end{bmatrix}$	$\frac{2.43}{2.89}$	2 97 3 56	4·07. 3·70	$  \begin{array}{c} 4.68 \\ 5.09 \end{array}  $
Hunter and I	fannin	g	N	4.99 3:19	5.50 2.95	5'67 3'54	6·50 3·54	5 13 2 76	4·37 2·76	4:47 3:21	2·43 1·81	3:39 2:47	3.30	3·33 2·48	4:42 3:63
Metropolitan				3.67	3.01	4.27	5.32	4.32	3:24	4.22	2.25	2.68	2.78	2.61	3:53
Balance of Cu	ımberla	and	122	3'27	2.67	3.20	3 28	2:35	1.95	2:51	1.24	1.83	2.07	2:49	3:18
South	•…	•••	S	4·08: 3·81	3·65 3·19	4.41 3.79	4.55 3.51	4·02 3·54	3.63 2.94	4·20 2·69	2:22 1:96	2·81 2·43	2.60 2.60	2·78 2·63	3·92 3·19
Tablelands-															
North	•••	•••		3.77	4.94 2.78	4.70 2.41	3.30 1.78	2.57 1.59	2.60	2:33 2:40	1:43 1:74	2·04 2·07	$\begin{array}{c} 2.74 \\ 2.66 \end{array}$	3·56 3·05	4·72 3·79
Central	•••	•••	S	2:13 3:16	1.87 2.80	2.04 3.02	1.75 2.89	$\frac{1}{2} \frac{46}{39}$	$\frac{1.94}{2.87}$	2·96 2·96	$\frac{1.55}{2.34}$	$\frac{1.61}{2.36}$	$\begin{array}{c} 1.81 \\ 2.62 \end{array}$	$\frac{2.43}{2.74}$	2:48 3:27
South Kosciusko	Piatea	u		2:43 2:71	1.99 2.24	2:19 2:57	1.97 2.30	1.82 2.57	2·24 3·07	2·20 2·88	2:08 3:20	$1.97 \\ 3.12$	3·16	2:10 2:59	2·54 2·97
Western Slopes					-										
North	•••	•••,	S	3:17 2:71	2:41 2:08	2:41 2:10	1.57 1.56	1.27.	2.05	$2.01 \\ 2.01$	1.45 1.54	1.59 1.62	$\begin{array}{c} 2.21 \\ 2.06 \end{array}$	2 55 2 30	3:05 2:93
Central	•••	•••	N S	1.85	2.02 1.52	2:07 1:73	1.72 1.76	1 41 1 47	2.05	$\frac{217}{205}$	1.44 1.85	1.54 1.55	1.59 1.77	2·08 1·87	2:47 2:22
South	•••	•••	N S		1.52 2:00	1.77 2:43	1.83 2.44	$\frac{1}{2}.72$	2.56 4.05	2:27 3:50	2·25 3·90	1.80 2.82	1.93 2.98	1.80 2.17	2:11 2:50
Plains-															
North	•••	•••	E W	2.33	1.95 1.73	1.99 1.75	1:38 1:18	1 56 1 33	1.96. 1.75	1.83 1.50	1.16 0.88	1·31 1·02	1.56 1.22	2·08 1·71	2·70 2·22
Central	•••	•••	N	1:58 1:49	1·35 1·40	1.42 1.31	1 32 1 38	1.22. 1.28.	1 81 1 92	1.52 1.43	1 07 1 38	1·11 1·19	1·23 1·37	1.28 1.40	$  \begin{array}{c} 1.92 \\ 1.85 \end{array}$
Riverina	•••	•••	W	1.28 1.00	1·34 0·95	1.31 0.80	1 46 1 07	1.52 1.18	2.13 1.49	1.68 1.25	1.83 1.26	1.23 1.08	1.68 1.58	1·29 1·05	1.41 1.24
							<del>-</del>				ļ-—-			<u> </u>	
Western Division	on	••2,	N	1.26	1.30	1.13	0.84	0:90	1.26	0.98	0.63	0.72	0:87 1:13	1.19	1.65
Western half			N	0.69	1.12	0.88	0:83	1.08	1.38 0.80	1.04 0.59	1.09	1.01	0.68	1.04 0.70	1 36 1 08
ALCATOT II HEIT	•	•••	S		0.97	0.58	0.60	1.00	0.99	0.75	0.75	0.80	0.92	0.90	0 79

#### EVAPORATION.

The rate of evaporation is influenced by the prevailing temperature and by the atmospheric humidity, pressure, and movement. In New South Wales evaporation is an important factor, because in the greater part of the inland districts water for use of stock is generally conserved in open tanks and dams. Actual measurements of the loss by evaporation have been made at a number of stations, and the average monthly evaporation, measured by loss from exposed water over a period of years, is shown below, together with the average monthly rainfall over the same period. The total annual loss by evaporation is about 40 inches on the coast and southern tablelands and as much as 90 inches in the west. In the far north-western corner of the State, for which actual records are not available, the total loss from evaporation is probably equal to nearly 100 inches per year.

Table 9.—Average Evaporation and Rainfall over a Period of Years.

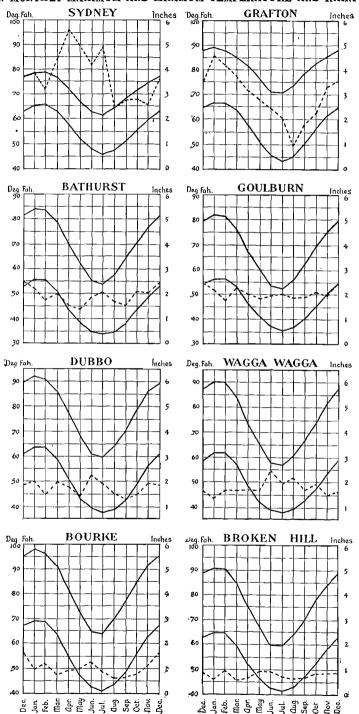
Station.		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
Wilcannia—	-	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.	ins.
Evaporation		9·46 0·71	7·89 1·16	7·15 0·57	4·94 0·66	2·95 0·87	1·90 0·85	1·95 0·65	2·89 0·50	4·46 0·55	6·37 0·83	7·56 0·80	8·95 1·28	66·48 9·43
70 - 1-14-11		8·09 1·85	7·10 1·41	6*44 1*42	4·32 1·12	3.04 1.36	2.05 1.74	2.00 1.24	2·71 0·76	4.08 0.96	6.03 1.14	7:23 1:37	8*58 1:96	61'67 16'63
Trainfull	•••	8·88 1·22	6·95 0·86	5.63 1.03	3·12 1·47	1.38 1.38	1·23 1·84	1·17 1·36	1·48 1·67	2·56 1·31	4·17 1·49	6·34 1·26	7·87 1·24	51·36 16·13
Umberumherka (Nea Broken Hill)—	r													
Evaporation	•••	12·71 0·45	10.62 0.70	9·21 0·52	5·95 0·41	4·13 0·80	2·84 0·78	2·92 0·54	3·97 0·48	5·86 0·57	8·48 0·65	10·14 0·88	12·01 0·56	88·85 7•34
Dointell		5.99 1.95	4.99 1.90	4·21 2·16	2·40 2·63	1·17 2·75	0·70 4·25	0·71 3·79	1.05 3.08	1·92 2·76	3·01 2·86	4·29 2·24	5·35 2·23	35·79 33·50
Doinfoll		9·01 2·05	7·03 1·78	5'62 1'89	3·44 2·14	2·07 1·57	1·34 1.69	1·34 1·59	1.99 1.00	3·11 <b>1·</b> 54	4·80 2·33	6·22 1·82	8·00 1·75	53·86 22·14
T) a f = f = 11		5·42 3·86	4·33 3·15	3·71 4·44	2·68 5·65	1·88 4·98	1·49 3·68	1·57 4·89	2·02 2·41	2:79 2:77	3·94 2·80	4·73 2·54	5·52 3·63	40.08 44.80

#### CLIMATIC DIVISIONS.

The territory of New South Wales may be divided into four climatic divisions, which correspond with the terrain—the coast, the tablelands, the western slopes of the Dividing Range, and the western plains (see map in frontispiece).

The northern parts of the State are generally warmer than the southern, the difference between the average temperatures of the extreme north and south being about 7° on the coast, 5° on the tablelands, and 7° on the slopes and plains. It should be noted, however, that the length of the State decreases from nearly 700 miles on the coast to about 340 miles on the western boundary. From east to west the average mean annual temperatures vary little except where altitudes are different, but usually the summer is hotter and the winter colder in the interior than on the coast. Thus at Sydney the average temperatures range from 71° in summer to 54° in winter, as compared with 76° in summer and 52° in winter at Wentworth

#### MEAN MONTHLY MAXIMUM AND MINIMUM TEMPERATURE AND RAINFALL.



The graph shows mean maximum and minimum temperatures in shade (deg. Fah.) for 30 years (1911-1940), except for Grafton and Wagga, which are for all years to 1940. The average monthly rainfall is for 30 years (1911-1940).

Temperature is shown by firm line, rainfall by broken line.

in the same latitude in the western interior. Similar variations are found in the north. The mean daily range at any station is seldom more than 30° or less than 13°.

#### COASTAL DIVISION.

In the coastal division, which lies between the Pacific Ocean and the Great Dividing Range, the average rainfall is comparatively high and regular, and the climate, though more humid, is generally milder than in the interior.

The following table shows the meteorological conditions of the principal stations in the coastal division, arranged in the order of their latitude. These stations are representative of the division, and the temperatures are the averages of a large number of years:—

Table 10.—Temperature and Rainfall—Coastal Division.

	-	ance	ا		Te	mperatu	re (in Sha	ıde).		]_ nual, £0.
Station.		Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfall— Mean Annual, 1911-1940.
North Coast		miles.	feet.	° Fah.	° Fah.	° Fah.	° Fah.	° Fah.	° Fah.	inches.
Lismore		13	42	66.7	75.2	56.9	22.6	113·0	23.0	52.11
Grafton		22	21	68.4	77.0	58.1	24.8	114.0	24.0	34.68
Hunter and Manne	ng									
Jerry's Plains		53	150	64·5	75.8	52.2	28.8	120.5	19.0	24.84
West Maitland		18	40	64.6	74.7	53·5	21.7	115.0	28.0	33.35
Newcastle		1	106	64.4	72.1	55.5	14.4	112.0	31.0	41.36
Sydney		5	138	63.2	71.0	54.3	14.1	113.6	35.7	44.80
South Coast—										
Wollongong		0	33	63.0	70.0	55.2	16.6	115.2	33.6	48.49
Nowra		6	50	62.8	70.5	54.5	19.7	110.8	31.5	37.87
Moruya Heads		0	55	60.3	67:0	52.8	14.6	111.0	22.6	35.71
Bega		8	50	59.8	68.8	49.9	26.3	116.5	20.0	35.92

Taking the coast as a whole, the difference between the mean summer and mean winter temperature is about 18° only.

The north coast districts are favoured with a warm, moist climate, the rainfall being from 34 to 80 inches annually. The mean temperature for the year is from 66° to 69°, the summer mean being 75° to 77° and the

winter mean 56° to 59°. On the south coast the rainfall varies from 30 to 60 inches, and the mean temperature ranges between 60° and 63°, the summer mean being from 66° at the foot of the ranges to 70° on the sea coast and the winter from 50° to 55° over the same area.

Coastal rains come from the sea with both south-east and north-east winds, being further augmented in the latter part of the year by thunderstorms from the north-west.

#### Sydney.

Sydney is situated on the coast about half-way between the extreme northern and southern limits of the State. Its mean annual temperature is 63° Fahr. The mean seasonal range is only 17°, calculated over a period of eighty-seven years, the mean summer temperature being 71° and the winter temperature 54°. On the average rain occurs on only 150 days in the year. The hours of sunshine average 6.78 hours a day over the whole year, ranging from an average of about 5½ hours in June to about 7½ hours daily from September to January.

The following table shows the average meteorological conditions of Sydney, viz. barometric observations and temperature based on the experience of the eighty-nine years ended 1947, mean hours of sunshine in the years 1921 to 1947, and rainfall during the period 1911 to 1940.

Table 11.—	-Temperature,	Sunshine	and	Rainfall—Sydney.
ading eter, uh.;	Temperature (in S	hade).		Rainfall.

·	Reading ometer, Fah.; ity and	Temper	ature (in	Shade).			Rain	fall.	_
Month.	Average Hourly Reading of Standard Barometer, corrected to 32° Fah.; Standard Gravity and Mean Sea Level-	Mean Standard.	Average Reading of Maximum Thermometer.	Averace Reading of Minimum Thermometer.	Average Hours of Sunshine,	Average.	Greatest.	Least,	Average number of days Rain.
	inches.	° Fah.	° Falı.	°Fah.		inches.	inches.	inches.	
January	29.892	71.7	78.4	65.0	230.8	3.86	15.26	0.25	13
February	29.941	71.5	77.7	65.1	200.0	3.15	18.56	0.12	13
March	30.013	69.4	75.8	63.0	201.3	4.44	20.52	0.42	14
April	30.068	64.7	71.4	57.9	183.6	5.65	24.49	0.06	13
May	30.086	59.0	65.9	52.1	177.7	4.98	23.03	0.18	14
June	30.065	54.8	61.4	48.2	165·3	3.68	16.30	0.19	12
July	30.072	53.0	60.0	46.0	192.8	4.89	13.21	0.10	12
August	30.065	55.3	63.1	47.5	216.3	2.41	14.89	0.04	11
September	30.014	59.3	67.2	51.3	221.5	2.77	14.05	0.08	11
October	29.973	63.5	71.2	55.8	230.1	2.80	11.14	0.21	12
November	29.938	67.0	74.3	59.6	226.1	2.54	9.88	0.07	12
December	29.882	70.0	77.1	62.9	230.1	3.63	15.82	0.23	13
Annual	30.001	63.3	70.3	56.2	2475.5	44.80	82.76	23.01	150

The extremes of temperature (in shade) were 113.6° on 14th January, 1939 and 35.7° on 22nd June, 1932.

The greatest rainfall recorded on any day, 11.05 inches, occurred on 28th March, 1942.

#### TABLELANDS.

On the northern tableland the rainfall ranges from 29 inches in the western parts to 40 inches in the eastern. The temperature is cool and bracing, the annual average being between 56° and 60°; the mean summer temperature lies between 66° and 72° and the mean winter between 44° and 47°. The southern tableland is the coldest part of the State, the mean annual temperature being about 54°. In summer the mean ranges from 55° to 68° and in winter from 33° to 45°. At Kiandra, the elevation of which is 4,578 feet, the mean annual temperature is 44.3°. Near the southern extremity of the tableland, on the Snowy and Muniong Ranges, snow is usually present throughout the year.

The statement below shows, for the tableland districts, particulars of average temperature and rainfall at typical stations over a period of years:—

Table 12.—Temperature and Rainfall—Tablela
--

		anee st.	_     .:		Ten	perature	in Sha	de.)		
Station.	•	Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Bange.	Highest.	Lowest.	Rainfall— Mean Annual 1911–1940.
	<i>t</i> —	miles.	feet.	° Fah.	° Fah.	° Fah.	° Fah.	° Fah.	° Fah.	inches.
Tenterfield		80	2,837	58•4	68.7	46.8	24.0	101.5	18•0	30.18
Inverell	•••	124	1,980	59.9	71.9	47.3	29.7	107.0	14.0	28.77
Glen Innes		90	3,518	56.2	66.5	44.6	24.5	101.4	16.0	31.32
Central Tableland-	_									
Cassilis (Dalkeit	h)	120	800	60.2	72.2	47.8	24.1	109.5	17.5	21.27
Mudgee		121	1,635	60.1	72.8	47.1	27.9	113.2	15.0	24.02
Bathurst		96	2,204	57.1	69.0	44.9	25.7	112.9	13.0	22.56
Katoomba		58	3,356	54.3	63.9	43.7	15.7	101.8	26.5	53.17
Crookwell		81	2,910	53.1	64.6	41.4	24.0	105.0	15.0	33.91
Southern Tableland	<i>l</i> —									
Goulburn		54	2,093	56.9	68.2	45.2	21.8	111.0	13.0	24.27
Canberra		68	1,906	56.1	68.4	43.9	22.5	109.0	14.0	*22.45
Kiandra		88	4,578	<b>44</b> ·5	55.2	33.1	21.1	94.5	5 below zero	60.67
Bombala	•••	37	2,313	52.7	62.7	41.9	24.6	104.5	14.0	26.33

\* 1924 to 1947.

#### WESTERN SLOPES.

On the western slopes the rainfall is distributed uniformly, varying from an annual average of 20 inches in the western parts to 30 inches in the eastern; the most fertile part of the wheat-growing area of the State is

\*97299-2¶

situated on the southern part of these slopes, where the average rainfall is about 25 inches per annum. The mean annual temperature ranges from 67° in the north to 59° in the south; the summer mean ranges from 80° to 72° and the winter from 53° to 46°.

North of the Lachlan River, good rains are expected from the tropical disturbances during February and March, although they may come as late as May, and at times during the remainder of the year. In the Riverina district, south of the Murrumbidgee generally, and on the south-western slopes, fairly reliable rains, light but frequent, are experienced during the winter and spring months.

The next statement gives information as to average temperature and rainfall for the principal stations on the western slopes over a period of years:—

Table	13.—Temp	erature	and	Rainfall-	–Wester	n Slopes.
	0	(		_		

		ance ust.	le.	(	Te	mperatu	re (in Sh	ıde).		nual, 46.
Station.		Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfull Mean Annual, 1911–1946.
North Western-		miles.	feet.	° Fah.	° Fah.	° Fah.	o Tio b	°Fah.	0 T3-1	
IVOTTA Western-	_	mnes.	reet.	ran.	ran.	ган,	° Fah.	ran.	ran.	inches.
Moree		204	686	67.5	80.5	53.4	28.1	117.0	19.0	21.43
Narrabri		193	697	66.6	80·1	52.1	27 · 7	117.0	20.5	24.14
Quirindi		115	1,278	61.8	74.3	48.4	29.2	114.0	13.0	25.58
Central Western	ı—									
Dubbo		177	870	63.6	76.9	49.9	26.3	115 4	16.9	20.91
South Western-	_									
Young	··· ···	140	1,416	59.5	72.6	46.6	25.7	113.0	19.0	24.59
Wagga Wagg	;a	158	612	61.6	74.9	48.5	24.7	117.0	22.0	21.42
Urana		213	395	62·1	75.1	48.8	25.7	119.0	25 0	17.40
Albury		175	530	61.3	74.2	48.6	25.2	117:3	19· <b>9</b>	27.66
				ľ		[	.			

#### WESTERN PLAINS.

The western district consists of a vast plain, its continuity being broken only by the low Grey and Barrier Ranges. Owing to the absence of mountains in the interior, the annual rainfall over a great part of this division, which lies in the zone of high pressure, does not exceed 10 inches. It increases from 7 inches on the north-western boundary of the State to 10 and 15 inches along the Darling River, and 20 inches on the eastern limits of the plain country. The lower Murray and Murrumbidgee basins, which extend into the western plains, are closer to the Victorian than the New South Wales coast, and this factor facilitates precipitation over

that region under the influence of southern depressions. The mean annual temperature ranges from 69° in the north to 62° in the south; the summer mean is from 83° to 74° and the winter from 54° to 50°.

The summer readings of the thermometer in this district are from 10° to 20° higher than those on the coast. Excessive heat is experienced occasionally during the summer season. In winter the average temperature is 52° and skies are clear. Owing chiefly to the dryness of the climate, these inland regions produce merino wool of excellent quality.

Particulars of meteorological conditions of the western plains and the Riverina division are shown in the following statement:—

-			nce t.		1	Ter	nperatur	e (in Sha				
Statio	on.		Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfall— Mean Annual, 1911–1940.	
			miles.	feet.	Fah.	° Fah.	° Fah.	° Fah.	° Fah.	° Fah.	inches.	
Brewarrina			345	430	67.9	81.7	53.5	27.6	120.0	22.0	13.68	
Bourke			386	361	68.7	82.5	5 <b>4</b> ·0	26.7	125.0	25.0	11.74	
Wilcannia	•••	•	473	267	66.7	80.0	53.0	26.6	122-2	21.8	9.43	
Broken Hill	•••		555	1,000	64.5	76.8	51.7	22.7	115.9	27.0	9.20	
Condobolin		•••	227	655	65.0	78.7	.50-9	26.8	120.0	20.0	16.12	
Wentworth		•••	478	125	63.8	75.8	52.0	24.1	118.5	21.0	10·8 <b>0</b>	
Нау			309	310	62.7	75.1	50.0	26.7	118-2	22.9	13· <b>65</b>	
Deniliquin			287	311	61.8	73.8	49.8	23·1	116.5	26.0	15.46	

Table 14 .- Temperature and Rainfall-Western Plains.

#### METEOROLOGICAL CONDITIONS, 1946 to 1948.

In 1946 the seasonal distribution of rainfall was unfavourable. Floods in northern coastal areas in February and March were followed by an extremely dry winter and fodder crops and pastures were affected badly. In early months good rains fell in all parts of the State, and in southern districts there were beneficial falls in June and July, but otherwise the winter months were very dry, and milder than usual. Inland, there were severe frosts in late winter and early spring, and the heaviest snowfalls for some years occurred on the Southern Alps in July and August. Drought conditions prevailed in the northern, western, and parts of the central districts until September. In the Riverina only light showers fell in the spring and rains in November were too late to restore the withering crops. Temperatures were normal in the closing months of the year, but there were severe heat waves in inland districts in January, 1947.

<sup>\* 97299-3¶</sup> 

The long dry period ended in February, 1947 (in coastal areas in January) with very heavy rains in western and northern districts; those in the northwest were the best for a number of years, but northern coastal districts again suffered flood damage. On 1st January, 1947 a terrific thunderstorm with very large hail caused great damage in the city and the eastern, southern and western suburbs of Sydney. Central inland districts had good following rains in March, but rainfall was deficient west of the tablelands in April, and the months May to July were very dry over the greater part of the State; 6th to 25th June was the longest period in any month without rain being recorded anywhere in New South Wales. Wheat areas, however, received useful rains in July. Dryness persisted in coastal areas until November, but elsewhere rainfall was considerably above average in the months September to December and resulted in lush pastures and the greatest harvest of wheat and oats ever garnered, despite over-wet conditions and wind and hail at time of ripening and harvesting. Temperatures generally were lower than usual in the early summer and Sydney had its wettest December since 1920.

In the months January to May, 1948, rainfall was alternately above and below normal over most of the State and seasonal conditions remained propitious for pastoralists and agriculturists but rather dry for dairy farming; in the Hunter and Manning division rainfall was deficient in every month from January to April. Nearly all the State received bountiful rains in June, which produced good spring pastures and gave cereal crops a good start in inland areas, but in north coastal areas the rains were torrential and severe flooding caused havoc to urban and rural property as well as to crops and pastures.

From July to December rainfall in inland areas was relatively light, but there were substantial falls in September in the north and in October and November in the south which maintained pastures and carried cereal crops to maturity. Seasonal conditions were favourable on the coast, except in the south, where very little rain fell from June until late in December and conditions had become very critical before the advent of good falls as the year ended. These late December rains were Statewide, extending to the droughty far north-west, and gave promise of replenishment of summer pasturage. Rabbits, however, were proving a grave menace in many parts of the State in the closing months of 1948.

Temperatures, particularly maximum temperatures, were below average in most months of 1948 and diurnal variations were smaller than usual. February was a hot month but at no time in the year were protracted heat waves experienced.

#### INDEX OF MONTHLY RAINFALL, 1946 TO 1948.

An index of rainfall in the sheep and wheat and coastal dairying districts in each month since January, 1946 is shown below. The index shows the weighted average ratio of actual to normal rainfall in each month; the weights are based on the average number of sheep depastured, or the average area sown with wheat, or the average production of milk in the districts concerned. Normal rainfall represents the average in the month during a long period of years.

Table 15 .- Index of Rainfall.

Month.		Shee	p Dist	ricts.		W	heat 1	Distric	ts.	Dairying Districts. (Coastal only.)			
	N.	c.	s.	w.	T.	N.	c.	s.	т.	N.	c.	s.	T.
1946—January February March April May June July August September October November December 1947—January February March	153 95 66 66 39 23 17 2 203 34 84 78 77 271 142	100 129 76 90 40 38 38 13 68 63 77 83 21 271	166 327 105 61 53 75 109 60 15 51 191 98	236 228 43 14 24 64 34 8 156 17 73 116 7	151 195 79 65 42 49 55 25 99 46 116 90 31 261 132	130 49 48 60 37 33 20 1 160 24 71 72 51 263 100	110 153 76 78 35 38 42 14 47 61 100 88 27 257 83	184 363 113 48 49 59 114 60 10 46 196 102 8 175 165	158 269 95 57 43 50 84 41 39 47 155 94 18 207 136	92 174 164 98 13 6 1 20 101 103 45 79 190 198 126	44 77 19 <b>7</b> 291 22 69 2 3 76 51 66 77 75 242	67 100 63 136 30 173 7 19 52 66 225 34 31 160 39	77 140 160 152 18 44 26 168 88 85 73 72 140 204 101
April May June July August September October November December	 81 62 32 64 136 148 148 144 168	59 88 38 135 94 168 161 192 285	96 41 61 155 100 119 106 156 306	45 51 41 157 178 175 136 176 174	76 61 44 122 117 147 136 165 247	58 61 38 80 129 140 170 128 173	76 83 32 142 82 139 135 196 325	95 43 63 171 96 126 115 156 319	85 56 53 152 97 131 127 163 302	127 78 8 8 61 82 78 143 176	113 101 56 17 35 48 70 150 262	186 32 76 17 146 34 65 170 256	131 79 29 11 65 67 74 146 208
1048—January February March April June July August Soptember October November December	 99 82 144 80 145 202 79 53 131 27 81 96	107 211 90 102 138 204 23 68 113 40 65 71	110 252 21 145 120 102 33 50 70 119 98 126	19 138 72 75 129 214 28 70 72 55 49 106	99 180 81 107 133 171 43 58 100 64 79 100	104 74 136 90 117 168 73 50 129 26 74 111	115 222 82 112 123 171 19 67 91 49 61 79	95 253 16 140 102 111 35 52 72 110 102 123	101 222 48 126 109 134 36 56 84 84 88	88 42 141 92 123 363 20 58 167 6 96	150 66 151 40 117 194 29 41 185 20 46 72	220 99 36 71 186 156 17 14 40 81 60 98	121 56 130 76 129 293 28 48 155 19 78

N., Northern; C., Central; S., Southern; W., Western; T. Total.

#### OBSERVATORY.

Sydney Observatory, lat. 33° 51′ 41.1″ south, long. 151° 12′ 17.8″ east, established in the year 1856, is a State institution. The work of the Observatory is astronomical, and the instruments are a 6″ meridian circle, 11½″ equatorial refractor, 13″ astrograph and a Milne seismograph. The scientific work consists of the determination of the position, distribution, and movement of stars in the region of the sky allotted to Sydney (viz., 52° to 65° of south declination) in the international astrographic programme and in the observation of comets, occulations of stars by the moon, etc. Readings of earth tremors from the seismograph are sent to other seismological observatories and to the International Seismological Summary. Astronomical observations are made for the determination of time, and signals are transmitted from the Observatory for use in navigation and for civil purposes. Educational work consists of lectures on astronomy and reception of visitors interested in the subject.

#### Standard Time.

The mean time of the 150th meridian of east longitude, or 10 hours east of Greenwich, has been adopted as the standard time in New South Wales, which is, therefore, 10 hours ahead of the standard time in England.

In the district of Broken Hill, South Australian standard time is generally observed, viz. 142½° of east longitude or 9 hours 30 minutes east of Greenwich. In the States of Queensland, Victoria, and Tasmania, the standard time is the same as in New South Wales. In Western Australia the standard time is the 120° of east longitude, or 8 hours east of Greenwich.

## Daylight Saving.

Standard time throughout Australia was advanced by one hour as a wartime measure in 1942, and three subsequent seasons, viz. from 2 a.m. on 1st January, 1942 to 2.a.m. on 29th March, 1942 and similarly by one hour between 27th September, 1942 and 28th March, 1943 and (except in Western Australia) from 3rd October, 1943 to 26th March, 1944.

#### TIDES.

A self-recording tide-gauge has been in operation at Fort Denison, in Port Jackson, since 1866. The datum of hydrographic plans, tide records and predictions is zero of the gauge. The heights of the various planes above this datum are as follows:—mean low water spring 0.39 feet, mean low water 0.79 feet, mean high water 4.32 feet, mean high water springs 4.72 feet. The mean range of tides is 3 feet 6½ inches. The lowest tide was recorded on 16th July, 1916, when the tide fell 1 foot 3 inches below datum. The highest tide was recorded on 26th May, 1880, viz. 7 feet 6½ inches; in 1876 the gauge recorded 7 feet 4½ inches on 22nd June and 7 feet 3 inches on 21st July. On 3rd August, 1921, the gauge registered 7 feet 2 inches, and on that day occurred the greatest tidal range on record—6 feet  $9\frac{1}{2}$  inches.

At Port Hunter the average rise and fall of tides is 3 feet 5½ inches, and of spring tides 4 feet 3 inches, the greatest range being 6 feet 5 inches. The highest tide registered was 7 feet 4 inches in May, 1898.

On the coast the average rise of spring tides is 4 feet 3 inches approximately.

# **HISTORY**

A brief historical sketch of New South Wales was published in the Official Year Book for 1929-30 on pages 40 to 52.

The industrial history of the State from its beginning as a colony in 1878 up to the early months of 1938 is traced on page 399 et seq. of the Wealth and Progress of New South Wales, 1897-98 and in editions of the Official Year Book up to 1936-37, as indicated on page 736 of that volume.

#### CHRONOLOGICAL TABLE OF EVENTS IN THE HISTORY OF NEW SOUTH WALES

A chronological table of events in the history of New South Wales from 1770 to 1919 was published in the Official Year Book for 1919, on pages 1 to 8. This table is repeated below in a revised form as from 1901 with a continuation from 1920 to 1948.

- 1901 Australian Federation—Interstate free-trade—Industrial Arbitration Act
  (State)—Sydney Harbour Trust formed—Closer Settlement Act—
  Western Lands Act—Introduction of Pacific Islanders prohibited.
- 1902 Mt. Kembla Colliery Explosion—Pacific Cable completed—First sitting of State Arbitration Court—First Federal Tariff.
- 1903 High Court of Australia inaugurated-Women's Franchise Act.
- 1904 Legislative Assembly reduced from 125 to 90 members—Patents, Trade Marks, etc. transferred to Commonwealth—Commonwealth Conciliation and Arbitration Act.
- 1905 Assisted Immigration resumed—Children's Courts instituted—Local Government extended to whole State (except Western Division).
- 1906 Public School fees abolished-Sydney Central Railway Station opened.
- 1907 Invalidity and Accident Pensions—Sydney-Melbourne telephone—Iron and steel blast furnace opened at Lithgow—Medical inspection of School' Children—"Harvester" Wage determined.
- 1908 Visit of United States Fleet—Minimum Wage Act—Wages Boards—Subventions to Friendly Societies—Federal Capital Site selected—Crown lauds tenures made convertible—Cataract Dam completed—Private Hospitals Act.
- 1909 Fisher Library (Sydney University) opened—Commonwealth replace State Old-age Pensions—Pure Food Act.
- 1910 Mitchell Library opened—Referendums, approve transfer of States Debts to Commonwealth, reject Commonwealth-States financial agreement—
  Australian silver coinage—Saturday Half-holiday in larger urban areas
  —Workmen's Compensation Act—Federal Land Tax—Commonwealth
  Invalid Pensions replace State pensions—First vessels of Australian
  Navy arrive—Australian Penny Postage.
- 1911 Australian Note issue—Federal Referendums, monopolies and industrial legislation (rejected)—Capital Territory transferred to Commonwealth—Compulsory defence training—First wireless station (private) licensed for public business—Australian Aviator, W. E. Hart, flew from Sydney to Penrith.
- Bursary Endowment, Secondary Education—Murray Waters Agreement—
  Irrigation farming began on Murrambidgee Irrigation Area—Commonwealth Bank (Savings Department) established—Commonwealth
  Maternity Allowances—Sydney (Pennant Hills) Wireless Station opened.

- 1913 Laying of foundation stones and naming of Canberra—Visit of Dominions Royal Commission—British Trade Commissioner appointed at Sydney—Arrival of principal units of Australian Fleet; R.A.N. established: ending Imperial control—First Cost of Living and Living Wage Inquiry in Arbitration Court—Interstate Commission appointed—Commonwealth Bank commenced general banking.
- 1914 Norfolk Island transferred to Commonwealth—First Aerial Mail, Melbourne to Sydney—Direct telephone, Sydney to Adelaide—Baby Clinics opened—State advances for homes—European War—Expeditionary force despatched—Australian Fleet placed under Imperial control.
- 1915 Australian Forces in action (Dardanelles and Egypt)—Iron and steel works at Newcastle—Conservatorium of Music opened—War census—Commonwealth Income Tax.
- 1916 Australian Forces in action in France—Hotels close 6 p.m. after referendum—Fair Rents Court—Valuation of Land Act—Eight Hours Act (48-hours week)—Military Service referendum (rejected)—Registration of private schools—Workmen's Compensation law—Imperial Wool Purchase Scheme.

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- 1917 River Murray Waters Act in operation—Daylight Saving tried and abandoned—Second Military Service referendum (rejected)—Extensive industrial dislocation.
- 1918 War Armistice—Board of Trade constituted—Women's Legal Status and
  Poor Persons Legal Remedies Acts—Proportional representation
  (State Parliament).
- 1919 European Peace Treaty—State Housing scheme—Influenza epidemic— Wheat Silos scheme begun—First flight, England to Australia, Sirs Ross and Keith Smith—Commonwealth Royal Commission on basic wage and cost of living—Federal referendums, extended legislative powers (rejected).
- 1920 Proportional representation and multiple electorates (State Parliament)

  —Control of Note issue by Board of Directors of Note Issue Department, Commonwealth Bank.
- 1921 Forty-four hours week (State)—Voluntary wheat pool—First direct wireless press message, England to Australia.
- 1922 Rural Bank established-Reversion to 48-hours week (State).
- 1923 Agreement to extend certain Victorian Railways into New South Wales.
- 1924 Grafton-South Brisbane Railway Agreement—Migration Agreement with United Kingdom based on £34,000,000 loan—Control of Note Issue by Commonwealth Bank Board—Australian Loan Council formed.
- 1925 Main Roads Board created—Sydney Harbour Bridge begun—Broadcasting stations opened—Compulsory voting (Federal elections).
- 1926 Section of City Underground Railway opened—Suburban railway lines being electrified—44-hours week restored—Widows' pensions (N.S.W.)
  —Workers' Compensation compulsory insurance by employers—Sydney Branch of Royal Mint closed.
- 1927 Federal Parliament sits in Cauberra—Commercial wireless service with England—Family Endowment (State)—Single seats and preferential voting (State elections)—Railway to Broken Hill opened.
- 1928 Commonwealth-States Financial agreement—Loan Council reconstituted— Liquor prohibition referendum (rejected)—First United States-Australia flight (Kingsford-Smith and Ulm)—Visit of British Economic Mission.
- 1929 Disputes in timber yards and coal mines—Royal Commission on Coal Industry—Compulsory voting (State elections)—Compulsory military training suspended,
- 1930 Wireless telephone to England—Reversion to 48-hours week (1st July)— Unemployment Relief Tax—Acute economic depression—Moratorium Act—Commonwealth Sales tax—Brisbane-Kyogle railway opened,

- Reversion to 44-hours week—Government Savings Bank of N.S.W. suspended payment, later re-opened and absorbed by Commonwealth Savings Bank—Premiers' Financial Agreement (to reduce expenditure)
  —Commonwealth Conversion Loan (internal debts £556,000,000)—State Lottery—State Flour "tax"—Interest and rents reduced—Commonwealth Court reduced wages by 10 per cent.
  - 1932 Sydney Harbour Bridge opened—State Cabinet dismissed by Governor— Imperial Economic Conference (Ottawa)—Clarence River bridge completes standard gauge railway to Brisbane—Farmers' Relief Act—Industrial Commission reconstituted.
  - 1933 Great wheat harvest—World Economic Conference (London)—Census, 30th June—Family Endowment Tax abolished.
- 1934 Legislative Council re-constituted—Hume Dam completed—Federal Wheat Commission Inquiry—New States Royal Commission—Bread Inquiry—Visit of H.R.H. Duke of Gloucester—England-Australian Air Mail—Constitution of Greater Newcastle.
- 1935 Silver Jubilee of King George V—Visit of Japanese Goodwill Envoy—Sydney County Council (Electricity) formed—State industrial undertakings (brickworks, etc.) sold—Royal Commission on banking.
- 1936 Death of H.M. King George V—Import quotas imposed—H.M. King Edward VIII abdicates; accession of H.M. King George VI.
- 1937 Aviation and Marketing Referendums (rejected)—Imperial Conference (London)—Commonwealth Court's "basic wage" adopted for State awards—Co-operative societies home building scheme initiated.
- 1938 150th Anniversary of foundation of Australia—British Empire Games and Empire Producers' Conference (Sydney)—Empire Air Mail Service—British Commonwealth Relations and Imperial Trade Conferences (London)—Australian Wheat Stabilisation scheme.
- 1939 Defence Measures—National Security Act—National Register and Wealth Census—Commonwealth Arbitration Court adopts 44 hours as standard week—War with Germany (3rd September)—Emergency control of exchange, prices, etc.—Imperial purchase of primary products—Federal wheat pool—Compulsory school period made 6 to 14 years.
- Australian Forces abroad—Empire Air Training Scheme—Australian
  Ministers to United States and Japan—General coal mining dispute—
  Prices of Commonwealth Government securities stabilised—Public
  works co-ordinated under Loan Council—Petrol rationing—Petrol from
  Glen Davis shale—Tasman Air Scrvice—Compulsory Defence Training
  —Volunteer Defence Corps formed—Enemy raiders in Australian
  waters—Commonwealth industrial arbitration powers extended—Trade
  Union Advisory Panel set np—National Advisory War Council—
  Newsprint rationed—Building operations restricted—Libraries Act
  proclaimed.
- 1941 Federal income tax, payment by instalments—Commonwealth replaces State Child Endowment—Payroll tax (Federal)—Man power organised—Australian Minister to China—Australian News and Information Bureau in New York—Youth Welfare Act proclaimed—School leaving age to rise by steps to 15 years in 1943—Australian Forces in Malaya—War with Japan (8th December)—Miners' Pensious—United States-Australia Lend-lease agreement.
- Australian Forces in various theatres of war—Fall of Singapore—Unified control of Allied Forces in South-West Pacific—Air raids on N.S.W. coastal areas—Japanese submarines sunk in Sydney Harbour—National Register of Civilians—Coupon rationing of clothing, tea, sugar—Uniform Federal replace States' income and entertainments taxes—War damage insurance—Shearing and retail deliveries zoned—Daylight saving (1 hour, summer months)—Commonwealth Widows' Pensions—Commonwealth subsidy for dairy industry—Open cut coal mining.
- 1943 Airgraph overseas service—National Welfare Fund established—National Civilian Register—Butter rationed by coupons—Compulsory third

party motor vehicle insurance—Dairying industry wages award—Commonwealth Bank opens Mortgage Department—Daylight saving.

- Referendum, extended Commonwealth powers (rejected)—Meat rationed by coupons—"Pay-as-you-earn" income taxation—Rural Bank Personal Loans Department—British Pacific Fleet based on Sydney.
- 1945 H.R.H. Duke of Gloucester, Governor-General—Hostilities cease, Europe, 8th May, Pacific, 15th August—United Nations charter signed (50 nations)—Captain Cook Dock (Sydney) opened—Annual Holidays Act (N.S.W.) operates—Occupation Survey (June)—Unemployment and Sickness Benefits (Commonwealth)—Federal Banking and Life Insurance Acts—United Kingdom-Dominions wool marketing agreement—Fish marketing under State control—Cumberland County Council (town planning) constituted—Peats Ferry (Hawkesbury River) Bridge opened—General demobilisation (from October)—Workers' Compensation Insurance, Fixed Loss Ratio Scheme.
- Commonwealth Hospitals Benefits—Electricity Authority (N.S.W.) constituted—Manpower controls end—Pensions for Members of Legislative Assembly—Commonwealth-State agreements ratified: War Service Land Settlement, Housing, Hospital Benefits, Coal Industry—Wool auctions resumed—Day baking of bread—First Australian-born Governor in office—Commonwealth Government airlines services inaugurated—Oversea Telecommunications Agreement (British Empire)—Immigration Agreement, United Kingdom and Australia—Basic wages increased (7s. a week) by Commonwealth Court (Interim Judgment)—National Security Act terminated 31st December—Commonwealth and State Acts continue certain controls—Referendums, Commonwealth powers over social services (approved); organised marketing and employment (rejected)—Double Income Tax relief agreement with United Kingdom.
- Commonwealth-State Joint Coal Board appointed—State referendum, Hotel Closing (6 p.m. approved)—Hon. W. J. McKell (Premier of N.S.W.) appointed Governor-General—Census (30th June)—Commonwealth Tuberculosis Benefits—40-Hours Week, State awards—Border Rivers Agreement with Queensland ratified—Australian gift, £25,000,000, to United Kingdom—War-time (Company) Tax repealed—Commonwealth arbitration law amended; Conciliation Commissioners appointed—Parliamentary Allowances (State and Federal) increased—Banking (Nationalisation) Act (Federal)—Australia joins International Monetary Fund and Bank—Compulsory voting at local government elections—Commonwealth wage subsidies cease and price stabilisation subsidies being withdrawn—Empire Conference on Japanese peace settlement at Canberra—Newcastle, 150th Anniversary—Rural Bank empowered to conduct general banking.
- Record cereal harvests—40-hours week under Federal awards—South Pacific Commission, first meeting in Sydney—Federal referendum, rents and prices (rejected)—Commonwealth control of rents, prices and land sales ended; control assumed by States—Further price subsidies withdrawn—County Council's plan for County Cumberland published—Quotas on imports from "dollar" countries—Australian gift, £10,000,000 to United Kingdom—Banking (Nationalisation) Act held invalid by High Court and Privy Council gives Commonwealth leave to appeal—Coal and power crises; State developing new mines—Volunteer defence training resumed—British Commonwealth Conference (Loudon)—E.C.A.F.E. Session (Lapstone, N.S.W.)—Allowances for Members of Legislative Council—Act increasing membership of Federal Parliament—Australia-New Zealand economic and trade co-operation agreement—First all-Australian motor car—Australian farmers accept new wheat stabilisation plan—Local government areas in County Cumberland reduced by amalgamations from 66 to 41 and Sydney Municipal charter withdrawn from 1st January, 1949.

# CONSTITUTION AND GOVERNMENT

THERE are in New South Wales three administrations, viz. the Federal, whose seat is in the Australian Capital Territory at Canberra, controlling matters affecting the interests of Australia as a whole; the State, located in Sydney, dealing with the more important questions of State and local interest; and the Local Government bodies, with headquarters at convenient centres within their respective areas, controlling matters of purely local concern in areas which extend over nearly two-thirds of the State.

The present system of government in the State dates from 1856. The Federal Government was established in 1901. Local Government, previously limited to municipalities scattered throughout the State, was extended to the whole of the eastern and central territorial divisions in 1906.

The Legislative Council of New South Wales, formerly nominee, became an indirectly elective chamber in 1934. The Federal Constitution was amended in respect of financial relations between Commonwealth and States in 1910, also in 1928 when the financial agreement providing for the Constitution of the Australian Loan Council was validated.

A brief account of the early forms of government in New South Wales and of the introduction of the present parliamentary system was published at page 25 of the 1921 edition of the Year Book. The system of Local Government is described in the chapter "Local Government" of this Year Book.

#### GOVERNMENT OF NEW SOUTH WALES.

The Constitution of New South Wales is drawn from several diverse sources, viz. certain Imperial statutes, such as the Colonial Laws Validity Act (1865) and the Commonwealth of Australia Constitution Act (1900); the Australian States Constitutional Act, 1907; the Letters Patent and the Instructions to the Governor; an element of inherited English law; amendments to the Commonwealth of Australia Constitution Act; certain State statutes; numerous legal decisions; and a large element of English and local convention.

The Imperial Parliament is legally omnipotent in local as well as in imperial affairs, but, by convention, its authority to legislate in respect of affairs of the State has not been exercised for many years. Section 9 (2)

of the Statute of Westminster, 1931 contains, in effect, a saving of the right of a State to ask for Imperial legislation in a matter within its exclusive authority, without the concurrence of the Commonwealth "in any case where it would have been in accordance with the constitutional practice existing before the commencement of (the) Act that the Parliament of the United Kingdom should make that law without such concurrence". For all practical purposes therefore, the Parliament of New South Wales may legislate for the peace, welfare and good government of the State in all matters not specifically reserved to the Commonwealth.

Imperial legislation forms the basis of the Constitution of New South Wales and powers vested in the Crown by virtue of its prerogative are exercised by the Governor.

#### THE GOVERNOR.

In New South Wales the Governor is the local representative of the Crown, and through him the powers of the Crown in the matters of local concern are exercised. In addition he is titular head of the Government of New South Wales; he possesses powers similar to those of a constitutional sovereign, and he performs the formal and ceremonial functions which attach to the Crown in its august capacity.

His constitutional functions are regulated partly by various statutes, which from time to time cast new duties upon him, partly by the Letters Patent constituting his office, and partly by the Instructions to the Governor.

The present Letters Patent were given under the Royal Sign Manual in 1900, and amended in 1909, 1935 and 1938. The present Instructions were issued in 1900 and were amended in 1909 and 1935.

These functions cover a wide range of important duties, and it is directed that "in the execution of the powers and authorities vested in him the Governor shall be guided by the advice of the Executive Council". This provision, however, is modified by the further direction that, if in any case the Governor should see sufficient cause ta dissent from the opinion of his Ministers, he may act in the exercise of his powers and authority in opposition to the opinion of his Ministers, reporting the matter to His Majesty through the Secretary of State for the Dominions without delay. The Governor possesses important spheres of discretionary action, e.g. in regard to dissolution of Parliament. Moreover, he is entitled to full information on all matters to which his assent is sought, and may use his personal influence for the good of the State. The general nature of his position is such that he is guardian of the Constitution and bound to see that the great powers with which he is entrusted are not used otherwise than in the public interest. In extreme cases his discretion constitutes a safeguard against malpractice.

His more important constitutional duties are to appoint the Executive Council and to preside at its meetings; to summon, prorogue, and dissolve the Legislature; to assent to, refuse to assent to, or reserve bills passed by the Legislature; to keep and use the Public Seal of the State; to appoint all ministers and officers of State; and, in proper cases, to remove and suggested officers of State. He exercises the King's prerogative of mercy,

but only on the advice of the Executive Council in capital cases and of a Minister of the Crown in other cases.

According to the law laid down in the last century—the Governor is not a viceroy and cannot claim as a personal privilege exemption from being sued in the courts of the State. Politically he is indirectly responsible to the Imperial Parliament through the Secretary of State for the Dominions, but in State politics he usually acts on the advice of his Ministers, and they take the responsibility for their advice. However, in an extreme case if good reason existed the local Legislature might be justified in asking for his removal.

The Governor's normal term of office is five years. His salary is £5,000 per annum, which, with certain allowances, is provided in terms of the Constitution Act out of the revenues of the State.

The periods for which the Governor may absent himself from the State are limited by the Instructions. When he is absent the Lieutenant-Governor acts in his stead in all matters of State. The Chief Justice is usually the Lieutenant-Governor. In the event of the Lieutenant-Governor not being available to fill the Governor's position, an Administrator assumes office under a dormant Commission appointing the Senior Judge of the State as Administrator.

Captain the Right Honourable John de Vere, Baron Wakehurst, K.C.M.G., was Governor from 8th April, 1937 to 6th June, 1945. His successor, Lieutenant-General John Northcott, C.B., M.V.O., assumed the office on 1st August, 1946. He is the first Australian-born Governor of New South Wales. Sir Frederick Richard Jordan, K.C.M.G., is Lieutenant-Governor and Chief Justice.

## THE EXECUTIVE COUNCIL.

All important acts of State, except in the limited spheres where the Governor possesses discretionary powers, are performed or sanctioned by the Governor-in-Council.

The Council is established by virtue of the Letters Patent constituting the office of Governor. By convention its members are invariably members of the Ministry formed by the leader of the dominant party in the Legislative Assembly. When a member resigns from the Ministry he resigns also from the Executive Council, otherwise he may be dismissed by the Governor.

The Executive Council meets only when summoned by the Governor, who is required by his Instructions to preside at its meetings unless absent for "some necessary or reasonable cause". In his absence the Vice-President presides.

#### THE MINISTRY OR CABINET.

In New South Wales the Ministry and Cabinet both consist, by custom, of those members of Parliament chosen to administer departments of State

and to perform other executive functions. The Ministry is answerable to Parliament for its administration, and it continues in office only so long as it commands the confidence of the Legislative Assembly, from which nearly all its members are chosen. An adverse vote in the Legislative Council does not affect the life of the Ministry. The constitutional practices of the Imperial Parliament with respect to the appointment and resignation of ministers have been adopted tacitly. Cabinet acts under direction of the Premier, who supervises the general legislative and administrative policy and makes all communications to the Governor.

Meetings of Cabinet are held to deliberate upon the general policy of the administration, the more important business matters of the State and the legislative measures to be introduced to Parliament, and to manage the financial business of the State. Its decisions are carried into effect by the Executive Council or by individual Ministers as each case requires.

Many administrative matters are determined by ministerial heads of departments without reference to the Executive Council, every Minister possessing considerable discretionary powers in the ordinary affairs of his department.

The Ministry in office in December, 1948 consisted of the following members:—

Premier and Colonial Treasurer.—The Hon. James McGirr, M.L.A.

Deputy Premier, Colonial Secretary, Secretary for Mines and Minister for National Emergency Services.—The Hon. J. M. Baddeley, M.L.A.

Minister for Housing and Assistant Treasurer.—The Hon. C. R. Evatt, K.C., LL.B., M.L.A.

Minister for Education.—The Hon. R. J. Heffron, M.L.A.

Attorney-General.—The Hon. C. E. Martin, M.Ec., LL.B., M.L.A.

Minister of Justice and Vice-President of the Executive Council.— The Hon. R. R. Downing, LL.B., M.L.C.

Secretary for Public Works and Minister for Local Government.— The Hon. J. J. Cahill, M.L.A.

Minister for Health.—The Hon. C. A. Kelly, M.L.A.

Minister for Transport.—The Hon. M. O'Sullivan, M.L.A.

Minister for Building Materials.—The Hon. W. E. Dickson, M.L.C.

Minister for Agriculture.—The Hon. E. H. Graham, M.L.A.

Minister for Conservation.—The Hon. G. Weir, LL.B., M.L.A.

Minister for Labour and Industry and Social Welfare.—The Hon. F. J. Finnan, M.L.A.

Secretary for Lands.—The Hon. W. F. Slieahan, LL.B., M.L.A.

Winister for Tourist Activities and Immigration.—The Hon. C. H. Matthews, M.L.A.

## Ministerial Salaries.

The salaries of Ministers as fixed by statute in 1925 were reduced in April, 1930, August, 1931, and December, 1932, were restored to the former level on 1st July, 1938 and were increased again in 1947. Particulars of the salaries payable as fixed on these several occasions are given in the following statement:—

Ministers.	As from 1st July, 1925.	As from 1st April, 1930.	As from 7th Aug., 1931.	As from 1st Dec., 1932.	As from 1st July, 1938.	As from 1st July 1947.
The Premier	£ 2,445	£ 2,078	£ 1,800	£ 1,710	£ 2,445	£ 2,945
The Attorney-General	2,095	1,781	1,564	1,486	2,095	2,595
The Vice-President of the Executive Council (and leader of the Government in the						
Legislative Council)	1,375	1,169	1,072	1,018	1,375	2,445
Other Ministers of the Crown $ \dots $	17,505	14,879	13,167	12,510	17,505	29,340
${\bf Total}  \qquad$	23,420	19,907	17,603	16,724	23,420	37,325

Table 16 .- Salaries of State Ministers.

These amounts include the annual allowances paid to Ministers as members of the Legislative Assembly, but exclude an entertainment allowance of £500 per annum payable to the Premier under the Parliamentary Allowances and Salaries Act, 1947.

#### THE STATE LEGISLATURE.

The State Legislature consists of the Crown and two Houses of Parliament, and State laws (except in the event of disagreement between the Houses—see page 32) are enacted "by the King's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and the Legislative Assembly in Parliament assembled". It exercises a general power of legislation and possesses plenary and not delegated authority. The Constitution Act of 1902 provides that "the Legislature shall, subject to the provisions of the Commonwealth of Australia Constitution Act, have power to make laws for the peace, welfare, and good government of New South Wales in all cases whatsoever". It can delegate its powers, and within its territory its enactments are restricted only by legislation of the Imperial Parliament applying to New South Wales and by valid federal enactments.

The two Houses of Parliament are the Legislative Council (or Upper House) and the Legislative Assembly (or Lower House). Their powers are nominally co-ordinate, but it is provided that bills appropriating revenue or imposing taxation and bills affecting itself must originate in the Legislative Assembly, which is the chamber elected by general franchise and controls taxation and expenditure. Moreover, the responsibility of the Ministry for financial measures is secured by a provision of the Constitution Act that the Legislative Assembly may not appropriate any part of the Consolidated Revenue Fund or of any other tax or impost for any purpose unless it has first been recommended by a message of the Governor to the Assembly during the current session.

Every member of Parliament must take an oath or make an affirmation of allegiance.

By virtue of the Constitution Act, it is a function of the Governor to summon, prorogue, and dissolve Parliament, but it is provided that both Houses shall meet at least once in every year, so that a period of twelve months shall not elapse between sessions. The continuity of Parliament is ensured by law. The Parliamentary Electorates and Elections Act, passed in 1912 and amended in subsequent years, provides that writs for the election of new members must be issued within four days after the publication of the proclamation dissolving Parliament or after the Assembly has been allowed to expire by effluxion of time; that they must be returned within sixty days after issue (unless otherwise directed by the Governor); and that Parliament shall meet within seven days of the return of writs. The duration of Parliament was limited to three years in 1874.

The procedure of each House is conducted according to that of its prototype in the Imperial Parliament, but comprehensive standing orders for regulation of the business of each House have been drawn up. Provision has been made under the Constitution Act, 1902, as amended by the Constitution Amendment (Legislative Council) Act, No. 2 of 1933, to meet cases of disagreement arising between the two Houses, eliminating the possibility of a deadlock.

With the consent of the Legislative Council, any member of the Legislative Assembly who is an Executive Councillor may sit in the Upper House for the purpose of explaining the provisions of bills relating to or connected with the Department administered by him. He may take part in debate and discussion, but may not vote in the Legislative Council.

Controversy has centred around the powers of the Governor in granting a dissolution of Parliament. Strictly speaking, only the Legislative Assembly is dissolved, but Parliament is ended thereby, because both Houses are necessary to constitute a Parliament. It is considered that the main cases in which a dissolution may be granted arise when, on a question of policy, the Ministry sustains an adverse vote in the Legislative Assembly, and when the Legislative Assembly becomes factious, or will not form a stable administration.

# Cases of Disagreement between Houses.

In the case of disagreement between the Legislative Assembly and the Legislative Council in respect of money bills, the constitutional provisions of 1933 preserve the traditional right of the Legislative Assembly to control the purse. Bills relating to appropriations for annual services may be presented for Royal Assent, with or without any amendment suggested by the Council, and may become Acts notwithstanding the failure of the Upper House to agree to them; but any provisions in any such Act dealing with any matter other than the appropriation shall be of no effect.

To overcome disagreements in regard to bills (other than such Appropriation bills) passed by the Legislative Assembly, it is provided that the Legislative Assembly may pass the bill again after an interval of three months. If the Legislative Council rejects it again (or makes amendments unacceptable to the Legislative Assembly) and if a conference of managers appointed by the two Houses and a joint sitting of the two Houses fails to

attain agreement, the Legislative Assembly may direct that the bill be submitted to a referendum of the electors. If approved by a majority of electors, the bill becomes law.

# THE LEGISLATIVE COUNCIL.

The Legislative Council was a nominee chamber, consisting of a variable number of members appointed for life without remuneration, until 1934 when it was reconstituted in terms of the Constitution Amendment (Legislative Council) Act, No. 2 of 1933.

The Legislative Council, as reconstituted on 23rd April, 1934, consists of sixty elected members. Until the Constitution Amendment (Legislative Council Members Allowances) Act, 1948, the services of members were rendered without remuneration or reimbursement, but by that Act members (other than the President, Chairman of Committees and Ministers of the Crown) are entitled to receive by way of reimbursement of expenses an allowance at the rate of £300 per annum as from 1st September, 1948. The members of the Legislative Assembly and the Legislative Council comprise the electoral body. They record their votes by secret ballot at simultaneous sittings of both Houses. Casual vacancies are filled by a like election. Contested elections in which more than one seat is to be filled are decided according to the principle of proportional representation, each voter having one transferable vote; but where only one member is to be elected, a preferential system is used.

Any man or woman who is entitled to vote at the election of members of the Legislative Assembly and has been resident for at least three years in the Commonwealth of Australia is eligible for election as a member of the Legislative Council, except that members of the Legislative Assembly are debarred. Membership of the Council is rendered void by the acceptance of any office of profit under the Crown or of any pension from the Crown; but persons in receipt of pay, half pay, or pension by virtue of service in the Defence Forces or office of profit in those services, together with the holder of the office of Vice-President of the Executive Council and Ministers of the Crown as specified in the second schedule to the Constitution Act, and the holders of offices of profit under the Crown created by Act of Parliament as offices of the Executive Government, remain eligible The seats of members are rendered vacant by death, for membership. resignation, absence without leave, acceptance of foreign allegiance, bankruptcy, acceptance of public contracts, or by criminal conviction. candidate for election must signify his consent to nomination and his nomination paper must be signed by two "electors"; an "elector" may sign only one nomination paper.

In the election of the first House of sixty members, four separate ballots were taken, and in each fifteen members were elected, the term of service being twelve years in the case of the fifteen first elected, and nine, six and three years, respectively, for each successive group. A group of fifteen members is elected every third year during the six months immediately preceding the retirement of the fifteen members whose term of service is about to expire. Members elected to fill casual vacancies serve only for the unexpired period of the term of the vacant seat. Elections to fill the fifteen seats which became vacant on 22nd April, 1937, and at triennial intervals thereafter, were held on 8th December, 1936, 1st November, 1939, 18th December, 1942, and 14th March, 1946.

The presence of one-fourth of the members, exclusive of the President, is necessary to form a quorum. The Legislative Councillors are required to choose a President from amongst their number. He ceases to hold office if he ceases to be a member of the Legislative Council, and may be removed from office by a vote of the Chamber, or he may resign his office. He receives a salary of £1,700 per annum. There is also a Chairman of Committees to whom a salary of £1,000 per annum is paid. Members of the Legislative Council are supplied with free passes on the State railways, tramways and omnibuses during membership.

## THE LEGISLATIVE ASSEMBLY.

The Legislative Assembly is the elective or popular House of Parliament, and is the most important factor therein. All bills appropriating any part of the public revenue, or for imposing any new rate, tax or impost, must originate in the Assembly, and by its power over Supply it ultimately controls the Executive. It consists of ninety members elected on a system: of universal adult suffrage for a maximum period of three years. Any person who is qualified to vote at any State election is eligible to be elected: to the Legislative Assembly, except persons who are members of the Federal Legislature or of the Legislative Council, or who hold non-political offices of profit under the Crown, other than in the Army or Navy; but any officer of the public service of New South Wales may be elected to the Legislative Assembly on condition that he forthwith resign his position in the service. All legal impediments to the election of women to the Legislative Assembly were removed in 1918. Several women have sincecontested seats at the elections; the first to be elected sat in the 28th Parliament, and there are two women in the present Legislative Assembly. The seat of a member becomes vacant in cases similar to those stated above for Legislative Councillors.

A Speaker presides over the House, and his election is the first business when the House meets after election. He presides over debate, maintains order, represents the House officially, communicates its wishes and resolutions, defends its privileges when necessary, and determines its procedure. There is also a Chairman of Committees elected by the House at the beginning of each Parliament; he presides over the deliberations of the House in Committee of the Whole and acts as Deputy-Speaker.

Payment of members of the Legislative Assembly was introduced as from 21st September, 1889. The amount was fixed originally at £300 per annum. Subsequent changes are shown below:—

Date of Change.			Amount per annum.	Date of Chan	Amount per annum.		
September, 188 September, 191 November, 192 July, 1922 July, 1925	2			£ 300 500 875 600 875	April, 1930 August, 1931 December, 1932 July, 1938 July, 1947		 £ 744 706 670 875 1,375

Table 17.—Payment to Members of the Legislative Assembly.

Each member receives an official postage stamp allowance of £30 per annum and a free pass on State railways, tramways, and omnibuses. The salary of the Speaker was increased from £1,675 to £2,175, and of the Chairman of Committees from £1,115 to £1,615 per annum as from July, 1937. At the same time the annual allowance to the leader of the Opposition was increased from £250 to £500 per annum, and provision was made for the payment of allowances of £250 per annum to the Government and Opposition Whips in addition to the allowances received as members.

# Members of Legislative Assembly Pensions.

A provident fund for members of the Legislative Assembly was established in terms of an Act passed in May, 1946. Members contribute at the rate of £78 per annum. Eligibility for pension depends upon length of service as member before or after the commencement of the Act.

Upon ceasing to be a member after 1st May, 1946, pension is payable at the rate of £6 a week to those who have served for an aggregate period of at least fifteen years, or at the rate of £5 a week to those who have served in three Parliaments (not necessarily for the full period thereof). An exmember is not entitled to pension under the latter qualification if he does not become a candidate for the next ensuing election, unless he satisfies the managing trustees of the fund that there were good and sufficient reasons for his failure to do so.

Pension at the rate of £3 a week is payable to the widow upon the death of a member entitled to pension or of a pensioner (unless he married whilst in receipt of pension). The widow's right to pension ceases if she marries.

When a person ceases to be member and is not entitled to pension, his contributions are refunded to him or to his widow. If the ex-member subsequently becomes a member, he (or in the event of his death whilst member, his widow) will not be entitled to pension unless the amount of any such refund had been repaid to the fund within a prescribed time.

If a pensioner accepts office of profit under the Crown or becomes a member of the Parliament of the Commonwealth or any State, his right topension is suspended during the term of such office or membership.

The provident fund is controlled by the Under Secretary of the Treasury, as custodian trustee, and not more than six members appointed by the Assembly as managing trustees. Any deficiency in the Fund is payable out of moneys provided by Parliament.

# STATE PARLIAMENTARY COMMITTEES.

A number of committees consisting of members of Parliament is appointed to deal with special matters connected with the business of the State and of either House; from time to time select committees are chosen to inquire into and report on specific matters for the information of Parliament and the public. Each House elects a committee to deal with its Standing Orders and with printing and a joint committee to supervise the library. In addition there are the more important committees described below.

# Committees of Supply and of Ways and Means.

These committees consist by custom of the whole of the members of the Legislative Assembly, and they deal with all money matters. The Committee of Supply debates and determines the nature and amount of the expenditure, and the Committee of Ways and Means debates and authorises the

issue of the sums from the Consolidated Revenue Fund and frames the resolutions on which taxing proposals are based.

Parliamentary Standing Committee on Public Works.

The Public Works Act, 1912 and amendments provide for the constitution of a joint committee of members of the Legislative Council and Legislative Assembly, called the Parliamentary Standing Committee on Public Works, to be elected by ballot in every Parliament. Three of the persons to be elected must be members of the Legislative Council and four must be members of the Legislative Assembly.

The Act prescribes that proposals submitted to Parliament for public works of an estimated cost exceeding £20,000 (except necessary repairs and alteration of existing railway lines and works of water supply, sewerage and drainage) must be referred to the Committee for report.

The Committee has not been constituted since the commencement of the Parliament elected in 1930, and various public works have been excluded from this provision of the Public Works Act by the Acts authorising their construction.

#### Public Accounts Committee.

For the better supervision of the financial business of the State, a Public Accounts Committee is elected by the Legislative Assembly in every Parliament, under provisions of the Audit Act, 1902, from among the members of the House, other than Ministers. It consists of five members and is clothed with powers of inquiry into questions arising in connection with the public accounts referred to it and into all expenditure by a Minister of the Crown made without Parliamentary sanction. It reports on such matters to the Legislative Assembly.

#### COURT OF DISPUTED RETURNS.

The Parliamentary Electorates and Elections Act provides for the establishment of a Court of Disputed Returns—a jurisdiction conferred on the Supreme Court. The business of the Court is to inquire into and determine matters connected with election petitions and questions referred to it by the Legislative Assembly concerning the validity of any election or the return of any member, and questions involving the qualifications of members. The law in this respect has been made applicable to disputed elections of the Legislative Council.

Decisions of the Court are final, but must be reported to the House.

#### COMMISSIONS AND TRUSTS.

In addition to the Ministerial Departments, various public services are administered by Commissions, Boards, and Trusts; the more important are:—

Aborigines Welfare Board. Board of Fire Commissioners of

New South Wales.

Commissioner for Main Roads.
Commissioner for Railways.
Commissioner for Road Transport and Tramways.

Commissioner of Police.

Electoral Commissioner.

Electricity Authority of New South Wales.

Forestry Commission.

Hospitals Commission.

Housing Commission.

Hunter District Water Board.

Maritime Services Board.

Metropolitan Meat Industry Commissioner.

Metropolitan Water, Sewerage and Drainage Board.

Milk Board.

Prickly Pear Destruction Commission.

Public Service Board.

Public Trustee.

State Superannuation Board.

Water Conservation and Irrigation Commission.

Western Lands Commissioner.

In each case the authority controls a specific service and administers the statute law in relation to matters of its concern.

# AUDITOR-GENERAL.

The Auditor-General is appointed by the Governor, and holds office during good behaviour until he attains the age of 65 years. In certain cases he may be suspended by the Governor, but he is removable from office only on an address from both Houses of Parliament. He is required to take an oath that he will faithfully perform his duties, and he is debarred from entering political life. He is endowed with wide powers of supervision, inspection and audit in regard to the collection and expenditure of public moneys and the manner in which the public accounts are kept. He exercises control over the issue of public moneys, and all warrants for the payment of moneys out of the Consolidated Revenue Fund and certain other accounts must be certified by him. Matters connected with the public accounts are subject to special or annual report to Parliament by him, and he may refer any matter to the Public Accounts Committee.

## AGENT-GENERAL IN LONDON.

The State of New South Wales maintains an Agent-General's Office in London; it is located at Wellington House, The Strand. As official representative, it is the duty of the Agent-General to work in close co-operation with the High Commissioner for Australia, to keep the Government informed of political and economic developments overseas, to promote trade with the United Kingdom and other countries, and generally to act as the agent of the State in London.

# STATE ELECTORAL SYSTEM.

The electoral system is administered by the Electoral Commissioner—who is charged with the administration of the provisions of the Acts relating to the registration or enrolment of electors, the preparations of rolls, and the conduct of elections of the Legislative Assembly and of referenda under the Constitution Amendment (Legislative Council) Act. The Electoral Commissioner holds office for seven years and is eligible for reappointment. He may be removed from office only by resolution of both Houses of Parliament, but is also deemed to have vacated his office in certain events.

#### FRANCIIISE.

The elections of members of the Legislative Assembly are conducted by secret ballot. Adult British subjects, men and women, are qualified for enrolment as electors when they have resided in the Commonwealth for

a period of six months, in the State for three months, and in any subdivision of an electoral district for one month preceding the date of claim for enrolment. By amending legislation, members and discharged members of the fighting forces, including those under 21 years of age who had served outside Australia, and adult members of the Civil Constructional Corps, if British subjects, serving on projects outside Australia were entitled to yote, though not enrolled, at the general election of 1944.

Persons are disqualified from voting who are of unsound mind or who have been convicted and are under sentence for an offence punishable in any part of the British Empire by imprisonment for one year or longer.

Each elector is entitled to one vote only. Compulsory enrolment was introduced in 1921, and compulsory voting came into force on 16th September, 1930. Joint electoral rolls are compiled for State and Federal purposes.

## ELECTORATES AND ELECTORS.

The electoral law provides that electorates are to be redistributed whenever directed by the Governor. In the event of there being no direction by the Governor, a distribution must take place after the expiration of nine years from the date of the last redistribution. The redistribution is made by a special commission of three persons, viz., the Electoral Commissioner, the Government Statistician, and the Surveyor-General. A redistribution was made in 1940.

For the purposes of the distribution it is prescribed by the Parliamentary Electorates and Elections (Amendment) Act of 1928 that the State must be divided into three parts, viz., the Sydney area, to which 43 seats are allotted, the Newcastle area 5 seats, and the country area 42 seats. Separate quotas of electors are determined for each area by dividing the total number of electors in the area by the number of seats. The number of electors in each electoral district at a redistribution must be within 1,200 of the quota.

The following table shows certain particulars as to representation in the Parliament of New South Wales in each year in which elections have been held since 1913. Similar information covering the period 1856 to 1916 was published in the 1931-32 edition of this Year Book on page 26:—

Year of Election,	Number of Members of Legislative Assembly,	Population per Member.	Proportion of persons enrolled to Total Popula- tion.	Total Number of Electors qualified to Vote.	Average number of Electors per Member.				
1913 1917 1920 1922 1925 1927 1930 1932 1935 1938 1941 1944	90 90 90 90 90 90 90 90 90 90 90	20,500 21,000 22,800 23,950 25,500 26,700 28,100 28,700 29,350 30,200 31,100 32,000 33,150	per cent. 55-1 58-5 56-1 58-0 58-3 58-6 57-4 56-8 57-9 59-2 60-3 60-4 62-1	1,037,999 1,109,830 1,154,437 1,251,023 1,339,080 1,409,493 1,440,785 1,465,008 1,528,713 1,607,833 1,684,781 1,732,766* 1,852,787	11,533 12,331 12,827 13,900 14,879 15,661 16,008 16,278 16,986 17,865 18,720 19,252* 20,586				

Table 18.—Parliamentary Representation in New South Wales.

<sup>\*</sup> Exclusive of members of the forces eligible to vote though not enrolled.

Women voted for the first time in 1904, having been enfranchised by the Women's Franchise Act, 1902, and since that year practically the whole of the adult population has been qualified to vote.

A member of the Legislative Assembly of New South Wales is elected for each of the ninety electorates by a system of preferential voting. Voters must number the candidates in order of preference on the ballot-paper, and votes are informal unless preferences have been duly expressed for all candidates. In counting votes, the candidate is elected who has secured an absolute majority of votes either of first preferences outright, or of first preferences plus votes transferred to him in due order of preference by excluding in turn candidates with the lowest number of votes and reallotting their votes according to the next preference indicated.

The following table shows the voting at the general elections of members of the Legislative Assembly of New South Wales in 1925 and later years. Compulsory voting first applied in the elections of 1930. Similar particulars regarding each election since 1894, when a system based on single electorates and the principle of "one man one vote" was introduced, are shown in earlier editions of the Year Book (see 1930-31, page 27 and No. 50, page 33). The number of electors as stated represents the number qualified to vote.

Table 19.-Voting at Elections of Legislative Assembly, New South Wales.

	Electors	Contested Electorates,						
Year of Election and Sex of Electors.	Enrolled (Whole	Electors	Votes R	lecorded.	Informal Votes,			
	State).	Enrolled.	Number.	Percentage.	Number.	Percentage.		
1925—Persons	1,339,080	1,339,080	924,979	69.1	30,155	3.28		
1927— "	1,409,493	1,394,254	1,150,777	82·5 94·9	15,086	$1.08 \\ 2.24$		
1930— ,, 1932—	1,440,785 1,465,008	1,428,648 1,418,141	1,356,423 1,367,087	96.4	$30,428 \\ 30,260$	2.24		
100 = "	1,528,713	1,347,884	1,294,752	95.8	39,333	3.04		
1935— "	1,607,883	1,268,980	1,215,495	95.8	32,237	2.65		
(Men	834,752	767,170	698,100	91.0				
1941 Women	850,029	773,804	727,652	94.0				
$1941 \begin{cases} \frac{Men}{Women} \\ Total \end{cases}$	1,684,781	1,540,974	1,425,752	92.5	35,858	2.52		
$\bigcap \mathbf{Men}$	833,300	686,479	610,904	*				
$1944 \stackrel{\checkmark}{\sim} Women$	899,406	746,687	699,368	*				
$1944 \begin{cases} Women \\ Total \end{cases}$	1,732,706	1,433,166	1,310,272	*	43,329	3.31		
( Men	903,138	832,337	794,922	95.4				
1947 Women	949,649	881,584	826,605	93.8				
[ Total	1,852,787	1,713,921	1,621,527	94.6	32.262	1.99		

<sup>\*</sup> Votes recorded include those of members of the Services who were not enrolled,

Under war conditions many electors were engaged on war and defence duties entailing prolonged absence from their districts and the proportion of electors who failed to vote was greater than usual in 1941 and 1944. The votes recorded in 1944 included 54,332 votes by members of the Forces; some of these voters were not enrolled as electors.

At general elections polling is conducted on the same day in all electorates, subject to provisions for adjournment of the poll for certain causes. Polling-day is a public holiday from noon, and the hotels are closed during the hours of polling.

Electors absent from their sub-divisions are permitted to record their votes at any polling-place in the State, such votes being designated "absent votes". Postal voting is provided for persons who are precluded from attendance at any polling-place by reason of illness or infirmity, being distant over 5 miles, or travelling. An elector, who is not enrolled or whose name has been marked as having voted, may in certain circumstances vote after making a declaration that he has not already voted. Votes recorded under this provision are known as "section votes".

The appended table shows the extent to which the franchise has been exercised by absentee and other voters at general elections in recent years:—

Table 20.—General Elections, Legislative Assembly of N.S.W.—Absentee,

Postal and Section Votes.

Votes Recorded. (Contested Electorates.)	1932.	1935.	1938.	1941.	1944.	1947.
Absent Votes	88,677	92,572	98,525	135,450	94,174	158,512
Postal Votes	19,756	19,644	21,069	20,749	27,235	31,337
"Section" Votes	3,541	2,975	1,937	3,294	2,859	1,623
All Votes	1,367,087	1,294,752	1,215,494	1,425,752	1,310,272	1,621,527
			<u> </u>		<u> </u>	<u> </u>

#### STATE PARLIAMENTS.

A list of the Parliaments from 1889, when payment of members was instituted, up to December, 1913 was published in the 1931-32 issue of this Year Book. A list of Parliaments since 1913 is appended.

Table 21.—Parliaments of New South Wales since 1913.

Number of Parliament.	Return of Writs.	Date of Opening.	Date of Dissolution.	Duration.	Number of Sessions.
23	23rd and 29th Dec., 1913*	23rd Dec., 1913	21st Feb., 1917	yrs mths, dys, 3 1 29	5
24	10th, 16th, and 23rd Apr., 1917*	17th April, 1917	18th Feb., 1920	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4
25	21st April, 1920	27th April, 1920	17th Feb., 1922	$\tilde{1}$ $\tilde{9}$ $\tilde{27}$	
$\frac{25}{26}$	19th April, 1922	26th April, 1922	18th April, 1925†	3 0 0	3 5 5
$\frac{20}{27}$	20th June, 1925	24th June. 1925	7th Sept., 1927	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5
28	29th Oct., 1927	3rd Nov., 1927	18th Sept., 1930	$\frac{2}{2}$ $\frac{2}{10}$ $\frac{10}{20}$	4
	21st Nov., 1930	25th Nov., 1930	13th May, 1932	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	ì
29	30th June. 1932	23rd June, 1932	12th April, 1935	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4
30				$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4
31	10th June, 1935	12th June, 1935			4
32	26th April, 1938	12th April, 1938	18th April, 1941	2 11 23	3
33	17th June. 1941	28th May, 1941	24th April, 1944	2 10 8	4 5
34	22nd June, 1944	22nd June, 1944	29th March, 1947	2 9 8	5
35	27th May, 1947	28th May, 1947			•••
			<u> </u>		<u> </u>

<sup>\*</sup> Under system of second ballot, where no candidate received an absolute majority of votes at first ballot. † Expired by effluxion of time.

The normal duration of Parliament is three years. Unless previously dissolved Parliament continues for three years from the day of the return of the writs.

On account of war conditions and the disturbed state of public affairs, the Legislative Assembly Continuance Act, 1916 was passed to provide for an extension of the term of the 23rd Parliament to four years. The Parliament, however, terminated after three years and sixty days.

# STATE MINISTRIES.

The various Ministries which have held office since 1913, together with the duration in office of each, are shown below. The life of a Ministry is not co-terminous with the life of a Parliament. Since 1856, when the present system was inaugurated, there have been fifty-three Ministries, but only thirty-five Parliaments. Up to 29th June, 1913, thirty-four Ministries had held office.

Table 22 .- Ministries of New South Wales since 1913.

	Ministry.			In (	Office.
Number,	Name of Premier and P	arty.		From-	то—
35	Holman (Labour)		••.	30th June, 1913	15th Nov., 1916
36	Holman (National)	•••	•••	15th Nov., 1916	13th April, 1920
37	Storey (Labour)	•••		13th April, 1920	10th Oct., 1921
<b>3</b> 8	Dooley (Labour)	•••		10th Oct., 1921	20th Dec., 1921
<b>3</b> 9	Fuller (National)	•••		20th Dec., 1921	20th Dec., 1921
40	Dooley (Labour)	•••		20th Dec., 1921	13th April, 1922
41	Fuller (National)*	•••		13th April, 1922	17th June, 1925
42	Lang (Labour)	•••		17th June, 1925	26th May, 1927
43	Lang (Labour)†	•••		27th May, 1927	18th Oct., 1927
44	Bavin (National)*	•••	•••	18th Oct., 1927	3rd Nov., 1930
45	Lang (Labour)	•••		4th Nov., 1930	13th May, 1932
46	Stevens (National)*	•••		16th May, 1932	11th Feb., 1935
47	Stevens (United Aust.)*†	•••		11th Feb., 1935	13th April, 1938
48	Stevens (United Aust.)*	•••		13th April, 1938	5th Aug., 1939
49	Mair (United Aust.)*	•••		5th Aug., 1939	16th May, 1941
50	McKell (Labour)	•••	•••	16th May, 1941	8th June, 1944
51	McKell (Labour)	•••		8th June, 1944	6th Feb., 1947
<b>52</b>	McGirr (Labour)	•••	•••	6th Feb., 1947	19th May, 1947
53	McGirr (Labour)	•••	•	19th May, 1947	‡

<sup>·</sup> And Country Party.

<sup>†</sup> Reconstruction.

## COST OF STATE PARLIAMENTARY GOVERNMENT.

The following statement shows the annual cost of State Parliamentary Government in New South Wales; expenses of Federal and local government are not included:—

Table 23.-Cost of State Parliamentary Government.

Head of Expenditure.		1925-26.	1935-36.	1945-46.	1946-47.	1947-48.
		£	£	£	£	£
Governor and Executive Council—		W. 000		0 400	4 =00	~ ^^
Governor's Salary	• • •	5,000	† 4,259	2,500	4,792	5,000
Salaries, etc. of Staff	•••	4,673	3,057	4,875	8,183	9,607
Other expenses	•••	2,203	3,592	9,368	12,434	9,536
		11,876	10,908	16,743	25,409	24,143
Ministry—						
Salaries of Ministers		23,420	16,924	21,629	23,420	38,627
Other	•••	1,078	6,365	2,878	838	1,036
		24,498	23,289	24,507	24,258	39,663
Parliament—						
Legislative Council—						
Salaries of President and Chair	man	1 000		0.010	0.050	0.050
of Committees Legislative Assembly—	•••	1,900	1,511	2,013	2,050	2,850
Salaries of Speaker and Chairma	n of					
Committees	•••	2,790	2,056	2,790	2,610	3,790
Allowances to Members*		67,417	52,392	69,050	68,584	103,024
Postage for Members ,		2,700	2,699	3,374	3,343.	3,370
Members' Travelling Expenses	•••	33,368	29,313	30,390	33,772	38,263
Both Houses-Joint expenditure-			,,,	,	00,11	,
	ıblic					
Remuneration of Members	•••	3,966	•	•••	•••	•••
·Salaries of Staff and continger	ıcies	2,145	592	626		•••
Salaries of Reporting Staff	•••	8,269	7,470	9,207	11,283	9,870
Library—Salaries of Staff	•••	2,541	2,622	3,754	4,396	4,807
Contingencies	•••	942	911	1,776	1,876	1,695
Other Salaries of Staff	•••	23,516	22,107	33,618	38,475	44,709
Printing—Hansard		6,189	4,741	5,892	3,928	5,384
Other		13,562	9,487	8,394	7,101	8,161
Other Expenses	•••	5,478	7,413	11,790	18,243	22,475
•		174,783	143,314	182,674	195,661	248,398
Tilland and I						
Electoral—		0.10	0.100	0.000	0.001	0.550
Salaries	• • •	2,104	2,100	2,306	3,891	3,778
Contingencies	•••	8,195	3,182	9,493	97,509‡	18,822
		10,299	5,282	11,799	101,400	22,600
Royal Commissions and Select Commit	tees	7,790	7,110	4,669	242	202
Grand Total	•••	229,246	189,903	240,392	346,970	335,008
Per head of population		ls. 11·7d.	ls. 5·1d.	1s. 7·8d.	2s. 4·1d.	2s. 2·7d

Excluding salaries of Ministers, Speaker, and Chairman of Committees. † Governor, £2,796;
 Lieut. Governor, £1,463. ‡ Includes cost of referendum on closing hour of hotels.

In the case of some items of expenditure included above there is not a clear line of demarcation between costs incurred in respect of parliamentary government and the costs of ordinary administration. This applies particularly to the salaries and expenses of ministers of the Crown, who fill dual roles as administrative heads and parliamentary representatives, and to the cost of Royal Commissions, which, in many cases, are partly administrative inquiries. In the absence of any means of dissecting the expenditure of this nature, these items have been treated as incidental to the system of parliamentary government. On the other hand items such as the costs of ministerial motor cars and the salaries of ministers' private secretaries are omitted from account as appertaining mainly to administration. Increased parliamentary salaries and allowances were material factors in the higher costs for the year ended 30th June, 1948.

The foregoing statement, however, does not represent the total cost of parliamentary government in New South Wales, because it excludes the cost of the Commonwealth Government. This amounted to £607,983 in 1945-46, £800,542 in 1946-47, and to £905,976 in 1947-48, equal to 1s. 7.6d., 2s. 1.5d., and 2s. 4.5d. per head of population in Australia in the respective years.

## THE COMMONWEALTH.

The federation of the six Australian States was inaugurated formally on 1st January, 1901 for their mutual benefit in matters upon which it was agreed that joint action was desirable. A detailed account of the inauguration of the Federation and the nature and functions of the Federal Parliament in their relation to the State was published in the Year Book for 1921 on pages 38-40 and 625.

The Commonwealth Constitution prescribes that the seat of Government of the Commonwealth shall be in the State of New South Wales. The seat of Federal Government is Canberra. The site was surrendered to the Commonwealth by New South Wales by the Seat of Government Surrender Act, 1909 and accepted by the Commonwealth by the Seat of Government Acceptance Act, 1909. The Federal Parliament commenced regular sittings at Canberra on 9th May, 1927.

The broad principles of federation were: the transfer of limited and specified powers of legislation to a Federal Parliament consisting of a Senate and a House of Representatives, the former intended to be a revisory chamber wherein the States are equally represented, and the latter, the principal chamber, consisting of members elected from the States in proportion to their population; complete freedom of action for the State Parliaments in their own sphere; a High Court to determine the validity of legislation; and an effective method of amending the constitution. State laws remain operative in all spheres until superseded by laws passed by the Federal Parliament in the exercise of its assigned powers. State laws, however, are invalid only to the extent of their inconsistency with valid federal enactments.

Since the inauguration of the Commonwealth there has been a great advance in its status in relation to the United Kingdom and other nations. At the conclusion of the war of 1914-18, Australia was a signatory to the Treaty of Versailles and in 1920 became a member State of the League of Nations. Its representative attended the League Assembly under sole authority of the Commonwealth Government, without intervention by the Imperial Parliament or powers from the King in his Imperial capacity.

Moreover, treaties concluded by the United Kingdom Government affecting Australia became subject to ratification by the Parliament of the Commonwealth.

Imperial conferences attended by representatives of the governments of Great Britain and various parts of the Empire have been held from time to time for discussion of matters of common interest. These conferences have no constitutional powers, but facilitate agreements which subsequently may be ratified by the Parliaments of the political units affected.

At the Imperial Conference in 1926, it was affirmed in respect of the United Kingdom and the Dominions of Australia, Canada, New Zealand and South Africa that "they are autonomous communities within the British Empire, equal in status, in no way subordinate to one another, in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations".

By the Statute of Westminster, 1931, passed by the Imperial Parliament with the concurrence of the Dominions, provision was made for the removal of all restrictions upon the legislative autonomy of the Dominions. Sections 2 to 6 inclusive of the Statute were adopted by the Parliament of the Commonwealth by the Statute of Westminster Adoption Act, 1942, the adoption having effect from 3rd September, 1939.

In accordance with its international status, Australia maintains legations in a number of foreign countries and exchanges diplomatic representatives, and its rights to make treaties in the name of the King, but independently of the Imperial Government, have been recognised.

During and since the war of 1939-45, the Commonwealth has become a member of international organisations and has also signed treaties of peace as an independent nation.

#### Commonwealth War-time Powers.

By the Constitution of the Commonwealth, the Federal Parliament is vested with power to make laws "for the peace, order, and good government of the Commonwealth with respect to the naval and military defence of the Commonwealth and of the several States". This power has received a wide interpretation, having been held to authorise in time of war a variety of measures regarded as within the exclusive powers of the States in peace time and also the winding-up after the war and restoring of conditions of peace as gradually as circumstances require.

Upon the outbreak of war in September, 1939, the National Security Act was passed to authorise the Commonwealth Government to take necessary steps for the public safety and the defence of the Commonwealth and its territories, and a vast system of controls was built up by means of regulations under the Act. In view of the temporary nature of the National Security Act, which would expire on the termination of the war, several proposals were made during the war and in 1946 for constitutional amendments to confer permanently upon the Commonwealth certain of the war-time powers exercised under the National Security Act. These were outlined on pages 38 and 39 of the 50th edition of the Year Book. Details of the referendums taken in relation to these proposals are given on page 49 of this volume.

It was provided in April, 1946 by amendment of the National Security Act, 1939-1943 that 31st December, 1946 would be the date of termination of the Act and all regulations made thereunder. It was deemed necessary, however, to continue during the period of transition from war to peace many controls introduced while the Act was in operation, and with this end in view, the State Premiers in conference with Commonwealth Ministers agreed to pass legislation complementary to Commonwealth laws. Relying upon its defence powers, the Commonwealth Parliament passed the Defence (Transitional Provisions) Act in December, 1946 to continue in operation till the end of 1947 many of the regulations, including those for the control of prices, capital issues and real estate transactions, the rationing of commodities and the acquisition and disposal of primary products. A complementary measure, the Economic Stability and Wartime Provisions Continuance Act, 1946 was enacted by the Parliament of New South Wales. The operation of the Defence (Transitional Provisions) Act, 1946 was extended until 31st December, 1948 by the Defence (Transitional Provisions) Act, 1947 in respect of certain matters, and again, in some respects, until 31st December, 1949 by the Defence (Transitional Provisions) Act, 1948.

In May, 1948 the Commonwealth Government again sought amendment of the Constitution to place rents and prices (including charges) permanently under Commonwealth control. When this proposal was rejected (see page 49), it was announced that Commonwealth control of rents and land sales would terminate in August and of prices in September, 1948. A conference of State Premiers resolved that continued control in these fields was imperative to maintain economic stability, and accordingly, practically uniform legislation to that end was enacted in the several States. The Commonwealth undertook to maintain a Federal authority to assist the States to make their controls effective, and the States set up a consultative office in Sydney to ensure consistency of policy and the efficacy of the administrative measures of each.

#### COMMONWEALTH LEGISLATURE.

The Parliament of the Commonwealth consists of the King, the Senate and the House of Representatives. The Governor-General is appointed by the Sovereign and is his representative in the Commonwealth. The executive power of the Commonwealth is vested in the Sovereign and is exercisable by the Governor-General as his representative.

#### THE SENATE.

For the purpose of electing senators the people of each State vote as one electorate.

From its inception the Senate has consisted of 36 members, six being elected in each State. This will continue to be so until the alterations directed by the Representation Act, 1948 become effective. From and including the day of the first meeting of the Parliament after the first dissolution of the House of Representatives occurring after the commencement of that Act (18th May, 1948), the number of senators for each State shall be ten. At the first meeting of the Senate following the dissolution

thereof, the Senate is to divide the senators chosen for each State into two classes of equal number; the places of senators of the first class become vacant at the expiration of three years and the places of those of the second class at the expiration of six years from the beginning of their term of service; thereafter the places of senators become vacant at the expiration of six years from the beginning of their term of service.

#### THE HOUSE OF REPRESENTATIVES.

It is prescribed by the Constitution that the number of members in the House of Representatives shall be as nearly as practicable twice the number of senators and that the number of members chosen in the several States shall be in proportion to the respective numbers of their people. The Constitution prescribed a method of determining the number until Parliament otherwise provided. Other provision was made by the Representation Act, 1905.

The number to be elected in each State is determined in the following manner: a quota is ascertained by dividing the number of people of the Commonwealth by twice the number of senators, then the number of people of each State is divided by the quota. The result indicates the number of representatives for each State, one more member being chosen if on the division there is a remainder greater than one-half of the quota. It is provided also that at least five members shall be elected in each original State. The representation of the States may be adjusted in every fifth year.

The number of representatives elected from the various States to the House of Representatives in 1937, 1940, 1943, and 1946 was as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 6; Western Australia, 5; Tasmania, 5. In addition, one representative of the Northern Territory is elected; he may attend and participate in debates but may not vote except on a motion for the disallowance of any ordinance of the Northern Territory or on an amendment of any such motion.

The members of the House of Representatives are elected by universal adult suffrage for a period of three years from single-member constituencies and the system of voting is preferential.

## Enlargement of Commonwealth Parliament.

In the next Parliament after the commencement on 18th May, 1948 of the Representation Act, 1948, the number of senators is to be sixty. Correspondingly, in terms of the Constitution and the Representation Act, 1905-38, the number of members of the House of Representatives will be 121, excluding the non-voting member representing the Northern Territory. The number of electorates will be increased in New South Wales from 28 to 47, in Victoria from 20 to 33, in Queensland from 10 to 18, in South Australia from 6 to 10 and in Western Australia from 5 to 8. Tasmania will have 5 electorates as heretofore.

To effect the transition in the Senate, seven senators are to be elected from each State at the elections of 1949. In the Parliament after that election and until 30th June, 1950, the Senate will comprise the thirty-six senators sitting in the preceding Parliament and, from each State, seven of the newly-elected senators chosen from their number in the manner prescribed by the Representation Act, 1948. From 1st July,

1950 the senators from each of the six States will comprise the three senators sitting prior to the 1949 elections, who retire normally on 30th June, 1953, the four newly-elected senators who hold places in the new Parliament prior to 1st July, 1950 (two retiring in 1953 and two in 1956) and the other three newly-elected senators, who will hold their places until 30th June, 1956.

#### COMMONWEALTH ELECTORAL SYSTEM.

The Commonwealth electoral system is similar to that of New South Wales. Compulsory voting was introduced in 1924. In terms of the Commonwealth Electoral (War-time) Act, 1943, the franchise was extended for the duration of the war and for six months thereafter to members of the forces under the age of 21 years who were serving or had served outside Australia.

The enlargement of Parliament necessitated a re-distribution of seats and re-determination of electoral boundaries. This has been effected, under a proclamation of 1st June, 1948, by Distribution Commissioners in each State, who by law, comprise the Chief Electoral Officer or Commonwealth Electoral Officer, the Surveyor-General of the State and one other. The number of electors in each division must be within one-fifth, more or less, of the quota number (i.e. the number of electors in the State divided by the number of members of the House of Representatives to be chosen). The Commissioners must take into account community or diversity of interest, means of communication, physical features, existing boundaries of divisions and subdivisions, and State electoral boundaries.

The voting at elections of members of the House of Representatives from New South Wales since 1913 is shown below:—

Table 24.—General Elections, House of Representatives—Voting in New South Wales.

Year.	only)		Votes R	tes Recorded.		Percentage of Votes Recorded to Electors Enrolled.			Informal Votes.	
ieur.	Men.	Women.	Men.	Women.	Men.	Women,	Total.	Number.	Propor- tion per cent,	
1913	554,028	482,159	405,152	312,703	73.13	64.85	69.28	22,262	3.10	
1914	491,086	429,906	351,172	257,581	71.51	59.92	66.10	14,816	2.43	
1917	484,854	447,437	370,618	292,925	76 44	65.47	71.17	19,874	2.98	
1919	527,779	508,129	385,614	308, 183	73.06	60 65	66.97	26,517	3.82	
1922	517,388	498,209	330,362	239,980	63.85	48.17	56.16	25,823	4.53	
1925	640,533	627,214	581,678	563,215	90.81	89.80	90.31	21,389	1.87	
1928	584,545	576,857	547,095	534,817	93.59	92.71	93.16	52,229	4.83	
1929	624,068	614,550	591,438	583,007	94.77	94.87	94.82	33,158	2.82:	
1931	722,480	710,672	689,905	671,786	95.49	94.53	95.01	48,824	3.59	
1934	771,456	759,973	730,222	728,090	95.82	95.80	95.81	48,801	3,33	
1937	744,004	742,827	720,032	717,384	96.78	96.57	96.68	33,052	2.30	
1940	832,280	834,776	779,568	796,381	93.67	95.40	94.43	46,193	2.93	
1943*	811,597	870,679	804,314	819,729	*	*	*	49,704	3.06	
1946*	902,533	956,261	856,688	891,462	*	*	*	43,107	2.45	

<sup>\*</sup> Votes recorded include votes of some members of the Services not enrolled as electors.

## ELECTION OF SENATORS.

In previous elections of senators a preferential system of voting was observed. At the Senate elections of 28th September, 1946, the total number of votes cast in New South Wales was 1,757,150 of which 132,543 or 7.54 per cent. were informal. The number of electors enrolled was 1,858,794, viz. 902,533 men and 956,261 women, and a number of persons was entitled to vote in terms of the War-time Amending Act of 1943, though not enrolled.

The amending Act of 1948 prescribed a proportional system of voting in the election of senators. Under the system a quota is determined by dividing the total number of first preference votes by one more than the number of senators to be elected and adding one to the quotient. The candidates having first preference votes in number equal to or in excess of the quota are elected.

The transfer value of the surplus votes of the candidate first elected (which is the fraction they represent over his total first preference votes) is determined. All his ballot papers are arranged in separate parcels for each other candidate according to order of preference, and ballot papers, selected at random from each parcel, are transferred to each continuing candidate in number corresponding to the fractional transfer value of the votes. Candidates whose original first preference votes and transferred votes then equal or exceed the quota are elected. The procedure for transfer of ballot papers is applied in respect of each elected candidate in the order of election; where more than one candidate is elected simultaneously at any stage, the candidate having the greatest number of votes is deemed to be first elected. Only ballot papers received by transfer from a candidate or candidates elected at the last preceding count are taken into consideration at each successive transfer of ballot papers.

If by process of transfer of surplus votes of elected candidates the quota has not been reached by the number to be elected, the candidate having fewest votes is excluded and all his ballot papers are transferred in the next available order of preference to the continuing candidates. If by repetition of the processes of transfer of surplus votes of elected candidates and distribution of votes of excluded candidates all vacancies have not been filled, the continuing candidate then having the majority shall be deemed elected in respect of the last vacancy, even though the votes received by him may be less than the quota.

By the same Act it was provided that long casual vacancies should be filled by the continuing candidates who, next, after the periodical vacancies have been filled, first receive the quota number of votes at scrutinies conducted in the manner described.

#### REFERENDUMS.

#### COMMONWEALTH REFERENDUMS.

For alteration of the Constitution of the Commonwealth, a proposed law must be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives and must be approved by a majority of electors voting in a majority of the States and by a majority of all the electors voting in the Commonwealth.

In all, twenty-three questions relating to alteration of the Federal Constitution have been submitted by referendums, and only in four matters (one each in 1906, 1909, 1928 and 1946) were the proposals approved. A majority of the votes in every State was in favour of three of these proposals. The majority in New South Wales was affirmative only on four other questions, including those relating to Organised Marketing of Primary Products and to Industrial Employment submitted in September, 1946. In three instances (including two in 1946) rejection was due to lack of approval in a majority of the States, although the aggregate votes cast in Australia favoured the proposals. (Two non-constitutional referendums relating to conscription for military service in the First World War were resolved in the negative.)

Particulars of the proposals embodied in the Post-War (Reconstruction and Democratic Rights) Bill of 1944 and in the Social Services, Industrial Employment and Organised Marketing of Primary Products Bills of 1946, submitted to the electors on 19th August and 28th September of the respective years, are given on page 40 of the Official Year Book, No. 50.

A bill passed late in 1947 to make rents and prices (including charges) matters permanently within the constitutional powers of the Commonwealth was rejected by the electors on 29th May, 1948. A majority of the electors in every State voted against the proposal, negative votes representing 58.34 per cent. and 59.34 per cent. of all effective votes cast in New South Wales and in Australia, respectively. Certain particulars of the voting in New South Wales and in the Commonwealth at the referendums of 1944, 1946 and 1948 are given below:—

Particulars and	States with		Votes	Cast.		Propo Forma	Informal	
Electorate.	Majority in Favour.	In Favour.	Not in Favour.	Informal	Total.	In Favour.	Not in Favour.	of all Votes Cast.
Reconstruction and Demo-						per cent.	per cent.	per cent.
oratic Rights (1944)— New South Wales Australia Social Services (1946)—	S.A., W.A.	759,211 1,963,400	911,680 2,305,418	23,228 56,633	1,694,119 4,325,451	45·44 45·99	54·46 54·01	1·37 1·31
New South Wales Australia Organised Marketing of	All States.	897,887 2,297,934	764,723 1,927,148	94,540 228,859	1,757,150 4,453,941	54·00 54·39	46.00 45.61	5·38 5·14
Primary Products (1946)— New South Wales Australia	N.S.W., V., W.A.	855,233 2,116,264	794,852 2,068,171	107,065 269,506	1,757,150 4,453,941	51·83 50·57	48·17 49·43	6.09 6.05
Industrial Employment (1946)— New South Wales	N.S.W., V.,	833,822	778,280	145.048	1,757,150	51.72	48-28	8.26
Australia	W.A.	2,080,275	2,035,860		4,453,941	50.30	49.70	8.03
Rents and Prices (1948)— New South Wales Australia	No States.	723,183 1,793,712	1,012,639 2,618,183		1,762,091 4,476,001	41.66 40.66	58·34 59·34	1·49 1·34

Table 25.—Referendums for Alteration of Constitution.

#### STATE REFERENDUM.

The question of the hour of closing of hotels and certain other licensed premises in New South Wales was referred by the State Government to the electors by referendum on 15th February, 1947, and the voting favoured the continued closing of licensed premises at 6 p.m. Further particulars regarding this referendum are given on page 893 of the Year Book No. 50.

# DEFENCE

IT is the province of the Commonwealth to provide for the defence of Australia (and the Parliament of the Commonwealth has exclusive power to legislate in defence matters) and for the control of the forces to execute and maintain the laws of the Commonwealth. Naval or military forces may not be raised or maintained by any State without the consent of the Commonwealth Parliament, but the Commonwealth has a constitutional obligation to protect every State against invasion and, on application by the State, against domestic violence. Under the Defence Act, citizen forces may not be called out nor utilised in connection with an industrial dispute.

#### Compulsory Military Training.

Male citizens between the ages of 18 and 60 years are rendered liable, under the Defence Act, to serve in the citizen forces for home defence in time of war, and may be required to undergo training between the ages of 12 and 26 years.

Compulsory military training was in operation from January, 1911 to November, 1929, when the citizen forces were re-constituted on the basis of voluntary enlistment. Particulars of the conditions of enlistment and of the forces in training under each system are given on pages 34 to 36 of the Year Book, 1939-40.

## MILITARY SERVICE, WORLD WAR, 1939-1945.

Soon after war began in September, 1939, compulsory military training was re-introduced. The classes and age groups affected and the periods of training were extended as the gravity of the war situation increased and, in December, 1941, all trainees then enlisted, with further classes and age groups, were called up for continuous service. The stages by which the strength of the Citizen Military Forces expanded, and particulars regarding the periods of training and the service required, are summarised in Table 25 of the Official Year Book, No. 50.

Simultaneously and throughout the war, volunteers were enlisted for active service in the Royal Australian Navy, the Second Australian Imperial Force (Army), and the Royal Australian Air Force, and Women's Services were also established by voluntary enlistment in each of these services. An outline of the conditions and spheres of service, together with particulars of net enlistments from New South Wales by sex and branch of the forces is given in the Year Book No. 50 on pages 43 and 44, and following pages of that volume outline briefly the arrangements for and progress of demobilisation of service personnel to 30th June, 1947. From June, 1945 to the end of that month, 203,357 men and 15,869 women were discharged in New South Wales, and in the next six months discharges in this State numbered 3,636, comprising 3,462 men and 174 women.

#### POST-WAR DEFENCE POLICY AND PROGRAMME.

The post-war defence policy of Australia was outlined in Parliament by the Minister for Defence in June, 1947. The broad objectives are the

provision of forces to enable fulfilment of obligatious under the United Nations Charter, including regional arrangements in the Pacific, to participate in British Commonwealth defence, and to provide for Australia's self-defence. The defence programme covers a period of five years from 1947-48 to 1951-52 and provides for the expenditure of £250,000,000 during the period, or an average annual vote of £50,000,000, compared with the average of £9,000,000 a year expended from 1934-35 to 1938-39.

The programme is designed to secure a balanced scheme of defeuce, by providing for the Navy, Army and Air Force, of defence research and development, and of munitions and supply, in proper proportions within the limits of the resources available for defence. Defence research and development is given high priority and an amount of £33,500,000 is included for this purpose over the five years. The most important item is the long-range weapons project being developed in Central Australia by the Australian and United Kingdom Governments jointly. There is to be continuous study of the impact of scientific developments on the types of weapons and armament for the forces, and a Scientific Advisory Committee and a New Weapons and Equipment Development Committee have been established in this connection.

A balanced defence policy requires full co-ordination of the Navy, Army and Air Force, the supply organisation, and the civil economy which supports the direct military effort. There are also new and difficult problems in planning the defence of the civil community against attack by modern weapons. Provision has been made for this co-ordination and planning and the resulting plans are embodied in the Commonwealth War Book and Departmental War Books which are under constant revision in the light of war-time policy and likely contingencies. Defence policy is to be kept flexible. The shape and size of post-war forces will be decided and the problems of organisation and training will be resolved in the light of future developments in weapons and methods of warfare whilst the scheduled programme is being pursued.

The programme enables Australia to accept a larger share in the defence of the British Commonwealth in the Pacific and, in corresponding degree, lessens the burden carried by the United Kingdom. Improved machinery for co-operation in British Commonwealth Defence, particularly in the Pacific area, has been provided under agreements with the United Kingdom and New Zealand Governments.

# Post-War Development Plans of the Services.

Naval defence plans provide that by 1951-52 there should be:-

In Commission:—

2 Light Fleet Carriers.

2 Cruisers.6 Destroyers.

6 Destroyers.
4 Frigates (3 Escort, 1 Training).

3 Survey Ships with Tenders.

2 Minesweepers (Training).3 Air/Sea Rescue Vessels.

Ocean-going Tug.
 Ammunition Vessel.

2 Boom Defence Vessels.

In Reserve:—
1 Cruiser.

2 Destroyers.6 Frigates.

30 Minesweepers.

40 Vessels of Varying Types.

An average of £2,500,000 a year is to be expended on the completion of the destroyer construction programme (2 under construction and 4 to be laid down).

The Army programme provides for Permanent Forces with a strength of 16,000 (to be used initially as part of the Occupation Forces in Japan) including one independent brigade group of three infantry battalions, an armoured unit, etc., and fixed establishments; and Citizen Forces with a strength of 50,000, comprising a field force of 2 infantry divisions, 1 armoured brigade group, and corps units. The Duntroon Royal Military College and other facilities for the training of officers are to be expanded. General enlistment of Citizen Forces began on 1st July, 1948. Both the Permanent and Citizen Forces are to be established on a voluntary basis.

The Royal Australian Air Force establishment as proposed comprises (a) a home defence organisation of 7 squadrons (4 interceptor fighter—Citizen Air Force; 1 heavy bomber general reconnaissance; 1 target-towing; and 1 air-sea rescue) with, in all, 54 aircraft; (b) task force elements comprising 9 squadrons (2 long-range fighter; 3 heavy bomber; 2 transport; 1 tactical reconnaissance; and 1 survey) with an aggregate of 90 aircraft; and (c) a training organisation, headquarters command, and miscellaneous units. In addition, there are to be 439 reserve operational aircraft and 698 aircraft for training and miscellaneous duties.

The projected personnel of each of the three defence services as planned, excluding reserve officers and other ranks and civilians, is 93,083, made up as follows:—

	Royal Australian Navy.	Army.	Royal Australian Air Force.	All Services.
Permanent Forces	14,753	16,000	11,930	42,683
Citizen Forces		50,000	400	50,400
Total	14,753	66,000	12,330	93,083

STRENGTH OF ARMED FORCES: 30TH JUNE, 1948.

At 30th June, 1948, the actual strength of the Australian Armed Forces was 40,375, including Navy, 10,774; Army, 20,254 full-time members and 1,015 Citizen Force members; and Air Force, 8,332. Of the totals, the numbers enlisted from New South Wales were 3,089 in the Navy, 7,527 full-time duty and 401 Citizen Force members in the Army, and 2,100 in the Air Force.

# **FACTORIES**

Prior to the federation of the Australian States in 1901, the manufactures of New South Wales were primarily goods for local use, consisting chiefly of food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.

The removal of interstate trade barriers and the operation of a uniform protective tariff fostered steady expansion after federation which accelerated (apart from an initial set-back) during the World War 1914-18 as a result of the demands created thereby, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development was set in train, iron and steel works and many subsidiary industries were established, the manufacture of machinery began, and a wide range of high-grade products—textiles, metal manufactures, electrical goods, etc.—was added to the list of commodities made in New South Wales.

The world-wide economic depression of 1929-33 affected factory activity severely, but returning general prosperity and the opportunities opened to local manufacturers by import restrictions, imposed to adjust the national balance of payments during the economic crisis, initiated revival in 1933 and gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties, and primage were reduced, but without materially prejudicing the progress of local manufactures.

When war broke out in September, 1939, Australia became a major source of supply for Empire countries east of Suez, and in meeting these demands, as well as those arising locally because of interruption of oversea importations, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibilities for supplies in the South-west Pacific Area gave added impetus to these developments, and manufacturing in New South Wales outstripped by far all previous levels.

The cessation of war production and the transition of industry to a peace-time basis retarded progress, but in 1946-47, although the process of readjustment was incomplete, marked expansion carried factory activity to a new record level.

WAR-TIME ORGANISATION OF MANUFACTURING INDUSTRIES.

On page 518 of the 1941-42 and 1942-43 edition of the Year Book, an outline was given of the controls introduced during the war to curtail non-essential production and to expand manufactures for war-time requirements. These controls were relaxed progressively after (and, in a few cases, before) hostilities ceased.

DECENTRALISATION OF MANUFACTURING INDUSTRIES.

Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Federal and State Ministers in August, 1945 to formulate a national policy for the decentralised

development of secondary industries. It was agreed that the State Governments should seek to promote decentralisation along the lines appropriate to each, providing necessary services, assistance, and concessions where warranted, to the full extent of State resources. The Commonwealth undertook to collaborate in related matters of federal industrial policies, and, in particular, to publicise opportunities for decentralised development, to assess the practicability of development in regions having disabilities to be offset, to advise as to new enterprises desirable in the interests of national defence, and to provide financial assistance where the costs of a project likely to serve the national interest would be great relative to the State's resources.

Steps taken by the Commonwealth have resulted in private enterprises being established in factories set up in country towns for war-time munitions production. Oversea concerns have been encouraged to undertake manufacturing in Australia and the war-time policy of encouraging textile, clothing, and other manufacturers to establish branch factories in country towns has been continued, largely as a means of solving the problem of labour supply.

COMMONWEALTH SECONDARY INDUSTRIES COMMISSION AND DIVISION.

The Secondary Industries Commission was established in October, 1948 within the Ministry of Post-war Reconstruction to investigate possible and appropriate uses of munitions factories developed during the war, to plan for the rapid and orderly transition of secondary industries from war-time to peace-time activities, and, generally, to seek avenues for promoting greater industrial efficiency and to explore opportunities for new manufacturing enterprises. The Commission has the assistance and advice of the Tariff Board and maintains close liaison with the Rural Reconstruction Commission, the Department of Works and Housing, the National Works Council, and other relevant authorities. It works in close association with private industry by means of industry advisory panels set up as occasion requires.

The Secondary Industries Division, later renamed the Division of Industrial Development, was created in February, 1945, and is the administrative agency of the Commission. Initially its functions were primarily of war-time significance, but in June, 1946, Federal Cabinet approved that the Division should supervise decentralisation and regional development, encourage new industries and expansion of existing industries, allocate government war-time factories and annexes, discuss with taxation authorities the incidence of taxation on secondary industries, extend research and technical facilities and assist in the solution of production, technical and management problems, initiate and encourage technological research, devise and supervise measures and activities for raising and maintaining the quality of products and increasing industrial efficiency, study distribution and handling problems to reduce costs, and develop local resources of raw materials.

The Secondary Industries Commission recommended that, as the Government's war-time factories in country towns ceased to be required for munitions production, they be converted to peace-time use by sale or lease to private enterprise. By December. 1947, 227 leases and outright sales (about half being in New South Wales) had been negotiated with Australian, British, Canadian, and United States companies, which have undertaken the production of engineering and electrical equipment, textiles, chemicals, and a wide range of other products.

The establishment and extension of industrial enterprises have been facilitated by freeing new capital issues of up to £25,000 in two years from requirement of the Commonwealth Treasurer's consent and by the opening in January, 1946 of an Industrial Finance Department of the Commonwealth Bank. (See chapter "Private Finance" of this volume.)

# STATE SECONDARY INDUSTRIES DIVISION.

In July, 1946, a Division of Secondary Industries was established within the State Department of Labour and Industry and Social Welfare to pursue the policy of encouraging industrial expansion and decentralisation.

The Division advises the Government in relation to the promotion of and prospects for industrial development and collaborates to that end with other authorities, both State and Federal. Present and prospective manufacturers may refer to the Division for general and technical information covering new industrial materials, processes and opportunities, the availability of factory premises and sites and suitable decentralised locations for new enterprises, and as to local and oversea sources of materials and equipment. It also arranges assistance in technical research, laboratory services, production efficiency examinations, and in establishing costing systems, and upon request will investigate the causes of loss of markets through oversea competition. Advice as to the direct assistance the Government may afford is given by the Division and in appropriate cases it negotiates for rail freight concessions, for permits to build, for the provision of housing for workers, for technical training facilities, and for the necessary water, power and transport services.

CUSTOMS TARIFFS AND BOUNTIES ON MANUFACTURED PRODUCTS.

Particulars of the Australian tariff, including its protective provisions, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia are given in the chapter "Oversea Trade" of this volume.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

Commodities manufactured in New South Wales in respect of which bounty might be claimed in June, 1948 and the current rates of bounty were as follows:—

Wire netting manufactured from Australian materials: 9s. 7d. per ton. No bounty has been paid since 1939-40 because the net rate of profit on manufacture has exceeded the prescribed limit for bounty.

Tractors manufactured from Australian materials and parts: £32 to £72 per tractor according to the brake power of the engine.

Sulphur produced from Australian materials: 27s. per ton plus or less 1s. per ton for each shilling by which the cost of imported crude brimstone is less than or exceeds £6 per ton, with a maximum rate of bounty of 36s. per ton. No bounty has been paid since 1940 owing to the high cost of imported sulphur and brimstone.

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1943-44

1945-46

Bounties were paid for motor radiator assemblies for use as original equipment of motor vehicles in 1939-40 and 1940-41, on rubber-insulated cable and wire produced during 1942-43, and on superphosphate produced in Australia in 1941-42 and 1942-43. The last-mentioned bounty was replaced by a subsidy payment to manufacturers, based upon the increase in cost of manufacture, under the Primary Producers Assistance (Superphosphate) Act, 1943. Particulars of superphosphate subsidy payments and of bounty paid on the expert of wine are shown in the chapter "Agriculture" of this volume.

The amount of bounty paid to manufacturers in New South Wales in respect of the various commodities during the years ended 30th June, 1937 to 1947 is shown in the appended table:—

Year.	Wire Netting.	Tractors.	Motor Radiator Assembly,	Sulphur,	Rubber Insu- lated Cable and Wire.	Super- Phosphate.
	£	£	£	£	£	£
1936-37	7,790	11,089	•••	11,071		•••
1937-38	6,271	13,620	•••	9,572		•••
1938-39	5,444	11,223		18,125		•••
1939-40	4,081	8,497	1,850	15,249		•••
1940-41		6,420	675			
1941-42		667				108,939
1942-43		850			3,502	6,258

Table 26.-Bounties on Manufactures, Payments in New South Wales.

#### Scientific Research and Standardisation.

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10,030 22,955

The Council for Scientific and Industrial Research.

The Council for Scientific and Industrial Research consists of a chairman and four other members nominated by the Commonwealth Government (these form the Executive Committee of the Council), the chairman of the six State Committees (these Committees have advisory functions in relation to the Council's business and matters for investigation), and other members (ten in 1947) co-opted by the Council by reason of their scientific knowledge. It is the function of the Council to initiate and conduct research in connection with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardisation of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

The activities of the Council and the results of its researches are described in its annual reports. Its attention was directed almost exclusively to the problems of the primary industries until 1937, when research extended into the field of secondary industries. The Council maintains a Central Library, an Information Service to provide scientific and technical information, and Scientific Liaison Offices in London and Washington.

The funds of the Council are provided by industry in the form of donations and special grants and by the Commonwealth Government. In 1946-47, expenditure by the Council for salaries, investigations, and general

expenses amounted to £1,443,092, of which £125,422 was provided by contributions and donations other than directly by the Commonwealth Government.

The income derived from the Science and Industry Endowment Fund established in 1926 is used in the training of students and in assisting persons engaged in scientific research. During 1946-47, income amounted to £4,407 (all interest) and expenditure comprised £640 for research grants and £3,126 for training of research students; at 30th June, 1947, the Fund amounted to £122,498.

# The Standards Association of Australia.

The Standards Association of Australia is governed by a council which comprises representatives of the Commonwealth and State Governments, scientific and professional organisations, and private industry. It receives financial support from private industry and from the Commonwealth through the Council for Scientific and Industrial Research.

The Association acts as the national standardising organisation of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry, and standards are evolved and accepted by general consent.

# The National Association of Testing Authorities.

The National Association of Testing Authorities organises national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily in respect of tests within their competence and the Association is to ensure the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

## The State Technological Museum.

The staff of the State Technological Museum also assists in the promotion of industrial efficiency and expansion by undertaking research and disseminating scientific and technical information.

## PATENTS, TRADE MARKS, ETC.

Details concerning patents, trade marks, designs, etc. are given in the chapter "Law Courts" of this Year Book.

## DEFINITIONS IN FACTORY STATISTICS.

The statistics relating to factories, as shown in this chapter, have been compiled from returns supplied annually by manufacturers in terms of the Census Act of 1901. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries), but does not cover smallgoods makers, laundries, farrieries, photography studios, florists and seedsmen, and abattoirs.

If a manufacturing business is conducted in conjunction with an importing or a retail business, particulars relating to the manufacturing section

only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry. This rule has not applied to the generation of electricity in and solely for the use of a factory since 1936-37, when the practice of requiring separate returns covering electricity plant and other factory operations was discontinued. The cost of generating power is distributed proportionately amongst the industries conducted in the factory.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc. of their employees, the value of premises and equipment, the horse-power of machinery, the value, and in most cases the quantities, of raw materials and fuel used, and quantities and values of principal materials and articles produced. The returns obtained from manufacturers relate to a comprehensive range of items, but are not intended to be a complete record of the income or expenditure of factories nor to show the profits or losses of factories collectively or individually.

The average number of factory employees is quoted in this chapter on two different bases: the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). The latter, which is used where available, is calculated by reducing the average number of employees working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

The value of factory output is the value of the goods manufactured or their value after passing through the particular process of manufacture, and may be regarded as the sum of the value of the raw materials used and the value added to these materials by the process of manufacture. The basis of valuation of the output is the wholesale selling value of the goods at the factory, exclusive of delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer.

The value of production is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the raw materials used, containers and packing, power, fuel, and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges).

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the sawmills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

In the special case of Government factories and workshops, the value of output is estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs.

Where there is a separate department for selling the products, the value of the output as recorded in the returns furnished by the manufacturers

is the nominal value at which the goods are transferred from the factory to the sales branch. The extent to which the recorded value of the output and the value of production are affected is not measurable, but is known to be appreciable in some industries. Being a constant practice, comparisons from year to year are not affected greatly, but it has a bearing in analysing statistics of the manufacturing industries, for example, in calculating the proportion of the output which is represented by cost of raw materials or by wages.

## CLASSIFICATION OF FACTORIES.

In the compilation of statistical data relating to factories in New South Wales, a standard classification of manufacturing industries, formulated at a conference of Australian statisticians in 1902 and revised from time to time, was used until the year 1929-30. A new classification was introduced in 1930-31, and this, in turn, was revised and extended in accordance with decisions of the Statisticians' Conference, 1945. Factory statistics for 1945-46 and 1946-47 were compiled on this revised basis and for the greater part may be compared with those for the years since 1930-31.

The principal classes and sub-classes in the current classification of factories are as follows:—

CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.
Briquetting and Pulverised Coal.
Carbide.
Line, Plaster of Paris, Asphalt.
Fibrous Plaster and Products.
Murble, Slate, etc.
Cement.
Asbestos Cement Sheets, etc.
Other Cement Goods.

CLASS II.—BRICKS, POTTERY, GLASS, ETC.
Bricks and Tiles, Fire Bricks and Fire-clay
Goods.
Earthenware, China, Porcelain, Terra-cotta.
Glass (other than Bottles).
Glass Bottles.
Other.

CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINT, OILS, GREASE.

Industrial and Heavy Chemicals and Acids. Pharmaceutical and Toilet Preparations. Explosives.
White Lead, Paints, Varnish.
Oils, Mineral.
Oils, Animal.
Boiling Down, Tallow Refining.
Soap and Candles.
Chemical Fertilisers.
Inks, Polishes, etc.
Matches.
Other.

CLASS IV.—INDUSTRIAL METALS, MACHINES, IMPLEMENTS AND CONVEYANCES.

Smelting, Converting, Refining, and Rolling of Iron and Steel.

Foundries—Ferrous.

Plant, Equipment and Machinery.

Other Engineering.

Extracting and Refining of other Metals, Alloys.

Electrical Machinery, Cables and Apparatus, Construction and Repair of Vchicles. Ship and Boat Building and Repairing, Marine Engineering.

Cutlery and Small Hand Tools.
Agricultural Machines and Implements.
Non-Ferrous Metals—Rolling and Extrusion, Foundries, Casting, etc.
Galvanised Iron-working and Tinsmithing—Iron and Steel Sheets.
Sheet Metal Working, Pressing, and Stamping.
Pipes, Tubes and Fittings, Ferrous.
Wire and Wire Netting (including Nails).
Stoves, Ovens, and Ranges.
Gas Fittings and Meters.
Lead Mills.
Sewing Machines.
Arms, Ammunnition (excluding Explosives).
Wireless and Amplifying Apparatus.
Other Metal Works.

CLASS V.—PRECIOUS METALS, JEWELLERY,

Jewellery.
Watches and Clocks (incl. Repairs).
Electroplating (Gold, Silver, Chromium, etc.).

CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton Ginning.
Cotton Spinning and Weaving.
Wool—Carding, Spinning, Weaving.
Hosiery and other Knitted Goods.
Silk, Natural.
Rayon, Nylon, and other Synthe 1; Fibres.
Flax Mills.
Rope and Cordage.
Canvas Goods, Tents, Tarpaulins, etc.
Bags and Sacks.
Other.

# CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furriers and Fur Dressing.
Woolscouring and Fellmongery.
Tanning, Currying and Leather Dressing.
Saddlery, Harness, Whips.
Machine Belting.
Bags, Trunks, etc.
Other.

Tailoring and Ready Made Clothing,
Waterproof and Oilskin Clothing.
Dressmaking, Hemstitching.
Millinery.
Shirts, Collars, Underclothing.
Stays and Corsets.
Handkerchiefs, Ties, Scarves,
Hats and Caps.
Gloves.
Roots and Shoes (not rubber)

CLASS VIII .- CLOTHING (EXCEPT KNITTED).

Hats and Caps.
Gloves.
Boots and Shoes (not rubber).
Boot and Shoe Repairing.
Boot and Shoe Accessories.
Umbrellas and Walking Sticks.
Dyeworks and Cleaning (including Renovating and Repairing).
Other,

#### CLASS IX .- FOOD, DRINK, AND TOBACCO.

Flour Milling. Cereal Foods and Starch. Animal and Bird Foods, Chaffcutting and Corn Crushing. Bakeries (including Cakes and Pastry). Biscuits. Sugar Mills, Sugar Refining. Sugar Confectionery (including Chocolate). Jam, Fruit, and Vegetable Canning. Pickles, Sauces, Vinegar. Bacon Curing. Butter Factories, Cheese Factories. Condensed and Dried Milk Factories. Margarine. Meat and Fish Preserving. Condiments, Coffee, Spices, etc. Ice and Refrigerating. Salt Refining. Aerated Waters, Cordials, etc. Breweries. Distilleries. Wine Making. Cider and Perry Making. Malting. Bottling. Tobacco, Cigars, Cigarettes, Snuff. Dehydrated Fruit and Vegetables. Ice-cream. Sausage Skins. Arrowroot.

Other.

CLASS X.—WOOD WORKING AND BASKETWARE.

Sawmills.
Plywood Mills (incl. Veneers).
Bark Mills.
Joinery.
Cooperage.
Boxes and Cases.
Wood Turning, Wood Carving, etc.
Basketware and Wickerware, including Seagrass and Bamboo Furniture.
Perambulators.
Wall and Ceiling Boards (not Plaster or Cement).

CLASS XI.-FURNITURE, BEDDING, ETC.

Billiard Tables, Cabinet and Furniture
Making and Upholstery.
Bedding and Mattresses (not wire).
Furnishing Drapery, etc.
Picture Frames.
Blinds.
Other.

CLASS XII.—PAPER, STATIONERY, PRINTING, BOOKBINDING, ETC.

Newspapers and Periodicals.
Printing—Government.
Printing, General, incl. Bookbinding.
Manufactured Stationery.
Stereotyping and Electrotyping.
Process and Photo. Engraving.
Cardboard Boxes, Cartons, and Containers.
Paper Bags.
Paper Making.
Pencils, Penholders, Chalks, Crayons.
Other.

CLASS XIII.—RUBBER.
Rnbber Goods and Tyres Made.
Tyre Retreading and Repairing.

## CLASS XIV .- MUSICAL INSTRUMENTS.

Gramophones and Gramophone Records. Pianos, Piano-Players, Organs. Other.

CLASS XV.—MISCELLANEOUS PROPUCTS.
Linoleum, Leather Cloth, Oil Cloth, etc.
Bone, Horn, Ivory, and Shell.
Plastic Moulding and Products.
Brooms and Brushes.
Optical Instruments and Appliances.
Surgical and other Scientific Instruments and Appliances.
Photographic Material, including Developing and Printing.
Toys, Games, and Sports Requisities.
Artificial Flowers.
Other.

CLASS XVI.—HEAT, LIGHT, AND POWER, Electric Light and Power, Gas Works.

# FACTORY DEVELOPMENT SINCE 1901.

The following summary of certain principal items from statistical returns indicates the development of factories in New South Wales since 1901:-

Table 2	27.—Facto	ries in	New	South	Wales.
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	J	lable 27	.—Factorie	s in Nev	v South	wales.		
Year,	Establish- ments.	Number Em- ployed.*	Total Horse- power of Engines Installed.	Value of Land, Buildings, Plant and Machin- ery.	Salaries and Wages.†	Value of Materials and Fuel used.	Value of Output.	Value of Pro- duction.
$\begin{array}{c} 1901 \\ 1911 \\ 1920-21 \\ 1928-29 \\ 1930-31 \\ 1931-32 \\ 1935-36 \\ 1936-37 \\ 1937-38 \\ 1938-39 \\ 1939-40 \\ 1940-41 \\ 1941-42 \\ 1942-43 \\ 1943-44 \\ 1944-45 \\ 1945-46 \\ 1946-47 \end{array}$	No. 3,867 5,039 5,837 8,465 7,514 7,397 8,486 8,726 9,097 9,464 9,458 9,919 10,166 10,110 10,755 11,359 12,287 13,961	No. 61,764 † 104,551 † 139,211 180,756 127,605 126,355 193,200 208,497 224,861 228,781 236,974 265,751 298,245 315,534 323,032 314,678 310,870 343,119	H.P. 57,335 212,555 491,576 1,028,212 1,328,864 1,382,682 1,505,247 1,578,940 1,692,993 1,791,814 1,929,824 2,052,821 2,104,937 2,213,490 2,267,112 2,301,635 2,349,111 2,468,539	£000 13,699 25,651 59,544 102,741 100,688 96,741 101,459 111,694 120,047 123,741 130,420 135,627 145,745 152,782 154,098 152,869 157,129	£000 4,945 10,048 25,619 38,545 25,205 36,642 42,210 44,606 47,693 57,700 93,518 88,900 93,518 89,243 87,647 103,588	£000 15,637 34,914 94,713 111,671 68,960 67,783 105,224 116,058 129,715 128,153 142,589 170,873 200,698 219,907 236,412 227,784 213,913 259,401	£000 25,648 54,346 137,841 185,298 118,484 114,439 174,694 192,812 214,883 218,419 239,198 285,917 339,488 373,489 399,138 387,659 367,092 445,947	£000 10,011 19,432 43,128 73,627 49,524 46,653 69,470 90,266 96,609 115,044 138,790 153,582 162,726 159,875 153,179
		Ave	erage per facto	ry.	I	verage per	employee.	
		No.	H.P.	£	£	Æ	Æ	£
1901 1911 1920-21 1928-29 1930-31 1931-32 1935-36 1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46		18·3 20·7 23·8 21·4 16·9 17·1 22·8 23·9 24·7 24·2 25·0 26·8 29·3 31·2 30·0 27·7 25·3	17·0 42·2 84·2 121·5 176·2 186·9 177·4 181·0 186·1 189·3 204·0 207·0 210·0 210·0 210·0 210·0 210·0 210·0	4,069 5,090 10,201 12,137 13,347 12,778 11,956 11,874 12,278 12,685 13,083 13,148 13,341 14,416 14,204 13,566 12,441 11,956	80 100 190 221 207 189 179 182 208 224 261 289 297 292 291	253 334 680 618 540 537 545 557 560 602 643 673 697 732 724 710	415 520 990 1,025 928 903 904 925 955 1,009 1,076 1,138 1,184 1,236 1,232 1,212	162 186 310 407 388 369 368 379 395 407 433 465 487 504 508

<sup>\*</sup> Average number during whole year, including working proprietors, † Excluding drawings by working proprietors, ‡ Estimated.

1,300

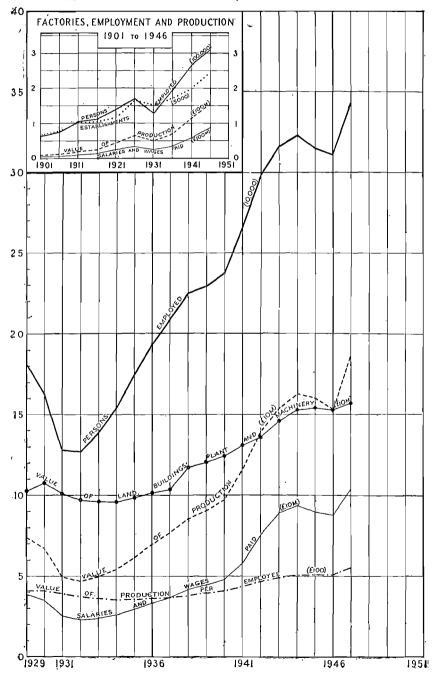
1946-47

Manufacturing industries expanded almost continuously from 1901 until 1928-29 but the depression caused a marked decrease in factory activity in each of the next three years. Sustained revival was initiated in 1932-33 under the stimuli of import restrictions imposed during the crisis and gradual economic recovery. The pre-depression level was surpassed by 1935-36 and in 1938-39 there were 999 more factories than in 1928-29, the number of employees was 48,025 (27 per cent.) greater, salaries and wages paid had increased by £6,061,000 (16 per cent.), and the value of production was £16,639,000 (23 per cent.) greater.

Further rapid expansion followed upon the outbreak of war in September, 1939, marked by the extension of existing and establishment of new industries to provide war supplies, equipment, and commodities previously imported from overseas. Industrial development accelerated upon the entry of Japan into the war in 1941. Between 1938-39 and 1943-44 (the wartime peak year), the number of factory workers increased by 41 per cent. to 323,032, the total amount of salaries and wages paid rose by 110 per cent.

to £93,518,000 and the average earnings per employee by 47 per cent. to £297 per annum, and the value of production grew from £90,266,000 to £162,726,000 (an increase of 80 per cent.).





Factory activity was retarded by the cessation of war production and the transition of industry to a peace-time basis, but in 1945-46 it remained far above the pre-war level. Between 1943-44 and that year, there were decreases only of 4 per cent. in the number of employees and 6 per cent. in salaries and wages paid and in the value of production, and the number of establishments was 11 per cent. greater.

In 1946-47, although the process of readjustment was not completed, factory activity expanded to a new record level and the number of employees rose to 343,119, salaries and wages paid amounted to £103,588,000, and the value of production advanced to £186,546,000. Compared with 1938-39 and 1943-44, there were increases of 50 per cent. and 6 per cent., respectively, in the number of employees, 132 per cent. and 11 per cent. in the amount of salaries and wages paid, and 107 per cent. and 15 per cent. in the value of production.

# GOVERNMENT FACTORIES AND WORKSHOPS.

The foregoing statement includes particulars of factories and workshops under Government control in New South Wales. These include aircraft and munitions factories, railway and tramway workshops, post office workshops, electric light and power works, printing works, manufacture of byproducts at abattoirs, dockyards, and factories for the production of clothing and school furniture. In Government factories not engaged in production of war supplies, repair work formed a large proportion of the work done.

Gas works and electricity undertakings of the local governing bodies are classified as private and not Government establishments.

The following table shows the details of the operations of the establishments under the control of the State and Commonwealth Governments separately from those conducted by private enterprise:—

Table 28.-Government and Private Factories.

Year ended 30th June,	Estab- lish- ments.	of Em during	Number ployees g Period eration.	+		Build	Value of Plant and Machin- ery,	Materiale	of	Value of Production.
	No.	No.	No.	£000	£000	£000	£000	£000	£000	£000
			G	OVERNME	ENT FACT	ORIES.				
1937	, 70	14,810	394	3,393	43	5,547	6,640	3,102	8,006	4,904
1938	71	15,159	478	3,715	54	5,618	6,785	3,379	8,574	5,195
1939	72	15,764	442	4,045	53	5,736	7,512	3,648	9,266	5,618
1940	72	16,757	469	4,471	58	5,757	7,951	3,897	10,207	6,310
1941	78	20,683	547	5,926	73	5,978	8,647	4,616	12,734	8,118
1942	118	27,263	1,148	9,062	182	6,745	9,437	6,502	18,586	12,084
1943	141	32,173	6,078	12,000	1,288	12,784	12,232	11,588	28,305	16,717
1944	146	32,335	8,330	12,216	1,818	16,322	13,464	12,148	29,414	17,266
1945	135	29,415	4,574	10,837	1,029	16,075	14,303	9,358	24,231	14,873
1946	101	27,205	1,957	9,123	371	12,043	12,411	8,689	21,189	12,500
1947	100	26,647	1,378	9,128	280	7,718	12,118	8,934	21,165	12,231
				PRIVATI	FACTOR	RIES.				
1937	8,656	137,254	156.039	28,058	5,149	46,082	45,339	112,957	184,806	71,849
1938	9,026	149,232	59,992	32,532	5,908	48,854	50,438	126,336	206,309	79,973
1939	9,392	153,749	61,845	34,226	6,282	51,618	55,181	124,505	209,153	84,648
1940	9,386	157,420	64,706	36,337	6,827	53,183	56,850	138,692	228,991	90,299
1941	9,841	175,262	71,388	43,614	8,147	55.909	59,886	166,256	273,182	106,926
1942	10,048	192,750	80,959	55,788	10,725	58,270	61,175	194,196	320,902	126,708
1943	9,969	193,682	86,384	62,555	13,057	59,839	60,890	208,319	345,184	136,865
1944	10,609	196,510	88,981	64,871	14,613	62,655	60,340	224,264	369,724	145,460
1945	11,224	196,057	87,141	63,098	14,279	64,984	58,736	218,426	363,428	145,002
1946	12,186	203,809	82,803	64,257	13,896	68,265	60,150	205,224	345,903	140,679
1947	13,861	232,443	87,116	77,995	16,185	74,177	63,116	253,167	424,782	174 315

<sup>\*</sup> Each Government Railway Workshop is counted as a separate establishment.
† Excluding drawings of working proprietors. 
‡ For the basis of estimation, see page 58.

Government factories expanded rapidly during the war years up to 1943-44. In 1943-44, employees numbered 40,665, salaries and wages paid amounted to £14,034,000, and the value of production was £17,266,000, representing increases of 151 per cent., 242 per cent., and 207 per cent., respectively, over the pre-war (1938-39) level. Production of munitions and other war supplies was the main source of the development and although it was curtailed progressively after that year, Government factory activity remained materially greater in 1946-47 than in 1938-39. In 1946-47, there were 28,025 employees in Government factories (73 per cent. more than in 1938-39), salaries and wages amounted to £9,408,000 (an increase of 130 per cent.), and the value of production was £12,231,000 (an increase of 118 per cent.).

War-time expansion was proportionately greater in Government than in privately-owned factories. In 1938-39, 7.0 per cent. and in 1943-44, 12.5 per cent. of all factory employees were on the payrolls of Government factories, and these employees received, in the respective years, 9.2 per cent. and 15 per cent. of total salaries and wages paid. Government factories contributed 6.2 per cent. of the total value of production in 1938-39, 10.6 per cent. in 1943-44 and 1945-46, and 6.6 per cent. in 1946-47.

A comment on the conversion of Government war-time factories to peace-time uses is given on page 54 of this volume.

# FACTORIES ACCORDING TO CLASS OF INDUSTRY.

In the following table statistics of factories in New South Wales during the years ended June, 1939 and 1947 are summarised according to the class of industry:—

Table 29.—Factories—Classes of Industry	Table	29	-Factories	-Classes	of	Industry
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							_	
Class of Industry.	Establishments.	Aver Ei	age Num nployed.	ber	Salaries and Wages exclusive of Draw- ings of Working Proprietors.	Value of Materials and Fuel Used.	Value of Output.	Value of Production.
	Est	Males.	Females.	Total.	Salaries exclusiv ings of Prof	Ä	Valt	
					£000	£000	£000	£000
	1038-30	_New 8	воцти. Т	ALES				
Treatment of Non-metalliferous Mine	1000 00			2020				
and Quarry Products	204	4,453	76	4,529	1,107	3.142	5,556	2,414
Bricks, Pottery, Glass	220	8,004	308	8,312	1,801	1,595	4,657	3,062
Chemicals, Paint, Oil, Grease	290	5,468	2,719	8,187	1,694	7,407	13,801	6,394
Industrial Metals, Machines,		,				·		•
Conveyances	2,634	77,512	4,940	82,452			79,833	31,691
Precious Metals, Jewellery	86	821	158	979	166	171	444	273
Textiles and Textile Goods (not dress)	159	5,736	9,353	15,089	2,097	5,512	9,065	3,553
Skins, Leather (not clothing or	010	3,390	916	4,306	820	0.000	4,199	1,277
footwear)	212		23,861	32.019	3,914	2,922 6,269	12,496	6,227
Clothing Food, Drink, Tobacco	1,623 1,715	8,158 18,857	9,657	28,514		34.967	51,073	16,106
Woodworking Bodystman	860	9,647	348	9,995	1,967	4,801	8,047	3,246
Turniture Dodding	351	4,915		6,140	1,170	2,186	3,997	1,811
Paper, Printing	6.85	11,872	5,418	17,290	3,529	5,398	11,936	6,538
Rubber	96	2,339	1,199	3,588	736	1,977	2,936	959
Musical Instruments	13	212	74	286	56	47	139	92
Miscellaneous Products	167	2,652		3,981		1,029	2,163	1,134
Heat, Light, Power	149	3,136	28	3,164		2,558	8,047	5,489
Total , ,	9,464	167,172	61,609	228,781	44.606	128,153	£18 419	90,266

<sup>\*</sup> Average during whole year, including working proprietors.

Table 29 .- Factories-Classes of Industry-continued.

Treatment of Non-metalliferous Minf and Quarry Products   152   2,625   95   2,720   888   1,709   3,069   1,360   Chemicals, Paint, Oil, Grease   428   8,390   4,383   12,728   4,070   17,778   29,732   11,954   11,955   11,9									
Treatment of Non-metalliferous Mins and Quarry Products   152   2,625   95   2,720   888   1,709   3,069   1,366   360	Class of Industry.	ablishments.	Ave: E	rage Nun mployed	aber .*	ries and Wages isive of Draw- s of Working Proprietors.	Value of aterials and fuel Used.	ue of Output.	Value of Production.
Treatment of Non-metalliferous Mine and Quarry Products		Est	Males.	Females	. Total.	Salar exch ing	X"	Val	
Bricks, Pottery, Glass 152 2,625 487 7,137 2,294 2,744 6,447 3,366 Chemicals, Paint, Oil, Grease 428 8,390 4,338 12,728 4,070 17,778 29,732 11,954 Industrial Metals, Machines, Conveyances 2,661 94,977 10,625 105,602 34,611 45,896 95,613 49,717 Precious Metals, Jewellery 185 1,530 269 1,799 513 561 1,406 845 836 17 8,575 16,304 4,151 11,950 19,784 7,835 8kins, Leather (not clothing or footwear) 289 4,370 2,045 6,415 1,965 6,606 9,919 3,313 Clothing 1,984 10,690 26,884 37,524 8,542 14,348 28,007 13,659 Food, Drink, Tobacco 992 16,347 9,243 25,590 7,644 4,143 82,007 13,659 Woodworking, Basketware 514 6,994 463 7,457 2,266 6,486 10,114 3,628 Furniture, Bedding 860 3,744 690 4,434 1,643 5,168 7,430 2,267 Misscellaneous Products 381 5,194 2,772 7,986 2,110 3,207 6,963 3,768 Heat, Light, Power 9,006 189,569 73,312 262,881 79,432 176,382 316,581 140,199 Treatment of Non-metalliferous Mine and Quarry Products 298 5,351 159 5,570 1,866 2,110 3,207 6,963 3,768 Ficks, Pottery, Glass 290 1,579 4,469 14,268 4,621 10,558 32,396 12,838 10,481 Metals, Machines, Conveyances 4,066 130,300 13,352 143,652 47,444 94,185 168,721 74,536 Precious Metals, Jewellery 201 1,579 285 1,864 523 5,747 14,262 24,057 9,765 8kins, Leather (not clothing or footwear) 201 1,579 285 1,864 523 5,747 14,292 24,057 9,765 8kins, Leather (not clothing or footwear) 201 1,579 285 1,864 523 5,747 14,292 24,057 9,765 8kins, Leather (not clothing or footwear) 201 1,579 285 1,864 523 5,747 14,292 24,057 9,765 8kins, Leather (not clothing or footwear) 21,869 25,869 78,312 262,881 79,432 176,382 316,581 140,199 14,632 277 14,435 14,45		1946	-47-—M	TROPOLI	S.	£600	£000	£000	£000
Bricks, Pottery, Glass 152 2,625 487 7,137 2,294 2,744 6,447 3,366 Chemicals, Paint, Oil, Grease 428 8,390 4,338 12,728 4,070 17,778 29,732 11,954 Industrial Metals, Machines, Conveyances 2,661 94,977 10,625 105,602 34,611 45,896 95,613 49,717 Precious Metals, Jewellery 185 1,530 269 1,799 513 561 1,406 845 836 17 8,575 16,304 4,151 11,950 19,784 7,835 8kins, Leather (not clothing or footwear) 289 4,370 2,045 6,415 1,965 6,606 9,919 3,313 Clothing 1,984 10,690 26,884 37,524 8,542 14,348 28,007 13,659 Food, Drink, Tobacco 992 16,347 9,243 25,590 7,644 4,143 82,007 13,659 Woodworking, Basketware 514 6,994 463 7,457 2,266 6,486 10,114 3,628 Furniture, Bedding 860 3,744 690 4,434 1,643 5,168 7,430 2,267 Misscellaneous Products 381 5,194 2,772 7,986 2,110 3,207 6,963 3,768 Heat, Light, Power 9,006 189,569 73,312 262,881 79,432 176,382 316,581 140,199 Treatment of Non-metalliferous Mine and Quarry Products 298 5,351 159 5,570 1,866 2,110 3,207 6,963 3,768 Ficks, Pottery, Glass 290 1,579 4,469 14,268 4,621 10,558 32,396 12,838 10,481 Metals, Machines, Conveyances 4,066 130,300 13,352 143,652 47,444 94,185 168,721 74,536 Precious Metals, Jewellery 201 1,579 285 1,864 523 5,747 14,262 24,057 9,765 8kins, Leather (not clothing or footwear) 201 1,579 285 1,864 523 5,747 14,292 24,057 9,765 8kins, Leather (not clothing or footwear) 201 1,579 285 1,864 523 5,747 14,292 24,057 9,765 8kins, Leather (not clothing or footwear) 201 1,579 285 1,864 523 5,747 14,292 24,057 9,765 8kins, Leather (not clothing or footwear) 21,869 25,869 78,312 262,881 79,432 176,382 316,581 140,199 14,632 277 14,435 14,45	Treatment of Non-metalliferous Mine			l	ſ	1	1	1	I
Industrial   Metals   Machines   Conveyances   Conveyance   Co	and Operry Products								1,360
Conveyances	Chemicals, Paint, Oil, Grease								11,954
Textiles and Textile Goods (not diess)	Industrial Metais, Machines, Conveyances	2,661			105,602	34,611			40,717
Skins   Leather (not clothing or footwear)	Precious Metals, Jewellery				1,799 16 304	513 4 151			845 7 834
Clothing	Skins, Leather (not clothing or		,		· '	,	, ,	· '	
Food   Prink   Tobacco   592   16,347   9,243   25,590   7,631   40,789   59,618   18,829   Mondworking   Basketware   514   6,994   4483   7,457   7,296   6,486   10,114   3,628   7,245	(C) - (1-1 '				37 524	8 512			13 659
Furniture, Bedding	Food, Drink, Tobacco			9.243	25,590	7.631			18,829
Paper, Printing	Woodworking, Basketware	514	6,994	463		2,266	6,486	10,114	3,628
Ruibber         60         3,744         600         4,434         1,643         5,168         7,430         2,202           Musical Instriments         1.8         470         115         585         185         167         439         2,72           Miscellaneous Products         381         5,194         2,772         7,966         2,110         3,207         6,963         3,756           Heat, Light, Power         9         2,777         23         2,800         1,030         4,146         9,828         5,682           Total         9,006         189,569         73,312         262,881         79,432         176,382         316,581         140,199           Treatment of Non-metalliferous Mine and Quarry Products         298         5,351         159         5,510         1.856         5,194         8,701         3,507           Bricks, Pottery, Glass         2298         5,351         159         5,510         1.856         5,194         8,701         3,507           Chemicals, Paint, Oil, Grease         2298         4,661         130,300         14,268         4,621         10,558         32,306         12,838           Industrial Metals, Jewellery         201         1,579<	Furniture, Bedding								
Miscell Instruments         18         470         115         585         185         167         439         272           Miscellaneous Products         381         5,194         2,772         7,966         2,110         3,207         6,968         3,756           Heat, Light, Power         9         2,777         23         2,800         1,030         4,146         9,928         5,685           Total         9,006         189,569         73,312         262,881         79,432         176,382         316,581         140,199           Total         9,006         189,569         73,312         262,881         79,432         176,382         316,581         140,199           Total         9,006         189,569         73,312         262,881         79,432         176,382         316,581         140,199           Total         20         8,560         582         9,148         2,903         3225         7,871         4,646           Chemicals, Paint, Oil, Grease         479         9,799         4,469         14,268         4,621         10,558         32,366         12,838           Industrial Metals, Agenetics         4,066         130,300 <td< td=""><td>25 . 3 1 2 -</td><td></td><td></td><td>9,575</td><td></td><td></td><td></td><td></td><td></td></td<>	25 . 3 1 2 -			9,575					
Miscellaneous Products   381   5,194   2,772   7,966   2,110   3,207   6,963   3,756	Section 1 To the section of the sect								
Heat, Light, Power   9   2,777   23   2,800   1,030   4,146   9,828   5,682     Total   9,006   189,569   73,312   262,881   79,432   176,382   316,581   140,199	201 11 72 1								3,756
Treatment of Non-metalliferous Mine and Quarry Products   298   5,351   159   5,510   1.856   5,194   8,701   3,507						1,030			5,682
Treatment of Non-metalliferous Mine and Quarry Products   298   5,351   159   5,510   1.856   5,194   8,701   3,507     Bricks, Pottery, Glass   230   8,560   582   9,148   2,903   3,225   7,871   4,646     Chemicals, Paint, Oil, Grease   479   9,799   4,469   14,268   4,621   10,558   32,396   12,838     Conveyances   4,066   130,300   13,352   143,652   47,444   94,185   168,721   74,536     Brecious Metals, Jewellery   201   1,579   285   1,864   523   572   1,447   845     Textiles and Textile Goods (not dress)   321   9,507   11,238   20,745   5,247   14,292   24,057   9,765     Skins, Leather (not clothing or footwear)   2,883   12,393   32,075   4,44   9,710   16,281   31,883   15,602     Food, Drink, Tobacco   2,169   25,190   11,392   36,582   10,807   58,271   83,380   25,109     Woodworking, Basketware   1,379   14,632   760   15,392   4,315   10,382   17,469   7,121     Furniture, Bedding   475   4,930   1,168   6,104   1,752   3,563   6,444   2,880     Rubber   138   4,027   782   4,800   1,726   5,310   7,719   2,400     Mustel Instruments   18   470   115   585   185   167   438   272     Miscellaneous Products   444   5,405   2,879   8,284   2,179   3,322   7,177   3,556     Heat, Light, Power   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Textiles and Textile Goods (not dress)   13,803   13,603   1,602     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Heat, Light, Power   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,502   1,716   5,825   13,861   8,036     Rubber   138   4,468   44   4,5	Total	9,006	189,569	73,312	262,881	79,432	176,382	316,581	140,199
Annie   Anni		1946-47	—New 8	SOUTH W	ALES.				
Bricks, Pottery, Glass   230   8,560   582   9,148   2,903   3,225   7,871   4,646   Chemicals, Paint, Oil, Grease   479   9,799   4,469   14,268   4,621   10,558   32,396   12,838   Industrial Metals, Machines, Conveyances   4,066   130,300   13,352   143,652   47,444   94,185   168,721   74,536   Textiles and Textile Goods (not dress)   321   9,507   11,238   20,745   5,247   14,292   24,057   9,765   Skins, Leather (not clothing or footwear)   330   4,743   2,075   6,818   2,082   7,298   10,763   3,465   2,669   2,169   25,910   11,362   3,4652   4,446   9,716   16,281   31,883   15,602   16,6	Treatment of Non-metalliferous Mine		ı			1		1	
Chemicals, Paint, Oil, Grease         479         9,799         4,469         14,268         4,621         10,558         32,306         12,838           Industrial Metals, Machines, Conveyances         4,066         130,300         13,352         143,652         47,444         94,185         168,721         74,536           Precious Metals, Jewellery         201         1,579         285         1,864         523         572         1,457         865           Textiles and Textile Goods (not dress)         321         9,507         11,288         20,745         5,247         14,202         24,057         9,768           Slsins, Leather (not clothing or footwear)         2,583         12,393         32,075         6,818         2,082         7,208         10,763         3,465           Clothing         2,262         7,108         11,392         30,682         10,807         58,271         83,880         25,609           Woodworking, Basketware         15,379         14,692         760         15,392         4,315         10,388         17,459         7,121           Furniture, Bedding         475         4,930         1,168         6,104         1,752         3,563         6,486         12,000         23,35         1,692	and Quarry Products	298	5,351				5,194	8,701	3,507
Industrial   Mētals, Machines, Conveyances   4,066   130,300   13,352   143,655   47,444   94,185   168,721   74,536   78,536	Bricks, Pottery, Glass		8,560						
Conveyances	Unemicals, Paint, Oil, Grease	479	9,799	4,409	14,268	4,621	19,558	32,396	12,838
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Conveyances	4.066	130,300	13,352	143,652	47,444	94,185	168,721	74,536
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Precious Metals, Jewellerv	201	1.579	285	1,864	523		1,487	865
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Textiles and Textile Goods (not dress)	321	9,507	11,238	20,745	5,247	14,292	24,057	9,765
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		990	1712	2.075	e or o	9.039.	7 208	10.763	9.165
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				32.676					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									25,109
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Woodworking, Basketware	1,379							
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Furniture, Bedding				6,104				
Musical Instruments      18     470     115     585     185     167     43!     272       Miscellaneous Products      414     5,405     2,879     8,284     2,179     3,322     7,17!     3,56       Heat, Light, Power      138     4,458     44     4,502     1,716     5,825     13,861     8,036					20,387 3 800				
Misrellaneous Products        414       5,405       2,879       8,284       2,179       3,322       7,171       3,556         Heat, Light, Power        138       4,468       44       4,502       1,716       5,825       13,861       8,036									
Heat, Light, Power 138 4,458 44 4,502 1,716 5,825 13,861 8,036	Miscellaneous Products	414	5,405	2,879	8,284	2,179	3,322	7,17	3,856
Total 13,961 255,733 87,886 343,119 103,588 259,401 445,947 186,546	TT4 IIII Device	138	4,458	44	4,502	1,716	5,825	13,861	8,036
	Total	13,961	255,733	87,386	343,119	103,588	259,401	445,947	186,546

<sup>\*</sup> Average during whole year, including working proprietors.

Factories engaged in the production of industrial metals, machines, etc. comprise the most important group of secondary industries in New South Wales. In 1946-47, these factories employed 143,652 persons, or 42 per cent. of the total number working in factories. Textile and clothing factories rank next in importance and employed 65,214 (19 per cent. of factory workers). There were 36,582 persons (11 per cent. of those in factories) occupied in the food, drink, and tobacco class, 14,268 (4 per cent. of employees) in the manufacture of chemicals, paints, etc., and 4,502 (1 per cent.) in the provision of heat, light, and power.

Between 1938-39 and 1946-47, the average number working in factories increased 114,338 or by 50 per cent. Metal and machinery works accounted for 54 per cent. of this increase, and employment in them rose by 74 per cent. during the period. Other noteworthy increases were 38 per cent. in textile and clothing factories, 28 per cent. in food, drink and tobacco factories, 42 per cent. in gas and electricity works, and 74 per cent. in factories manufacturing chemicals, paints, etc.

There were significant changes in the relative importance of certain groups of industries (measured by the average number employed) between 1938-39 and 1946-47. In the latter year, metal and machinery works employed 42 per cent. of all persons in factories, compared with 36 percent. before the war. The proportion of the total in most other groups declined during the period. Textile and clothing factories, for example, embraced 19 per cent. of all persons employed in factories in 1946-47 compared with 21 per cent. in 1938-39, and the proportion in food and drink factories decreased from 12 per cent. to 11 per cent.

Of the total value of production in factories in 1946-47, metal and machinery works contributed 40 per cent., textile and clothing establishments 13.6 per cent., food and drink factories 13.4 per cent., and chemical and paint works 7 per cent.

#### GEOGRAPHICAL DISTRIBUTION OF FACTORIES.

The operations of the factories in each statistical division of New South Wales in the years 1938-39 and 1946-47 are summarised in the following table to provide a measure of the spread of secondary industries over the State:—

Table 30.—Factories in Statistical Divisions	Table	30.—I	Factories	in	Statistical	Divisions
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
Metropolis	Division.		No. of Estab- lishments.	Average Number of Employees.*	Value of Land and Buildings and Fixtures.	Value of Plant and Machinery.	Salaries and Wages Paid.		Value of Output.	Value of Production.
Balance of Cumberland							£000	£000	£000	£000
Metropolis 9,006 265,505 63,675 47,084 79,432 176,382 316,581 140,199 Balance of Cumberland 371 6,604 1,341 1,238 1,762 4,360 7,234 2,874 North Coast 635 6,410 1,578 2,273 1,652 6,654 9,694 3,040 Hunter and Manning— Greater Newcastle 467 24,469 3,985 7,085 8,465 29,089 44,625 15,536 Balance 587 9,046 1,635 2,237 2,365 5,001 9,096 4,005 South Coast— Wollongong-Port Kembla 201 9,488 2,074 5,618 3,205 15,202 22,307 7,105 Balance 366 2,943 760 778 717 1,907 3,283 1,376 Northern Tableland 198 1,308 329 309 296 638 1,187 549 650 Central Tableland 183 1,393 470 440 468 864 1,889 1,025 North-western Slope 187 1,362 470 440 468 864 1,889 1,025 North-western Slope 187 1,656 476 292 376 960 1,583 623 South-western Slope 241 1,686 476 292 376 960 1,583 623 South-western Slope 453 4,489 1,270 818 1,044 3,238 5,088 1,850 Northern Plain 105 6,66 163 153 164 358 662 304 Central Plain 93 418 95 117 84 121 264 143 Riverlna 282 2,248 711 556 625 1,792 2,892 1,100 Western Division 124 1,306 327 1,169 532 8,199 11,548 3,349	Balance of Cumberland North Coast Hunter and Manning South Coast Northern Tableland Central Tableland Southern Tableland North-western Slope Central-western Slope South-western Slope Northern Plain Central Plain Western Division Western Division		149 443 701 355 157 321 147 156 178 348 102 80 240 113	3,141 4,179 19,162 7,400 865 3,712 1,013 946 2,528 658 373 1,662 1,252	613 1,288 4,282 2,373 225 1,313 342 273 285 818 134 81 534 366	738 1,896 9,042 8,613 203 1,537 480 281 262 587 123 79 359 1,355	524 751 4,805 1,620 131 725 219 178 157 408 107 54 281	923 5,701 20,334 9,554 282 1,320 288 482 344 1,306 190 60 774 3,418	1,802 7,186 30,155 13,830 532 2,793 696 825 658 2,110 373 168 1,319 4,721	879 1,485 9,821 4,276 1,473 408 343 314 804 183 108 545 1,303
Metropolis 9,006 265,505 63,675 47,084 79,432 176,382 316,581 140,199 Balance of Cumberland 371 6,604 1,341 1,238 1,762 4,360 7,234 2,874 North Coast 635 6,410 1,578 2,273 1,652 0,664 9,604 3,040 Munter and Manning— Greater Newcastle 467 24,469 3,985 7,085 8,465 29,089 44,625 15,536 Balance 587 9,046 1,635 2,237 2,365 5,001 9,096 4,005 South Coast— Wollongong-Port Kembla 201 9,488 2,074 5,618 3,205 15,202 22,307 7,105 Balance 366 2,943 760 778 717 1,907 3,283 1,378 Northern Tableland 198 1,308 329 309 296 638 1,187 549 600 1,000 1					1946-194	<u> </u> 7.		l	ļ	
Balance of Cumberland         371         6,604         1,341         1,238         1,762         4,360         7,234         2,874           North Coast           635         6,410         1,578         2,273         1,652         6,664         9,694         3,040           Hunter and Manning—         Greater Newcastle          467         24,469         3,985         7,085         8,465         29,089         44,625         15,536           Balance           587         9,046         1,035         2,237         2,365         5,001         9,06         4,005           South Coast—          366         2,943         760         778         717         1,907         3,283         1,376           Wollongong-Port Kembla         201         9,488         2,074         5,618         3,205         15,202         22,307         7,105           Balance           366         2,943         760         778         717         1,907         3,283         1,376           Northern Tableland          462         7,710         2,573         4,726         2,065         3,651         6,					1040-104	' · · · · · · · · · · · · · · · · · · ·				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Balance of Cumberland North Coast Hunter and Manning— Greater Newcastle Balance		371 635 467	6,604 6,410 24,469	1,341 1,578 3,985	1,238 2,273 7,085	1,762 1,652 8,465	4,360 6,654 29,089	7,234 9,694 44,625	2,874 3,040 15,536
10tai 13,001   347,309   31,300   70,204   103,388   239,401   443,947   186,546	Wollongong-Port Keml Balance Northern Tableland Central Tableland Southern Tableland North-western Slope Central-western Slope South-western Slope Northern Plain Central Plain Riverlna Western Division		366 198 462 183 187 241 453 105 93 282 124	2,943 1,308 7,710 1,936 1,362 1,686 4,489 656 418 2,248 1,306	760 329 2,573 470 433 476 1,270 163 95 711 327	778 309 4,726 440 341 292 818 153 117 556 1,169	717 296 2,065 468 336 376 1,044 164 84 625 532	1,907 638 3,651 864 895 960 3,238 358 121 1,792 8,199	3,283 1,187 6,527 1,889 1,583 5,088 662 264 2,892 11,548	1,376 549 2,876 1,025 592 623 1,850 304 143 1,100 3,349
	Total	•••	13,961	347,584	81,895	75,234	103,588	259,401	445,947	186,546

<sup>\*</sup> Average during period of operation (including working proprietors).

The secondary industries of New South Wales are located mainly in the metropolitan area, where 65 per cent. of the total number of factories were situated in 1946-47. These factories absorbed 76 per cent. of the total number of factory employees and contributed 75 per cent, of the total value of production. Other important manufacturing centres are adjacent to the major coal-fields—at Newcastle in the Hunter and Manning Division, at Wollongong-Port Kembla in the South Coast Division, and at Lithgow in the Central Tablelands Division. Factories in these areas in 1946-47 employed approximately 12 per cent, of total factory workers and accounted for approximately 14 per cent, of the total value of production. At Broken Hill, in the Western Division, the mining of silver-lead-zinc ore deposits has given rise to a number of ore-treatment plants and other subsidiary factories.

Between 1938-39 and 1946-47, the number working in factories in New South Wales increased by 50 per cent. Although the number of workers in the metropolis increased by only 45 per cent. during the period, the metropolitan predominance of secondary industries was not lessened materially. In a number of divisions, the proportionate increase in factory employment exceeded the overall average for the State. Thus, in the Hunter and Manning and South Coast divisions, the respective rises of 75 per cent. and 68 per cent. in the number employed in factories reflect the development of heavy and textile and clothing industries. The other noteworthy increases of 110 per cent. in the Balance of Cumberland, of 108 per cent. in the Central Tablelands, and of 78 per cent. in the Central- and South-western Slopes divisions were the results partly of the establishment of war-time factories and annexes, partly of the governmental policy of decentralisation of industry, and partly of scarcity of labour in the metropolitan area. In the case of a number of divisions, factory development did not keep pace with the overall average for the State.

The following table shows the factories and employees in each statistical division in 1946-47 grouped according to class of industry: Table 31.—Factories—Classes in Statistical Divisions, 1946-47.

Industrial Metals Machines, etc. Chemicals, Paint Oil, Grease. Bricks, Pottery, Glass. Printing Woodworking. etc. Leather Classes. Drink, Heat, Light Power. Total. Division. Furniture. Clothing. Paper, Skins, Food, Other ( NUMBER OF ESTABLISHMENTS, Cumberland-9,006 Metropolis 428 2,661 289 1,984 992 514 391 538 796 Balance North Coast 13 3 95 139 53 57 371 635 15 13 66 155 9 17 32 36  $\frac{54}{198}$ 13 10 Hunter and Manning-Greater Newcastle 8  $\frac{147}{148}$  $\frac{92}{62}$  $\frac{38}{153}$  $\frac{16}{21}$ 30 16 73 3  $1\overset{1}{0}$ Balance 1ŏ 148 587 South Coast— Wollongong— Pt. Kembla  $\frac{44}{32}$ 4 5 4 1 3  $\frac{3}{6}$ 201 Balance 2 93 93 89 14  $1\overline{2}$ 16 366 Tablelands Northern  $^{11}_{3}$ 6 16 7 8 15 7 50 18 52 198 Central 5 119 66 26 127 Southern ž š 183 Western Slopes-North 4 5 1 1 2 8 187 11 19 Central 1<u>1</u> 3 20 63 South 13 142 2 6ŏ 52 112 453 Plains Northern 33 6 2 7 2 1 5 23 21 105 6 1 2 1 8 12 Central 17  $\overline{15}$ 93 ... Riverina 105 20 11 1 15 7 282 80 25

<u>13</u>

475

722

40

2,583 2,169 1,379

8

138 1,069

38

4,066

321

330

Western Division

Total

230

479

Table 31.—Factories—Classes in Statistical Divisions, 1946-47—continued.

Division.	Bricks Pottery, Glass.	Chemicals, Paint, Oil, Grease.	Industrial Metals, Machines, etc.	Textiles.	Skins, Leather.	Clothing.	Food, Drink, etc.	Woodworking.	Furniture, etc.	Paper, Printing.	Heat, Light, Power.	Other Classes.	Total.
			A	VERAG	E NUA	iber E	MPLOYI	ED.*					
Cumberland-			$\overline{}$	ı	ī	1	ı	1	1			l	
	7,197	12,933	106,758	16,322	6.469	38,065	25.740	7,514	5,502	18.491	2,800	17,714	265,505
Balance	450				247	480			28	7148	l '	384	6,604
	73	39	1,085	129		343	1,960	2,282	57	199	61	182	6,410
Hunter and			'				'			İ	ĺ		
Manning													
Greater		1	I		ı	l	1		I		I	I	l

 $24,469 \\ 9,046$ Newcastle.. 1,437 1,090530 593 254 17,980 397 1.067 325 205 508 Balance 332 295 2.126 945 16 1,634 1,954 79 225 137 South Coast-Wollongong-Pt. Kembla 9,488 202 Rolance 236 5 538 107 18 326 560 689 18 62 44 340 2,943 Tablelands. Northern .308 349 139 246 323 69  $\frac{1,308}{7,710}$ Central 1.270 442 162 207 250 88 478 2.89433 902 422 562 Southern 25 562 412 20 458 161131 51 44 1,936 Western Slones-North 389 14 138 1,362 46 34  $\frac{79}{177}$ Central 135 160 50 1 686 995 1,134 8 28 60 136 4,489 South 12 782 602 478 Plains— Northern 31 656 203 123 217 18 16 5 5 14 58 2 25 167 ٠. . . . ... 3 7 1,222 205 2.248 6 7 178 84 Rivering 34 505 75 50 1,306 Western Division 8 134 695 14,485 145,138 20,892 6,901 45,235 37,245 15,808 6,261 20,489 4,529 21,347 347,584 Total

Factories manufacturing chemicals, paints, oils, and grease are concentrated mainly in the metropolis and are of some importance in the Hunter and Manning, South Coast and Central Tablelands divisions. The increase in the proportion of workers in these factories in the Central Tablelands between 1938-39 and 1946-47 reflects the establishment of war-time factories which were later converted to peace-time production. The spread over the State of factories in the metals, machines, etc., group did not vary materially during this period. The proportion employed in the Metropolitan, Balance of Cumberland, and Central Tablelands divisions increased, with the continuing development of this group of industries, but the proportion in most other divisions declined, although in Hunter and Manning the actual number of employees increased substantially. The metropolitan predominance of textile mills and clothing factories lessened significantly, and during and since the war, a number of factories has been established in country areas and government war-time factories have been converted for the manufacture of textiles and clothing. In the case of textile mills, the proportion of factory workers in the Metropolis declined from 88 per cent. in 1938-39 to 78 per cent. in 1946-47 and small decreases were evident in the Balance of Cumberland and Central Tablelands divisions, while the proportion in Hunter and Manning, Southern Tablelands, and Southwestern Slopes increased. In the case of clothing factories, the proportion employed in the Metropolis fell from 95 per cent. to 84 per cent. and there were increases in the Hunter and Manning, South Coast, Central Tablelands, and South-western Slopes divisions. The distribution of factories in the food, drink, and tobacco class varied little during this period.

Only the relief of the pattern of factory activity in the Metropolis changed between 1938-39 and 1946-47. The relative importance of the metals and

<sup>\*</sup> Average number during period of operation (including working proprietors).

machinery and chemicals, etc. groups was increased, but proportionately fewer workers were employed in 1946-47 in factories in the bricks, etc., textiles, clothing, food, etc., and paper and printing groups. Textile mills absorbed the greatest proportion of workers in the Balance of Cumberland division in 1938-39, but in 1946-47 metal and machinery workshops were most important, with textile mills ranking second, and there were significant gains in the proportion occupied in the manufacture of clothing, chemicals, etc., and food, etc. Woodworking displaced food, drink, and tobacco as the chief class in the North Coast division; proportionately more workers were employed in textile and clothing factories and proportionately fewer in metal and machinery workshops. In the Hunter and Manning and South Coast divisions, the dominance of factories producing metals, machines, etc. was lessened only slightly between 1938-39 and 1946-47, but the importance of textile and clothing factories increased appreciably and the proportion of workers engaged in the manufacture of chemicals, ctc. and food, etc. declined.

The following table shows the number of factories and the average number of factory employees in each metropolitan municipality and in the County of Cumberland in the years 1945-46 and 1946-47. The table is intended to give an indication of the distribution of factories in the metropolis and its environs.

Table 32.—Factories in the Metropolis and Environs.

-					<u> </u>			<u></u>	
						194	5-46.	194	6-47.
Mur	nicipali	ty.			Area.	Establish- ments.	Average Number of Employees.	Establish- ments.	Average Number of Employees.
					acres.	No.	No.	No.	No.
City of Sydney—						1 150	90.679	1.194	22.962
Inner Area	•••	•••	•••	• • • •	) (	1,156	20,673	70	4,600
Pyrmont	• • • •	•••	•••	• • • •	1 1	68	4,413		
Western	•••	•••	•••	• • •	} 3,220 {	397	11,494	440	13,990
Eastern		• • •	•••	•••	[] -,}	701	19,669	765	22,698
Quay	•••	• • •	• • •	•••	1) [	360	11,690	387	12,158
Camperdown		•••	•••	•	<u> </u>	113	5,239	114	5,039
Te	otal	•••	•••	•••	3,220	2,795	73,178	2,970	81,447
Inner Industrial—									
Paddington					421	66	1,564	85	1,553
70 10	•••	•••	•••	•••	404	241	16,406	248	18,224
	•••	• • • •	•••	•••	827	220	17,484	236	18,752
Waterloo Alexandria	•••	•••	•••	• • • •		358		373	
	•••	***	•••	•••	1,051		20,248		21,410
Mascot	•••	• • •	• • •	•••	2,223	94	3,765	123	4,679
Botany	•••	•••	•••	•••	2,168	82	4,814	89	4,436
St. Peters	•••	•••	• • • •	• • • •	902	91	3,510	105	3,979
Erskineville		***	•••	• • •	186	49	1,100	54	1,251
Newtown	•••		•••	• • •	480	190	3,986	212	4,073
Darlington	***	• • •	•••	• • •	54	36	1,081	38	1,116
Glebe	•••	•••	•••		518	164	4,496	171	5,567
Annandale	•••	•••	,.,		346	196	4,235	218	4,571
Leichhardt	•••	***		• • • •	1,155	162	4,121	201	4,693
Balmain	•••	•••	•••	•••	977	199	10,238	212	9,453
To	otal	•••			11,712	2,148	97,048	2,365	103,757
Illawarra-Bankstowi	n—								
Marrickville					1,889	232	10,911	259	11,288
Rockdale				•••	5,102	107	1,569	138	2,052
Bexley	•••				1,910	50	354	58	407
Kogarah	•••	•••		•••	4,807	110	871	133	1,058
Hurstville	•••	•••		•••	6.120	127	1,105	196	1,754
Canterbury	•••	•••	•••	•••	8,259	269	2,354	343	3,049
77 0.11	•••	•••	•••	• • • •	1,674	49	889	63	1,216
Bankstown	•••	•••	•••	•••	19,205	50	3,289	84	2,721
	•••	•••	•••	•••					
_ To	otal .				48,966	994	21,342	1,274	23,545

<sup>\*</sup> During period of operation (including working proprietors).

Table 32.—Factories in the Metropolis and Environs—continued.

		194	5-46.	194	6-47.
Municipality,	Area.	Establish- ments.	Average Number of Employees.	Establish- ments.	Average Number of Employees
	acres.	No.	No.	No.	No.
Ashfield Drummoyne Burwood and Strathfield	850 2,048 1,984 2,942 3,313	148 148 121 } 188	2,334 4,656 4,328 7,757	179 170 130 211	2,724 4,437 5,110 7,951
Total	11,137	605	19,075	690	20,222
Auburn	5,228 2,590 4,038 4,476	79 111 55 174	4,771 3,239 3,163 5,411	101 140 76 207	4,516 3,511 3,419 5,638
Total	16,332	419	16,584	524	17,084
Mosman North Sydney Willoughby Ku-ring-gai Hunter's Hill Lane Cove Ryde, Eastwood, Dundas, Ermingto	14,682	91 44 219 120 17 41 33	792 330 3,880 1,520 59 304 461 718	122 49 282 160 19 50 47	1,040 395 4,613 1,921 70 438 428
Total	51,942	624	8,064	812	9,874
D 3	4,867 8,528	155 152	1,294 7,724	178 193	1,591 7,985
Total	13,395	307	9,018	371	9,576
	156,704 801,657	7,892 275	244,309 6,100	9,006 371	265,505 6,604
Total, County of Cumberland	958,361	8,167	250,409	9,377	272,109

<sup>\*</sup> During period of operation (including working proprietors). † Pitt and Merrylands wards of Holroyd Municipality.

In the metropolitan area, factories are concentrated in the City of Sydney and an adjacent industrial belt, in which section 70 per cent. of the factory employees in 1946-47 were engaged. There are relatively few factories in the Northern and Eastern municipalities; in 1946-47 factories in these had only 7 per cent. of the factory employees in the metropolis. The remaining 23 per cent. of factory employees in the metropolis were distributed more or less evenly over the Illawarra-Bankstown and Inner and Outer Western regions.

#### VALUE OF PREMISES AND EQUIPMENT.

The next table shows the variations since 1911 in the recorded value of premises used for manufacturing purposes and of factory plant and machinery. The recorded value of factory premises, machinery, etc. since 1927-28 has been its depreciated or book value, that is, the original cost less any depreciation reserve existing in respect of it; prior to 1927-28 some factory owners stated the value of their premises and plant at original cost. Where factory premises are rented by the occupier, the value of the premises has been computed by capitalising the rent paid at fifteen years' purchase. Rented plant and machinery has been valued by capitalising the rent paid, before the war at fifteen years' purchase, during the war at five years' purchase, and from 1945-46 at ten years' purchase.

Table 33.—Value of Factory Pro	emises, Machinery, etc
--------------------------------	------------------------

	No. of	Value of	Value of	Average V Establis	
Year.	Establish- ments.	Land, Buildings, and Fixtures.	Machinery, Tools, and Plant.	Land, Buildings, and Fixtures.	Machinery Tools and Plant,
		£	£	£	£
1911	5,039	13,140,207	12,510,600	2,608	2,483
1920-21	5,837	28,428,917	31,115,444	4,870	5,331
1928-29	8,465	51,375,003	51,365,710	6,069	6,068
1930-31	7,544	49,822,312	50,865,884	6,604	6,743
1931-32	7,397	46,462,828	50,277,992	6,281	6,497
1935-36	8,486	49,494,222	51,964,982	5,832	6,124
1938-39	9,464	57,353,625	62,692,956	6,060	6,624
1940-41	9,919	61,886,528	68,533,346	6,239	6,909
1941-42	10,166	65,015,509	70,611,613	6,395	6,946
1942-43	10,110	72,622,902	73,121,771	7,183	7,233
1943-44	10,755	78,978,013	73,803,954	7,343	6,860
1944-45	11,359	81,058,876	73,039,252	7,136	6,430
1945–46	12,287	80,308,347	72,560,630	6,536	5,905
1946-47	13,961	81,894,595	75,234,273	5,866	5,389

The premises owned by the occupiers were valued in 1945-46 at £56,156,622 and in 1946-47 at £54,138,070, and rented premises (valued as described above) at £24,151,725 and £27,756,525, respectively. The value of rented factory plant and machinery had some war-time significance, but was not separately recorded after 1945-46.

# NEW INVESTMENT IN FACTORY PREMISES AND EQUIPMENT.

The figures in Table 33 refer to depreciated or book values and do not indicate the expenditure during a year on new factory buildings and equipment and additions and replacements in existing factories. This expenditure, as recorded in annual statistical returns, is shown in the following comparisons for the years 1936-37 to 1946-47:—

Table 34.—Cost of New Factories, Additions and Replacements.

Year.	Land and Buildings.	Plant and Machinery.	Total.
	£	£	£
1936 – 37	1,797,390	4,602,142	6,399,532
1937 - 38	2,142,726	8,585,958	10,728,684
1938 – 39	2,475,380	9,052,938	11,528,318
1939-40	2,524,316	6,283,092	8,807,408
1940-41	3,078,084	8,686,797	11,764,881
1941-42	3,481,755	8,350,793	11,832,548
1942-43	7,409,458	8,182,967	15,592,425
1943-44	6,539,464	9,593,925	16,133,389
1944 – 45	1,902,615	7,500,628	9,403,243
1945-46	2,399,007	9,329,257	11,728,264
1946-47	3,959,561	11,714,541	15,674,102

The principal industries in which there were additions and replacements of plant and machinery during 1946-47 and earlier years were as follows:—

Table 35.—Cost of Additions and Replacements of Plant and Machinery.

	Industry	r.		1938–39,	1943-44.	1944-45.	1945-46.	1946-47.
Tron and Steel	Works, Met	als, Mac	hinery, etc.	£ 3,714,615	£ 5,147,873	£ 2,859,373	£ 3,566,391	£ 4,741,498
Works treating (mainly Col	ng Mine and te Works)	Quarry	Products	665,225	235,334	331,230	295,994	420,685
Heat, Light a tricity)	nd Power W	orks (m	ainly Elec-	1,923,835	892,512	921,189	1,036,811	585,961
Tactories mak	ing Food an	d Drink		1,080,413	1,133,732	740,943	1,161,606	1,649,373
Factories enga	ged in Paper	r-making 	g, Printing, 	338,841	175,879	155,309	341,066	740,256
All Other				1,330,009	2,008,595	2,492,584	2,927,389	3,576,768
							<u>_</u>	<u>-</u>
	Total			9,052,938	9,593,925	7,500,628	9,329,257	11,714,541

#### SIZE OF ESTABLISHMENTS.

In the following statement, the factory establishments in New South Wales since 1921 are grouped according to the average number of persons employed during their period of operation. Where two or more classes of manufacturing are conducted in one factory, each class is regarded in the compilation of factory statistics as being undertaken in a separate establishment.

Table 36.—Size of Factories in New South Wales.

*****			Employing o	on the Avera	ge Persons	numbering—		
Year,	Under 4.	4.	5 to 10.	11 to 20.	21 to 50.	51 to 100.	Over 100.	Total.
			Numbei	R OF ESTABI	ISHMENTS,			
1921 1928-29 1931-32 1938-39 1941-42 1942-43 1948-44 1944-45 1945-46 1946-47	1,006 2,466 2,877 2,720 3,207 3,171 3,505 3,612 3,536 3,897	500 782 684 976 929 929 924 965 1,118 1,317	1,936 2,387 1,839 2,534 2,524 2,488 2,571 2,824 3,304 3,853	1,064 1,221 872 1,316 1,365 1,374 1,472 1,609 1,803 2,052	820 963 692 1,101 1,190 1,179 1,290 1,319 1,490 1,708	265 355 227 438 447 449 462 503 518 585	246 291 206 379 504 520 531 527 518 549	5,837 8,465 7,397 9,464 10,166 10,110 10,755 11,359 12,287 13,961
	A	VERAGE NU		OYED DURIN g working pr		OF OPERATION	on.	
1921 1928-29 1931-32 1938-39 1941-42 1942-43 1943-44 1944-45 1945-46	2,256 4,997 5,525 5,708 6,491 6,474 7,086 7,261 7,302 8,153	2,000 3,128 2,736 3,904 3,716 3,716 3,696 3,860 4,472 5,268	13,462 16,556 12,519 17,553 17,395 17,874 19,668 22,902 26,903	15,469 17,729 12,750 19,272 19,908 20,167 21,812 23,485 26,395 30,010	26,006 30,631 21,689 35,234 37,810 37,012 40,825 41,469 46,458 53,291	18,061 24,331 15,683 31,223 31,834 31,595 32,824 35,022 36,155 41,101	67,757 87,770 61,350 118,906 184,971 202,048 202,539 186,482 172,090 182,858	145,011 185,142 132,252 231,800 302,120 318,317 326,156 317,187 315,774 347,584

Factory establishments which operated in New South Wales during 1946-47 are classified in the next table according to size and geographical location:—

Table 37.—Size and Geographical Location of Establishments, 1946-47.

Average	Nı	ımber of Es	tablishmen	ts.		nber of Pers uding work		
Number Employed during Period of Operation.	Metro- polis.	Newcastle and Wollon- gong Districts.	Re- mainder of State.	New South Wales.	Metro- polis.	Newcastle and Wollon- gong Districts.	Re- mainder of State.	New South Wales
Less than 4 5 to 10 11 to 20. 21 to 50 51 to 100 101 to 200 201 to 300 301 to 400 401 to 500 501 to 750 751 to 1,000	2,141 085 2,393 1,469 1,384 486 255 62 45 25 29 11	183 69 176 89 75 30 16 8 44 22	1,573 563 1,284 249 69 34 9 4 3	3,897 1,317 3,853 2,052 1,708 585 305 79 53 30 34	4,426 2,740 16,892 21,676 43,549 34,091 34,685 15,338 15,434 11,057 17,503 9,547	382 276 1,219 1,304 2,208 2,207 2,200 2,014 1,454 900 2,482 2,507	3,345 2,252 8,792 7,030 7,534 4,803 4,798 2,207 1,359 1,414 501 1,595	8,15 5,26 26,90 30,01 53,29 41,10 41,68 19,55 18,24 13,37 20,48 13,64
Over 1,000 Total	9,006	668	4,287	13,961	38,567 265,505	33,957	48,122	55,86 347,58

<sup>\*</sup> Average during period of operation.

Small factories are numerous. Establishments having ten or fewer workers in 1946-47 comprised 65 per cent. of the total number, but these occupied only 11 per cent. of the persons in factories. The larger part of the factory workers are engaged in the large establishments. Thus, in 1946-47 there were only 549 factories (4 per cent. of the total) having an average of more than 100 persons engaged, but in these factories 53 per cent. of all factory workers were occupied. In 1938-39 the comparative figures were 379 factories (4 per cent. of the total) occupying 51 per cent. of all persons engaged in factories.

This tendency to concentration in large industrial units applies in the Metropolis and is even more pronounced in the Newcastle and Wollongong-Port Kembla industrial areas. Elsewhere in the State, however, the small manufacturing unit predominates. In 1946-47 the percentage of establishments with more than 100 workers was 5 per cent. in the metropolis and 7 per cent. in the Newcastle and Wollongong-Port Kembla districts, and these establishments employed 54 per cent. and 78 per cent. of all persons in factories in the respective areas.

The most numerous of the factories with less than four employees are boot repairing establishments and garages where motor repairs are effected. In 1946-47 boot repairing establishments numbered 794 with 1,660 employees, including 705 with 1,072 employees where less than four were employed. The number of works for motor repairs was 1,407 with 10,550 employees, including 497 with 1,107 employees where less than four persons were engaged.

#### EMPLOYMENT IN FACTORIES.

The conditions of employment in factories are prescribed by the Factories and Shops Act, the provisions of which are outlined in the chapter "Employment" of this volume. Particulars of the technical training provided under the State education scheme, and of apprenticeship indenture and training are given in the chapters "Education" and "Employment", respectively.

In the following table the growth in factory employment is compared with the increase in the total population since 1901. The comparison is shown in quinquennial periods up to 1926. Then two periods are comhined in order to smooth the fluctuations in factory employment during the depression. The decrease in factory employees during the years 1926-27 to 1930-31 represented an average rate of 4.9 per cent. per annum, and the increase in the next five years, 10.3 per cent. per annum. During the ten years 1936-37 to 1945-46, employment in factories increased at an average annual rate of 6.1 per cent.

•				
Period.		Growth in Facto	ory Employment.	Growth in Population,
Calendar or Financial Years.	Duration.	Numerical Increase.*	Annual Rate of Increase.	Annual Rate of Increase.
	years.		per cent.	per cent.
1902 to 1906	5	11,592	3.5	1.7
1907 to 1911	5	30,802	7.9	2.6
1912 to 1915-16	$4\frac{1}{2}$	7,777	1.6	2.4
1916-17 to 1920-21	5	28,610	4.9	2.1
1921-22 to 1925-26	5	24,763	3.4	$2\cdot 2$
1926-27 to 1935-36	10	23,426	1.4	1.5
1936-37 to 1940-41	5	72,551	7.5	1.0
1941-42 to 1945-46	5	45,119	3.4	1.0
1946-47	1	32,249	10.4	1.1

Table 38.—Relative Growth of Factory Employment in N.S.W.

The following comparative statement shows the average number of persons engaged in the various classes of manufacturing industries during 1928-29, 1946-47, and certain intervening years:-

I able	39.—£	mpioym	ent" in	ractor	ies by	Classes.		
Class of Industry.	1928–29.	1931–32.	1938-39.	1941-42.	1943–44.	1944-45.	1945-46.	1946-47
Treatment of Non-metal-								
liferous Mine and Quarry					l .			
Products	4,060	1,638	4,529	4,448	3,547	3,556	4,376	5,510
Bricks, Pottery, Glass	6,674	2,391	8,312	8,405	5,669	6,212	7,466	9,148
Chemicals, Paint, Oil,	0.40=		0.40			40.000	40.104	1,000
Grease	6,137	5,135	8,187	10,593	11,788	12,229	13,164	14,268
Industrial Metals, Machines,		00.001	00.450	100 111	140 000	171 070	100 000	140 050
Conveyances	62,090	38,981	82,452	132,444	163,023	151,076 893	136,602	143.652
Precious Metals, Jewellery Textiles and Textile Goods		476	979	1,016	857	093	1,110	1,864
(not Dropp)	8,894	9,989	15,089	21,049	20,383	19,426	18,341	20,745
Skins, Leather (not Cloth-	0,094	9,000	13,000	21,040	20,000	10,420	10,041	20,745
ing or Footwear)	3,246	3,278	4,306	5,618	6,016	5,854	6,385	6,818
Clothing	28,473	19,669	32,019	34,367	32,188	34,668	37,651	44,469
Food, Drink, Tobacco	22,490	20,054	28,514	32,055	33,662	34,152	35,474	36,582
Woodworking, Basketware	8,864	3,838	9,995	12,132	12,815	12,902	13,499	15,392
Furniture, Bedding	5,737	2,527	6,140	5,350	3,920	4,010	4,987	6,104
Paper, Printing	13,932	11,331	17,290	17,155	15,095	15,834	16,959	20,387
Rubber	0 775	1,786	3,538	4,140	4,005	3,814	3,990	4,809
Musical Instruments	1,257	540	286	307	262	280	311	585
Miscellaneous Products	1,504	1,826	3,981	5,691	6,096	5,995	6,407	8,284
Heat, Light, Power	3,848†	2,896	3,164	3,475	3,706	3,777	4,148	4,502
Total	180,756	126,355	228,781	298,245	323,032	314,678	310,870	343,119
	,		1		ı	1		

Table 39 - Employment\* in Factories by Classes

<sup>\*</sup> Relates to average number employed over the whole year, including working proprietors.

Average over whole year, including working proprietors.

<sup>†</sup> Includes some employment on maintenance work not included in later years.

Employment in factories attained the pre-depression record number of 180,756 in 1928-29 and then declined rapidly to 126,355 in 1931-32. Recovery began in 1932-33, and by 1935-36 employment (193,200) surpassed the pre-depression level. Thereafter it rose steadily and in 1938-39 there were 228,781 persons employed in factories (27 per cent. more than in 1928-29). The expansion which commenced after the outbreak of hostilities in 1939 accelerated upon the entry of Japan into the war in 1941. Between 1938-39 and 1940-41, the number of factory employees rose by 16 per cent. to 265,751, and at the war-time peak in 1943-44 the number had increased 41 per cent. over the 1938-39 level to 323,032. The cessation of war production and the transitional difficulties in resuming peace-time activities caused a decline in factory employment after 1943-44, but even so, the number of employees on factory payrolls in 1945-46 was 310,870 or 36 per cent. more than in 1938-39. During 1946-47, general demobilisation of the armed forces proceeded rapidly, marked progress was made in the readjustment of industry to a peace-time basis, and employment in factories expanded to a record level of 343,119, which was 90 per cent, above 1928-29, 50 per cent, above 1938-39, and 6 per cent. above the former peak in 1943-44.

In 1928-29, 34 per cent. (62,090) of the persons engaged in factories were occupied in the manufacture of industrial metals, machines, etc. Employment in these workshops declined by 37 per cent. between 1928-29 and 1931-32, but increased by 1938-39 to 82,452, and was then 33 per cent. higher than in 1928-29. Following the general pattern, the number employed in this group rose to the peak of 163,023 in 1943-44 (98 per cent. above the pre-war level), declined to 136,602 in 1945-46 (12 per cent. below 1943-44), and increased, with progress in overcoming transitional difficulties, to 143,652 in 1946-47. In this year, metal and machinery workshops employed 74 per cent. more persons than in 1938-39, and absorbed 42 per cent. of the total number of factory workers, compared with 50 per cent. in 1943-44 and 36 per cent. in 1938-39.

Employment in textile and clothing factories fell by 21 per cent. from 37,367 in 1928-29 to 29,658 in 1931-32 and thereafter increased steadily, and in 1938-39 was 47,108, or 26 per cent. greater than in 1928-29. This upward trend continued until 1942-43 when employment declined slightly due to diversion of labour to the forces and to the rationing of civilian clothing. By 1946-47 the number employed had risen again to 65,214, which was 16 per cent. greater than in 1945-46 and 38 per cent. and 75 per cent. greater, respectively, than in 1938-39 and 1928-29. The proportion of factory workers in textile and clothing factories in 1946-47 was 19 per cent. compared with 21 per cent. in both the pre-war year and 1928-29.

In food, drink, and tobacco factories, employment fell by 11 per cent. from 22,490 in 1928-29 to 20,054 in 1931-32 and then rose steadily to 28,514 in 1938-39, when it was 27 per cent. greater than in 1928-29. Growth was unchecked during the war and early post-war years and in 1946-47 these factories employed 36,582, 28 per cent. more than in 1938-39 and 63 per cent. more than in 1928-29; 12 per cent. of the total number of factory workers were in these factories in both the pre-depression and pre-war years and 11 per cent. in 1946-47.

## Nature of Employment.

During 1946-47 an average of 347,584 persons were engaged in the manufacturing industries. Of these, 3 per cent. were working proprietors, 10 per cent. comprised the managerial and clerical staff, and 1 per cent.

were chemists, engineers, draftsmen, etc.; 85 per cent. of those employed in factories were engaged in the actual processes of manufacture, in the sorting and packing of finished articles, and as foremen and overseers.

Of the males employed in the manufacturing industries in this year, 4 per cent. were working proprietors, 8 per cent. managerial and clerical staff, 1 per cent. technical staff, and 86 per cent. were foremen and factory workers engaged in the actual processes of manufacture, etc. The corresponding percentages for female factory workers were 1, 16, 1, and 82.

Persons employed in factorics in each class of industry during 1946-47 are classified in the following table according to the nature of their employment:—

Table 40,—	Nature (	of Em	ployment	in	Factories,	1946-4	7.

Class of Industry.	Work- ing Pro- prietors.	Mana- gerial and Clerical	Chemists, Drafts- men and other Technical	Fore- men and Over-		s in Fac- or Mill.		Total (average during period of opera-
	prictors.	Staff.	Staff,	seers.	Males.	Females.	Others.	tion).
Treatment of Non-metal-								
liferous Mine and Quarry								
Products	240	530	121	215	4,431	35	26	5,598
Bricks, Pottery, Glass	138	734	39	304	7,687	312	40	9,254
Chemicals, Paint, Oil, Grease	172	2,366	730	591	7,219	3,269	138	14,485
Industrial Metals, Machines,	112	2,000	1 00 [	001	1,210	0,209	130	14,400
Conveyances	3,405	15,203	2,585	5,624	110,633	7,185	503	145,138
Precious Metals, Jewellery	232	178	2,000	75	1,242	194	11	1,934
Textiles and Textile Goods		-	- I	-	,			-,0-2
(not Dress)	168	1,320	35	786	8,155	10,327	101	20,892
Skins, Leather (not Cloth-			1			i i		-
ing or Footwear)	261	518	15	239	3,984	1,851	33	6,901
Clothing	2,380	2,358	30	1,096	8,975	30,106	290	45,235
Food, Drink, Tobacco	1,644	4,731	317	1,317	19,834	9,125	277	37,245
Woodworking, Basketware	1,202	1,330	22	524	12,338	269	123	15,808
Furniture, Bedding	436	488	5	260	4,079	965	28	6,261
Paper, Printing	537 107	$\frac{2,567}{584}$	54	811 196	11,398 2,970	4,624	498	20,489
Mr. dest. Took	3	92	109	28	400	540	341	$^{4,847}_{585}$
Minnellane - Declarate	333	825	51	361	4,332	2,312	169	8,383
Heat, Light, Power	24	385	87	208	3,682	2,512	137	4,529
,			-					
Total—Males	10,332	20,090	3,773	11,400	211,359		2,136	259,090
Females	950	14,119	430	1,235		71,181	579	88,494
Persons	11,282	34,209	4,203	12,635	282,	540	2,715	347,584

Very little work is given out at piece rates and most of the workers employed in their own homes are engaged in textile and clothing manufacture. Outworkers in the clothing trades must be licensed annually by the Industrial Registrar in terms of the Factories and Shops Act. The licenses may be granted to persons who are in necessitous circumstances or are unable to work in factories owing to domestic ties or for other sufficient reason. An occupier of a factory may not employ more than one licensed outworker to every ten indoor workers or fraction thereof, except with the approval of the Industrial Registrar.

The next table shows the nature of the employment of persons working in factories during 1928-29, 1946-47, and certain intervening years. Because of a change in the grouping of employees introduced in 1945-46, it is not possible to classify employment in this and later years on a basis rigidly comparable with that used in previous years. In this table, factory workers have been arranged in broad groups to give approximate comparability.

Table 41.—Nature of Employment in Factories.

Year.		Working Proprietors.		Managerial, Clerical, Technical Staff.		Foremen, Workers in Factory or Mill, Carters, etc.		Total (Average during period of operation).	
	Males.	Females.	Males,	Females.	Males.	Females.	Males.	Females. To	
1928-29	6,464	421	12,471	4,697	120,169	40,920	139,104	46,038 185	
1931-32	5,779	324	10,159	4,066	79,310	32,614	95,248	37,004 132	
1936-37	6,765	442	14,025 $15,047$	6,475	133,310	50,049	154.100	56,966 211	
1937-38	7,059	489		7,093	144,759	53,436	166,865	61,018 227	
1938-39	7,202	502	15,961 $16,834$	7,584	146,350	54,201	169,513	62,287 231	
1939-40	7,128	492		8,096	150,215	56,587	174,177	65,175 239,	
1940-41 1941-42 1942-43	7,497 7,563	563 566 645	17,999 19,581	9,402	170,449	61,970 70,177	195,945 220,013	71,935   267, 82,107   302 92,462   318	
1942-45 1943-44 1944-45	7,394 7,917 8,203	718 771	20,439 $21,615$ $22,246$	13,554 15,359 15,397	198,022 199,313 195,023	78,263 81,234 75,547	$\begin{array}{c} 225,855 \\ 228,845 \\ 225,472 \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
1945-46	8,634	780	21,363	14,692	201,017	69,288	231,014	84,760 315	
1946-47	10,332	950	23,863	14,549	224,895	72,995	259,090	88,494 347	

# Sex Distribution of Factory Employees.

The following table shows the number of male and female employees in factories, and the proportion of the mean male and female population working in factories in 1946-47 and selected earlier years:—

Table 42.—Sex of Factory Employees.

	Ma	iles.	Fen	nales.	Total.		
Year,	Number Employed.	Number per 1,000 Mean Male Population.	Number Employed.	Number per 1,000 Mean Female Population.	Number Employed.	Number per 1,000 Mean Population.	
$\begin{array}{c} 1920-21 \\ 1928-29 \\ 1931-32 \\ 1937-28 \\ 1938-39 \\ 1939-40 \\ 1940-41 \\ 1941-42 \\ 1942-43 \\ 1943-44 \\ 1944-45 \\ 1945-46 \\ 1946-47 \\ \end{array}$	107,700 135,773 90,667 164,391 167,172 172,259 194,194 216,856 223,669 226,824 223,770 227,454 255,733	101·0 107·1 69·5 120·1 121·1 123·7 138·5 153·7 156·8 157·8 155·3 172·6	31,511 44,983 35,688 60,470 61,609 64,715 71,557 81,389 91,865 96,208 90,908 83,416 87,386	30·8 37·0 28·2 45·1 45·4 47·2 51·5 58·0 64·7 67·1 62·6 50·3	139,211 186,756 126,355 224,861 228,781 236,974 265,751 298,245 315,534 323,032 314,673 310,870 343,119	66-6 72-8 49-2 83-0 85-7 95-2 106-0 110-9 112-5 168-4 106-0 115-8	

<sup>\*</sup> Average during whole year, including working proprietors.

In 1946-47 the manufacturing industries provided employment for 11.6 per cent. of the population, compared with 6.7 per cent. in 1920-21, 4.9 per cent. in 1931-32, 8.4 per cent. in 1938-39, 11.25 per cent. (the former peak) in 1943-44, and 10.6 per cent. in 1945-46. The employment in 1946-47 comprised 17.3 per cent. of the male population and 5.9 per cent. of the female population; in 1945-46, 15.5 and 5.7 per cent.; in 1943-44, 15.8 and 6.7 per cent.; and in 1920-21, 10.1 and 3.1 per cent., respectively.

The number (average over the whole year) and proportion of females employed in various classes of factories in 1946-47 and selected earlier years are shown below:—

Industry.	(Av	erage ove	ales Empl r whole ye ng proprie	ar.	Proportion of Females Employed to Total Employed.				
	1938–39.	1943-44.	1945-46.	1946-47.	1938–39,	1943-44.	1945-46.	1946-47	
	l	l					per cent.	per cent.	
Chemicals, Drugs, Medicines Engineering, Brass, Copper		1,936 2,580	2,219 2,870	$\frac{2,372}{3,167}$	42·2 3·5	40·6 9·0	39·6 6·3	39·1 6·8	
Electrical Machinery, Wire-		/	'						
less Motor Vehicles and Acces-	1,869	7,767	5,866	5,337	18.5	34.9	27.5	23.2	
sories	737	1,272	1,125	1,204	6.6	13.0	10.0	8.1	
ing	857	1,924	1,505	1,238	13.2	21.8	16.4	12.9	
Cottou	1,016	2,611	1,896	1,834	59.2	65.2	56.1	50.7	
Wool, Worsted, and Shoddy Hosiery, other knitted	3,722	4,939	3,336	3,382	55.5	60.5	49.1	44 6	
Goods	4,011	4,097	3,900	4,159	75.7	81.5	77.2	74.5	
Machine Belting, Bags, Trunks	628	1,492	1.612	1.676	49-9	68-4	62.7	57.5	
Tailoring, Slop Clothing	9,939	10,819	12,848	15,029	82.5	85.7	84.7	83.4	
Dressmaking, Millinery	3,178	2,321	2,918	3,276	94.1	94.8	93.2	92.6	
Shirts, Underclothing, Ties, etc.	5,677	5,201	5,992	6.664	91.6	92-1	90.5	89.1	
Boots and Shoes (making,	0,011	0,201	0,992	0,004	91.0	97.7	90-5	001	
repairs, and accessories)	3,198	3,154	3,219	3,968	45.0	41.8	40.6	42.0	
Biscuits	1,640	1,525	891	925	61.5	56.3	47.6	49.9	
Confectionery	2,023	1,626	1,422	1,438	59.3	58.1	52.8	49.5	
Jam, Fruit, and Vegetable		'	·						
Canning	562	1,242	1,314	1,015	53.3	48-6	48.5	42.1	
Condiments, Coffee, Spices	949	1,258	1,187	1,280	62.8	66-5	62.5	61.5	
Tobacco, Cigars, etc	1,942	1,977	1,836	1,711	62.5	66.6	61.3	56.1	
Papermaking, Stationery,	0.000		0.450	0.050			400	٥۵	
Paper Bags, etc	2,398	2,637	2,173	2,258	60.0	61.7	46.0	37.2	
Newspapers, Printing, Bind- ing	2.894	2,849	2,928	3,470	24.5	31.5	26.4	26.0	
Dubban	1.199	1,210	810	782	33.9	30.2	20.4	16.3	
All other Industries	11,545	31,771	21,549	21,147	11.6	20.8	15.9	14.2	
Total	61,609	96,208	83,416	87,332	26.9	29.8	26.8	25.5	

Table 43.—Females Employed in Factories.

In 1938-39, 26.9 per cent. of all persons working in factories were females. The proportion rose to 29.8 per cent. in 1943-44, but by 1946-47 it had receded to 25.5 per cent. The overall increase of 25,723 in the number of female employees between 1938-39 and 1946-47 was the net result of an increase of 34,599 up to 1943-44 and subsequent movements giving a net decrease of 8,876.

The proportion of females employed in metal and machinery works is small, but in 1946-47 it was much greater than in 1938-39.

Females predominate in most factories engaged in the manufacture of textiles and clothing. The proportion of females occupied in these factories in 1946-47 was rather lower than in 1938-39, with the exception of men's order- and ready-made outerwear, where the proportion was slightly higher. Woollen and worsted was the only industry in this group where the number of females employed was less in 1946-47 than in 1938-39.

In most factories comprising the food, drink, and tobacco class, the number and proportion of female employees declined between 1938-39 and 1946-47.

# Ages of Factory Employees.

The following comparative statement shows factory employees classified by sex in three age groups: under sixteen years, sixteen and under twentycne years, and adults. Until 1936-37 the numbers of factory employees in age groups were recorded as averages over the whole year, and working proprietors were included. Since 1936-37 the ages of factory employees have been recorded as at 15th June and working proprietors have been excluded.

Table 44.--Age and Sex of Factory Employees.

Year.	Un	der 16 Yea	ırs.	16 and	under 21	Years.			Total, Factory	
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Employ- ees.
			N	UMBER O	f Factory	и Емрьоч	EES.		_	
		Av	erage over	whole yea	ır (includir	ng workin	g proprieto	ors).		
1911* 1921 1928-29 1930-31 1936-37	1,826	2,182 3,466 5,054 2,734 7,551	4,563 6,992 9,012 4,560 13,275	Not 13,420 23,354 16,624 29,664	available   9,998   17,663   13,143   22,593	23,418 41,017 29,767 52,257	†76,624 90,754 108,461 75,431 116,676	†23,364 18,047 22,266 17,847 26,289	†99,988 108,801 130,727 93,278 142,965	104,551 139,211 180,756 127,605 208,497
			At 15t	h June (w	orking prop	prietors es	ccluded).			
1937 1939 1941 1942 1943 1944 1945 1946 1947	5,888 5,759 5,901 5,125 4,221 3,881 3,287 2,451 2,186	7,539 7,084 6,799 4,668 3,158 3,014 2,870 2,265 2,094	13,427 12,843 12,700 9,793 7,379 6,895 6,157 4,716 4,280	30,601 31,923 38,325 29,588 27,247 28,098 29,331 30,089 31,027	22,630 24,289 29,275 27,949 27,933 27,042 24,816 23,353 23,413	53,231 56,212 67,600 57,537 55,180 55,140 54,147 53,442 54,440	113,509 122,041 155,847 176,801 187,484 185,828 182,164 203,801 218,916	25,659 28,529 37,631 49,825 63,475 61,754 59,249 56,701 61,008	139,168 150,570 193,478 226,626 250,959 247,582 241,418 260,502 279,924	205,826 219,625 273,778 293,956 313,518 309,617 301,717 318,660 338,644
			PERCENT	AGE OF T	OTAL FACT	TORY EMI	PLOYEES.			

		A	verage ove	r whole ye	ar (includ	ing worki	ng proprie	tors).		
1911* 1921	$\frac{2\cdot 3}{2\cdot 5}$	2.1	4·4 5·0	Not 9.7	available	e.   16.9	†73·3 65·2	$  \begin{array}{c} \dagger 22.3 \\ 12.9 \end{array}  $	†95·6   78·1	100·0 100·0
1928-29 1930-81	$\frac{2\cdot 2}{1\cdot 4}$	2·8 2·1	5·0 3·5	12·9 13·1	9.8	22.7	60·0 59·1	$12.3 \\ 14.0$	72·3 73·1	100·0 100·0
1936-37	$2.7^{-2}$	3.6	6.3	14.2	10.9	25.1	56.0	12.6	68.6	100.0
			At 15t	h June (w	orking pro	prietors e	ex <b>clu</b> ded).			
1937 1939 1941	2·9 2·6 2·2	3.7 3.2 2.5	6·6 5·8 4·7	$14.9 \\ 14.5 \\ 14.0$	11·0 11·1 10·7	25·9 25·6 24·7	55·1 55·6 56·9	$\begin{array}{ c c c } & 12.4 \\ & 13.0 \\ & 13.7 \end{array}$	67.5 68.6 70.6	100·0 100·0 100·0
1942 1943	1·7 1·4	1·6 1·0	3·3 2·4	10·1 8·7	9·5 8·9	19·6 17·6	60·1 59·8	17·0 20·2	77·1 80·0	100·0 100·0
1944 1945	1·2 1·1	1·0 1·0	2·2 2·1	9·1 9·7	8·7 8·2	17·8 17·9	60·0 60·4	20·0 19·6	80·0 80·0	100·0 100·0
1946 1947	0.8 0.8	0·7 0·6	1·5 1·2	9·4 9·4	7·3 6·9	16·7 16· <b>1</b>	64·0 64·7	17·8 18·0	81·8 82·7	100·0 100·0

<sup>\*</sup> Estimated.

At 15th June, 1947, 74.5 per cent. of factory employees (excluding working proprietors) were males and 25.5 per cent. were females, compared with 72.7 per cent. and 27.3 per cent. in 1939. Of the male employees, 3.6 per cent. in 1939 and 0.9 per cent. in 1947 were under 16 years of age, 20.0 per cent. and 12.3 per cent. were aged 16 and under 21 years, and 76.4 per cent. and 86.8 per cent. were adults. The corresponding proportions for female employees were 11.8 and 2.4 per cent., 40.6 and 27.1 per cent., and 47.6 and 70.5 per cent.

Juveniles under 16 years of age represented 1.2 per cent. compared with 2.4 per ceut. in 1943 and 5.8 per ceut. in 1939. Between 1939 and 1947, the number of these ages decreased by 8,563 (3,573 boys and 4,990 girls) or 67 per cent. to 4,280, reflecting the gradual raising of the minimum school leaving age from 14 years in 1940 to 15 years in 1943 and the abnormally low birthrate during the depression years.

<sup>†</sup> Adults and employees 16 to 21 years.

Employees aged 16 to 21 years increased by 11,388 (6,402 youths and 4,986 girls) between 1939 and 1941, and then, owing mainly to enlistments in the Forces, decreased by 12,420 (11,078 youths and 1,342 girls) in the next two years. In 1947, there were 14 per cent. more youths and 16 per cent. fewer girls than in 1943 and the total in this age group was 54,440, compared with 55,180 in 1943, 67,600 in 1941, and 56,212 in 1939. The proportion of employees aged 16 to 21 years declined from 25.6 per cent. (14.5 per cent. youths and 11.1 per cent. girls) in 1939 to 16.1 per cent. (9.2 per cent. and 6.9 per cent.) in 1947.

The whole of the increase in factory employees between 1939 and 1947 comprised adults. The proportion in this group rose from 68.6 per cent. (55.6 per cent. men and 18.0 per cent. women) in 1939 to 80.0 per cent. (59.8 per cent. males and 20.2 per cent. females) in 1943, and to 82.7 per cent. in 1947, despite a decline in the proportion of females to 18.0 per cent. In number, adults increased by 100,389 (65,443 males and 34,946 females) from 150,570 in 1939 to 250,959 in 1943. From 1943 to 1945 there was a loss of 5,320 men, and 36,752 men were gained in the next two years, but over these four years women employees decreased by 2,467. Adult employees numbered 279,924 in 1947, which was 129,354 (96,875 males and 32,479 females) more than in 1939.

## Child Labour in Factories.

The Factories and Shops Act prescribes that no child under school-leaving age (15 years since 1943) may be employed in a factory unless by special permission of the Minister for Labour and Industry, and the Minister may prohibit the employment of children under the age of 16 years in any factory in connection with dangerous machinery or in any work in which he considers it undesirable that they should be engaged. Moreover, the employment of children under 16 years of age is not permitted unless the employer has obtained a certificate by a legally qualified medical practitioner regarding the child's fitness for employment in that factory.

The number of certificates of fitness issued to children under 16 years of age in recent years is shown below:—

		1939.	1943.	1944.	1945.	1946.	1947.
$_{\mathrm{Boys}}$	•••	6,023	4,192	4,287	3,805	3,461	3,066
Girls	•••	6,175	2,554	3,278	3,178	3,095	2,465
Total	•••	12,198	6,746	7,565	6,983	6,556	5,531

# Monthly Factory Employment.

Monthly data of the number of employees on factory payrolls (excluding working proprietors) on the pay day nearest the fifteenth of the month have been collected in respect of each month since July, 1932. The following table shows the number of factory employees in each of the months July, 1936 to June, 1947. Corresponding data in respect of the various types of manufacturing industries are published in the "New South Wales Statistical Register".

Table 45.—Monthly Factory Employment.

Year.	N	Number	of Emp 15th	oloyees of each	on Fact Montl	ory Paş ı (exclu	Rolls o	n the E orking p	'ay Day ropriet	meares	to the	
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April,	May.	June
				MA	Les(T	'housan	da).					
1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46	136·3 150·9 158·0 158·8 172·5 202·1 213·3 217·8 217·6 216·6 239·7	137·5 152·3 158·9 158·5 175·9 203·7 214·0 217·1 216·9 241·8	138·7 153·1 159·0 159·6 178·1 205·6 213·9 219·2 216·3 212·7 242·7	141·2 155·3 159·2 163·8 179·6 208·0 214·4 219·4 215·2 :209·0 244·4	143.0 156.8 159.3 166.3 183.9 210.5 214.9 219.5 215.2 205.2 244.6	143·3 158·0 158·9 168·3 186·6 213·2 215·7 220·0 216·1 194·8 242·5	142·1 156·5 156·9 166·8 185·9 210·2 216·6 219·9 215·3 215·1 243·6	145·2 157·0 158·3 166·6 189·6 210·9 217·2 219·8 215·7 224·9 245·6	146·7 158·6 159·8 168·0 194·9 212·2 218·4 219·4 215·4 229·0 249·3	145·9 157·8 158·7 164·2 193·1 211·8 219·1 218·1 215·2 231·4 250·0	147·5 158·6 159·4 159·5 197·4 212·2 219·0 217·7 213·5 234·6 250·8	149.8 159.1 166.0 200.1 211.0 218.9 217.8 214.8 236.0 252.7
				FEM	ALES—	(Thouse	inds).					
1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46	51·8 56·5 59·9 59·3 65·4 76·0 84·8 94·6 91·6 85·7 83·1	53·1 57·9 60·6 60·5 66·8 77·3 85·3 95·4 91·1 86·0 84·3	54·3 58·8 61·2 61·2 68·6 75·0 86·4 96·4 90·7 84·7 85·1	55·0 59·4 61·8 63·0 69·8 79·5 88·1 96·8 90·1 81·7 85·8	55.5 60.0 61.9 64.2 70.8 80.7 89.3 96.9 89.7 81.5 86.7	54·8 60·6 61·7 64·0 71·5 81·8 91·1 96·4 89·7 75·7 86·4	51·6 56·7 57·0 61·8 68·9 79·4 90·4 91·4 87·5 79·5 84·3	55·1 59·9 60·3 64·1 71·7 80·8 91·4 94·0 88·3 80·3 85·7	56·7 61·1 61·4 66·0 73·3 81·8 92·6 94·8 88·8 82·4 87·3	56·3 60·8 61·0 65·4 72·5 81·8 93·8 94·2 87·7 81·7	56-0 60-8 60-5 64-3 73-2 82-6 93-9 92-2 87-6 82-2 86-5	56.0 60.2 59.9 64.2 73.7 82.4 94.6 91.8 86.9 86.5
				Pers	ons—('	Phousar	ıds).	,				
1986-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47	188·1 207·4 217·9 218·1 237·9 278·1 298·1 312·4 309·2 302·3 322·8	190:6 210:2 219:5 219:0 242:7 281:0 299:3 314:1 308:2 302:9 326:1	193:0 211:9 220:2 220:8 246:7 280:6 300:3 315:6 307:0 297:4 327:8	196·2 214·7 221·6 226·8 249·4 287·5 302·5 302·3 290·7 330·2	198·5 216·8 221·2 230·5 254·7 291·2 304·2 316·4 304·9 286·7 331·3	198·1 218·6 220·6 232·3 258·1 295·0 306·8 316·4 305·8 270·5 328·9	193·7 213·2 213·9 228·6 254·8 289·6 307·0 314·3 302·8 294·6 327·9	200·3 216·9 218·6 230·7 261·3 291·7 308·6 313·8 304·0 305·2 331·3	203·4 219·7 221·2 234·0 268·2 294·0 311·0 314·4 304·2 311·4 386·6	202-2 218-6 219-7 229-6 265-6 293-6 312-9 312-3 302-9 313-1 336-5	203·5 219·4 219·9 223·8 270·6 294·8 312·9 309·9 301·1 316·8 387·3	205.8 219.6 219.6 230.8 273.8 294.0 313.5 309.6 301.7 318.7

The decline in employment between March and May, 1940 was the result of restricted coal supplies accompanying an industrial dispute in the coal industry, and for similar reasons employment declined materially between August and December, 1945. The rapid war-time growth in factory employment which continued into 1943-44 was reversed in 1944 by the curtailment of war production and subsequently by the conversion of industry to a peace-time basis. Difficulties of readjustment were being resolved in 1946-47 and employment rose steadily to record levels.

Seasonal variations in the level of factory employment are of little magnitude. The level of female employment fluctuates rather more than does that of male employment, and for the greater part the variations are incidental to the Christmas holiday period and, as regards females, to the fruit processing season.

## SALARIES AND WAGES IN FACTORIES.

The amounts of salaries and wages quoted throughout this chapter are exclusive of amounts drawn by working proprietors.

The following table contains a comparison of the salaries and wages paid to male and female factory employees and the average earnings per employee during 1946-47 and certain earlier years. Corresponding information in respect of individual industries is published in the "New South Wales Statistical Register".

Table 46.—Salaries and Wages Paid in Factories.

(Exclusive of drawings by working proprietors.)

Paid to Males.	Paid to Females.	Total.		ı		
	l l	10001.	Male.	Female.	Person.	
£	£	£	£ s.	£ s.	£s	
8,917,583	1,130,079	10,047,662	$118 \ 18$	44 16	100 a	
22,766,216	2,852,375	25,618,591	219 15	91 5	190 (	
33,508,975	5,035,712	38,544,687	$258 \ 15$	112 19	221 8	
19,258,969	3,492,044	22,751,013	226 - 1	98 14	188 14	
31,450,699	5,191,745	36,642,444	216 - 6	92 14	181 19	
36,247,087	5,962,788	42,209,875	230 4	99 8	194 - 2	
38,271,867	6,334,630	44,606,497	238 14	103 13	201 13	
40,807,966	6,884,585	47,692,551	246 19	107 3	207 17	
49,539,287	8,220,245	57,759,532	265 - 4	115 16	224 - 1	
64,850,115	10,907,541	75,757,656	309 13	134 19	261 (	
74,554,087	14,346,149	88,900,236	344 12	157 5	289 (	
77,087,334	16,430,992	93,518,326	352   0	172 1	297 - 7	
73,934,690	15,308,351	89,243,041	342 17	169 17	$291\ 1'$	
73,380,046	14,267,414	87,647,460	335 7	172 13	290 18	
87,122,808	16,464,751	103,587,559	355 0	190 9	312 3	
	8,917,583 22,766,216 33,508,975 19,258,969 31,450,699 36,247,087 38,271,867 40,807,966 49,539,287 64,850,115 74,554,087 77,087,334 73,934,690 73,380,046	8,917,583     1,130,079       22,766,216     2,852,375       33,508,975     5,035,712       19,258,969     3,492,044       31,450,699     5,191,745       36,247,087     6,962,788       38,271,867     6,334,630       40,807,966     6,884,585       49,539,287     8,220,245       64,850,115     10,907,541       74,554,087     14,346,149       77,087,334     16,430,992       73,934,690     15,308,351       73,380,046     14,267,414	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

The amount of salaries and wages paid to factory employees rose 110 per cent. from £44,606,000 in 1938-39 to a war-time peak of £93,518,000 in 1943-44, of which £77,087,000 (101 per cent. more than in 1938-39) was paid to male employees and £16,431,000 (159 per cent. more than in 1938-39) to female employees. Between 1943-44 and 1945-46, the amount of salaries and wages declined by 6 per cent, to £87,647,000 (£73,380,000 paid to males and £14,267,000 to females). In 1946-47, a record amount of £103,588,000 was paid, which was 132 per cent. above the pre-war level and 11 per cent. above 1943-44 and comprised £87,123,000 paid to male employees and £16,465,000 to female employees (128 per cent. and 160 per cent. more than in 1938-39). The average payment per employee rose from £202 (£239 per male employee and £104 per female employee) in 1938-39 to £297 (£352 and £172) in 1943-44, declined to £291 (£335 and £173) in 1945-46, and rose markedly to £312 (£355 per male and £190 per female employee) in 1946-47, when the average earnings per employee were 55 per cent. (males 49 per cent. and females 84 per cent.) higher than in the pre-war year 1938-39. These movements reflect the rise and fall in overtime earnings during the war years and, between 1938-39 and 1946-47, changes in the average number and age constitution of employees, a narrowing margin between female and

male wage rates, and an upward trend, particularly in 1946-47, in wage rates generally.

In calculating the average earnings per employee, the aggregate salaries and wages paid have been related to the average number of employees (including juveniles but excluding working proprietors) working during the whole year. The amounts therefore represent the average payment received by an employee for a full year's work. The average earnings of men and boys so calculated in 1946-47 were highest in rubber factories, £400 5s. 11d., factories manufacturing chemicals, paints, etc., £391 2s. 8d., paper and printing works, £387 18s 7d., and heat, light, and power works, £385 2s. 5d. per male worker. The average amounts paid to women and girls in the principal industries in which they were employed were as follows: food and drink factories, £195 16s. 9d., clothing factories, £188 1s. 10d., textile factories, £186 1s. 11d., printing and bookbinding trades, £184 7s. 0d., per female worker.

The wages paid to factory workers are for the most part subject to regulation by industrial awards and agreements. These matters are discussed in greater detail in the chapters "Employment", "Industrial Arbitration", and "Wages" of this Year Book.

#### Motive Power.

To avoid duplication, statistics of motive power available for use in manufacturing have been compiled covering total horse-power of engines and electric motors installed (a) in factories engaged in manufacturing processes, and (b) in electricity generating stations. Certain establishments which generated electricity for their own use furnished a separate return of the generation of electricity prior to 1936-37; in that and later years, particulars of the generation of electricity have been included in the return covering the general operations of the establishment. The effect of this change was to increase (by approximately 50,000 H.P. in 1936-37) the horse-power of prime movers, principally steam, in factories and reduce by an equivalent amount the horse-power of engines in electricity generating stations.

Prior to 1936-37 occupiers of factories were asked to state in their annual returns (1) the full capacity of their machinery, and (2) the average horse-power in use during the period of operation. Since 1936-37 the details have been collected on a slightly different basis, viz. (1) the horse-power of machinery ordinarily in use, and (2) the horse-power of machinery in reserve or idle.

The number of factories (other than electricity generating stations) in which power-driven machinery was used in 1946-47 and earlier years is shown in the following table, together with the full capacity of engines and electric motors installed. The horse-power is the combined total of engines and electric motors ordinarily in use and in reserve or idle, and represents the total power available for manufacturing purposes, whether actually in use or not; obsolete engines are excluded.

Table 47.—Horse-power of Engines in Factories.
(Excluding electricity generating stations.)

	Establish- ments	Establish- ments	Horse-power of Engines Installed.								
Year.	using Manual Labour only.	using Power Driven Machinery.	Steam.	Gas.	Elec- tricity.	Water.	Oil.	Total.			
	No.	No.	н.Р.	H.P.	H.P.	H.P.	H.P.	H.P.			
1911	1,489	3,446	79,807	14,728	27,466	92	1,307	123,400			
1920-21	835	4,885	129,894	15,345	149,870	38	1,805	296,952			
1928–29	805	7,534	128,252	10,632	321,237	314	9,646	470,081			
1931-32	358	6,921	139,061	8,024	359,452	429	16,087	523,053			
1936 - 37	390	8,230	197,972*	6,576	485,444	258	19,049	709,299			
1937 – 38	385	8,605	210,124	6,218	527,407	815	19,098	763,662			
1938 – 39	443	8,915	209,697	5,692	601,999	398	20,541	838,327			
1939-40	336	9,023	187,601	5,548	658,418	109	20,478	872,154			
1940-41	362	9,462	198,478	4,835	710,634	68	22,185	936,200			
1941-42	409	9,661	203,428	5,430	755,969	53	23,408	988,288			
1942 - 43	298	9,716	209,179	4,965	807,567	195	24,229	1,046,135			
1943-44	310	10,343	205,933	4,266	832,486	183	25,708	1,068,576			
1944-45	306	10,951	203,366	4,283	865,669	171	27,406	1,100,895			
1945 - 46	271	11,916	200,272	4,279	912,319	141	29,006	1,146,017			
1946-47	285	13,577	193,166	4,336	972,767	433	34,862	1,205,564			

\*See text above table.

In factories (other than electricity generating stations) using power-driven machinery, the average horse-power installed per establishment increased from 36 in 1911, 61 in 1920-21, and 62 in 1928-29, to 94 in 1938-39 and 96 in 1945-46, and declined to 89 in 1946-47. In 1946-47 only 2.1 per cent. of the establishments operated without the use of power-driven machinery, compared with 4.7 per cent. in 1938-39.

A further analysis of the power of engines installed in factories (excluding electricity generating stations) in the years 1938-39, 1945-46, and 1946-47 is shown below:—

Table 48.—Horse-power of Engines in Factories. (Excluding electricity generating stations.)

	1938	<b>⊢39.</b>	194	5-46.	194	3-47.
Class of Engine.	Ordinarily in Use.	In Reserve or Idle.	Ordinarily in Use.	In Reserve or Idle,	Ordinarily in Use,	In Reserve
Steam— Reciprocating Turbine Internal Combustion—	H.P. 129,197 49,721	H.P. 18,740 12,039	H.P. 104,638 56,812	H.P. 27,176 11,646	H.P. 107,079 51,920	H.P. 22,592 11,575
Gas Petrol or other Light Oils Heavy Oils Water	4,912 3,267 15,420 398	780 415 1,439 	3,221 6,489 14,057 141	1,058 2,821 5,639	3,363 8,997 12,731 387	973 3,267 9,867 46
Total Prime Movers	202,915	33,413	185,358	48,340	184,477	48,320
Electric Motors— Driven by purchased Electricity Driven by Electricity generated in Own Works	475,506 85,180	34,291 7,022	766,967 81,674	55,302 8,376	835,661 71,306	61,121 4,679
Total Electric Motors	560,686	41,313	848,641	63,678	906,967	65,800
Total Power installed	763,601	74,726	1,083,999	112,018	1,091,444	114,120

The horse-power of engines installed in factories other than electricity generating stations increased by 44 per cent. between 1938-39 and 1946-47. In the latter year, 81 per cent. of the horse-power of engines in

these factories was electrical, compared with 72 per cent. before the war. Over the same period, steam horse-power decreased from 25 per cent. to 16 per cent. of the total.

## Motive Power in Electricity Generating Stations.

Particulars of the horse-power of the various types of prime movers installed and units of power generated in electricity generating stations in 1946-47 and earlier years are shown in the following table:—

Table	40	E	٤	Flancainian	Generating	CI-L'
1'4016	40.	-cheines	1173	Electricity	Generating	Diamons.

Year.		Horse-pow	er of Engines	Installed.		Electricity
	Steam.	Gas.	Water.	Oil.	Total.	Generated.
	H.P.	H.P.	H.P.	H.P.	H.P.	thous. unit
1911	87,173	1,610	280	92	89,155	135,337
1920-21	189,670	3,727		1,227	194,624	342,536
1928-29	520,033	8,229	19,250	10,619	558,131	959,985
1931-32	790,932	6,339	20,280	42,078	859,629	1,075,706
1936-37	791,185	5,842	16,660	55,963	869,650	1,636,833
1937-38	827,575	5,448	41,523	54,785	929,331	1,816,814
1938-39	848,895	5,250	41,540	57,802	953,487	1,948,489
1939-40	948,455	5,200	41,160	62,855	1,057,670	2,145,447
1940-41	1,005,008	4,702	41,270	65,641	1,116,621	2,405,118
1941-42	1,001,938	4,771	41,270	68,670	1,116,649	2,656,244
1942-43	1,065,962	4,422	36,860	60,111	1,167,355	2,844,180
1943-44	1,083,881	4,547	37,610	72,498	1,198,536	2,826,131
1944-45	1,086,441	4,762	37,610	71,927	1,200,740	2,877,336
1945-46	1,091,562	3,839	37,500	70,193	1,203,094	2,831,801
1946-47	1,153,392	3,242	37,010	69,331	1,262,975	3,228,670

Further details of electricity generating stations are shown on page 121. Fuel Consumed.

The value of fuel consumed and water and lubricating oil used in the manufacturing industries in 1946-47 amounted to £13,964,552. This sum includes fuels of various types valued at £12,919,259, as shown below, and water and lubricating oil valued at £1,045,293.

Table 50.—Value of Factory Fuel Consumed, 1946-47.

4 <u>0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</u>								
Class of Industry.	Coal.	Coke.	Wood,	Fuel Oil.	Elec- tricity.	Gas.	Other (Incl. Tar Fuel).	Total.
	T	T						Ī
Treatment of Non-		£	£	£	£	£	£	£
Metalliferous Mine and			ł	1				
Quarry Products		14,171	4,970		149,599	23,961	8,268	365,667
Brick, Pottery, Glass		6,459	35,289	150,773	95,628	103,714	7,495	881,998
Chemicals, Paint, Oil,								
Grease	201,951	19,755	11,033	100,631	190,214	17,662	15,147	556,393
Industrial Metals,						5 b = 4 s = -		
'Machines, Conveyances		1,746,638	15,709	304,131	1,433,153	635,630	112,948	4,717,259
Textiles and Textile		1	0.000		150 100		4 400	0-0100
Goods (not Dress)	82,446	3,524	3,220	1,545	172,124	2,916	4,408	270,18 <b>3</b>
Skins, Leather (not Cloth-		0		500				100 000
ing or Footwear)	65,311	3,510	797	563	50,652	1,649	187	122,669
Clothing	32,448	17,223	6,230	8,630	138,456	18,179	5,540	226,706
Food, Drink, Tobacco	446,292	65,882	145,735	125,384	613,328	85,564	7,793	1,489, <b>97</b> 8
Woodworking, Basket		0.010	1	20.050	1.0.000	1 015		000 700
ware	37,246	3,342	11,485	29,258	146,809	1,615	777	230,532
Furniture, Bedding	1,883	506	304	54	33,740	2,133	83	38,703
Paper, Printing	94,925	1,425	1,531	11,158	105,730	16,873	528	232,170
Rubber	42,844	3,776	1,716	15,351	114,496	1,922	473	180,578
	2,587,134	301,154	12,811	436,101	15,901	63,963	72,927	3,489,991
Other	20,635	1,675	4,813	3,789	73,675	11,778	37	116,432
Total	4,725,592	2,189,040	255,673	1,191,279	3,333,505	987,559	236,611	12,919,259

<sup>\*</sup> The value of coal used for making coke and gas is included as a cost of material and not fuel.

<sup>\* 111-2</sup> 

More than half the coal used as fuel in factories is for the generation of electricity; large quantities are used also in the manufacture of bricks, pottery, and glass, in metal and machinery works, and in food and drink factories. The coke is used for the most part in smelting. Most of the firewood is used in bakeries and butter factories, and of the oil in electricity works, metal and machinery works, glassworks, and food and drink factories. Large quantities of coke oven gas and blast furnace gas are used in the iron and steel works at Newcastle and Port Kembla. The principal users of electricity are metal and machinery works, food and drink factories, and manufacturers of textiles, clothing, and chemicals, etc.

The quantities of coal, coke, and fuel oil used in the various classes of industry during the years 1938-39, 1945-46, and 1946-47 are shown in the following table, together with the quantity of coal used as raw material in coke and gas works:—

Table 51 .- Coal, Coke, and Oil Used in Factories.

		1938-39			1945-46	·		1946-47	•
Class of Industry.	Coal.	Coke.	Oil.	Coal.	Coke.	Oil.	Coal.	Coke.	Oil.
Fuel-	thous.	thous.	thous, gall.	thous.	thous.	thous.	thous.	thous.	thous.
Non-metalliferous Mine and Quarry Products	235	24	127	168	26	49	212	27	74
Bricks, Pottery, Glass	301	3	1,802	215	1	3,381	321	4	3,318
Chemicals, Paint, Oil	60	8	820	106	17	2,269	112	17	3,141
Metals, Machines, Conveyances	400	1,142	7,338	319	852	6,974	384	999	7,303
Textiles and Textile Goods	37		204	42	1	66	50	2	42
Skins, Leather	19	1	225	31	3	13	37	2	10
Clothing	9	2	370	20	6	94	19	9	241
Food, Drink, Tobacco	215	28	2,220	260	34	2,111	267	40	2,765
Wood Working, etc	4		132	23	1	263	24	1	358-
Furniture, Bedding	2		14	1		1	1		1
Paper, Printing	36		191	47	1	251	54	1	267
Rubber	19	1	26	22	1	55	28	2	402
Heat, Light and Power	1,165	133	10,735	1,696	235	7,947	1,979	251	10,792
Other	8	2	12	9	3	37	12	1	92
Total used as Fuel	2,510	1,344	24,216	2,959	1,181	23,511	3,500	1,356	28,806
Raw Materials—									
Coke Works	1,662			1,456			1,792		
Gas Works	578		*	796		*	862		*
Total (Fuel and Raw Materials)	4,750	1,344	*	5,211	1,181	*	6,154	1,356	•

<sup>\*</sup> Not available for publication,

A comparative statement of the total quantities of coal used as raw material and fuel, and of coke, wood and oil used as fuel in the factories in 1946-47 and earlier years is shown below:—

Table 52.-Coal, Oil, etc. Used in Factories.

	С	oal.				
Year.	Fuel.	Raw material, coke and gas works.	Coke as fuel.	Wood as fuel,	Oil as fuel.	
	tons.	tons.	tons.	tons.	gallons.	
1936-37	2,312,983	1,961,782	1,138,847	139,888	22,548,27	
1937-38	2,488,672	2,113,720	1,161,165	163,694	22,841,25	
1938-39	2,509,664	2,239,978	1,344,208	172,963	24,215,82	
1939-40	2,419,416	2,454,807	1,472,155	185,674	21,454,22	
1940-41	2,684,356	2,987,969	1,703,676	211,442	28,320,62	
1941-42	3,006,732	3,158,718	1,697,836	208,469	30,238,45	
1942-43	3,037,445	3,025,772	1,671,112	165,893	23,400,38	
1943-44	3,036,600	2,896,270	1,599,071	169,482	22,718,09	
1944-45	3,031,800	2,520,069	1,473,041	169.754	22,448,98	
1945-46	2,959,244	2,252,343	1,180,805	176,962	23,511,32	
1946-47	3,500,435	2,653,720	1,356,140	201,378	28,806,06	

NOTE.—In 1945-46, 15,407,405 gallons and in 1946-47, 17,730,889 gallons of tar fuel were used; quantities in previous years are not available.

The quantity of coal used as fuel in factories has grown with the expansion of the secondary industries and particularly of the electric light and power works. Larger quantities were used in making coke in the early war years to enable record production of iron and steel. Coal supplies were restricted in 1946-47, but New South Wales factories consumed 30 per cent. more coal than in 1938-39 and 18 per cent. more than in 1945-46. The consumption of oil fuel, which had been fairly constant except for a temporary increase in 1940-41 and 1941-42, increased in 1946-47. Wood and coke fuel consumption also was greatest in mid-war years, since when it has returned to about the pre-war level.

#### VALUE OF MATERIALS, ETC. USED AND OF PRODUCTION.

The following statement shows the value of output and the value of production of the manufacturing industries in 1946-47 and various earlier years, together with the amount of salaries and wages paid and the value of materials, fuel, etc. used. The bases of the values shown and certain changes in statistical practice which affect the comparisons are explained on page 57 of this volume.

Table 53.—Value of Factory Output and Production.

				Output u			
Year.	Salaries and Wages Paid (exclusive of drawings of working proprietors).	Value of Materials, Containers, etc. used.	Value of Fuel Consumed.	Balance (i.e., Other expenses, profit, etc.)	Output	Value of Production (Value added iu manu- facture).	Average Value of Production per Employee
	£000	£000	£000	£000	£000	£000	£
1911	10,048	33,671	1,243	9,384	54,346	19,432	185.9
1920-21	25,619	91,104	3,609	17,509	137,841	43,128	309.8
1928-29	38,544	105,357	6,314	35,083	185,298	73,627	407.3
1931-32	22,751	63,557	4,229	23,902	114,439	46,653	369-2
1936-37	36,642	109,593	6,465	40,112	192,812	76,754	368.1
1937-38	42,210	122,591	7,124	42,958	214,883	85,168	378 8
1938-39	44,606	120,502	7,651	45,660	218,419	90,266	394-5
<b>1939–40</b>	47,693	134,454	8,135	48,916	239,198	96,609	407.7
1940-41	57,760	161,253	9,620	57,284	285,917	115,044	432.9
1941-42	75,758	189,469	11,229	63,032	339,488	138,790	465.4
1942 - 43	88,900	207,599	12,308	64,682	373,489	153,582	486.7
1943-44	93,518	223,604	12,808	69,208	399,138	162,726	503.7
1944-45	89,243	215,219	12,565	70,632	387,659	159,875	508.1
1945-46	87,647	201,706	12,207	65,532	367,092	153,179	508·1
1946 <u>-</u> 47	103,588	245,436	13,965	82,958	445,947	186.546	562.2

<sup>\*</sup> From 1931-32, includes value of water and lubricating oil used.

Based on average number of employees over full year.

The value of materials used in 1946-47 was £245,436,182, including containers and packing £11,711,427 and tools replaced and repairs to plant £8,494,803.

On the average, out of every hundred pounds worth of goods produced in factories in 1946-47, the materials, containers, and fuel cost £58 4s. and the employees received £23 4s., leaving a balance of £18 12s. The balance is in general the proportion which accrues to the proprietors for their own work in the factories, and for overhead expenses, including depreciation, taxation, workers' compensation, etc., and profit. In some cases the value of the output as recorded represents the value at which the products are passed from the factories to the sales departments (see page 58).

The following table shows separately the proportions of the items which made up the total recorded value of output of all factories and of private establishments only. The latter comparison is the more satisfactory, because the nature of the work undertaken in Government workshops differs greatly from that of the private establishments and the value of much of the output of Government workshops has been estimated (see page 58).

Table	54.—Ar	alveis	of the	Value (	of	Factory	Output.
AUDIC	04	1047313 1	Or cire	raiuc v	W# 1	LOVIN	CHIDAS.

		All Estal	blishments.		Private Establishments Only.					
Year,	1	Fotal Value	per cent, of of Output ed by—		Proportion per cent, of Total Value of Output absorbed by—					
	Materials and Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.	Total.	Materials and Fuel.	Salaries and Wages.	Overhead Charges, Profit, etc.	Total,		
1920-21	68.7	18.6	12.7	100	70.4	16:4	13.2	100		
1928-29	60.3	20.8	18.9	100	61.8	19.2	19.0	100		
1931-32	59.2	19.9	20.9	100	61.4	18.2	20.4	100		
1936 - 37	60.2	19.0	20.8	100	61-1	18.0	20.9	100		
1937 - 38	60.4	19.6	20.0	100	61.2	18.6	20.2	100		
1938 - 39	58.7	20.4	20.9	100	59.5	19.4	21.1	100		
1939-40	59.6	19.9	20.5.	100	60.6	18.8	20.6	100		
1940-41	59.8	20.2	20.0	100	60.9	18.9	20-2	100		
1941-42	59.1	22.3	18.6	100	60.5	20.7	18-8	100		
1942 - 43	58.9	23.8	17.3	100	60.4	21.9	17.7	100		
1943-44	59.2	23.4	17.4	100	60.7	21.5	17-8	100		
1944-45	58.7	23.0	18.3	100	60/1	21.3	18.6	100		
1945-46	58.3	23.9	17.8	100	59.3	22.6	18.1	100		
1946-47	58.2	23.2	18.6	100	59.0	22:2	18.8	100		

In private establishments, the proportion absorbed by materials and fuel was approximately 60.2 per cent. during the last ten years but fell to 59.0 per cent. in 1946-47. The proportion of salaries and wages rose from 18.0 per cent. in 1935-36 and an average of 20.6 per cent. during the last ten years to 22.6 per cent in 1945-46 and 22.2 per cent. in 1946-47. Overhead charges, etc. and profit absorbed an average of 19.2 per cent. and the proportion fell from 21.1 per cent. in 1938-39 to 18.8 per cent. in 1946-47.

The ratio of the total amount of salaries and wages paid to the recorded value of production was about 50 per cent. in pre-war years; it rose significantly during the war to the peak of 57.9 per cent. in 1942-43, declined to 55.8 per cent. in 1944-45, and in 1946-47 was 55.5 per cent. compared with 49.4 per cent. in 1938-39. The ratio varies widely from industry to industry, and in a number of them was lower in 1946-47 than in 1938-39, as shown in the following table:—

Table	55.—Ratio	of	Wages	to	Value	of	Production.

O1	Ratio c	f Amount	of Wages	Paid to V	alue of Pro	duction,
Class of Industry.	1938–39.	1942-43.	1943-44.	1944-45.	1945-46,	1946-47
Treatment of Non-metalliferous Mine	per cent.	per cent.				
and Quarry Products	45.0	48.1	48.8	51.5	56.8	52.9
Bricks, Pottery, Glass	F0.0	67.7	66.7	66.5	66.9	62.5
Chemicals, Paint, Oil, Grease	00.5	32.4	34.7	34.2	34.9	36.0
Industrial Metals, Machines, Con-					•	
veyances	58.4	69.4	68.1	66.1	67.9	6347
Precious Metals, Jewellery	63.0	54.2	51.4	55.1	60.3	60-4
Cextiles and Textile Goods (not Dress)		56.4	55.5	54.6	57.5	53.7
Skins, Leather (not Clothing or	1					
Footwear)	64.2	60.9	60.6	61.9	60.9	60.1
Clothing	60.0	61.1	59.9	59.0	60.7	62.3
Food, Drink, Tobacco	34.3	39.2	40.7	39.9	43.2	43.0
Woodworking, Basketware	00.0	62.3	62.1	61.5	62.2	61.0
Furniture, Bedding	64.6	60.8	58∙9	59.8	63.2	60.8
Paper, Printing	54.0	52.2	50.5	50.3	57.7	55.7
Rubber	76.8	74.5	74.8	81.7	7941	71.7
Musical Instruments	61.3	58.5	59.3	59.4	61.5	67:8
Miscellaneous Products	E4.5	68.1	58.6	60.4	57.1	56.5
Heat, Light, Power	16.8	18.6	19.5	19.5	20.9	21.4
Total	49.4	57.9	57.5	55.8	57.2	55.2

#### PRINCIPAL FACTORY PRODUCTS.

The monthly production of certain commodities and the authorities responsible for the collection of the relevant data are shown in the Monthly Statement (and its successor, the Monthly Bulletin) of Australian Production Statistics issued by the Commonwealth Statistician since June, 1947. Additional commodities are included in this Bulletin as information regarding them becomes available.

Information relating to the principal articles manufactured in New South Wales in the years 1938-39, 1945-46, and 1946-47 is summarised in the following table. In this table the production shown is the total recorded production of each article classified according to its appropriate industry, even though in some cases portion of the total output may have been a byproduct of establishments classified in other industry groups. For example, the total output of coke is shown in Class I, which relates to the treatment of non-metalliferous mine and quarry products, although coke is produced in both coke works (in Class I) and gas works (in Class XVI).

Certain of the principal articles in the table are listed in italics to distinguish them as items for which details of production during years prior to 1936-37 are available. Information in respect of the remainder of the items listed is available only for years subsequent to 1936-37.

In a number of cases, items have been marked "not available for publication", either because the commodity was produced in only one or two factories and could not be published because of the secrecy provisions of the Census Act, 1901 or because the measure of quantity or value was incomplete or meaningless.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47.

	TINH OF	1938-	39.	1945-	46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
		-	£		£		£
CLAS	s I.—Tre	atment of N	on-metallife	rous Mine an	d Quarry P	roducts.	
Coke Tar—	tons	1,548,521	1,639,684	1,470,149	2,505,761	1,726,719	2,937,90
Crude Refined	gals.	24,310,282	255,666	18,230,200	169,874	22,198,380	205,69
Cement, Portland	tons	2,988,064 432,487	47,506 $1,447,542$	12,785,206 320,556	169,431 962,231	14,063,131 393,397	218.21 1,300,10
Cement Pipes † Cement Tiles	1,000	···	251,210	·	248,026	230	323,74
Asbestos Cement			•	•	•		6,97
Building Sheets Fibrous Plaster	sq. yds.	5,290,851	420,956	7,805,432	764,842	9,656,808	927,86
Sheets	"	2,671,076	239,631	1,632,041	249,496	3,397,367	504,59
Lime— Quick	tons	29,690	69,308	17,533	49.233	18,515	46,65
Hydrated	,,	10,731	35,597	7,638	28,565	7,764	29,16
Agricultural	"	5,629	7,468	4,985	5,303	17,419	21,17
	·	CLASS II	-Bricks, Po	ttery, Glass,	etc.		
Bricks, Building Fire Bricks and	1,000	379,236	1,265,555	144,594	695,097	249,533	1,277,38
Blocks	l		310,895		490,896		608,51
Floor and Wall Tiles Roofing Tiles (Terra-	sq. yds.	82,154	39,468	19,923	10,265	54,085	34,28
cotta)	1,000	20,129	305,980	12,230	215,969	19,523	366,89
Earthenware Pipes Pottery (Orna-		′	402,613	`	236,907		370,91
mental)			15,865		80,807	l i	161,39
Perra-cotta		•••	51,585		20,120		30,17
Banitary Earthen- ware		,	109,409		*		117,13
Domestic and other Earthenware					ro 911		
Glass Bottles	:::		$44,667 \\ 736,925$		$58,311 \\ 1,393,327$		32,91 1,612,56
	<u> </u>						
		ASS III.—Ch	emicals, D	yes, Paint, C	ils, etc.		
Cosmetic Creams and Lotions			133,366		481,650		598,17
Pharmaceutical Products Pooth Paste and			2,204,682		2,991,997		3,441,80
Powder			276,946		616,447		743,55
Disinfectants Insecticides	•••		90,134		215.724		272,79
Sprays, Vermin			144,732 37,956	•••	320,232 49,198		415,67 50,42
Poilet Lanoline	lb.	12,434	2,114	52,705	13,461	41,450	8,85 165,74
Water Paints Oil Paint, (Ready	,,	4,307,304	80,160	3,454,443	71,869	6,413,580	165,74
Mixed) & other	gall.	1,694,656	1,060,310	2,083,853	1,694,251	1,795,743	1,644,79
Colours— Dry	1b.	6,035,807	62,117	6,729,218	131,210		165,37
Ground in Oil		*	*	991,081	53,456	574,795	28,98
Varnishes Kalsomine	gall. lb.	$\substack{416,331\\4,046,276}$	$173,316 \\ 61,484$	382,782 3,873,704	$\begin{array}{c} 221,751 \\ 67,027 \end{array}$	467,592 4,446,508	296,20 78,65
Lacquer—	l i				,	· ·	
Clear Colours	gall.	56,139 316,357	$39,169 \\ 245,197$	80,125 360,504	55,688 350,074	94,715 405,629	92,65 436,01
Thinners	,,	300,964	93,155	454,048	198,860		266,55
Synthetic Finishes Clear	gall.	19,173	15,033	9.470	9,603	13,595	14,19
Colours	,,	323,721	338,731	9,479 $329,712$	414,631	359,138	542.48
Thinners	,,	* 147,520	*	42,141	414,631 11,236 275,373	41,908	13,16
Enamels Stains, Oil Zinc Oxide	,,	85,131	150,249 $47,524$	259,463 101,768	275,373 50,157	1 89.474	255,29 54,33
Zinc Óxide	cwt.	85,131 111,376	158,577	92,959	166,801	202,670 7,837	406,8
Paint and Varnish	"	18,141	51,431	6,718	20,847	7,837	29,68
Removers	gall. cwt.	7,922 $20,789$	4,297 22,488	$41,135 \\ 23,004$	25,528 46,218	30,330 34,125	20,06 86,46
Putty							

<sup>\*</sup> Not available for publication.
† Excludes Asbestos Cement Pipes not available for publication.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

			_				
		1938-	39.	1945-	-46.	1946	-17.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works	Quantity.	Value at Works.
			£	<u> </u>	£		£
	CLASS I	II.—Chemica	ls, Dyes, Pa	ints, Oils, et	tc.—continue	ed.	
Rubbing Compounds Plastic Woods	lb.	264,395 15,342	11,503 1,708	90,570 22,886	4,751 2,232	168,317 70,621	8,371 6,644
Oil Linseed Neatsfoot Coconut	gall. ,, tons	2,153,127 40,107 13,864 1,751	409,916 7,427 306,889 77,658	3,288,093 67,362 8,160 2,393	1,311,973 14,131 453,820 235,890	1,390,976 68,176 4,898	700,358 14,976 343,382
Peanut Coconut Cake and	,,	8,353	50,483	4,943	24,846	2,784	22,596
Meal Linseed Cake and	,,	14,650	148,859	23,313	214.076	8,863	86,914
Meal Peanut Meal Grease Tallow, Raw	ib. cwt,	6,338,279 269,982	56,379 237,055	3,549 8,058,677 340,442	24,490 194,408 501,532	* 10,448,127 309,323	* 271,204 588,852
Soap— Household Toilet Sand	"	321,957 107,390 42,718	567,303 531,015 63,208	263,556 196,943 30,395	527,388 1,097,960 38,701 60,979	161,822 188,232 31,982 47,329	347,725 1,288,941 45,981 89,700
Soft and Other	"	15,627 487,692	17,941 1,179,467	41,812 532,706	1,725,028	429,365	1,772,347
Soap Extracts and Powders Cleansers and Cleansing Pow-	,,	60,102	102,769	265,764	782,773	196,457	671,717
ders Candles	,,	28,502 *	76,025 *	48,786 5,256	115,044 20,859	65,783 5,599	154,325 26,540
Soda Crystals Talcum Powder	,,	48,893 *	16,964 *	36,896 26,234 3,391	17,402 475,988 88,246	18,824 24,372 3,843	9,233 435,949 137,874
Face Powder Stearine Manures	"	29,291 767,854	28,794 268,778	46,737 749,130	90,600 381,105	38,468 720,914	81,887 380,116
Sulphate of Ammonia	tons	20,960 57,011	192,639 235,077	19,377 50,339	191,392 294,551	22,377 63,187	250,832 372,687
Sulphuric Acid Printing Ink Writing Ink	•••		188,654 28,328		294,551 292,737 50,735	´	372,687 419,207 57,193
Polish— Auto Floor			13,870 $103,442$	•••	11,672 185,882		16,506 207,884
Brass Boot and Shoe			$78,426 \\ 21,023$	•••	52,624		62,590 31,776 110,366
_ Stove			61,431 $19,599$		54,422 5,158		6,288
Mucilage			9,903		8,413		8,676
Other Adhesives— Powder Liquid	cwt.	*	*	6,125 25,242	22,283 66,713	7,457 36,140	34,223 91,438
		dustrial Met	als, Machine	es, Implemen	ts and Conv	- veyances.	
					3,403,147	925,679	3,495,372
Pig Iron Steel Ingots Rails, Bars, Sections	tons	1,104,605 1,168,305 972,799	2,664,276 4,209,891	$\begin{array}{r} 852,197 \\ 1,054,483 \\ 853,431 \end{array}$	6,386,858	1,311,959 1,099,514	7,412,052 15,567,304
Internal Combustion Engines—Petrol	No.	1,214	54,430	6,306	275,547	8,943	309,633
Marine —Engines Petrol	,,	967	30,235	897	44,332	2,803	135,273
tural Steel Machinery—	tons	49,956	1,368,569	54,331	2,022,872	56,059	2,437,572
Mining and Ex- cavating			198,206		693,344		714,138
Weighing Appli- ances Laundry (other		•••	42,188		82,285	•••	82,626
than House- hold) Metalworking	, 		39,973 184,594		96,660 735,705		118,272 578,348
Refrigerating (not Household)			336,028		411,498		483,214
-,	I			·	·		

<sup>\*</sup> Not available for publication.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

	TT " ~	1938-	39.	1945-	46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
			£		£		£
CLASS IV,	-Industria	l Metals, Ma	chines, Imp	lements and	Conveyance	s—continued.	
Machinery—contd.			l	1			
Woodworking		•	46,271		113,592		190,57
Printing Textile	•••	•••	10,879		16,966	•••	25,39
Machine Tools			10,793 *		56,344 369,998		82,06 516,05
Refrigerators	NT.o	10 100	F00 000	10 = 10		10.05	-
(Household) Furniture of Iron	No.	13,102	509,863	18,748	698,226	40,975	1,838,97
and Steel Metal Window	•••	•••	85,232		333,274		593,24
Frames Non-ferrous Alloy	•••	•••	80,155	•	57,452		105,91
Window and Door Fittings			31,525		46 440		£0.54
Lawnniowers	No.	19,958	36,595	2,255	$\frac{46,449}{11,131}$	24,823	50,53 100,87
Bolts and Nuts		***	266,758		425,075		552,10
Screws Washers		•••	5,837 8,221	•	86,353	•••	39,54
Spades and Shovels	No.	104,911	17,733	144,768	$13,562 \\ 36,280$	247,248	33,98 68,27
Packers' Cans Household :Utensils		•••	1,485,909	•••	3,172,207	***	3,139,0
of Sheet Iron and Steel			194,584		393,423	1	740.00
Ploughs	No.	778	194,004	729	995,425 *	881	549,80
Oultivators	,,	985	*	3,129	•	*	•
Dairy and Butter- making Machin-			_				
ery Milking "Machines Railway Cars and	No.	<b></b>	:	<b>*</b>	:	203	106,14 $16,56$
Wagons	,,	744	406,790	1,496	•	445	•
Stoves—							
Wood, Coal and							
Coke Burning	,,	17,154	87,786	10,154	62,745 123,243 62,463	12,033	103,20
Gas Electric	,,	17,736 4,930	$181,309 \\ 75,532$	8,507 5,069	123,243	12,883 31,221	192,29 288,78
Other	,,	* *,,,,,,	***************************************	34,910	9,912	81,128	123,98
Wire	tons	82,294	1,420,332	62,794	1,625,004	101,333	2,509,2
Wire Gates Nails	tons	6,163	79,002	5,036	53,483	10.070	116,44
Pipes - Wrought.	10118	0,103	157,195	9,050	139,815	10,076	373,5
Welded, Black							
and Galvanised Pipe Fittings		•••	1,158,420 313,421	•••	2,148,995 730,545		3,461,60 816,00
Motor Chassis As-			·			•••	020,0
sembled— Imported Car	No.	10 701		272		F 10F	
Imported Truck	,,,	$19,701 \\ 4,842$	•	3,529	•	7,167 3,660	÷
Motor Bodies	"	2,012		0,020		0,000	
Car		970	40.070	9	790	900	05.4
Passenger Buses	"	870 186	49,272 $119,247$	.156	730 116,158	223 258	$\frac{25,45}{210,05}$
Trucks	"	2,809	171,207	822	86,810 16,375	1,445	131,00
Utilities and Vans	,,	579	51,486	130	16,375	369	67,3
Trailers, Caravans and other	,,	1,132	95,654	320	77,296	550	128,07
Total Bodies Made	,,	5,576	486,866	1,431	297,369	2,845	561,9
Bicycles	,,	36,416	*	30,621	*	30,259	• "
Motor Car Acces- sories—							
Pistons	,,	16,947	9,842	29,205	14,223	•	
Piston Rings	"	1,301,365 17,104	55,447	1,264,161	80,215	1,927,982	96,3
Radiator Cores Dynamos—	,,	17,104	33,041	7,357	23,820	10,218	.29,30
Alternators	,,	63	4,062	704	36,914		
Generators	,,	329	10,562	896	47,886	2,181	61,28
Rlectric Motors— Alternating Cur-							•-
Alternating Cur-	,,	26,538	294,441	50,637	622,843	77,998	824,88
Direct Current							

Not available for publication.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

		1938-	-39.	• 1945-	-46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity:	Value at Works.	Quantity.	Value at Works.
			£		£		£
CLASS IV.	-Industr	ial Metals, M	Tachines, In	plements an	d Conveyan	ces—continue	d.
Transformers and							1
Converters-							
Above 20 kVa	No.	967	221,244	1,224	332,544	: 1,315	354,75
Below 20 kVa	,,	117,568	76,775	158,204	137,163	243,246	271,92
Electric Batteries							
Wet	,,	12,164	41,539	69,184	134,257	88,896	149,598
_ Dry	,,	*	*	*	*	24,543,524	778,98
Batteries—		44.040		055 550		F 40 100	07/076
Auto and Radio For Power	,,	414,948	543,659	377,570	563,071	562,180	874,258
Plants		*		*	*	31,507	169,30
Telephone and Tele-	,,	· ]				01,001	100,000
graph Appara-						."	
tus			115,481		1,251,609		1,342,36
Electric Meters	No.	115,460	182,080	80,780	264,997	141,698	474,287
Electric Regulating,	2,0,	110,100	102,000	00,100	-01,00.	,	,
Starting and							
Controlling Ap-							
paratus			462,524		727,951		996,593
Honsehold Fittings			,		· /		
(Switches, etc.)			51,417		144,522		233,386
Portable Tools and				1			
Appliances			2,033		103,597		64,69
Electric Clocks	No.	*	*	*	* (	25,882	59,52
Electric Heating							* . 0 00
Apparatus		•••	112,294		249,827		540,038
Wireless Chassis	3.T.	00.014	580 501		701 011	101 000	1 905 100
made Complete Wireless	No.	89,816	578,531	44,478	531,311	101,993	1,305,130
Complete Wireless Sets Assembled		10.1.600		84 115		164,089	*
Parts for Receiving	,,	124,689	•	54,115	•	104,000	-
Sets (excluding		l					
valves)			296,160		812,809		845,089
Wireless Transmit-		•••	200,100		012,000		040,00
ting Apparatus.			126,174		1,655,100	<b></b>	500,87
Other Wireless and			,_		_,,	***	,
Amplifying, Ap-							
paratus			127,976		324,478		291,696
Lead Pipes and	·					4	
Tubes	: cwt.	2,739	5,750	6,785	12,901	26,324	52,92
Lead Sheets	,,	23,098	37,276	20,190	38,150	101,868	207,63
Ships and Boats—	NT				0.000.000		
Steel Wooden	No.	T 40	75 019	50	2,909,838	7 07	010 11
Small Boats less	, ,,	43	75,913	134	656,767	27	216,41
than 5 tons		370	23,528	276	59,929	404	109,845
	,,						

## CLASS VI.—Textiles and Textile Goods,

Cotton Piece Goods Wool Tops and Noils		1,898,920 7,045,824			1,520,719 927,322		
Cloth, Woollen and		1,020,022	120,704	0,121,221	821,822	0,100,545	1,545,427
Worsted	<del>_</del>	12,373,749	2,350,992	12,620,939	3,603,029	13,080,295	4,262,178
Flannel	1.,,	575,359					
Blankets	pair	106,447					
Stockings and	-	,	,	-0.,200		,	
Socks—	i I						l.
Men's	doz. pair				315,752	270,732	396,271
Women's	,,	520,127			433,570		
Children's	**	344,567	163,078	191(588	134,551	174,830	127,572
Total Stockings	1: 1	1			11		
and Socker	5 23	1,055,219	804,782	728,376	883,873	746,925	1,170,264
Knitted Apparel— Underwear—	3	1			1	Γ'	
107 é o 1	doz:	149,591	117,378	001001	1.5 000	A CONTRACTOR	III - marana
Darron					147,388		
Cotton	,,	504,341 337,123	206,453		742,756		820,119
Other	,,	42,166	21,742		380,782		
Other	"	42,100	21,742	17,910	20,957	65,113	137,587
					* *	<u> </u>	

<sup>\*</sup> Not available for publication.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

		1930-39 [	0 1940-4				
	77-14 -6	1938-	39.	1945-	-46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
		CLASS VI.	£ -Textiles an	d Textile G	£ oods—contin	ued.	£
Knitted Apparel	}				ľ		
continued. Women's and	}						
Girls' Night-							
wear— Rayon	doz.	23,993	57,438 14,117	46,375 5,216	295,815 48,786	46,454 6,551	327,713 52,143
Other	,,	6,252	14,117	0,210	40,700	0,001	02,140
Women's and Girls' Costumes, Dresses, etc		9,863	17,755	5,934	78,634	1,389	31,297
Bathing Suits,	,,	,,,,,,	,	,	·		
Trunks, etc	,,	51,379	207,752	37,979	212,740 20,376	59,071 7,927	362,249 35,158
Other Cardigans,	,,	1,674	7,101	7,972	20,570	1,021	55,100
Swe aters.							
etc.— Chest under 34	:						
inches— Wool	,,	11,104	25,186	21,815 $21,150$	71,165 43,384	31,443	147,847
Other Chest 34 inches	11	360	461	21,150	43,384	6,098	16,408
and over—	•	40,610	198.420	30,172	286,047	35,350	372,630
Wool Other	"	11,741	198,420 25,517	53,126	180,918	60,364	185,291
Total Knitted Apparel—				404 500	<b>=</b> 00.000	D17 400	1 004 150
Woollen	,,	256,110 351,469	560,428 234,841	186,723 459,752	783,930 630,681	215,409 537,769	1,034,158 746,090
Cotton Rayon	"	537,042	688,819 29,337	397,871 18,251	1.089,779	537,769 387,539 66,230	1,187,776 $149,784$
Other Tarpaulins	"	45,576 	92,841		220,529	'	339,710
Sails Tents			59,536 8,795		24,816 155,046	···	13,675 169,071
Flour Bags, Calico	No.	12,950,583	173,441	*		•	•
		CLASS 7	VII.—Skins	and Leather			
Scoured Wool	lb.	31,246,493†		35,808,116†		43,777,722†	
Pelts	No.	1,752,626	. *	2,309,074		2,570,901	*
Leather sold by weight				44 940 094	005.005	10.057.000	1 040 001
Sole and Belting Harness, etc	1b.	10,369,070 314,180	593,827 24,687	11,753,271 763,862	905,937 70,920	12,677,036 755,922	1,040,301 68,925
Dressed and		02.,	ĺ	•			
Upper from Hides	.,	436,707	46,296	760,105	63,900	9,541	697
Total Sold by Weight	,,	11,119,957	664,810	13,277,238	1,040,757	13,442,499	1,109,923
Leather Sold by Area—	1						
Upholstery	sq. ft.	1,828,882	80,586	3,835,039	212,798	4,088,182	230,214
Dressed, and Upper from Hides				11 401 700	000 401	19 707 550	990 714
Hides Dressed from	,,	6,099,429	283,308	11,431,586	636,401	13,787,552	820,714
Skins		5,812,393	293,068	5,112,853	361,860	4,871,666	423,652 380,780
Goat	"	4,136,808	257,457 159,885	3,369,440 11,588,469	322,496	3,655,269 11,584,818	380,780 374,210
Sheep Other	"	4,136,808 7,793,737 387,300	25,769	394,556	35,861	460,742	50,640
Total Sold by Area	,,	26,058,549	1,100,078	35,731,943	1,889,358	38,448,229	2,280,210
Rough tanned Hides, Splits—	"	' '					
	,,,	1,224,187	28,374 17,502	2,887,124 260,607	82,015 15,642	3,237,652 306,931	98,739 16,482
Rough tanned Basils	lb.	919,591 1,386,207	75,442	896,864	92,286	681,291	94,136
Horse and Cow Rugs Harness, Single Set	No.	* 347	1,774	33,228 468	3,346	28,560 511	65,612 5,079
Saddles	"	3,417 4,860	14,179 4,640	4,072 2,168	28,793 2,852	$\frac{4,471}{3,543}$	34,061 5,419
Collars (Horse)	93	*,000	4,040	1 2,100	1 2,002	, ,,,,,	0,110

<sup>•</sup> Not available for publication. † Exclusive of wool scoured and used for tops and other goods at woollen mills.

, , , ,

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

	, , , , , , , , , , , , , , , , , , ,	1938-	-39.	1945-	-46.	1946-	-47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
	Cr	ASS VII.—SI	£ kins and Le	ather—contin	£ ued.		£
<b>-</b> <b>T</b> runks	No.	2,444	7,423	2,059	7,158	2,387	9,545
Suitcases and Kit-			150,069	327,187	254,503	413,909	363,664
bags Handbags	,,	545,475 472,343	171,217	777,015	872,434	915,574	1,081,481
School Bags Machine Belting,	"	19,807	2,648	75,559	18,569	53,275	21,323
Leather Leather Coats	 No.	 12,029	73,315 *	 13,037	134,96 <b>9</b> 44,8 <b>4</b> 9	16,825	172,936 54,428
			ss VIII.—C				
Made from Woven			Ī				
Piece Goods— Men's and Boys'—							
Shirts	doz,	334,649	•	304,805	•	378,590	•
Collars (for sale separately)	,,	•	•	3,517	•	11,084	•
Undershirts,	"						
Underpants and Combina-							
tions	,,	$144,499 \\ 103,294$	*	$134,942 \\ 82,380$	*	162,586 77,496	•
Pyjamas Handkercbiefs	"	806,089	•	547,197	*	77,496 585,725	*
Neckties	,,	280,294	•	130,374	•	190,851	•
Garters and Hose Sus-							10.44
penders	,,	24,439	10,255	16,073	8,506 65,137	8,289 $52,271$	10,11 <b>5</b> 96,077
Braces Women's and	,	48,662	87,594	51,608	03,107	02,211	00,011
Girls'— Underwear		316,854	•	251,413		302,613	•
Pyjamas and	,,	· .				55,131	
Nightdresses Handkerchiefs	33	51,744 839,349		$49,470 \\ 542,093$	ě	582,920	•
Swimming Suits	"	*	•	4,918	65,437	11,076	15 <b>6</b> ,72 <b>9</b> 463,578
Corsets Corselets	,,,	} 46,112	316,932	$   \left\{ \begin{array}{c}     32,849 \\     702   \end{array}\right. $	349,087 17,891	36,365 922	22,926
Brassieres	2,	35,424	75,401	62,349	219,578	87,564	355,065
Gloves— Dress	doz. pr.	1,265	6,546	10,958	86,934	16,562	127,184
Working	l " l	33,553	22,179	71,485	105,959	119,560	178,869
Umbrellas	No.	202,164	71,911	69,156	67,187	84,930	85,118
Hats— Fur Felt	doz,	72,271	•	57,802	•	74,258	:
Wool Felt	,,	62,991	•	60,307	•	68,523	•
Straw— Men's and Boys'	"	30,311	•	4,834	•	4,553	•
Women's and Girls'		109,368		42,697	*	59,248	*
Otber	"	43,839	*	59,319	•	70,150	*
Caps Total Hats and	,,	30,145	•	22,631	•	22,587	•
Caps	,,	348,925	•	247,590	•	299,319	•
Boots, Leather— Men's	pair	610,261	310,834	475,587	387,579	466,039	373,110
Women's	,,,	2,417	2,228	1,538	1,336	$^{128}_{5,331}$	$\frac{387}{3,112}$
Children's Shoes, Leather†	,, ·	25,666	8,852	4,567	2,655		•
Men's	,,	1,140,741	567,585 1,072,942	1,368,186	1,068,597	$1,520,161 \\ 2,767,492$	1,299,737 2,407,958
Women's Children's	,,	1,853,980 1,057,618	1,072,942 266,715	2,400,154 1,888,037	1,820,558 644,806	2,258,822	857,886
Other Boots and	"		·			182,748	32,165
Shoes Slippers, Felt and	,,,	76,553	22,008	36,917	7,669	102,740	32,103
Fabric— Men's		209,195	27,013	218,055	54,814	695,604	131,380
Women's	"	1,520,007	158,076	834,643	192,924	1,125,737	290,879
Children's	,,	419,401	21,308	561,934	47,572	649,096	64,704
Slippers, Leather— Men's	,,	232,634	46,629	132,301	58,756	153,268	93,049
Women's	"	640,742 85,127	89,751 6,847	349,087 100,748	72,863 14,276	347,693 69,807	$115,029 \\ 12,144$
Children's Total Boots, Shoes	"	00,127				10,241,926	5,681,540
Total Doors, Shoes		7,874,342	2,600,788	8,371,754	4,374,405		

<sup>•</sup> Not available for publication.

<sup>†</sup> Includes Sandals.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

	77-2, -0	1938-	39.	1945-	46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
		<del></del>	£	<u>·</u>	£		£
		CLASS V	III.—Clothi	ng—continue	1.		
Uppers, leather, for sale	pair	17,133	6,129	*	*	5,414	4,614
Soles, Leather, for	,,	726,544	40,624	2,209,321	174,55 <b>7</b>	2,071,873	171,236
Heels, leather, for sale	,,	*	*	1,271,506	48,593	1,097,154	39,499
Boot and Shoe Accessories			147,821		232,429		207,433
				nk and Toba			
Flour	short ton				4,515,622	537,389	5,699,478
Bran, Wheaten Pollard, Wheaten	"	547,162 107,779 121,154	599,810 662,125	80,545	464,813	98,231 $124,334$	592,279 745,406
Sharps and Screen- ings	, ,	3,358		5,957	75,552		144,227
Wheatmeal		16,119		42,114	390,550	5,967 49,717	510,483
Breakfast Foods— Made from Wheat	cwt.	140,645	347,637	163,295	425,040	174,981	480,572
Other	.,,	109,904 82,706	520,472	110,036 123,740	582,556 269,225	$\begin{array}{c} 174,981 \\ 131,571 \\ 152,515 \end{array}$	652,599 359,964
Cornflour (Edible Starch)	9		*	124,675	228,383	158,589	305,589
Semolina Macaroni and Ver	. ,,	38,230	1	78,025	41,888	141,581	109,415
micelli	. ,,	83,486	52,279	49,535	78,771	49,036	79,030
Rice— Dressed	. ,,	340,476	320,258	394,255	519,915	455,287	659,501
Meal Flour	. ,,	55,366 27,641	12,011 19,048	21,198	6,023 4,321 156,993	24,883 12,271 337,193 3,091,317	7,492 12,167
Meatmeal Dog Biscuits	. ,,	* *	*	311,522 3,000,098	156,993 43,273	337,193 3 091,317	174,374 48,767
Biscuits Ice Cream Cones	.1	43,611,260 948,195	1,591,740 43,588	46.067.436	1,718,190	47,511,937 905,492	1,845,359 59,636
Confectionery—	] "			,			0.,
Chocolate Other	. "!	21,988,214 26,810,961	1,397,797 1,503,044	27,065;828 28,841,865	1,965,700 1,665,419	28,459,894 35,169,261	2,163,109 2,104,943
Cocoa and Chocolat (Potable)	e "	945,888	' '	} · · · ·		2,922,696	113,992
Jams, Conserves	· ,	20,634,785	1	1 ' '		l ' '	1,593,312
Fruit Preserve in Liquid	d "	28,387,125	1	1 ' ' '	' '	' '	764,077
Vegetables Pre served in Liquid	)	4,902,288		1	1	25,957,541	1,069,966
Dehydrated Veget	5-			4,140,138	1		118,792 97,715
Tomato Pulp Fruit Pulp	ewt.	35,490	*	41,118 32,929	8 54,531	994,762 73,667 37,700	97,718 46,794
Crystallised Fruit Candied Peel	. ,	337,489 554;279	9 18,197 9 14,719	7 383,210	29,578	659,864 67 <b>3</b> ,000	50,817 22,403
Pickles and Sauces-	-  " '	1					
Pickles Chutney		1,939,19	1 81,708	$\left\{\begin{array}{c}4,590,856\\621,823\end{array}\right\}$	214,985 53,867	4,559,310 444,507	253,221 37,607
Sauce— Tomato	1 1	3,607,53	5 157,243	6,412,78	395,148	6,037,868	
Other Total Pickles an		3,702,27	5 214,687	4,418,86	261,733	5,340,188	331,865
Sauces .		9,249,00	1 453,633	16,044,320	925,733	16,381,873	1,049,854
Boup— Tomato	,,	881,65	6 21,096	2,111,23	92,710	3,484,203	156,685
Other		565.88	4 27 789	1,264,93°	7  55,529	1,928,210	92,532
Butter		1,817,33 113,840,73 7,193,02	4 7,103,19	1,705,488 1 74,280,98	5,598,824	60,384,672	1 4.887.59
Cheese Bacon and Hamt	,,	21,721,91	2 271,621 4 *	LI 4.857.69U	276,814	33,118,582	*
Lard		662,35	2 15,678	37,494,335 1,175,58	31,095	1,024,530	28,35

<sup>\*</sup>Not available for publication. + Exclusive of bacon and ham made from green bacon imported interstate: 4,265;331-lb:in:1988-39, 1,357,900 lb:in:1945-46; and 2,101,235 lb. in 1946-47.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

	TTinde in	1938-	-39.	1945-	-46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
	CLÁ	ss IX.—Foo	£ d, Drilık aı	d Tobacco	£ continued.		£
Milk—		]					•
Condensed Concentrated Powdered and	lb.	3,815,546 2,332,097	89,013 39,619	5,055,968 19,510,583	158,267 417,926	1,081,942 20,435,991	30,771 445,67
Malted	,,	4,761,487	244,379	15,130,512	949,052	12,831,084	857,20
Preserved Meat Meat Extracts and Pastes	,,	3,377,960 173,773	124,251 $23,234$	26,542,794 999,161	1,458,133 197,523	17,994,815 1,014,863	1,056,013 230,463
Margarine—	,,	110,110	20,201	000,101	101,020	1,011,000	200,100
Table Other Total Margarine	1) 1)	4,492,247 22,475,085 26,967,332	162,692 566,627 729,319	$\substack{15,167,113\\25,313,121\\40,480,234}$	$\begin{array}{c} 758,896 \\ 726,931 \\ 1,485,827 \end{array}$	9,206,048 21,570,370 30,776,418	459,402 614,293 1,073,695
Other Edible Fats (including drip-							
(including dripping)	12 13 13 13 23 23 23 24 24	18,709,985 1,617,370 388,505 175,632 600,876 195,900 2,019,088 1,096,636	283,572 129,141 14,874 10,773 87,935 10,712 80,293 48,077	17,379,812 2,396;525 317,026 70,103 629,257 183,268 4,577,790 45,722	535,782 246,792 29,749 7,353 123,196 11,868 159,827 3,395	15,913,690 2,617,835 262,252 101,772 594,624 219,136 3,035,049 444,972	438,309 281,757 36,029 12,72- 125,936 16,517 137,869 36,179
Flavouring Essences Industrial		}	32,974	***	105,890	{	196,000 124,798
Pennut Butter Toing Sugar Starch (Inedible) Baking Powder Self-ralsing Flour Jelly Crystals Ice Ice Creum Acerated Waters, etc. Cordials and Syrups Pure Fruit Juices Tomato Juice	ewt. 1b. cwt. 1b. tons. gall. gall.	1,154,457 9,077,191 20,934 1,434,750 249,990 3,060,132 232,747 2,232,760 9,312,068 423,746 53,395	85,099 145,481 27,521 101,496 295,589 153,967 438,157 773,761 813,971 186,747	$\substack{2,496,917\\17,675,000\\17,293\\1,752,766\\262,951\\7,661,287\\425,239\\4,923,514\\12,441,300\\2,331,966\\362,228\\234,750}$	200,251 280,860 52,524 105,844 354,846 409,028 865,743 1,271,010 1,335,742 948,523 235,219 65,180	1,494,564 26,314,763 25,832 990,041 336,037 6,071,487 471,320 5,277,682 13,817,209 2,150,224 89,312 332,291	135,04° 436,18( 67,99( 76,463) 463,54( 342,000 976,87( 1,328,622 1,493,45: 830,12( 37,09) 87,814
Ale, Beer and Stout— Bülk Bottled Total Ale and Beer Malt	,, ,, bush.	27,174,284 6,724,739 33,899,023 640,915	2,213,128 1,252,071 3,465,199 211,627	33,032,990 6,040,827 39,073,817 555,351	2,667,090 1,093,514 3,760,604 262,186	43,053,753 7,600,488 50,654,241 608,650	3,462,8 <b>6</b> 1,355;1 <b>4</b> 4,818,00 283,25
Tobacco— Plug Flake Fine Cut Total Tobacco Cigarettes	lb,	1,793,705 5,272,078 3,690,037 10,755,820 4,496,428	508,496 1,971,057 1,259,151 3,738,704 2,254,036	2,469,403 4,803,595 4,275,328 11,548,326 5,524,816	915,221 1,969,907 1,713,304 4,598,432 3,600,766	2,608,453 5,870,415 4,538,731 13,017,599 6,795,385	1,110,744 2,579,638 1,927,577 5,617,956 4,438,804
Sausage Casings— Beef Mutton and Lamb Pig	ewt.	8,411 5,832 862	11,628 82,772 11,943	7,551 6,556 713	27,062 71,956 18,123	8,458 6,937 1,075	35,366 78,94 30,36
		CLASS XV		g and Baske			
Rough Sawn Timber— Native— Hardwoods	sup. ft.	129,510,433		180,024,508	•	919 919 515	
Softwoods Imported (including Inter-	sup. It.	49,840,052	*	72,082,499	*	212,313,515 88,618,190	*
state)— Hardwoods	,,	767,511	•	1,025,681	*	693,658	*

<sup>\*</sup> Not available for publication.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

	TInit - C	1938	-39.	1945	-46.	1946	-47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
			£		£	<u> </u>	£
70.	CLAS	s X.—Wood	working an	l Basketware	c—continued		
Rough Sawn Timber —continued. Imported (includ- ing Interstate) —continued. Softwoods Total Sawn Timber	sup. ft.	101,051,353 281,169,349	*	1,016,662 254,149,350	* *	1,609,520 303,234,883	:
Sleepers Palings Floorboards—	sup. ft.	652,331 3,699,186	5,601 28,904	813,149 3,769,048	12,626 44,988	992,428 5,166,430	14,678 77,514
Australian Timber Imported Timber Weatherboards—	"	28,185,505 2,137,266	327,760 41,218	17,245,671 411,044	326,185 15,398	25,341,622 544,325	527,198 29,664
Australian Timber Imported Timber Other Dressed Timber Linings,	"	8,802,107 914,884	108,532 17,641	3,911,905 *	78,574 *	6,123,700 37,193	128,932 2,278
etc	sq."ft.  No.	28,863,077 14,576,406 3,798,634  32,580	645,285 249,341 65,353 1,441,864 *	20,486,291 19,544,863 12,431,647  75,604	891,517 345,856 102,289 1,944,363 103,711 347,109	24,035,434 22,323,483 17,699,908  47,244	1,340,150 420,308 157,726 2,590,282 62,615 330,026
Boxes, Butter Cases, Fruit Other Boxes, Cases,	No.	2,536,040 3,978,313	183,618 145,618	1,023,228 3,017,014	104,736 207,010	568,127 3,021,676	78,232 214,058
and Crates Axe Handles Other Handles Firewood Baskets	gross tons	2,594 25,741 64,145	514,578 7,908 29,024 46,024 9,127	5,121 45,422 107,747	1,969,734 60,372 90,805 153,283 11,249	5,696 67,286 124,236	1,702,624 77,376 129,775 168,554 22,827
Seagrass and Bam- boo Furniture Clothes Pegs	 gross	<b>*</b> ··	46,475 *	50,744	30,754 7,300	 43,125	46,550 8,386
		CLASS XI.	Furniture	e, Bedding, e	te.		
Perambulators (in-						<del></del> -	
cluding Pushers and Strollers) Furniture Picture and Mirror	No.	42,282	73,933 2,418,014	50,012 	129,311 2,568,682	48,859	157,636- 3,662,376
Frames			68,940		88,425		120,404
Wireless Cabinets (Wooden)	No.	133,760	287,737	27,723	90,138	66,800	255,227
Mattresses— Spring Inner Spring Kapok, etc	"	79,140 17,407	95,448 70,881	37,635 20,942 128,283	86,681 132,967 381,206	59,782 36,296 129,937	133,617 263,936 489,345
Other Bedding and Pillows Quilts, Down, etc. Blinds and	No.	16,465	383,598 <b>4</b> 0,111	31,732	236,791 71,585	35,378	308,533 105,832
Awnings— Outdoor Other			61,245 207,452	:::	49,120 133,680		97,913 178,186
	LASS XII	I.—Paper, St	ationery, P	rlnting, Bool	kbinding, et	c.	
Cardboard Boxes Envelopes Exercise Books, etc. Paper Bags Paper Containers Writing Pads Stay Paper Sigarette Papers	    1,000	     1,770,079	1,038,051 163,946 198,811 296,621 131,221 100,640 * 53,333		1,858,829 197,774 262,486 385,817 264,335 95,830 93,498		2,485,187 247,017 347,881 456,638 387,870 135,037 120,051

<sup>\*</sup> Not available for publication.

Table 56.—Principal Articles Manufactured in N.S.W., 1938-39 to 1946-47—continued.

•	77.11.6	1938-	39.	1945-	-46.	1946-	47.
Description.	Unit of Quantity	Quantity.	Value at Works.	Quantity.	Value at Works.	Quantity.	Value at Works.
			£		£		£
_		Cı	-,IIIX 88A	-Rubber.			
Rubber Tyres Rubber Boots and	No.	662,736	1,233,832	540,103	2,385,907	908,353	3,607,40
Shoes (including Goloshes) Rubber Hose	pair ft.	3,557,914 5,517,879	$457,170 \\ 102,084$	821,340 9,820,496	177,524 324,257	1,986,723 11,301,878	525,200 377,100
Surgical Instruments and Appliances Buttons			51,672 31,689		252,552 244,592		
and Appliances Buttons Brushes— Hair and Cloth Nail Tooth	gross			2,321 3,080 33,172 1,966	252,552		195 04 374,433 77,803 8,925 229,625
Shaving Shaving Shaving Shaving Shaving Shaving	" "	459 6,880 2,723	3,637 59,114 23,522	1,056 5,351 14,257	13,738 69,145 72,957	1,172 7,359 17,422	17,116 139,79 81,87
Brooms— Millet Bassine Hair and Bristle Mops Foys Games	)) )) )) 	4,840 1,382 913 2,602	67,080 15,520 17,741 14,802 215,371	4,455 1,806 2,020 5,718	116,789 33,031 48,168 61,454 423,446 13,433	5,215 1,648 1,687 4,650 	149,05 28,12 63,61 49,74 916,46 19,70
Fennis Racquet Frames Golf Clubs	doz.	9,348 6,586	100,875 70,841	12,611 2,320	120,688 42,216	* 7,609	* 147,96

## CLASS XVI.—Heat, Light, and Power.

Electricity	1		1	· I	1		
Generated and							
sold	000 units	1,608,269	5,602,877	2,400,499	8,547,825	2,745,804	9,748,120
Used in Generat-	1					100 505	
ing Station	,,	87,913	•••	142,788	•••	166,525	•••
Lost Generated in Fac-	,,	137,358	•••	165,627		179,899	•••
tories for Own					1		
Use		114,949		122,887		136,442	•••
000 111 111	,,	111,010		122,007		201,222	
Total Electricity					0 - 1 - 00-	0.000.000	
Generaled	"	1,948,489	5,602,877	2,831,801	8,547,825	3,228,670	9,748,120
Gas—						1	
Sold	000 cub.	9,330,921	1,546,562	13,353,932	2,586,724	14,683,936	2,767,239
	ft.						
Used in Own		00 505		70.050		#1 100	
Works Lost	"	80,565		76,856		71,122 $1,988,895$	•••
Lost	,,	1,484,699		1,870,922	•••	1,500,050	•••
Tolal Gas made	١,,	10,896,185	1,546,562	15,301,710	2,586,724	16,743,953	2,767,239
	'			i			
	l l					' <u> </u>	

<sup>\*</sup> Not available for publication.

#### INDIVIDUAL INDUSTRIES.

In the following pages particulars are given of the structure and production of certain of the more important individual secondary industries of New South Wales. The basis of classification of factory establishments by industry is indicated at page 59. The appropriate classification of each establishment is determined according to its predominant activity, but the particular establishment may also have lesser activities which should, but cannot, be classified to other industries. The quantities of principal articles produced in these individual secondary industries are therefore only the quantities produced by the establishments classified thereto; the total production of these articles by all establishments in New South Wales, however classified, is given in Table 56.

#### CEMENT WORKS.

The extensive deposits of limestone and shale in New South Wales are used for making cement in establishments situated in proximity to the supplies of raw material and coal mines.

Items.	1937–38.	1938-39.	1943-44,	1944-45.	1945-46.	1946-47.
Number of Establishments  Average Number of Employees* Total Horse-power installed  Value of Land and Buildings Value of Plant and Machinery Salaries and Wages Paid Value of Fuel and Power used Value of Materials used Value of Output Value of Production Cement made  total Limits on Shell, Coral used tons	44,258 591,038 956,660 269,917 216,983 345,998 1,469,636 906,655 ,438,267	931 48,495 586,510 1,059,604 246,490 202,961 385,428 1,453,599 865,210 492,487 583,748	4 573 43,669 478,648 609,692 188,668 190,671 289,582 909,029 428,776 305,384 386,770	4 589 43,833 467,829 596,879 204,522 190,379 360,732 1,002,168 451,057 327,830 446,420	4 633 43,779 460,622 559,638 191,461 186,685 399,841 1,016,973 430,547 320,556 434,327	44, 722, 42,918, 459,091, 553,613, 234,359, 216,233, 442,586, 1,315,552, 667,783, 398,397, 547,088.

Table 57.—Cement Works.

The largest output of cement, 438,267 tons, was recorded in 1937-38. During the war, large quantities of Portland cement were used on defence projects, but restrictions were imposed on ordinary public works and civilian building, and production declined to 320,556 tons in 1945-46 (27 per cent. less than in 1937-38). As conditions eased, output rose to 393,397 tons in 1946-47, but was still 10 per cent. and 9 per cent. less, respectively, than in 1937-38 and 1938-39.

#### GLASS AND GLASS BOTTLE WORKS.

In the decade preceding the outbreak of war in 1939, there was substantial progress in the manufacture of glassware in New South Wales, and during the war production was extended to new types such as glassware

<sup>\*</sup> Average over whole year,

for scientific purposes. Much of the activity in glass and glass bottle works comprises bevelling, cutting, silvering, and mirror making. Particulars of the factories are shown below:—

Ttems.	1938–39.	1941-42.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments  Average Number of Employees* Total Horse-power installed Value of Land and Buildings Value of Plant and Machinery Salaries and Wages paid Value of Fuel and Power used Value of Materials used Value of Output Value of Production  E Value of Production  £	39 3,214 9,073 722,331 467,836 672,740 158,609 693,688 2,024,036 1,171,739	41 4,259 9,895 929,555 624,851 1,062,754 278,421 1,011,068 3,013,102 1,723,613	39 3,652 10,869 977,800 634,656 1,156,862 348,341 1,074,927 3,219,808 1,796,540	40 3,919 10,502 987,222 736,158 1,115,996 376,093 1,195,605 3,319,059 1,747,361	44 4,099 13,463 1,007,736 760,194 1,272,367 408,736 1,197,863 3,610,064 2,003,465	51 4,416 12,909 1,104,080 776,384 1,414,320 500,877 1,725,971 4,714,748 2,487,900

Table 58:--Glass and Glass Bottle Works.

The number of employees in glass and glass bottle works increased from 3,214 in 1938-39 to 4,259 in 1941-42, fell to 3,652 in 1943-44, and subsequently rose to 4,416 in 1946-47. The value of production amounted to £1,171,739 in 1938-39, was about 50 per cent. higher during the war years 1941-42 to 1944-45, and increased further to £2,003,465 in 1945-46 and £2,487,900 in 1946-47 (71 per cent. and 112 per cent., respectively, above the pre-war level).

## BRICK, TILE AND POTTERY WORKS.

Utilising the abundance of clay, brickworks have been established in many parts of the State. In a number of cases the industry is associated with tile-making and pottery. Particulars of these industries are shown below:—

Items.	1938–39.	1942-43,	1943–44,	1944-45,	1945-46,	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power installed Value of Land and Buildings Value of Plant and Machinery Salary and Wages Paid Value of Fuel and Power used Value of Materials used Value of Output; Value of, Production  \$ Value of, Production \$ £	176 5,043 20,063 1,047,940 1,232,838 1,118,664 356,964 380,051 2,611,482 1,874,467	108 2,453 18,485 967,143 1,003,087 708,134 190,957 3C2,119 1,507,674 1,014,598	90 1,981 14,923 822,902 779,692 565,077 145,850 260,958 1,184,595	98 2,260 16,719 929,181 819,542 659,698 179,130 262,917 1,357,083 915,036	141 3,314 20,659 1,051,640 1,109,588 928,218 278,609 369,688 1,930,661 1,282,365	169 4,648 22,999 1,263,562 1,274,673 1,462,854 435,040 545,921 3,023,989, 2,113,028,

Table 59.—Brick, Tile and Pottery Works.

Ordinarily the local factories supply all the bricks, roofing tiles, and earthenware pipes required for use in New South Wales, but it is usual, for a considerable proportion of the floor and wall tiles to be imported.

<sup>\*</sup> Average over whole year.

<sup>\*</sup> Average over whole year:

Production of brick, tile and pottery works fell to very low levels during the depression years, and again during the war when all non-military construction work was restricted severely. Although it began to increase again after 1943-44, the output in 1946-47 remained much below the prewar and pre-depression levels. The production of bricks (excluding fire-bricks) declined 93.5 per cent. between 1928-29 and 1931-32 and 85 per cent. between 1938-39 and 1943-44, and in 1946-47 was 34.2 per cent. less than in 1938-39 and 42.9 per cent. less than in 1928-29.

In 1946 the State Government resumed and re-opened the State Brickworks at Homebush Bay (sold in 1935) to help overcome a post-war shortage of bricks; production commenced in August of that year.

The following statement shows the output of the principal products of brick, tile, and pottery works at intervals since 1928-29:—

3	Produ	cts.		1928-29.	1931-32.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Bricks			thous,	437,158 1,625,464		379,236 1,265,555				144,594 695,097	249,533 1,277,385
Firebricks Tiles—	•••	•••	£	103,985					551,093		608,511
Roofing (T			£	332,284						12,230 215,969	19,523 366,897
Floor and	Wali	* s	q. yd. £	† 40,896	l f	82,154 39,468			6,839 3,984		54,085 34,230
Pipes— Earthenwa			£	250,151	49,221	402,613	168,495	148,281	106,837	236,907	370,918
Pottery : Earthen	and ware	Othe	er £	256,873	90,339	231,518	242,897	222,010	260,001	249,119	357,862

Table 60.-Output of Bricks, Tiles, etc.

## CHEMICALS, DRUGS, AND MEDICINES.

The production of industrial and heavy chemicals and pharmaceutical and toilet preparations developed considerably during and since the war years. A summary of the operations of the relevant factories in recent years is contained in the following table:—

Items.	1938–39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power Installed Value of Land and Bauldings Value of Plant and Machinery Salarles and Wages Paid Value of Fuel and Power Used Value of Materials Used Value of Output Value of Production £ Value of Production	7,256 1,044,646 613,642 534,983	175 4,211 11,740 1,636,581 1,521,038 1,079,472 167,975 3,769,313 8,015,859 4,078,571	196 4,774 13,299 2,041,277 2,146,185 1,308,023 194,901 4,338,550 9,033,965 4,500,514	210 5,059 20,134 2,196,971 2,167,455 1,424,914 208,156 4,494,760 9,449,223 4,746,307	219 5,806 20,178 2,107,542 1,875,385 1,627,455 247,038 5,288,440 10,830,154 5,294,676	231 6,068 22,246 2,249,789 1,897,311 1,944,723 255,112 6,384,028 12,466,977 5,827,837

Table 61.—Chemicals, Drugs, and Medicines.

<sup>\*</sup> Glazed and unglazed.

<sup>†</sup> Not available.

Between 1938-39 and 1946-47 the number of establishments increased by 99 (75 per cent.), the number of employees by 115 per cent., the value of land, buildings, and machinery by 150 per cent., and the value of production by 145 per cent.

# SOAP AND CANDLE FACTORIES.

A wide variety of household and toilet soaps and soap extracts and powders is produced in New South Wales, as well as the comparatively small quantity of candles required for local use. Production expanded during the war but the demands of the services left soap, etc. for civilian use in short supply. Restricted supplies of tallow and other raw materials caused the fall in the production of soap and soap extracts and powders, etc. during 1946-47. The following table summarises the operations of the soap and candle factories during recent years:—

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments  Average Number of Employees*  Total Horse-power installed  Value of Land and Buildings  Value of Plant and Maebinery  Salaries and Wages paid  Value of Fuel and Power used  Value of Materials used  Value of Output  Value of Production  Materials Treated  £  Materials Treated	27 1,460 3,952 335,682 224,237 284,580 30,078 796,759 1,825,877 999,040	34 1,751 4,629 378,540 219,442 458,096 59,594 1,744,793 3,593,398 1,789,011	1,670 4,376 374,577 195,082 465,930 57,245 1,591,239 3,135,574 1,487,000	34 1,642 4,336 369,771 165,140 440,541 49,335 1,641,446 3,230,507 1,539,726	40 1,721 4,280 376,634 161,333 495,275 50,061 1,686,739 3,408,769 1,671,969	41 1,867 4,342 400,993 159,955 555,515 37,563 1,625,610 3,328,880 1,665,707
Tallow cwt.   Alkali for Soap cwt.   Resin cwt.   Coco-nut Oil cwt.   Principal Products—   Soap Extracts and powders   b.   Glycerine†   lb.   Soda Crystals†   lb.	242,592 ‡ 25,539 68,866 478,488 6,266,064 3,057,600 2,540,944	499,252 10,434 48,298 714,317 17,068,688 6,157,312 3,169,152	427,486 1 6,590 39,749 538,924 25,173,232 4,459,840 1,635,312	411,702 † 6,789 42,353 524,958 26,429,648 3,936,688 1,496,208	401,129 72,452 4,762 41,922 518,114 29,429,568 3,982,720 1,417,472	322,940 58,950 6,001 24,131 411,375 21,695,184 2,766,960 ‡

Table 62.-Soap and Candle Factories.

#### METAL AND MACHINERY WORKS, ETC.

Factories engaged in the treatment of industrial metals and the manufacture of machinery, conveyances, etc. comprise the largest group of manufacturing industries in New South Wales. The growth of these industries was checked during the depression but otherwise proceeded steadily during the years 1914 to 1939, and accelerated during the war (1939-45), when munitions, aircraft, ships, machine tools, and mechanical equipment of types and in quantities not formerly manufactured in New South Wales were produced. The curtailment of war production and the transition of industry to a peace-time basis caused the decline in activity in these industries from the war-time peak in 1943-44 to 1945-46, but it increased again in 1946-47 as progress was made in overcoming transitional difficulties.

<sup>\*</sup> Average over whole year. † Total production of glycerine and soda crystals in 1946-47 (including quantities made in chemical works as well as in soap factories) was 3,791,984 lb. and 2,108,288 lb, respectively. ‡ Not available.

A comparative statement showing the development of the metal and machinery works since 1911 is given below:—-

Table	63.	Metal	and	Machinery	Works.
-------	-----	-------	-----	-----------	--------

Year,	Number of Establish- ments.	Average Number of Employees.	Total Horse- power installed.	Salaries and Wages Paid.	Value of Materials and Fuel Used.	Value of Output,	Value of Production,
1911 1920-21 1928-29 1931-32 1932-33 1933-34 1934-35 1935-36 1936-37 1937-38 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1946-47	934 1,262 2,170 1,956 1,957 2,005 2,200 2,298 2,401 2,545 2,634 2,667 2,781 2,837 2,913 3,127 3,296 3,530 4,066	29,066 45,603 62,090 38,981 43,902 49,760 57,810 66;277 73,464 81,472 82,452 86,841 105,597 132,444 158,113 163,023 151,076 136,602 143,652	37,813 182,263 199,475 234,910 233,224 259,299 282,734 293,601 311,043 337,431 338,350 301,944 481,557 466,039 514,395 529,279 537,033 549,596 571,062	£ thous. 3,426 9,897 15,045 7,545 8,489 9,416 11,163 13,174 14,795 17,451 18,495 20,345 26,988 40,134 51,554 48,040 42,478 47,444	£ thous. 7,986 23,789 31,922 16,332 20,875 24,934 30,111 35,636 42,124 47,701 48,172 53,592 68,344 86,439 98,470 101,273 92,038 77,319 94,185	£ thous. 13,829 37,064 54,995 27,730 33,774 40,230 43,402 57,777 67,996 76,808 79,863 87,923 113,308 146,553 172,797 189,890 168,721	£ thous. 5,843 13,275 23,073 11,898 12,899 15,296 18,291 22,141 25,872 29,107 31,691 34,331 44,964 60,114 74,327 78,525 72,659 62,571 74,536

<sup>\*</sup> Average over whole year.

In the following table the metal and machinery works are grouped according to their predominant activity to show the extent of the operations during 1946-47 of the principal industries that comprise this factory class:—

Table 64.—Metal and Machinery Works: Individual Industries, 1946-47.

Industries.	Number of Establish- ments.	Average Number of Em- ployees*,	Total Horse- power Installed.	Salaries and Wáges Paid.	Value of Materials and Fuel Used.	Value of Output.	Value of Produe- tion.
Smelting, Iron and Steel	16	11,131	215,193	£ thous. 4,611	£ thous. 24,630	£ thous. 34,925	£ thous,
Extraction and Refining other Metals Tron and Steel Sheets and	18	1,570	38,175	639	11,723	15,121	3,398
Tron and Steel Sheets and Sheet Metal Working Rolling, Founding, etc. non-	206	9,616	32,505	3,080	7,936	12,724	4,788
ferrous Metals	136	5,438	28,115	1,876	6,363	9,629	3,266
Pipes, Tubes, and Fittings	14	3,624	14,166	1,332	2,492	4,747	2,255
Wireworking (including nails)		3,690	17,197	1,382	3,169	5,370	2,201
Plant, Equipment, Machin- ery, and other Engineering Electrical and Wireless Equip-	1,127	28,218	62,273	9,079	11,657	25,102	13,445
ment Motor Vehicles and Cycles	392	22,986	25,197	6,862	9,589	19,461	9,872
(coustruction, assembly, repair, accessories) Railway and Tramway Roll-	1,580	15,097	<b>1</b> 6,512	4,118	3,517	10,791	7,274
ing Stock	41	18,897	37,821	6,297.	4,596	11,970	7,374
Ship and Boat Building	98.	10,425	50,959	3,866	2,131	6,789	4,658
Aircraft	17	3,664	7,129	1,233	3,474	5,017	1,543
Other	338	9,296	25,820	3,069	2,908	7,075	4,167
Total, Metal and Machinery Works	4,066	143,652	571,062	47,444	94,185	168,721	74,596

<sup>\*</sup> Average over whole year.

Because the classification of many individual factories was changed upon the introduction of the new factory classification (see page 59) in 1945-46, comparable data for all these individual industries are not available for earlier years. In most of these industries, activity intensified during the war years, slackened between 1943-44 and 1945-46, and re-expanded in 1946-47. In particular, the employment and value of production in factories manufacturing aircraft, ships, etc., and electrical and wireless equipment increased substantially during the war, and, despite decreases due to curtailment of war production and transitional difficulties in resuming peacetime activities, were in 1946-47 considerably above the 1938-39 level.

Details of the principal items manufactured in these industries during 1938-39, 1945-46, and 1946-47 are given in Table 56.

#### Iron and Steel Works.

The great expansion that has occurred in the metal and machinery works group is bound up in the remarkable progress of the iron and steel industry in New South Wales. A brief review of the history of the industry is presented in the 1937-38 issue of the Year Book on page 628.

The principal iron and steel works are at Newcastle and Port Kembla in proximity to the northern and southern coalfields respectively. These works are modern and efficient, and they are controlled by an organisation which owns the coke works and iron and steel furnaces, large deposits of iron ore, limestone, coal and other minerals, and a fleet of ships for the transport of iron ore and other raw materials and the carriage of finished products of the steel works.

The following table shows the production of pig iron and steel in New South Wales since 1925-26:—

Year.	Pig Iron,	Steel Ingots.	Steel Rails, Bars and Sections.	Year.	Pig Iron.	Steel Ingots.	Steel Rails, Bars and Sections.
1925-26 1931-32 1932-33 1936-37 1937-38 1938-39 1939-40	Tons. 430,597 190,132 336,246 913,406 929,676 1,104,605 1,212,006	Tons. 385,231 221,488 392,666 1,073,146 1,158,415 1,168,305 1,290,226	Tons. 339,463 178,740 295,523 837,445 906,078 972,799 1,034,714	1940-41 1941-42 1942-43 1943-44 1944-45 1945-46	Tons. 1,461,737 1,376,893 1,276,395 1,192,803 1,117,709 852,197 925,679	Tons. 1,654,314 1,696,606 1,625,829 1,523,489 1,345,626 1,054,483 1,311,959	Tons. 1,337,584 1,388,620 1,266,768 1,217,201 1,089,509 853,431 1,099,514

Table 65.—Production of Iron and Steel.

The production of iron and steel was seriously restricted during the depression, but recovered rapidly in 1932-33, and was greater in 1933-34 than in any previous year. Following a period of steady expansion, output reached the record level of 1,461,737 tons of pig iron in 1940-41 and 1,696,606 tons of steel in 1941-42, but then declined and in 1945-46 amounted to 852,197 tons of pig iron and 1,054,483 tons of steel. Production rose in 1946-47 to 925,679 tons of pig iron (37 per cent. and 16 per cent. below the 1940-41 and 1938-39 levels, respectively, and 1,315,043 tons of steel (23 per cent. below 1941-42 and 12 per cent. above 1938-39), but was still restricted by inadequate and irregular supplies of coal, shortage of labour, and industrial disputes.

An appreciable proportion of the steel produced in New South Wales is manufactured from pig iron reduced in the blast furnace established at Whyalla (South Australia) by the Broken Hill Pty. Co. Ltd. The furnace was blown in in May, 1941, but smelting operations were suspended from May, 1944 until April, 1946.

During 1947-48 oversea exports of iron and steel (excluding scrap iron) from New South Wales amounted to 67,906 tons valued at £807,012. The quantities and values of exports in certain earlier years were: 1946-47, 195,929 tons, £1,776,432; 1945-46, 169,609 tons, £2,662,575; 1938-39, 197,499 tons, £3,124,994; 1937-38, 77,000 tons, £1,980,812. The bulk of the exports in 1947-48 was shipped to New Zealand.

The prices of iron and steel operative during the first quarter of each year 1938 to 1948 are given in the next table. These prices, which are quoted in the annual report of the Australian Tariff Board for 1947-48, are prices net c.i.f. in Australian currency at State capital ports. In June, 1948 the price of pig iron (£6.75 per ton) was 50 per cent. above the 1938 level and 17 per cent. above 1946. The price of bar and structural steel in 1948 was £14.13 per ton, being 39 per cent. and 12 per cent higher, respectively, than in 1938 and 1946. During and since the war, the prices have been subject to control in terms of the Commonwealth, and later the State prices regulations.

Table 66.—Prices of Iron and Steel in Australia.

Item.	1938, 1939	. 1940. 1941.	1942.   1943.	1944. 1945,	1946. 1947. 1948
Pig Iron Bar and Structural Stee	4·50 10·13   10·13	£ per ton; $\frac{4.50}{10.13} \begin{vmatrix} 4.50 \\ 10.13 \end{vmatrix}$	net c.i.f. State 4.50   5.75   10.13   12.63	te capital ports	$\begin{bmatrix} 5.75 &   & 6.75   & 6.75 \\ 12.63 &   & 14.13   & 14.13 \end{bmatrix}$

Variations in the prices of iron and steel in Australia compare favourably with price movements overseas. The following statement gives comparable prices of pig iron and bar and structural steel to domestic purchasers in Australia, the United Kingdom, and the United States of America in 1948 and selected earlier years. The prices are expressed in terms of Australian currency at the existing rates of exchange and their bases of quotation are net c.i.f. State capital ports for Australia, delivered consumers' works (net) for the United Kingdom, and f.o.b. basing points for the United States; the Australian and United Kingdom prices relate to the first quarter of the year, the United States prices relate to January.

Table 67.-Price of Iron and Steel, Australia and Overseas\*.

		Pig Iron.				Bar Steel.			. Structural Steel.		
	Year,		Aus- tralia.	United Ring- dom,	U.S.A.	Aus- tralia.	United King- dom,	U.S.A.	Aus- tralia.	United King- dom,	U.S.A.
							0.1 4	_		,	·
1938			4.50	8.00	6.38	10.13	£A per to:   14:31	13.89	10.13	13.78	12.76
1946	•••	• • • •	5.75	10.53	8.26	12.63	22.10	15.75	12.63	19.35	14.70
1947		• • • • • • • • • • • • • • • • • • • •	6.75	10.88	9.77	14.13	22.69	18.20	14.13	19.66	16.45
1948			6.75	12.13	11.69	14.13	24.38	20.30	14.13	21.13	19.60
Percer crea 1948	se 193	in- 8 to	50	52	83	39	70	46	39	53	54

<sup>\*</sup> Source-Annual Report, Australian Tariff Board, 1947-48.

Prices in Australia have been consistently lower, and between 1938 and 1948 the percentage increases in the prices of iron and steel in the United Kingdom and the United States appreciably exceeded the increases in Australian prices. In this respect, therefore, Australian industry appears to have held a strong competitive advantage.

# Metal Extraction.

In addition to the iron and steel works there are other establishments for the treatment of ores and the extraction of metals. The quantity of gold, silver, copper and other metals extracted in 1938-39 and each of the last five years (including pig iron produced in iron and steel works) is shown in the next table:—

37		Metals extracted from Ores, Concentrates, etc.										
Year.	Gold.	Silver.	Copper.	Tin.	Iron Pig.	Antimony.	Platinum					
-	oz. fine.	oz,	tons,	tons.	tons.	tons.	oz.					
1938 - 39	371,748	468,163	6,856	3,236	1,104,605	227	15					
1941 - 42	439,154	478,746	10,550	3,332	1,376,893	579	4					
1943-44	278,019	535,891	15,134	2,569	1,192,803	496						
1944-45	218,540	392,410	18,574	2,542	1,117,709	515						
1945-46	205,145	360,158	18,403	2,350	852,197	108	•••					
1946-47	223,020	270,359	12,029	2,075	925,679	226	•••					

Table 68.—Metal Extraction in N.S.W.

Gold and silver have been extracted from ores mined in various parts of Australia, Papua, New Guinea and Fiji, and copper and tin from Australian ores. South Australia is the usual source of iron ore but the New South Wales deposits were worked during the war years to help maintain the production of the iron and steel works.

# COTTON MILLS.

Under the impetus of war, the cotton spinning and weaving industry developed rapidly and its range of products was extended to cover cotton tweeds, duck, drills, canvas, towelling, tyre cord and tyre cord fabric, etc. Between 1938-39 and 1943-44, the number of establishments increased from 13 to 37, the number of employees by 133 per cent., and the value of production by 330 per cent. There was a decline in activity between 1943-44 and 1945-46, the number of employees falling 16 per cent. and the value of production 19 per cent. During 1946-47, the mills expanded their operations, although hampered by shortage of raw materials and particularly of labour; the number employed increased to 3,615 (111 per cent. above 1938-39, but 10 per cent. below 1943-44) and the value of production rose to £1,711,648 (slightly below 1943-44 and four times greater than in 1938-39). Particulars of the spinning and weaving operations of cotton mills in the years 1942-43 to 1946-47, as compared with the pre-war year 1938-39, are contained in the following table:—

	Cotton	mina (Dp	initing a	uu Weav	s.	
. Item.	1938–39,	1942–43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments  Average Number of Employees*  Total Horse-power installed  Value of Land and Buildings  Value of Plant and Machinery  Salaries and Wages paid  Yalue of Fuel and Power used  Value of Materials used  Yalue of Output  Yalue of Production  Yalue of Production	1,716 3,895 290,597 258,456 217,003 22,122 618,931	36 4,116 7,735 617,119 836,738 823,676 61,281 2,447,125 4,040,765 1,532,359	37 4,006 8,263 632,319 760,581 885,957 65,761 2,848,901 4,661,179 1,746,517	39 3,946 8,835 653,286 849,169 872,166 64,682 2,742,768 4,554,404 1,746,954	, 40 3,381 8,805 634,222 636,388 776,932 63,882 2,327,797 3,804,932 1,413,253	42 3,615 9,591 693,936 675,717 1,018,669 70,674 2,964,923 4,747,245 1,711,648

Table 69.—Cotton Mills (Spinning and Weaving).

The production of cotton and woollen and worsted piece goods in cotton mills during the years 1936-37 to 1946-47 is shown in Table 73.

# WOOLLEN AND TWEED MILLS.

Most of the woollen goods required in New South Wales are manufactured in Australia. Woollen mills have been established in Sydney, Goulburn, Albury, Lithgow, Liverpool, and Orange. In 1946-47 there were forty-six establishments in this group, employing on the average 4,195 males and 3,382 females. In some of the factories all the processes, from scouring the greasy wool to weaving tweed and cloth, were carried out. Others were concerned with spinning, or topmaking, or weaving only, and tops were made for export as well as for local use.

Details of employment, output, and other particulars relating to woollen and tweed mills in 1938-39 and each of the last five years are shown in the following table:—

			_			
, Items.	1938–39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments  Average Number of Employees* Total Horse-power installed  Value of Land and Buildings  Value of Plant and Machinery  Salaries and Wages paid  Value of Fuel and Power used  Value of Materials used  Value of Output  Value of Production  Scoured Wool Processed  1b.	22 6,712 11,845 607,215 1,051,096 974,382 131,481 2,511,519 4,299,710 1,656,710 15,761,440	35 9,382 13,405 893,552 1,115,792 1,974,993 172,495 5,467,568 8,985,689 3,345,626 20,496,145	35 8,165 13,491 925,017 1,072;098 1,876,402 168,179 4,763,430 7,891,709 2,960,100 20,228,128	37 7,021 13,753 948,954 1,061,823 1,626,473 149,045 3,873,835 6,666,216 2,643,336 15,085,781	37 6,801 14,778 1,085,639 1,150,183 1,655,356 144,693 3,094,650 6,884,484 2,745,141 13,278,650	46 7,577 15,036 1,041,818 1,195,558 1,006,997 153,282 4,747,006 8,323,671 3,423,383 14,478,321

Table 70.-Woollen and Tweed Mills.

The quantity of scoured wool (and its estimated greasy weight) processed for different purposes in New South Wales factories—in woollen and tweed mills and other textile factories and in hat and cap factories—in 1938-39 and each year since 1942-43 was as follows:—

Purpose.	1938-39.	1942-43.	1943–44.	1944-45.	1945–46.	1946-47.
Woollen Mills for making— Wool tops and noils Woollen Yarn Other textile factories for making felt, etc. Hat and cap factories	11,865 2,286 1,610 186	16,486 4,010 2,566 297	16,438 3,790 3,581 289	1b, thous, 12,041 3,045 3,888 209	1b, thous, 10,361 2,918 3,845 155	1b. thous. 10,786 3,693 4,457 184
Total Scoured Wool Estimated Weight as in grease	15,947 30,125	23,359 50,600	24,098 51,060	19,183 41,700	17,279 37,500	19,120 41,400

Table 71.—Scoured Wool Processed in N.S.W. Factories.

The production of wool tops and noils and woollen and worsted yarn; in woollen and tweed mills during 1938-39 and later years is recorded in the following table. The total production shown comprises both the marketable output of tops, noils, and yarn; and also the quantities produced for further processing in the mills...

<sup>\*</sup> Average over whole year.

Table 72.—Production of Wool Tops and Noils and Woollen and Worsted Yarn.

Item.	1938–39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Tops and Noils—  For sale or addition to stocks  For further processing in the	lb. 7,045,824	lb. 8,451,201	lb. 8,277,651	lb. 6,503,162	lb. 5,121,227	lb. 6,108,543
mills	3,986,637	7,866,424	7,754,869	5,433,826	5,084,557	4,782,772
Total—Tops Noils	10,121,972 910,489	14,730,827 1,586,798	14,456,140 1,576,380	10,690,810 1,246,178	9,238,954 966,830	9,782,193 1,109,122
Total	11,032,461	16,317,625	16,032,520	11,936,988	10,205,784	10,891,315
Yarn, Woollen and Worsted— For sale or addition to stocks For further processing in the mills	4,052,071 6,439,379	8,286,329 11,244,946	6,829,512 10,226,153	4,970,112 7,476,639	4,253,662 -6,362,554	4,603,759 6,927,784
Total—Woollen Worsted	2,375,934 8,115,516	4,491,719 15,039,556	4,142,696 12,912,969	3,425,924 9,020,827	2,988,044 7,628,172	7,877,355 3,654,188
Total	10,491,450	19,531,275	17,055,665	12,446,751	10,616,216	11,531,543

The next table shows the production of woollen and cotton piece goods and blankets in woollen, tweed, and cotton mills during the years 1936-37 to 1946-47:—

Table 73.-Production of Woollen and Cotton Piece Goods, etc.

<b>Y</b> ear.		and Worsted Pieg g Serge, Tweed, 1	Cotton Piece Goods (Tweed, Duck, Canvas, Drill, etc.).	Blankets.	
	Woollen and Tweed Mills.	Cotton Mills.	Total.	Cotton Mills.	Woollen Mills.
1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47	sq. yd. 11,503,931 12,467,930† 14,169,359 16,887,527 17,581,438 19,463,832 14,822,198 13,059,490 13,447,218‡	sq. yd. 305,315 481,178 504,820 519,549 437,720 474,748 649,281 403,599 106,210 148,068	8q. yd. 11,701,500 11,809,246 12,949,168 14,674,179 16,357,076 18,019,158 19,938,110 17,507,913 14,725,707 13,255,700 13,595,886	sq. vd. 1,774,599 1,984,802 1,908,920 4,963,824 8,240,822 9,330,863 12,263,138 13,511,786 12,791,137 8,778,988 11,641,754	pairs. 119,698 134,499 106,447 123,821 127,971 183,471 181,782 170,303 159,367 107,198 117,720

<sup>\*</sup> Not available for publication. † Includes a small quantity produced in knitting mills. † Includes a small quantity produced in rayon weaving mills.

During the war much of the production of woollen, tweed, and cotton mills was for war purposes. The rising outputs of woollen and worsted cloth, serge, drill, canvas, blankets, etc. to satisfy service requirements more than offset the decreases in the quantity of other piece goods produced, the demand for which contracted because of the rationing of civilian clothing and household drapery. The production of woollen and worsted piece goods rose from 12,949,108 square yards in 1938-39 to a record level (19,938,110 square yards) in 1942-43, but by 1946-47 had fallen again to 13,595,886 square yards, or 7.9 per cent. above the 1938-39 level. The quantity of cotton piece goods produced was greatest (13,511,786 sq. yards) in 1943-44, decreased by 35 per cent. to 8,778,988 sq. yards in 1945-46, and increased to 11,641,754 square yards in 1946-47, when it was 510 per cent. greater than in 1938-39.

#### Hosiery and Knitting Factories.

Marked progress has been made in the production of hosiery and knitted goods. In 1946-47 there were 112 establishments employing 5,581 persons, including 4,159 women and girls, the value of materials and fuel used was £3,020,793, and the value of production amounted to £2,508,434.

The following comparative statement reviews the operations of the hosiery and knitting factories in 1938-39 and each of the last five years:—

Table 74.—Hosiery and Knitting M
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Particulars.	1938-39,	1942-43,	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments	78	85	95	97	104	112
Average Number of Employees*	5,298	4,757	5.030	5,100	5,049	5,581
Total Horse-power Installed	2,857	3,256	3,333	3,413	3,990	4,420
Value of Land and Buildings £	701,582	712,877	771,679	810,035	835,283	920,947
Value of Plant and Machinery £	622,681	460,259	426,946	397,551	432,830	475,081
Salaries and Wages paid £	697,004	887,510	980,884	997,553	1,086,669	1,267,001
Value of Fuel and Power used £	36,468	38,491	43,211	39,976	41,278	45,883
Value of Materials used £	1,482,743	2,625,670	2,871,873	2,464,992	2,403,706	2,974,910
Value of Output £	2,619,764	4,290,171	4,778,157	4,360,564	4,279,576	5,529,227
Value of Production £	1,100,553	1,626,010	1,863,073	1,855,596	1,834,592	2,508,434
Yarn used—			' '		'	
Woolleu lb,	1,536,598	4,300,930	3,528,062	3,279,307	1,932.519	2,252,189
Cotton lb.	2,578,800	3,914,104	3,744,132	3,905,529	3,434,683	4,051,337
Silk 1b.	223,575	768		_ ,,,,,,,	2,100	28,906
Rayon lb.	3,031,145	2,017,284	2,782,433	2,781,427	2,907,878	2,701,191
Articles produced—						
Seeks and Stockings doz. pairs		986,642	999,401	809,458	728,376	746,925
£	804,032	1,082,297	1,238,926	961,248	883,873	1,170,264
Knitted Apparel					200 250	
Underwear doz.	1,033,221	937,655	963,145	1,021,176	832,958	952,300
Con Process and the State of th	960,621	1,473,052	1,504,630	1,493,699	1,291,883	1,587,072
Cardigans, sweaters, etc. doz.	63,815	189,269	160,634	136,948	126,263	133,255
Other Imitted manner 3	249,584	835,832	711,483	571,082	581,514	722,176
Other knitted garments doz.	93,161	49,516	78,068	88,093	103,476	121,392
£	303,220	273,535	433,415	516,288	656,351	808,560

<sup>\*</sup> Average over whole year.

## WOOL-SCOURING AND FELLMONGERING.

The proportion of the wool clip of New South Wales scoured locally is small and fluctuates considerably from year to year. Oversea manufacturers generally prefer to buy wool in the grease and to treat it according to the purposes for which it is to be used.

Particulars of the operations of the wool-scouring and fellmongering works in 1938-39 and each of the last five years are shown below:—

Table 75.—Wool-scouring and Fellmongering.

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		_	_				
Average Number of Employees*         871         1,362         1,500         1,388         1,310         1,362           Total Horse-power Justalled         3,590         4,253         4,736         4,261         4,606         5,050           Value of Land and Buildings         £ 162,973         173,327         184,411         173,774         179,331         189,811           Value of Plant and Machinery         £ 208,292         44,738         828,074         48,2993         488,840         439,011           Value of Fuel and Power used         £ 35,066         87,577         83,371         71,532         67,121         83,314           Value of Materials used†         £ 1,348,855         2,193,347         1,518,671         1,588,671         1,292,134         1,339,027         2,930,023           Value of Production         £ 270,068         587,099         655,864         594,574         611,997         792,112           Materials Treated—         Greasy Wool         Ib. 38,195,743         51,679,953         44,680,379         36,499,319         36,913,441         57,866,446           Skin Pieces         Ib. 1,564,419         1,196,781         2,289,755         2,199,370         2,181,075         1,414,354           Articles Produced—         1b. 30,025,	Items,	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Skin Pieces lb. 1,564,419 1,106,781 2,208,755 2,199,370 2,181,075 1,414,354 Articles Produced— Scoured Wool lb. 30,025,413 43,655,712 43,089,009 35,063,916 33,240,428 42,003,456	Number of Establishments Average Number of Employees Total Horse-power Iustalled Value of Land and Buildings Value of Plant and Machinery Salaries and Wages paid Value of Fuel and Power used Value of Materials used† Value of Outputf Value of Production Materials Treated— Greasy Wool	29 * 3,590 £ 162,973 £ 150,527 £ 208,292 £ 35,066 £ 1,039,761 £ 1,344,895 £ 70,068 1b. 38,195,743	30 1,362 4,253 173,327 192,933 447,348 87,577 1,518,671 2,193,347 587,099 51,679,953	1,500 4,736 184,411 236,433 528,074 83,371 1,588,671 2,327,906 655,864 44,680,379	30 1,388 4,261 173,774 210,291 482,993 71,532 1,292,134 1,958,240 594,574 36,499,319	31 1,310 4,606 179,331 217,594 438,840 67,121 1,339,027 2,018,145 611,997 36,913,441	32 1,302 5,050 189,811 216,051 439,011 83,314 2,930,023 3,805,449 792,112 57,386,446
	Skin Pieces Articles Produced—	lb. 1,564,419	1,196,781	2,298,755	2,199,370	2,181,075	1,414,354
	Scoured Wool 1						42,003,456 2,570,901

<sup>\*</sup> Average over whole year.
† Exclusive of value of large quantities of wool and/or skins treated on commission basis.

Scoured wool is produced also in the wool-washing plants of woollen mills for sale, for addition to stocks, and for further processing in the mills. The total quantities of scoured wool produced in New South Wales factories, comprising that treated in woollen mills and wool-scouring and fellmongering works, in 1938-39 and each of the last five years are shown below:—

Scoured Wool Produced.	1938-39.	1942-43.	1943-44,	1944-45.	1945-46.	1946-47.
In Wool-scouring and Fellmon-	lb.	lb.	lb.	lb.	lb,	lb.
gering Works— From scouring	18,120,054	23,527,328	21,328,824	16,315,430	17,772,035	28,544,615
From fellmongering	11,905,359	20,128,384	21,760,185	18,748,486	15,468,393	13,458,841
Total	30,025,413	43,655,712	43,089,009	35,063,916	33,240,428	42,003,456
In Woollen Mills— For sale or addition to stocks For further processing in the mills	1,221,080 4,695,463	3,817,021 10,988,700	3,096,942 11,083,072	2,230,491 8,977,612	2,567,688 7,949,709	1,774,266 8,994,219
Total	5,916, 43	14,805,721	14,180,014	11,208,103	10,517,397	10,768,485
Total produced—  For sale or addition to stocks  For further processing in the  woollen mills	31,246,493 4.695,463	47,472,733 10,988,700	46,185,951 11,083,072	37,294,407 8,977,612	35,808,116 7,949,709	43,777,722 8,994,219
Total	35,941,956	58,461,433	57,269,023	46,272,019	43,757,825	52,771,941

The table reveals a substantial increase in the quantity of scoured wool produced; the higher level of the war years 1942-43 and 1943-44 was due to the expansion of activity to meet the requirements of local woollen mills and to ensure greater economy in shipping space for wool exported. In 1946-47 in comparison with 1938-39, production of scoured wool was 47 per cent. greater, with that in wool-scouring and fellmongering works increased by 40 per cent. and production in woollen mills by 82 per cent.

#### TANNERIES.

The tanning industry is able to meet almost all local requirements of leather. The supply of hides and skins for treatment is dependent principally on livestock slaughterings, which in turn are affected by the level of meat and wool prices and the nature of seasons. During and since the war, the quantity of hides and skins treated in tanneries to produce leather and basils, etc. increased materially; the value of production rose 113 per cent. and 21 per cent. respectively from £574,888 in 1938-39 and £1,013,446 in 1943-44 to £1,225,349 in 1946-47.

The marketing of hides and leather is controlled by the Australian Hides and Leather Industries Board, established in November, 1939, which determines the quantities of hides and leather to be exported or sold for home consumption.

Particulars of the operations of tanneries in New South Wales in 1938-39 and each of the last five years are:—

	Table	7718	inneries.			
Items.	1938–39.	1942-43,	1943-44.	1944-45,	1945-46.	1946-47.
Number of Establishments	60	70	73	76	76	77
Average Number of Employees*	1,632	1,907	1,909	1,880	1,945	2,005
Total Horse-power Installed	5,180	6,934	8,161	6,910	7,462	8,602
Value of Land and Buildings £	297,636	392,089	402,772	410,179	424,259	451,094
Value of Plant and Machinery £	208,702	242,162	240,927	261,903	294,795	311,009
Salaries and Wages paid £	357,210	588,656	605,304	610,547	631,168	741,559
Value of Fuel and Power used £		47,830	52,573	50,953	49,153	54,316
Value of Materials used £	1,303,529	2,215,300	2,217,021	2,184,026	2,214,699	2,568,331
Value of Output £	1,910,085	3,215,377	3,283,040	3,234,137	3,293,731	3,847,996
Value of Production £	574,888	952,247	1,013,446	999,158	1,029,879	1,225,349
Materials Treated—						
Cattle Hides No.		872,817	833,066	813,955	787,543	885,881
Calf Skins No.	693,055	686,138	623,064	656,103	687,043	704,010
Sheep Pelts No.	1,608,478	1,890,447	2,044,266	1,909,146	1,529,887	1,508,612
Sheep Skins No.	1,401,338	1,637,657	1,626,478	1,874,581	1,638,587	1,698,155
Goat Skins No.	989,286	800,903	722,518	738,241	731,162	824,072
Other Hides and Skins No.	2,237	20,288	28,367	28,567	32,671	48,622
Bark used tons	8,092	4,902	4,683	4,833	3,808	3,724
Tanning Extract (veg.) used tons	1,731	5,402	5,679	5,781	5,504	5,544
Leather Produced-					l	
Sold by areat sq. ft.	26,058,549	36,787,557	37,060,880		35,731,943	38,448,229
	11,119,957	15,727,921	14,644,593		13,277,238	13,442,499
Basils Produced lb.	1,386,207	1,272,856	979,573	1,199,262	896,864	681,291

Table 77.—Tanneries.

#### HAT AND CAP FACTORIES.

There are 24 factories for the manufacture of hats and caps, all in the metropolitan district, and in 1946-47 the employees numbered 1,373, including 725 females. During the war years, civilian hats and caps were rationed and the factories were occupied mainly in supplying defence requirements.

Particulars of the operations in the factories in 1938-39 and each of the last five years are as follows:—

Items.	1938–39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments		24	22	22	22	24
Average Number of Employees*	1,593	1,400	1,292	1,239	1,240	1,373
Total Horse-power Installed		1,545	1,516	1,564	1,602	1,724
	209,199	225,888	220,626	227,032	225,003	234,476
	E 94,611	93,343	83,544	75,595	75,244	94,291
Salaries and Wages paid	E 257,731	344,375	345,563	318,185	327,132	390,395
Value of Fuel and Power used :	12,209	17,536	17,544	15,296	14.662	16,411
Value of Materials used	312,386	510,673	477,932	401,890	351,860	441.501
Value of Output	684,837	1,044,151	1,021,500	974,061	898,552	1,012,844
Value of Production	360,242	515,942	526,024	556,875	532,030	554,932
Materials used—	'	,		,	,	,
Rabbit Skius lb	. 673,519	990,700	849,576	725.035	608,818	690.405
Scoured Wool 1b	185,994	297,198	289,241	208,880	155,459	183,814
Hats made—Felt doz		165,889	153,993	136,741	118,109	142,781
Other doz		58,399	45,214	48,642	43,982	59,010
Caps made doz		26,213	32,336	28,318	22,227	22,200

Table 78.—Hat and Cap Factories.

Hats and caps are made also in millinery establishments; in 1946-47 these numbered 84 and employed 1,487 persons, and the value of their production amounted to £504,795. The total production of hats and caps in all establishments in 1938-39, 1945-46, and 1946-47 is shown in Table 56.

<sup>\*</sup> Average over whole year: † Dressed and upper from hides and skins and upholstery leather. ‡ Sole, harness, some dressed and upper from hides.

<sup>\*</sup> Average over whole year.

#### BOOT AND SHOE FACTORIES.

Particulars of the operations of boot and shoe factories in New South Wales in 1946-47 and selected earlier years are shown in the following table:—

Table 79 .- Boot and Shoe Factories.

Items.	1938-39.	1941-42	1943-44.	1944-45.	1945-46.	1946-47:
Number of Establishments	101	105	109	119	134	183
Average Number of Employees	101 * 5.741	6,244	5,779		6,053	7,415
			2,694	2,816	3,349	3,711
Total Horse-power Installed	2,323					
Value of Land and Buildings	£ 425,428	528,457	596,873	588,039	593,134	754,392
Value of Plant and Machinery	£ 243,754	276,634	290,703	307,707	354,487	364,246
Salaries and Wages paid	£ 848,733	1,281,105	1,306,389	1,279,481	1,432,430	1,914,165
Value of Fuel and Power used	£ 16,279	19,419	21,556	21,997	23,682	28,162
Value of Materials used	£ 1,369,667	2,510,712	2,487,840	2,435,032	2,347,191	2,900,160
Value of Output	£ 2,610,578	4,353,381	4,404,285	4,386,196	4,437,680	5,788,868
Value of Production	£ 1,224,632	1,823,250	1,894,889	1,929,167	2,066,807	2,860,546
Leather Used—	1 ' '	' '				
Sole	ъ. 5,079,290	9,259,344	7,846,158	7,661,504	6,980,294	8,012,210
Upper sq.	ft. 9,100,230	16,048,171	14,530,189	13,506,084	12,044,556	14,163,828
Ready-made Soles pa		614,946	1,048,149	1,114,425	1,198,204	1,676,700
Ready-made Heels pa		+	829,999	538,952	1,179,247	2,058,502
Articles Produced—	1		0=0,000	00-,0-2	-,,	-,,
Boots and Shoest pa	irs 4,762,454	6,294,510	6,478,407	6,803,506	6,136,741	7,195,913
poon and onoth pa	£ 2,244,886	3,832,987	3,917,888	4,298,109	3,913,536	4,967,765
Slippers, etc pa		3,313,771	2,503,589	2,167,082	2,196,608	3,041,173
suppers, etc pa		443,818	406,269	403,805	440,738	707,172
	£ 349,624	440,010	400,200	400,000	330,100	101,112

<sup>\*</sup> Average over whole year.

Footwear for civilians was included in the war-time clothing rationing scheme and the factories were occupied largely in meeting orders for the defence forces. Rationing of footwear ended in November, 1945, and thereafter the production of civilian footwear expanded. The output of boots, shoes, and slippers rose from 7,869,560 pairs in 1938-39 to a war-time peak of 9,608,281 pairs in 1941-42, declined to 8,333,344 pairs in 1945-46, and rose to 10,237,086 pairs in 1946-47 (30 per cent. and 7 per cent. respectively above 1938-39 and 1941-42). The value of production rose by 134 per cent. from £1,224,632 in 1938-39 to £2,860,546 in 1946-47.

Of the 183 factories manufacturing boots and shoes in 1946-47, 166 were situated within the metropolitan area. Factories making rubber shoes and goloshes are classified as rubber works (see Table 90) and are therefore not included here. The figures in the foregoing table also exclude boot repairing establishments and factories producing boot accessories. Particulars of boot repairing establishments are shown below:—

Items.		1938–39.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments Average Number of Employ Value of Materials and Fuel Value of Output Leather used— Sole Upper Soles (ready-made) Heels (ready-made)	used £ lb. sq. ft. pairs	621 1,091 138,209 414,961 836,925 13,551	747 1,378 229,166 696,393 1,119,184 24,550 161,175 58,619	779 1,459 255,345 768,628 1,244,031 24,033 117,615 49,312	793 1,526 266,249 768,359 1,302,634 17,189 156,266 71,989	794 1,614 299,735 858,668 1,275,722 29,428 219,224 176,973

<sup>\*</sup> Average over whole year.

## FLOUR MILLS.

The amount of mill power available for grinding and dressing grain is ample for manufacturing the flour consumed in New South Wales. The export trade in flour is large but fluctuates more or less with variations in wheat production. Restrictions upon wheat growing affected operations.

<sup>†</sup> Not available.

<sup>‡</sup> Including sandals.

<sup>†</sup> Not available.

during the war years. Flour production in 1946-47 was 537,389 tons, compared with 547,112 tons in 1938-39, an average of 480,472 tons in the five years ended June, 1945, and 451,895 tons in 1945-46.

Particulars of the tax imposed by the Commonwealth Government on flour for home consumption to provide finance for assistance to wheat farmers are given in the chapter "Agriculture" of this Year Book. The rate of tax was £2 18s. 10d. per 2,000 lb. net weight of flour from 23rd October, 1940 until the tax lapsed on 22nd December, 1947.

Details concerning flour-milling in New South Wales in 1938-39 and each of the last five years are as follows:—

Items,	1938–39,	1942-43.	1943–44.	1944-45.	1945-46.	1946-47.
Number of Establishments  Average Number of Employees* Total Horse-power Installed  Value of Land and Buildings Value of Plant and Machinery Salarles and Wages paid  Value of Fuel and Power used Value of Materials used Value of Output  Value of Production  Salarles and Wages Value of Production  Flour  Flour  Bran, Pollard, Sharps, etc., ttons Wheat Meal  Wheat Tense	54 1,356 10,503 805,(16 710,207 312,778 86,720 4,297,338 5,281,514 807,456 26,427,132 547,112 222,116 9,268	52 1,146 11,598 808,895 659,686 360,910 75,631 4,008,054 4,815,957 732,272 18,852,942 363,452 154,061 34,670	53 1,360 12,359 823,130 674,825 459,483 101,626 5,480,338 6,668,262 1,086,298 25,264,614 496,853 208,496 19,022	1,436 12,176 839,533 696,280 501,287 109,099 6,129,508 7,430,722 1,192,115 27,348,773 516,168 217,482 36,428	54 1,403 12,864 854,211 725,274 487,008 99,166 5,267,808 6,267,808 6,276,225 909,251 23,203,802 451,895 190,485 32,609	55 1,497 13,518 909,640 809,684 570,657 114,673 6,580,615 8,052,985 1,357,697 26,815,120 537,389 228,532 42,406

Table 80 .- Flour Mills.

## BISOUIT FACTORIES.

The following table shows particulars of the operations of biscuit factories in 1938-39 and each of the last five years:—

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power Installed Value of Land and Buildings Value of Plant and Machinery Salaries and Wages Paid Value of Fuel and Power Used Value of Materials Used Value of Output Value of Production Supar tons (2,000 lb.) Sugar Sugar Library Supar Sugar Sugar Supar Sugar Sugar Supar Supar Supar Sugar Supar Supar Supar Supar Sugar Supar	373,646 268,786 375,701 38,203 830,341 1,663,976 795,432 14,838	3,016 5,369 468,422 274,522 665,511 69,752 1,313,685 2,891,236 1,507,799 34,00 92,315,979	16 2,710 5,469 484,865 243,559 622,784 61,207 1,323,951 2,830,782 1,445,624 28,239 5,028 77,600,207	17 2,111 5,540 493,110 226,269 511,548 52,594 1,067,135 2,422,435 1,302,706 18,295 4,420 65,334,606	21 1,873 6,705 571,044 263,864 463,531 46,388 889,660 1,856,179 920,131 15,113 4,076 46,718,266	22 1,855 5,364 591,394 288,678 480,711 46,929 938,786 1,883,160 897,445 16,420 4,221 48,032,819

Table 81.—Biscuit Factories.

During the war biscuits were produced in large quantities for the defence forces. The production of biscuits in biscuit factories increased 50.6 per cent. between 1938-39 and 1941-42 and by a further 62.9 per cent. to a record of 92,315,979 lb. in 1942-43, but by 1946-47 output had declined to 48,032,819 lb. and was only 11 per cent. greater than in 1938-39. The value of production rose 89.6 per cent. between 1938-39 and 1942-43, and although it fell 40.5 per cent. between 1942-43 and 1946-47, it was then 12.8 per cent. greater than in 1938-39.

<sup>\*</sup> Average over whole year.

<sup>†</sup> Tons of 2,000 lb.

<sup>\*</sup> Average over whole year.

<sup>†</sup> Including ice cream cones.

An export trade in biscuits is maintained chiefly with Eastern countries and the islands of the Pacific. In 1947-48, 2,566,989 lb. of biscuits were exported oversea, compared with an average of 1,835,479 lb. in the prewar years 1936-37 to 1938-39, 34,133,459 lb. (mostly for the armed forces) in 1942-43, 8,132,386 lb. in 1945-46, and 3,279,184 lb. in 1946-47.

# SUGAR MILLS AND SUGAR REFINING.

Sugar cane is cultivated in the lower valleys of the northern coastal rivers of New South Wales, and the cane is crushed at three large mills, situated at Harwood Island on the Clarence River, at Broadwater on the Richmond, and at Condong on the Tweed. The number of employees in these mills rose from 212 in 1938-39 to 297 in 1946-47, and the output of raw sugar declined from 45,106 tons to 39,768 tons or by 12 per cent.

There is one sugar refinery in New South Wales (situated at Pyrmont, Sydney) which treats raw sugar from Queensland mills as well as those on the North Coast. Employment in the refinery rose from 691 in 1938-39 to 950 in 1944-45 and fell to 896 in 1946-47.

The sugar industry is subject to an agreement between the Commonwealth and Queensland Governments, particulars of which are given in the chapter "Agriculture" of this volume. The term of the current agreement extends to 31st August, 1951.

# BUTTER FACTORIES.

Butter-making is one of the chief industries connected with the preparation of articles of food, and more than 95 per cent. of the butter made in New South Wales is made in butter factories, most of which are situated in country districts. The quantity of butter produced in these factories depends mainly on the prevailing seasonal conditions in the dairying districts, but is affected also by variations in the use of milk for processing.

Production was at its greatest (143,208,344 lb.) in the bountiful season 1933-34. During 1938-39 and the later years shown in Table 82, seasonal conditions were generally unfavourable, the industry was under-manned and handicapped by other war-time difficulties, and there was marked expansion in processed milk products. The production of butter fell from 113,840,734 lb. in 1938-39 to 71,721,764 lb. in 1944-45, rose slightly to 74,280,087 lb. in 1945-46, and in 1946-47 was 60,384,672 lb., the lowest output since 1919-20 and 58 per cent. below the 1933-34 record.

Most of the butter factories are organised on a co-operative basis and each dairy-farmer who supplies cream is paid according to its butter-fat content. The factories are under the general oversight of government officials who advise and instruct dairy farmers and factory managers in matters connected with the industry to promote and maintain high quality in its products. Most of the butter produced in New South Wales factories is of the "choicest" quality and very little is classified as second or lower grade.

Butter is important in the export trade. Arrangements for regulating the marketing of butter for both local consumption and export are described in the chapter "Dairying Industry" of this Year Book.

Details concerning butter factories and their operations in 1933-34, 1938-39, and each of the last four years are shown below:—

Items.	1933–34.	1938–39.	1943-44.	1944-45.	1945-46,	1946-47.
Cream from other States 1b.	569,923 639,845 282,334 77,596 5,384,940 6,053,394 590,858 278,486 142,303,307 905,037	564,558 624,145 302,037 82,716 6,673,567 7,342,631 586,348 211,250 113,091,595	649,183	88 1,338 23,693 585,546 686,927 404,373 132,943 5,052,171 5,739,811 54,607 71,144,483 577,281 71,721,764	1,389 23,449 584,091 724,457 447,712 136,537 5,784,882 6,517,676 506,257 151,290 73,751,886 528,201 74,280,087	1,296 21,697 591,316 737,163 421,737 123,239 4,891,866 5,815,530 800,425 152,298 59,853,304 531,368 60,384,672

Table 82.—Butter Factories.

In addition to the foregoing factories, there were other establishments, numbering 66 in 1946-47, engaged in the treatment of dairy produce, viz. 29 making cheese, 33 making bacon and ham, and 4 manufacturing condensed and powdered milk and other milk products. The following table shows particulars of the operations of these factories in 1938-39 and each of the last five years; the quantities of condensed, powdered, and concentrated milk produced are not available for publication.

Items.	1938-39.	1942-43.	1943-44.	1944–45.	1945-46.	1946-47.
	60 730 259,519 213,597 161,053 1,484,822 1,850,840 366,018 7,193,022 21,721,914	56 1,073 366,988 260,813 289,929 2,554,962 3,198,849 643,887 5,146,431 29,430,124	56 1,154 385,721 278,237 326,342 3,225,213 3,992,740 767,527 5,374,388 29,852,545	59 1,304 389,518 293,558 391,651 3,919,324 4,978,110 1,058,786 4,390,847 43,846,580	62 1,289 403,119 345,953 399,132 3,611,398 4,552,194 940,796 4,857,690 37,494,332	1,272 433,869 325,768 423,233 3,247,871 4,051,245 803,374 4,544,454 33,118,682

Table 83.-Cheese, Bacon, and Preserved Milk Factories.

Butter, cheese, bacon, and hams are produced on farms as well as in factories. The total output of these commodities is given, and the arrangements for supervising their production and organising their marketing are described in the chapter "Dairying Industry" of this Year Book.

<sup>\*</sup> Average over whole year.

<sup>†</sup> Full capacity of machinery in use.

<sup>\*</sup> Average over whole year. † Excluding bacon made from Interstate imports of green bacon:—4,220,085 lb. in 1938-39, and 3,869,163 lb., 827,110 lb., 709,298 lb., 1,357,100 lb., and 2,191,235 lb. in successive years 1942-43 to 1946-47.

#### MARGARINE.

The next table shows the total production of margarine in margarine, meat preserving, and other factories in New South Wales during 1946-47 and selected earlier years:—

Table 84.—Production of Margarine.

Items.			1928-29.	1938-39.	1943-44.	1944-45.	1945-46	1946-47.
Table Margarine	• • • •	lb.	*	4,492,247 162,692	20,446,492 1,043,548	27,179,330 1,435,733	15,167,113 758,896	9,206,048 459,402
Other Margarine	•••	Ib. £	*	22,475,085 566,627	34,493,539 901,625	30,834,585 842,900	25,313,121 726,931	21,570,37 <del>0</del> 614,293
Total Produced		lb. £	16,627,959 551,014	26,967,332 729,319	54,940,031 1,945,168	58,013,915 2,278,633	40,480,234 1,485,827	30,776,418 1,073,695

<sup>\*</sup> Not available.

The demand for margarine as a substitute for butter was partly responsible for the great increase in the quantity of margarine produced during the war years. Output rose to a record level of 58,013,915 lb. in 1944-45 but declined to 30,776,418 lb. (85 per cent. above 1928-29 and 14 per cent. above 1938-39) in 1946-47.

#### MEAT AND FISH PRESERVING.

The following table contains particulars of the operations of meat and fish preserving factories during 1938-39 and each of the last five years. These factories produced quantities of margarine and edible fats in addition to-dehydrated meat, preserved meat and fish, and various types of meat and fish pastes and extracts.

Table 85 .- Meat and Fish Preserving Factories.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power Installed Value of Land and Buildings Value of Plant and Machinery Salaries and Wages paid Value of Fuel and Power Value of Materials used Value of Output Value of Production  £ Value of Production	6 211 246 62,471 19,307 39,183 5,159 119,918 158,311 33,234	10 1,032 822 100,989 136,153 260,552 28,862 1,279,097 1,820,202 512,243	14 1,171 1,050 151,063 134,582 329,312 2,038,126 2,828,833 737,529	13 993 1,043 186,820 114,215 290,393 44,834 1,877,718 2,497,302 574,750	12 946 1,237 134,886 105,254 264,169 35,187 1,492,444 2,001,593 473,962	7 690 1,282 105,922 96,166 215,565 31,370 1,259,660 1,739,895 448,865

<sup>\*</sup> Average over whole year.

The total production of preserved and dehydrated meat in New South Wales factories during 1938-39 and each of the last five years is shown below. A small proportion of the preserved meat is the product of bacon factories.

Table 86.-Meat Preserved and Dehydrated.

Items Produced.		1938-39.	1942–43.	1943-44.	1944-45.	1945-46.	1946–47.
Preserved Meat Dehydrated Meat	lb. £ lb. £	3,377,960 124,251 *	23,962,491 1,166,149 *		27,830,484 1,742,202 2,347,638 308,554	26,542,794 1,458,133 658,124 88,554	17,944,815 1,056,013 

<sup>\*</sup> Not available.

The quantity of preserved meat produced annually varied little from 5,000,000 lb. for several years prior to 1938-39, when it declined to 3,377,960 lb. Output rose substantially during the war years, largely to satisfy the requirements of the services, reached a record of 29,075,208 lb. in 1943-44, and then fell slightly to 26,542,794 lb. in 1945-46 and more markedly to 17,944,815 lb. in 1946-47, when it was five times greater than in 1938-39. The dehydration of meat was a war-time measure; production declined from 4,970,557 lb. in 1943-44 to 658,124 lb. in 1945-46 and then reased.

#### Breweries.

In 1946-47 six establishments in the State were classed as breweries, and four were within the metropolitan boundaries. The tendency to concentration in large units has been very marked in this industry. The following summary of the brewing operations of these establishments during 1938-39 and each of the last five years excludes all subsidiary operations (bottling, malting, manufacture of aerated waters, etc.) performed by the breweries.

lable	87.—	-Breweries.	

Items,	1938-39.	1942-43.	1943-44,	1944-45.	1945-46.	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power Installed Value of Land and Buildings Value of Plant and Machinery Salaries and Wages paid Value of Suterials used Value of Materials used Value of Output Value of Production Materials Treated— Malt Hops	782,142 310,682 85,850 1,040,086 3,492,243 2,366,307 1,059,628 931,922	1,081 11,476 1,166,092 758,823 362,638 92,554 1,223,384 3,625,178 2,300,240 1,034,047 809,178 8,050 36,495,590	1,065 11,479 1,168,014 705,568 362,744 99,543 1,292,586 3,784,024 2,391,895 1,098,320 839,366 8,411 38,224,792	1,112 11,487 1,168,261 653,179 397,676 104,367 1,358,124 3,920,889 2,458,398 1,134,695 868,863 8,486 39,033,673	1,162 11,499 1,168,491 614,491 426,156 108,736 1,337,219 2,390,874 1,132,611 811,001 8,428 39,073,817	1,306 11,762 1,177,238 678,126 499,780 144,046 1,779,041 4,933,401 4,933,401 1,500,165 1,053,890 11,160 50,654,241

<sup>\*</sup> Average over whole year.

Information relative to the consumption of beer in New South Wales is shown in the chapter "Social Condition" of this Year Book. Between 1938-39 and 1946-47, employment in breweries increased nearly 30 per cent. and the quantity of ale, beer, and stout produced rose by nearly 50 per cent. from 33,900,000 gallons to 50,650,000 gallons.

The rate of excise duty on locally manufactured beer has been 4s. 7d. per gallon since September, 1942.

### TOBACCO FACTORIES.

The tobacco industry is highly organised, the bulk of the output being produced in three large establishments. Most of the tobacco leaf treated in New South Wales factories is imported from the United States of America. In 1946-47 only 10 per cent. was Australian leaf, mostly purchased from Queensland as very little is grown in New South Wales. Large quantities of tobacco and cigarettes are exported, mainly to other States; during the war years, exports oversea increased considerably to supply the Services.

<sup>†</sup> Excluding waste beer.

The following table show details of the operations of tobacco factories in New South Wales in 1938-39 and each of the last five years:—

Items.	1938-39	1942-43.	1943-44.	1944-45.	1945~46.	1946-47.
Number of Establishments	8	8	8	8	8	10
Average Number of Employees*	3,108	3,125	2,969	3,012	2,997	
Total Horse-power Installed	6,104	6,199	6,341	5,799	5,761	·
Value of Land and Buildings £	645,706	615,318	605,989	588,793	588,640	'
Value of Plant and Machinery £	625,774	526,552	493,848	458,120	432,248	
Salaries and Wages paid &	623,799	749,835	724,912	712,209	749,800	'
Value of Fuel and Power used £	23,846	41,601	30,083	30,071	36,547	1
Value of Materials used &	4,806,898	6,216,947	6,922,959	7,068,047	7,022,802	· •
Walne of Out-out		' '	8,529,942	8,384,985		10,486,303
Value of Desiretters of	6,039,442	8,315,718	' '		' '	' '
Value of Production £	1,208,698	2,057,170	1,576,900	1,286,867	1,200,941	1,253,965
Materials treated—						
Australian Leaf lb.	2,640,849	2,696,316	2,558,445	2,391,375	2,448,691	1,795,227
Imported Leaf lb.	10,882,129	13,638,496	13,328,032	12,850,741	12,682,604	15,947,436
Articles Produced						
Tobacco lb.	10,755,820	13,106,766	11,978,090	11,258,655	11,548,326	13,017,599
Cigarettes lb.	4,496,428	5,615,025	5,931,319	5,870,132	5,524,816	6,795,385
Cigars lb.	†	†	t t	t	t	†
· ·	l			Į		

<sup>\*</sup>Average over whole year. † Not available for publication—only a small quantity produced.

Employment in tobacco factories has not been fully maintained at the pre-war level, but in comparison with production in 1938-39, the quantities of tobacco and cigarettes made in 1946-47 were, respectively, 21 and 51 per cent. greater.

Information relating to the consumption of tobacco in New South Wales was given in the chapter "Social Condition" of the 50th and previous editions of the Year Book.

The excise duties imposed on tobacco, eigarettes, and eigars manufactured locally for home consumption have been increased substantially since 1938-39. The rates current (March, 1949) since September, 1942 are: tobacco, a predominant rate of 10s. 11d. per lb., machine-made eigarettes, 20s. 9d. per lb., and hand-made eigars, 11s. 7d. per lb., less, in each case since November, 1943, a rebate of  $4\frac{1}{2}$  per cent.

#### SAWMILLS.

Sawmilling is an important industry in many parts of the State, the majority of the mills being situated in the forest areas. Besides general milling, moulding and planing are undertaken at some mills. In the metropolitan district, sawmills are conducted in connection with yards where imported timbers are treated and joinery work is done.

Details concerning the sawmilling industry at intervals since 1938-39 are as follows:—

-		~~	~	*11
Ta	hla	89.	Saw	milis.

Items.	1938–39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
Number of Establishments	435	532	585	605	645	713:
Average Number of Employees*	4,981			5,733		
Total Horse-power Installed	, 00,000			41,140		
Value of Land and Buildings						
Value of Plant and Machinery				802,225		
Salaries and Wages Paid	970,988					
Value of Fuel and Power Used	51,856		89,679			
Value of Materials Used 5	2.817,588					
Value of Output	4,464,421			6,235,561	06,792,094	49,145(819
Value of Production	1,594,977					3,341,019
Logs Treated-	1,	, , , , ,	,,,,	, , , , , , , , , , , , , , , , , , ,		-,,
Hardwood-					·	
Native!.dub.!ft	16/400/342	20,529,000	21(977)000	21.169.000	22,420,703	26.331.157
Imported†cub. ft						
(Boftwood-		, ,	,	, -	,	,
Nativecub. ft	6.514.209	11,411,000	11,314,000	9,701,000	9,208,070	11,533,891
Imported†cub.ft				80,000		
Fawn Timber Produced-	" /"	l '	' '	,	,	,
∛Hardwood-		17	11			
	129.510.433	164.210.997	170.284.394	170.203.823	180.024.508	212,313,515
Imported Logs : sup. ft				595,892		
Softwood—	1	,	, , , ,	, -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	**/
Native Logs sup. ft	49,840,052	85,806,168	88,750,933	75,769,327	72,082,499	881618.190
Imported Logst sup. ft	101,051,353	453,513	12,824,767	768,562	1,016,662	1,609,520
Total Sawn Timber snp. ft	281,160(349	<sup> </sup> 250)685/198	262,959,587	247(337,604	254,149,850	303,234,883
	,,				, , , , , ,	, -,

<sup>\*</sup> Average over whole year.

† Interstate and Oversea.

The quantity of sawn timber produced in the mills declined during the war years, but by 1946-47 had risen to 303,234,883 sup. ft. or 8 per cent. above 1938-39. During this period, the output of sawn hardwood timber rose 64 per cent. from 130,277,944 sup. ft. to 213,007,173 sup. ft., and the output of sawn softwoods from native logs rose 78 per cent. from 49,840,052 sup. ft. to 88,618,190 sup. ft.; the production of sawn softwood timber from imported logs declined 98 per cent. from 101,051,353 sup. ft. to 1,609,520 sup. ft., largely because of a world shortage of lumber and partly due to import controls. Between 1938-39 and 1946-47, the proportion of sawn softwood timber which was produced from imported logs declined from 67 to 2 per cent.

## RUBBER WORKS.

The demand for rubber goods in New South Wales is met to a large extent by local manufacturers. The next table contains particulars of the operations of rubber works (including tyre repairing and retreading establishments) during 1988-89 and each of the last five years:—

"Table 90.—Rubber" Works.

Items.	1938-39.	1942-43.	1943-44.	1944–45,	1945-46.	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power Installed Value of Land and Buildings Value of Plant and Machinery Salaries and Wages Paid Value of Theel and Power Used Value of Materials Used Value of Outputh Value of Production† Crude Rubber Used Articles Produced— Rubber Hose Rubber Hose Rubber Hose Goloshes and Rubber Shoes prs.	537,440 735,830 94,862 1,882,261 2,935,592 1,058,469 16,262,116 5,517,879	95 3,489 24,630 770,917 489,867 1,008,809 119,935 3,108,568 4,671,598 1,353,095 14,753,168 5,022,235 362,703 157,849	102 4,005 26,189 787,624 497,563 1,231,519 138,265 (3,720,384 5,504,107 1,645,508 14,777,619 4,032,793 445,826 114,133	104 26,372 776,578 478,263 1,179,757 140,840 3,511,630 5,096,518 1,444,048 11,898,909 6,319,241 358,957 215,412	118 3,990 28,764 856,381 495,034 1,255,163 149,208 3,757,049 5,492,063 11,295,312 9,820,496 540,103 821,340	188 4,809 31,083 932,484 617,489 1,726,287 7,719,253 2,408,898 22,233,534 11,301,878 1986,723

<sup>\*</sup> Average over whole year,

The recorded value of output of the rubber works represents, for the amost part, the value at which the products of the large establishments are transferred to their selling organisations.

# ELECTRICITY GENERATING STATIONS.

For the purpose of comparability, particulars of the electricity industry are confined to the generation of electricity in electricity generating stations, and exclude both the transmission and distribution of electricity and also the generation of electricity by factories solely for their own use. The value of output of the electricity industry is the amount received from the sale of electricity less the costs of transmission and distribution.

Though hampered in recent years by shortage of equipment and the uncertainty of supplies and quality of coal, which necessitated periods of rationing of electricity supplies, the production of electric light and power has expanded materially since 1938-39. The particulars in the following table show the development of electricity generating stations (excluding factories generating electricity for their own use) between 1938-39 and 1946-47:—

Table '91.—Electricity Generating Stations.

Items.	1938-39.	1942∸43.	1943-44.	1944-45.	1945-46	1946-47.
	953,487 4,584,817 11,695,870 634,276 1,363,608 223,343 5,719,029 4,132,078 1,162,997	2,446 2,446 1,167,355 4,185,371 11,639,996 915,151 2,242,533 396,008 7,933,738 5,295,197 1,527,303 2,709,269	7,102 2,521 1,189,356 4,125,958 11,277,284 985,142 2,412,047 411,219 8,208,762 5,385,496 1,559,777 2,684,922	2,566 1,200,740 4,190,837 11,024,215 -989,882 2,631,643 429,650 8,582,674 5,521,281 1,674,888 2,742,188	1,203,094 4,4,181,042 10,874,564 1,071,363 ,2,692,513 496,049 8,749,030 5,560,468 1,695,576 2,708,914	3,133 1,262,976 4,383,1i9 10,742,731 1,252,522 3,204,655 549,830 6,212,854 1,978,993 3,092,229

<sup>\*</sup> Average over whole year.

The Electricity Authority of New South Wales was appointed in 1946 to plan and co-ordinate electricity supplies throughout the State. The larger of the undertakings have been united in a grid to enable the interchange of electricity when necessary. In 1946-47 six of the electricity generating works were owned by the State Government and forty-three by local government bodies; fifty owere privately-owned.

Large works in Sydney, Newcastle, and Lithgow, controlled by the Commissioner for Railways, supply electricity for transport and the railway and tramway workshops, and as well, supply current for industrial and domestic use. A State Government undertaking at Port Kembla supplies power to harbour and constructional works, etc. in the vicinity and to a number of towns along the South Coast and in the Southern Highlands. There is also a Government hydro-electric scheme based on the Burrinjuck Dam.

The largest of the electricity works owned by local government authorities is the Sydney County Council undertaking which supplies most consumers in the Metropolitan area. The operations of the local government undertakings are treated more fully in the chapter "Local Government" of this Year Book,

<sup>†</sup> Excludes distribution system.

The next table contains an analysis of the disposal of the electricity generated in electricity generating stations and other New South Wales factories during 1938-39 and each of the last five years:-

1 able 92.—	Generatio	n and	Disposai	OI.	Liectr	icity.
				·		
0.701	1000 00	4010 10	3040 44	1 40		3015 4

Source and Manner of Disposal.	1938-39.	1942–43.	1943-44.	1944–45.	1945-46.	1946-47.
Electricity Generating Stations— Bulk Sales to large industrial concerns, railways and tram-	000 units.	000 units.	000 units.	000 units.	000 units.	000 units
ways, and for subsequent distribution* Sales to Domestic and small Commercial and Industrial	1,171,702	1,575,138	1,585,221	1,636,225	1,613,165	1,829,968
users and for Street Lighting	369,394	551,694	581,809	552,308	544,675	663,076
Used in Electricity Generating Stations Used in own works outside	87,913	127,676	133,107	153,876	142,788	252,760
generating stations Lost, etc	$\substack{11,429 \\ 193,102}$	285,083 169,678	226,311 158,474	240,261 159,518	$\substack{242,659 \\ 165,627}$	166,525 179,899
Total Electricity generated in Generating Stations Other Factories—	1,833,540	2,709,269	2,684,922	2,742,188	2,708,914	3,092,228
Electricity generated for own	114,949	134,911	141,209	135,148	122,887	136,442
Total Electricity generated in N.S.W. Factories	1,948,489	2,844,180	2,826,131	2,877,336	2,831,801	3,228,670

<sup>\*</sup> Principally to Local Government Undertakings.

#### GAS WORKS.

The gas works in 1946-47 consisted of one governmental concern, 21 country municipal or shire works, and 17 privately-owned.

Despite the incidence of industrial disputes and the substantial progress that has been made in the installation of electric plants for purposes of illumination, power, and cooking, the consumption of gas in increasing. The quantity of gas produced in New South Wales gasworks rose 54 per cent. from 10,896 million cub. ft. in 1938-39 to 16,744 million cub. ft. in 1946-47. The particulars in the following table show the development of gas-producing works during these years:-

Table 93.-Gas Works.

Items.	1938-39.	1942-43.	1943-44.	1944-45,	1945-46,	1946-47.
Number of Establishments Average Number of Employees* Total Horse-power installed Value of Land and Bulldings; £ Value of Plant and Machinery; £ Salaries and Wages paid. Value of Fuel and Power used £ Value of Materials used £ Value of Output £ Value of Production £ Coal used tons Articles Produced— Gast thous cub. ft. Coke tons Sulphate of Ammonia tons	3,219,493 288,913 207,891 762,764 2,327,850 1,357,195 578,127 10,896,185 412,986	1,271 19,438 798,289 3,119,315 414,706 291,216 1,291,423 3,447,320 1,864,681 711,023 14,006,100 461,237 4,015	42 1,185 19,066 803,416 3,191,816 420,682 325,232 1,449,814 3,577,340 1,802,264 754,434 14,558,126 481,511 4,487	40 1,211 10,383 781,724 3,254,366 435,143 336,348 1,446,349 3,574,655 1,791,958 771,706 14,923,581 503,122 6,200	39 1,289 20,575 806,378 3,323,226 451,690 360,811 1,503,659 1,741,066 795,961 15,310,710 499,165 6,320	39 1,369 20,758 802,099 3,121,112 463,562 389,214 1,681,494 3,894,055 1,823,347 862,128 16,743,953 543,017 6,491

<sup>\*</sup> Average over whole year. † Includes gas lost and gas used in own factories. # Excludes distribution system.

In addition to the coke and sulphate of ammonia made in gas works, considerable quantities are made in other establishments in which coal is treated. The quantity of coke produced by all plants in 1946-47 was 1,726,719 tons.

# MINING INDUSTRY.

NEW SOUTH WALES contains extensive mineral deposits of great value and variety. Coal was discovered as early as 1796 and until 1851 was the only mineral raised, but under the industrial conditions prevailing its importance was not fully realised. World-wide interest, however, was excited by the announcement in 1851 that gold had been discovered in New South Wales. The discovery attracted a rapid flow of immigration to the country and promoted the development of its resources. Since 1883 extensive silver-lead-zinc deposits have been mined at Broken Hill. Copper and tin deposits also were opened up. Coal and silver-lead-zinc have proved to be the richest sources of mineral production.

## DEVELOPMENT OF MINING IN NEW SOUTH WALES.

The development of mining in New South Wales since 1927 is illustrated by the data in the following table. These data have been summarised from the returns supplied annually by the mine owners in terms of the Census Act, 1901, and relate to mining operations only, exclusive of any ore-dressing and smelting operations. The value of the output shown is the value of the minerals raised during the year, as estimated before treatment, and includes government subsidies paid under the prices stabilisation scheme and the small value of minerals won by fossickers. The item "persons employed" represents the average number of persons engaged during the year in mining operations, including working proprietors but excluding persons engaged in the treatment of ores, etc. at the mine, head office and salaried staffs, and fossickers. The salaries and wages paid are exclusive of drawings by working proprietors and subject to deduction for explosives sold to employees. The values of land and buildings and plant and machinery are depreciated book values and exclude the value of plant used for the treatment of ores. The value of materials, fuel, and power used includes the value of timber, fuel, power, stores, and other materials used in mining operations and the cost of replacing tools worn out and of repairing plant and machinery. As there are many other costs and overhead charges incurred in conducting mining operations, however, these data do not provide a complete record of income or expenditure and do not show the profits or losses of mines. Quarrying operations are not included in this table; available information is shown on page 160 of this volume.

Table 80.-Development of Mining.

_	16:	Persons	Horse- power Installed,	Salaries and Wages. Paid. †	Value of—			
Year.	Mines in Operation.				Land and Buildings,	Plant and Machinery.	Materials, Fuel and Power Used.	Output.
	mr.			•	£	•		£
1927	No. 378	No.	170 700	£		£	2,452,014	12,351,521
1931	431	29,373	172,768	7,872,842	4,305,777	8,974,129	962,370	5,706,425
		18,370	138,256	3,838,763	3,724,217	7,453,590		10,351,089
1937	610	19,775	134,540	5,836,680	3,723,707	7,450,227	1,406,685	10,301,009
1938	582	20,891	141,306	5,969,287	3,686,962	8,141,917	1,557,277	10,047,453
1939	597	22,506	143,043	6,592,871	3,815,465	8,363,440	1,777,797	11,466,916
1940	583	22,886	157,490	6,028,288	3,721,381	8,504,471	1,865,929	11,024,079
1941	560	22,481	147,170	7,586,272	3,764,438	8,526,267	2,154,513	13,604,975
1942	458	21,695	147,915	8,264,210	3,744,088	8,219,426	2,373,670	14,652,530
1943	386	21,764	147,749	8,565,985	3,685,705	7,954,182	2,573,057	14,896,805
1944	360	21,390	150,518	8,506,897	3,700,488	7,872,139	2,679,312	15,236,026
1945	359	21,452	151,808	8,078,293	3,679,771	7,942,351	2,761,215	15,185,431
1946	351	22,146	161,360	9,363,565	3,625,302	7,969,787	3,095,106	18,740,036
1947	416	22,859	168,818	11,829,046	3,575,501	7,978,277	3,696,043	<sup>1</sup> 24,878,907

Average during year, including working proprietors and excluding fossickers,
 † Subject to deduction for Explosives—see Table 84.

Mining activity generally was at a peak in 1927 but contracted greatly with the onset of the depression and recovered very slowly. Re-expansion was accelerated during the war years.

Coal mining is the principal mineral industry of New South Wales, the output of coal representing approximately 60 per cent: of the total value of minerals raised during the last ten years. The development of the coal mining industry in New South Wales since 1927 is illustrated by the data in the next table. Further comment on the industry is given on page 134.

Table 81.—Development of Coal Mining.

				Salaries	Value of—				
Year.		Persons Employed, * Installed.		and Wages Paid. †	Land and Buildings.	Plant / and Machinery.	Materials, Fuel, and Power Used.	Output.	
	No.	No.		ę	£	£	£	£ .	
1927	135	24,483	145,827	6.515,487	4,089,139	8,000.373	1,667,034	9,586,693	
1931	169	15,522	129,286	3,222,379	3,541,988	6,736,886	654,319	4,441,335	
1937	173 -	13,828	108,974 .	3,947,598	3,433,439	6,333,082	704,393	5,541,611	
1938	174	14,828	109,721	3,984,806	3,402,128	6,603,469	757,365	5,652,964	
1939	172	16,144	108,454	4,659,229	3,405,206	6,584,637	959,947	7,027,035	
1940	163	16,777	$122,\!120$	4,047,568	3,295,221	6,690,770	936,218	6,360,541	
1941	152	16,812	116,482	5,543,745	3,347,127	6,701,158	1,213,869	8,458,852	
1942	138	16,634	115,348	6,318,215	3,309,484	6,520,904	1,447,827	9,738,75 <b>6</b>	
1943	. 125	16,808	119,750	6,447,726	3,274,995	6,512,920	1,503,323	9,788,787	
1944	137	16,839	121,739	6,443,890	3,299,088	6,433,572	1,634,621	9;761,304	
1945	143	17,020	123,935	5,968,680	3,289,487	6,530,015	1,655,406	9,451,930	
1946	144	17,008	127,992	6,447,927	3,171,205	6,203,985	1,888,982	10,534,914	
1947	152	17,204	132,210	7,678,237	3,160,640	6,215,320	2,173,242	12,101,178	

<sup>\*</sup> Average during year, including working proprietors. see Table 84.

The production of coal from open cuts, by which the coal is won after the removal of the overburden, began in 1940 and continued in a relatively small way until 1948 after which expansion was rapid. The following data; which are included in Table 81; illustrate the development of open-cut coal mining since 1944. Data in respect of the years 1940 to 1943 cannot be published because of the secrecy provisious of the Census Act; 1901;

Table 82.—Development of Open Cutt Goal Minings

Year.	Number of Open Cut Mines.		Salarios	Value of—			
		Persons Employed.*	Salaries and Wiges Paid.	Plant and Machinery.	Materials, Fuel and Power Used	Output.	
	No.	No.	£,.	£	£.	£	
1944	4 .	102	29,457	21,644	20,464	127,403	
1945	5.	255	85,210	32,641	76,412	409,713	
1946	6	, 290	113,087	69,707	150,020	618,440	
1947	13 .	406⊲	155.184	176.519	205,505	821,500	

<sup>\*</sup> Average during year, including working proprietors:

Apart from the coal fields, the silver lead-zinc deposits are the most important source of mineral output in the State. The development of silver-lead-zinc, gold, tin, copper, and the various branches of mining other than coal mining is illustrated by the data in the following table. Supplementary information is given later in this chapter.

Table 83.—Development of Mining, other than Coal, Mining,

-		,	Torse		Value of:				
Year,	Mines: in . Operation:	in Foundation Power	Salaries and Wages Paid. †	Land., and Buildings,	Plant and Machinery,	Materials, Fuel, and Power Used	Output.		
	No.	No.		£	£	£	£	£	
1927	243	4,890 +		1,368,355	216,638	973,756	784,980	£ 2,764,828	
1931	262	2,848	8,970	616,384	182,229	716,704	308,051	1,265,090	
1937.,	437,.	5,947,	25,566	1,889,082	290,268	1,117,145	702,292	4,809,478	
1938	408	6,063	31,585	1,984,481	284,834	1,538,448	799,912	4,394,489,	
1939H	425	. 6,302/	34,589	1,933,642(	410,259	1,778,803:	817,850	4,439,881.1	
1940	420	6,100	35,370	1,980,720	426,160	1,813,701	929,711	4,668,538	
1941 1	408	5,669	30,688	2,042,527	417,311	1,825,109	940,644	5,146,629	
1942,;	320	5,061	32,567	1,945,995	434,604	1,698,522	925,843	4,913,774	
1943	261	4,956	27,999	2,118,259	410,710	1,441,262	1,069,734	5,108,018	
1944	223:	4,551	28,779	2,063,007	401,400	1,438,567	1,044,691	5,474,722)	
1945	216	4,432	27,873	2,109,613	390,284	1,412,336	1,105,809	5,733,601	
1946	207	5,138	33,368	2,915,638		1,765,802	1,203,124	8:205,122"	
1947	264	5,655	36,608	4,150,809	414,861	1,762,957	1,522,801	12,777,729	

<sup>\*</sup> Average during year, including working proprietors and excluding fossickers.

† Subject to deduction for explosives—see Table 84.

The amounts of salaries and wages paid, as shown in the foregoing tables, represent gross earnings which were subject to the following deductions for explosives purchased by employees from the mine owners:—

Table 84.-Value of Explosives sold to Employees.

<b>Үеат</b> ;	Соа] Міцеял	Other Mines.	AlleMines	Year.	Coal Mines.	Other Mines.	All Mines,
	£÷	£.	£		£	£	£,
1931 1937 1938 1939 1940 1941	98,767 117,418 110,369 117,724 99,873 108,393	30,605 74,041 86,491 91,734: 98,736 99,763	129,372 191,459 196,860 209,458 198,609 208,156	1942 1943 1944 1945 1946 1947	116,807 109,070 106,581 95,±98 97,590 91,505	93,807 88,758 81,399 73,597 107,783 114,027	210,614 197,828 187,980 169,095 205,373 205,532

# GEOGRAPHICAL DISTRIBUTION OF MINES.

The operations of the mines in each statistical division of New South Wales during 1947 are summarised in the following table to provide a measure of the spread of the mining industry over the State:—

Table 85 ... Mines, in Statistical Divisions, 1947.

			Salaries,	13	Value of	
Division.	Mines in Operation. Persons Employed.		and Wages Paid,	Land, Build- ings, Plant, and Maghinery,	Materials, Fuel, and, Power Used.	Output.
North Coast Hunter and Manning South Coast Northern Tableland Central Tableland Southern Tableland North-western Slope Central-western Slope South-western Slope North and Central-Plain Riverina Western Division	94 55 10	No	£ 59,578 5,144,102 1,593,617 09,435; 1,022,656 213,650 73,822; 7,978 11,163 16,799 17,495, 3,598,751		£ 33,906 1,439,714 420,999 30,234 416,459 100,067 22,6206 8,259 12,2896, 1,206,143	£ 272,956 8,166,011 2,260,426 170,669 1,898,986 830,857 125,356 16,486 41,140 48,884 51,399,10,995,827,
Total, New South Wales	416	22,859	11,829,046	11,553,778	3,696,043	24,878,907

<sup>\*</sup> Average during year, including working proprietors and excluding fossickers.
† Subject to deduction for Explosives.

The Broken Hill and Captain's Flat mining districts, where silver-lead-zinc mining is predominant, are in the Western Divison and Southern Tablelands Division, respectively. Copper is obtained at Cobar (also in the Western Division) and from the concentrates mined at Broken Hill and Captain's Flat. The principal tin mines are in the Central Tablelands Division. The diagrammatic map at page 10 of this volume shows the location of the principal mining centres in the State.

The coal mines in the Northern District are situated in the Hunter and Manning and North-west Slopes Divisions, those in the Southern District are in the South Coast Division, and those in the Western District are in the Central Tablelands Division. Data of the operations during 1947 of the coal mines in these statistical divisions have been included in Table 85-and are shown separately in the next table:—

		ĺ		Value of—				
Division.	Mines in Operation.	Persons Employed.*	Salaries and Wages Paid.†	I and, Build- ings, Plant, and Machinery.	Fuel and Power	Output.		
				<u> </u>				
	No.	No.	£	£	£	£		
Hunter and Manning	95	11,525	5,140,231	7,058,941	1,439,511	8,156,672		
South Coast	24	3,585	1.589,976	1,478,511	420,182	2,252,034		
Central Tableland	30	1,949	881.595	800.546	297.847	1,588,172		
North-western Slope	3	145	66,435	37,962	15,702	104,300		
Total, New South Wales	152	17,204	7,678,237	9,375,960	2,173,242	12,101,178		

Table 86.—Coal Mines in Statistical Divisions, 1947.

#### EMPLOYMENT IN MINING.

Mining leases and permits contain conditions as to the minimum number of men to be employed. Labour conditions in respect of mining leases of Crown lands and of leases or agreements to mine on private lands may be suspended in cases where low prices for the products or other adverse circumstances affect the working of a mine, but usually are as follows:—

Coal, shale, mineral oils, petroleum, and natural gas.	First year of term: 2 men to 320 acres. Thereafter: 4 men to 320 acres.
Gold	Throughout full term: 1 man to 10 acres.
Other minerals	First year of term: 1 man to 20 acres. Thereafter: 1 man to 10 acres.

For dredging leases the prescribed labour is in the proportion of 7 men to 100 acres.

The following table shows the average number of persons (including working proprietors) employed in the mining industry in New South Wales during 1947 and selected earlier years. Quarry workers are excluded and the number of fossickers—men working more or less intermittently, washing alluvial deposits, picking over abandoned workings, and prospecting—reported by mining wardens is shown separately.

<sup>·</sup> Average during year, including working proprietors.

<sup>†</sup> Subject to deduction for Explosives.

Total Silver-lead. Year. Coal. Gold. Tin. Shale. Other. Employed. Fossickers. zinc. 29,373 18,370 17,864 18,890 1,176 10,111 6,0171927 24,483 325 3,305 15,522 12,788 13,515 13,828 62 520 1,755 2,429282 1931 220 1935 1,626 618 403 1936 1,561 3,022 3,557 520 272 5.314 1,324 714 673 790 3,818 3,786 3,547 14,828 16,1441,172 1.34136 364 388 20,891 22,506 3,567 3,259 1938 1939 57 22,886 22,481 21,695 1,251 917 725 475 3,024 16 812 3,276 3,032 420 2,133 1941 881 175 194216,634 548 717 2741943 19442,933 2,918685 608 763 537 21,764 21,39016.808 319 256 981 16.839 193 911 295 2,915 3,551 3,930 1945 17,020 306 553 153 505 380 21,452 22,146 883 17,008 17,204475 156 873 1946 576 607 1947

Table 87.—Persons Employed\* in Mining.

The number of persons employed in coal mining declined from the peak of 24,483 in 1927 to 15,522 in 1931 and 12,788 in 1935, and thereafter increased gradually to 16,144 in 1939 and 17,204 in 1947. Employment in collieries in 1947 was 7 per cent. and 11 per cent. greater, respectively, than in 1939 and 1931, but 30 per cent. less than in 1927.

The expansion in the production of gold in the early nineteen-thirties and war-time curtailment of operations are reflected in the rise and fall in gold mining after 1927. In 1947, 73 per cent. fewer persons were engaged in gold mining than in 1935.

The number of persons employed in silver-lead-zinc mining declined during the depression from the peak of 3,305 in 1927 to 1,755 in 1931, rose steadily to 3,786 in 1939, and, after falling to 2,915 in 1945, reached a new peak of 3,930 in 1947. In this year, employment in silver-lead-zinc mining was 4 per cent., 124 per cent., and 19 per cent. greater, respectively, than in 1939, 1931, and 1927.

In all branches of mining, the number of persons employed in 1947 was very slightly less than in 1940, but 22 per cent. below the record number in 1927.

The average number of persons employed in underground collieries and open-cut coal mines in the northern, southern, and western districts in 1947 and earlier years was as follows:—

					<del></del>			
	Undergro	und Mines,		c	Open Cut Mines.			
Northern District.	Southern District,	Western District.	Total.	Northern District.	Western District.	Total.	Total Employed.	
16.820	4 913	2.750	24 483				24,483	
				1 1			15,522	
				1	,		13,828	
9,436	3,729	1,663	14,828			•••	14,828	
10,242	4,049	1,853	16,144	l [			16,144	
10,718	4,180	1,847	16,745	l l	32	32	16,777	
10,804	4,098	1,879	16,781		31	31	16,812	
10,801	4,054	1,755	16,610		24	24	16,634	
11,074	4,010	1,701	16,785	/	23	23	16,808	
10,927	3,984	1,826	16,737	3	99		16,839	
10,942	4,012	1,811	16,765	98	157		17,020	
11,154	3,802	1,762	16,718	129	161	290	17,008	
11,470	3,585	1,743	16,798	200	206	406	17,201	
	16,820 10,441 8,976 9,436 10,242 10,718 10,804 10,927 10,942 11,154	Northern District.  16,820 4,913 10,441 3,083 8,976 3,313 9,436 3,729 10,242 4,049 10,718 4,180 10,801 4,054 11,074 4,010 10,927 3,984 10,942 11,154 3,802	Northern   Southern   Western   District.     District.     Western   District.	District.   Dist	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	

Table 88.—Coal Mines by Districts: Persons Employed.\*

<sup>\*</sup> Average during year, including working proprietors and excluding fossickers.

<sup>\*</sup> Average during year, including working proprietors.

The following table shows the number of persons working above and below ground in coal and other mines on the last working day in 1947, and selected earlier years. The proportion of employees working below ground in collieries is greater than in other mines, although in recent years the margin has been reduced.

Table 89	-Persons	Employed*	in Mining:	Above	and	Below Ground
----------	----------	-----------	------------	-------	-----	--------------

		Coal:M	ines.			Total			
Year.	Working Pro- prietors	Employees above ground	Employees below- ground.	Total.	Working Pro- prietors,	Employees above ground.	Employees below ground.	Total.	Em- ployed.*
7 00F4		0.000	10.011	0,,400	050	1 554	0.000	1 4 000	00.070
1927†		6,203	18,211	24,483		1,554	3,063	4,890	29,373
1931	1784	4,047	11,583			765	1,739	2,976	18,784
1937"	254	3,393	11,046		687	1,975	3,506	6,168	20,861
$1938^{-1}$	244	3,766	11,821	15,831	584	1,800	3,332	5,716	
1939	207	3,766	12,440	16,413	660	1,790	3,628	6,078	22,491
1940	113	4.194	12,802	17,109	675	1,795	3,489	5,959	23,068
1941.	100	4,086	13,005	17,191	$592_{-}$	1,678	2,732	5,002	22,193
1942	75	3,991	12,786	16.852	444	1,389	2,801	4.634	21,486
1943	67	4.341	12,971	17,379	401	1,348	3,083	4.832	22,211
1944	73"	4,388	12,778	17,239		1,155	2,816		
1945	75:	4,445	12,694	17,214		1,195	3,037	4,616	
1946	78		12,617	17,439	319,				
		4,744				1,347	3,895	5,561	23,000
1947	97	4,900	12,544	17,541	415	1,284	4,145	5,844	23,385

<sup>\*</sup> Number employed on last working day, including working proprietors. † Average during year, includeding working proprietors.

In 1947, 93 per cent. of the employees-in mines in New South Wales. (92 per cent. in collieries) were adult ment and only 7 per cent. (8 per cent. in collieries) were youths under 21 years of age. Approximately 74 per cent. of the adult employees and 62 per cent. of the employees under age 21: worked underground. The age groups of employees working above and below ground on the last full working day of 1946 and 1947 were as follows:—

Table 90 --- Persons Employed in Mining: Age Groups.

				A. D.		
	•	1946.		1	1947.	
Age group.	Coal Mines.	Other Mines.	All Mines.	Coals Mines.	Othera: Mines.	All Mines.
Under Age 21—						
Above Ground	530′1	53	5834	5341	51	585
Below Ground	8.60	86.	946.	825-	137	962~
Total under age 21	1,390	139	1,529	1,359	188	1,547
Age 21 and over—		1	·			
Above Ground	4,214	1,294	5,508	4:366	1,233	5,599
Below Ground	11,757	3,809	15,566	11,719	4,008	15,727
Total age 21 and oven	15,971	5,103	21,074 /	16,0850	5,241	21,326
Total Employed*	17,361	5 <b>,242</b> .	22,603	17,444;	5,429	22,873
	1	1.	T.	l		I :

<sup>\*</sup> Number employed on last working day, including working proprietors.

The employment of boys under 16 years of age and of women and girls in or about a mine is prohibited, and restrictions are placed upon the employment of youths.

## MINING PLANT AND MACHINERY.

The following table shows the value of the plant and machinery in use in underground and open-cut coal mines and the other main branches of mining in 1947 and selected earlier years. These values are depreciated book values (original cost of machinery less depreciation reserve) and exclude the value of plant used for ore-dressing or smelting operations.

Table 91.—Value of Mining, Plant and Machinery in Use. £ thousand.

		Coal.		Gold,	Silver- lead- zinc,		Other.		
Year.	Under- ground Mines.	Open Cut Mines.	Total.			; Tin.		Total.	
1927 1931 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	8,000 6,737 6,333 6,603 6,585 6,691* 6,701* 6,521* 6,513* 6,411 6,498 6,134-1 6,098	   * * * * 22 32 70	8,000 6,737 6,333 6,603 6,585 6,691 6,701 6,521 6,513 6,433 6,530 6,204 6,215	53 25 180 508 535 562 524 498 219 212 218 468 398	574 561 726 804 982 982 1,005 937 883 900 859 906	202 100 179 169 202 165 181 147 152 152 149 139	145 31 32 58 59 105 115 116 187 175 180 253 296	8,974 7,454 7,450 8,142 8,363 8,505 8,526 8,210 7,954 7,872 7,942 7,970 7,978	

<sup>\*</sup> The small amount of machinery used by open cut mines is included in " underground mines".

The value of mining plant and machinery in use in 1947 was 11 per cent. less than in 1927, being more than six times greater in gold mining, 66 per cent. greater in silver-lead-zinc mining, and 22 per cent. less in coal mining.

The following statement shows the value of the plant used in actual mining operations (that is, in winning and weighing the minerals, hauling them to the surface, ventilating the mines, etc.) and in transporting the minerals from the surface to wharf or railway in 1947 and selected earlier years.—

Table 92.—Purpose of Mining Plant and Machinery in Use. £ thousand.

		CoaldMi	nes:						
Year.	Mining Opprata- tions.	Transport to Wharf or Railway.	Other Machin- ery.	Total.	Mining Operations,	Transport to Wharf or Rallway	Other Machin- ery:	Total,	Total all Mines.
_				1		<u> </u>			
1927	4,703	2,923	374	8,000	801;	104.	69.	974	8,974
1931	3,955	2,528	254	6,737	681	14	$\begin{vmatrix} \tilde{2} \\ 2 \end{vmatrix}$	717	7.454
1937	3,795	2,283	255	6,333	996	16	105	1,117	7,450
1938	3,981	2,345	277	6,603	1,328	24	187	1,539	8,142
1939	3,972	2,345	2681	6,585	1,537	14	227.	1,778	8,363
$1940^{\circ}$	4,184	2,242	265	6,691	1,590	18\	2064	1,814	8,505
1941	4,274	2,106	321	6,701	1,488	20	317	1,825	<b>8,526</b> :
1942	4,125	2,066	330	6,521	1,248	41.	409.	1,698	8,219
1943.	4,111	2,062	340	6,513	1,024	33	384	1,441	7,954
1944a	4,088	2,024	321	6,433	1,020	511	368	1,439	7,872
1945	4,230	1,979	321	6,530	1,007	507	355	1,412	7,942
1946	4,098	1,695	411	6,204	1,304	584	404	1,766	7,970
1947	4,277	1,626	312	6,215	1,271	68;	424	1,763	7,978:

In the coal mines, the value of the machinery employed in mining operations in 1947 represented 69 per cent. of the total value and 26 per cent. was used for transporting the minerals from the surface of the mine to a wharf or railway station. In other mines 72 per cent. was used in mining operations and only 4 per cent. in transporting minerals. In some cases mine owners have constructed railway lines for the purpose of connecting the mines with the State railway system or with wharves.

The rated capacity of the engines and electric motors installed in coal and other mines in 1947 and earlier years is shown in the following table. The horse-power is the combined total of engines and electric motors ordinarily in use and in reserve or idle and represents the total power available to operate mining machinery.

Table 93.—Horse-power	to	Engines	installed	in	Mines.

Year.		Coal	Mines.			Total			
	Steam Engines.	Electric Motors.	Other Engines.	Total.	Steam Engines.	Electric Motors.	Other Engines.	Total.	All Mines.
1927 1931 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	110,590 88,716 59,160 58,161 58,341 59,735 53,919 52,121 52,081 50,646 50,309 47,709 45,416	35,048 40,453 49,341 50,827 49,002 61,344 61,878 66,815 69,829 72,837 78,730 83,749	189 117 473 733 1,111 1,041 1,479 1,349 854 1,264 789 2,329* 3,045	145,827 129,286 108,974 109,721 108,454 122,120 116,482 115,348 119,750 121,739 123,935 128,768*	21,420 5,585 10,540 11,114 10,300 10,190 10,569 8,681 7,802 8,611 7,290 6,611 6,914	4,416 2,789 9,125 15,003 18,650 19,039 15,890 16,537 16,767 16,451 16,797 22,237 24,807	1,105 596 5,901 5,468 5,639 6,141 4,229 7,349 3,340 3,717 3,786 4,520 4,887	26,941 8,970 25,566 31,585 34,589 35,370 30,688 32,567 27,999 28,779 27,873 33,368 36,608	172,768 138,256 134,540 141,304 143,043 157,490 147,170 147,915 147,749 150,518 161,808 162,136 168,818

<sup>\*</sup> Revised since last issue.

The horse-power of engines installed in mines in 1947 was only 2 per cent. less (9 per cent. less in coal mines and 36 per cent. more in other mines) than in 1927. During this period, steam horse-power decreased from 76 per cent. of the total horse-power in coal mines and 80 per cent. in other mines to 35 per cent. and 19 per cent. respectively, and the proportion of electrical horse-power increased from 24 per cent. in coal mines and 16 per cent. in other mines to 63 per cent. and 68 per cent.

The next table shows the quantity and value of fuel, power, and timber used in mines in 1947 and selected earlier years:—

Table 94.—Fuel, Power, and Timber used in Mines.

				Fuel and	l Power Us	sed.			Value of
Year.	Co	al.	Woo	od.	Oil.	Electricity.	Other.	Value of Fuel and	Timber Used.
. <u> </u>	Quantity.	Value.	Quantity.	Value.	Value.	Value.	Value.	Power Used.	Osed.
1927 1931 1937 1938 1939 1940 1941 1942 1943 1944 1944 1945 1946	tons. 510,315 280,294 238,727 243,664 254,270 230,621 238,671 245,226 222,755 211,996 202,019 198,750 192,494	£ 528,922 192,199 146,230 169,544 180,601 178,160 179,492 207,828 197,485 194,414 189,888 192,489 215,153	tons. 31,518 9,478 41,689 43,494 44,158 63,951 53,613 51,171 51,150 49,144 30,163 28,400 23,486	£ 34,879 7,684 28,630 30,009 31,096 30,720 29,802 23,854 28,112 27,267 25,242 21,913 18,753	£ 2,015 1,475 10,649 13,144 16,391 19,862 21,463 20,426 23,713 28,232 40,055 52,390 67,842	£ 151,498 127,629 197,128 212,506 245,495 261,716 310,365 357,100 377,164 344,380 354,709 397,454 446,492	£ 2,273 5 153 199 401 450 353 475 239 167 199 98	£ 719,587 328,992 382,790 425,203 473,782 490,850 541,572 609,561 626,949 594,532 610,061 664,445 748,338	£ 450,763 214,197 377,474 440,074 477,907 499,195 549,032 559,071 557,388 647,999 602,069 626,790 684,633

# MINERALS WON IN NEW SOUTH WALES.

The next table shows the average annual value of the minerals won in New South Wales in each quinquennial period from 1901 to 1945, the annual production since 1927, and the total value of production to the end of each period. The value of coal production since 1929 included in these data has been derived from the returns supplied annually by mine owners in terms of the Census Act, 1901. With this exception, these data are from the records of the Mines Department and relate to the value of minerals won during the year, as estimated after treatment at the mine, rather than to the value of minerals raised, as estimated before treatment; the basis of valuation is the assay value of the ores, but as there is commonly an association of metals in the same mineral matter, it is difficult to make a reliable estimate of the metallic content, especially when the ores are exported before final treatment. The output of gold included in these data has been valued at the contemporary Australian price, and the premium in 1947 and to the end of 1947 on the valuation at standard rate quoted by the Mines Department amounted to £326,271 and £5,343,890, respectively. The value of production of lime, Portland cement, coke, and iron from scrap has been excluded (although included in the output of mines by the Mines Department) as for statistical purposes these items have been treated as products of factories. The data include the value of output of quarries held under mining title to 1924 and of all quarries thereafter.

I able	95value	OL	Wilnerais	won	m	Hew	Doutn	waies.
T I			- 11					

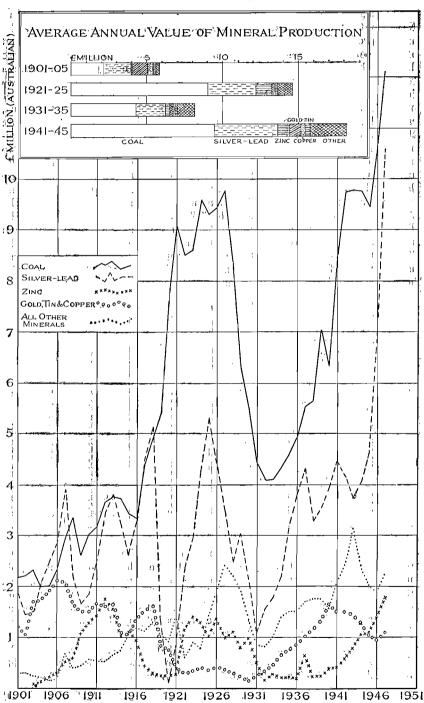
	Value of Mi	nerals Won,		Value of Minerals Won.		
Period.	Average per Annum.	To end of Period,	Year,	During Year.	To end of Year.	
	£	£		£	£	
To end of 1900	l	132,535,358	1932*	6,947,621	467,343,161	
1901-1905	5,873,176	161,901,240	1933*	7,642,871	474,986,032	
1906-1910	8,330,883	203,555,656	1934*	8,795,523	483,781,555	
1911-1915	10,169,752	254,404,418	1935*	10,283,903	494,065,463	
1916-1920	10,871,895	308,763,893	1936*	11,316,352	505,381,815	
1921 - 1925	14,649,335	382,010,570	1937*	13,218,647	518,600,462	
1926-1930*	14,253,809	453,279,617	1938*	12,099,764	530,700,226	
1931-1935*	8,157,169	494,065,463	1939*	13,914,823	544,615,049	
1936-1940*	12,892,832	558,529,626	1940*	13,914,577	558,529,626	
1941-1945*	18,197,397	649,516,611	1941*	16,919,143	575,448,769	
	i i	1	1942*	18,424,737	593,873,506	
1927	17,048,370	416,568,658	1943*	18,912,994	612,786,500	
1928	14,363,569	430,932,227	1944*	18,496,173	631,282,673	
1929*	12,265,666	443,197,893	1945*	18,233,938	649,516,611	
1930*	10,081,724	453,279,617	1946*	21,767,243	671,283,854	
1931*	7,115,923	460,395,540	1947	27,788,209	699,072,063	

<sup>\*</sup> Revised since last issue.

Up to the end of the year 1900, the total value of gold won (£48,422,000) exceeded that of any other mineral, but with the subsequent decline in gold mining and the development of the coal and silver-lead-zine fields, coal advanced rapidly to the head of the list, and the value of silver, lead and zinc surpassed the output of gold. At the end of 1947, coal represented 45 per cent. of the total value of mineral production, silver, silver-lead, and zinc 31 per cent., and gold 10 per cent.

The following statement shows the estimated quantity and value of individual metals, precious stones, industrial minerals, and quarry products won in the years 1939 and 1944 to 1947 and to the end of 1947. These data have been derived from the records of the Mines Department except that the quantity of coal produced in and since 1942 has been supplied by the Joint Coal Board and the value of coal produced in and since 1929 has been

VALUE OF MINERAL PRODUCTION, NEW SOUTH WALES.



derived from the returns collected under the Census Act, 1901. Further particulars regarding the output of quarries are given on page 160.

Table 96.-Individual Minerals Won in New South Wales.

Table	96.—Ir	ıdividual	Minerals	'Won'in	New Sou	ith Wale	s
Mineral.			Out	put during 1	ear.	_	Total
mmerai,		1939.	1944.	1945.	. 1946.	1947.	output to end of 194
· · · · · · · · · · · · · · · · · · ·			QUANTITY	<u>'</u> '.		<u> </u>	<u> </u>
klunite	tons	750	630	631	716	400	66,910
antimony (metal and			348	152	55	85	22,013
Asbestos (fibre)	tons		2,577	2,632	3,037	4,021	*
Bismuth	owt.	. 1	190	64	20	60	18:080
Building stone	tons		32,559 242	13,456 282	201,102	364,475	8,643,778 46,245
Phrome ore	tons	116	'242				46,245
lays	tons	1,717,996	396,500	528,526	1,055,856	1,462,659	1 27.952.960
Coal	tons	11,195,832	11,042,9397	10,176,254†	11,186,3831		523,329,32
Eppper (ingots) matte, Diamonds	ore) tons	1,925 103	3,099 198	3,050 721	2;946 50	2,391	301,984
Diamonds Dolomite	tons			25,590	21,278	30,355	206,911
luospar	tons	-0,111	1			00,000	10,112
old	oz. fine	87,189	62,610	43,129	32,009	50,082	1 15.986 709
łravel	c. yd.	2,268,611	62,610 1,897,226 151,888	2,042,518 42,673	2,098,313	3,172,020	15,695,661 2,058,531 150,734
ron (pig)	tons		151,888	42,673	١		2,058,531
ron oxide	tons		7,060	8,062	12,685	9,238	150,734
ronstone flux	tons	051.000	000 000	1100 040	70.050	110,000	135,162
imestone flux	tous		239,270	139,348	78,759	112,771	5,312,528
ead (pig, etc.) Ingnesite	tons		31,245	22,342	21,375	35,751	326,62 497,498
Inganese ore	tons	146	770	984	1,385	1,587	46,56
Iolybdenite	. tons		· 5	1 2	-,	3	998
latinum	Oz.	7	21	2			20,24
toad Material	tons	1,935,237	1,085,119	1,244,031	1,496,721	953,470	39,352,236
cheelite	tons	14	18	17	.22	1.15	1,910
hale (oil)	tons		137,458 88,326	123,170	121,654 33,958	138,427 33,762 112,471	2,855,568
ilica	'tons	76,436	172,168	68,907 131,309	122,364	110 171	1;023;994 47,162,090
ilver ore, con-	oz, fine	10,430	172,100	, 191,909	122,304	112,471	47,102,090
trates, etc	tons	306,225	240,563	.,205,805	215,928	212,410	16,021,003
In (ingots, concentre	ites.	000,220	_10,000			212,110	10,021,00
оге)	'tons	1,291	824	776	674	-552	□151,791
Volfram	tons		301	31	12	23	2,989
line concentrates	tons	. 278,540	300,850	<b>265,284</b>	273,781	249,420	11,546,185
			VALUE.		,		
Alunite		1.499	£ 2,189	£ 2,222	£ 1,195	£ 1,410	£ 200 106
intimony (metal and	ore)	1,423 1,261	10,433	5,808	2,179	4,442	228,436 442,090
rsenic			10,200		-,	-,	193,990
sbestos			9,073	8,478	9,992	11,203	111,300
Blamuth		10	1,870	2,362	515	3,456 167,032	253,807
Building stone		203,012	26,380	- 36,409 775	80,000	167,032	3,143,482 142,849
hrome ore	•••	352	727	775	010 700	005 015	142,849
lays	3,000	357,652	98,073 9,761,304†	122,240	212,562	285,815	5,702,798
oal opper (ingots, matte	(0to)	7,027,025† 105,407	309,900	305,000	10,534,914† 344,682	12,101,178 290,905	311,113,203 18,252,060
	, ore)	167	479	167	115	215	150,647
oloniite		41,068†	24,351†	18,271†	12,364†	12,692	459/329
luospar		***	·				31.571
old		848,985	657,152	461,293	344,497	539,008	73,253,360
ravel		453,722	379,445	408,504	419,662	634,404	31,571 73,253,366 8,874,275
on (pig)	.,, .,,	73	835,384	208,208	10,000	, HI 000	10,753,309
on oxide		78	≥ 5,578	5,549	10,737	• 7,633	134,525
onstone flux	····	49,740	77,814	57,314	25,840	40,645	1,901,17
mestone flux ead (pig, etc.)	•••	40,740	11,014	01,014	20,010	40,040	6,442,397
agnesite		34,217	46,097	26.721	26,230	51,432	842.195
anganese ore		477	5,065	6,977	0,822	12,642	$\substack{842,195 \\ 135,129}$
olybdenite		5,382	1.037	- 209	[	r 470	227,412
pal		1,020	3,020	3,000	3,500	1,000	1,643,476
latinum		35	20	22	051.450	000 770	128.996
oad material		464,133 3,388	263,613	292,968	354,472	220,558	9,690,669
cheellte	•••	3,388	7,247 165,285	7,111	8,680 139,902	6,847	259,490
hale (oil)		$13,322 \\ 19,902$	14,829	164,648	100,002	193,798	3,815,447 493,008
lica liver	•••	7 091	22.507	17,932 -20,703 -4,604,962	14,128 28,297 6,971,256	19,294 26,242 10,554,416	6,813,916
ilver lead ore, concen	trates: etc	7,021 3,539,419	22,597 4,046,338	4:604.962	6.971.256	10.554.416	1174 BB2 383
in (ingots, concentra		366,138			257,153	246,423	19,929,834
olfram		16,249	10,982	9,604	` 3,859	9,184	422,220
inc concentrates		1 252,102	1;052,220 136,750	1,073,340	1,379,183	1,774,959	34,014,203
ircon-Rutile-Ilmenite			136,750	198,083	142,037	276,161	1,152,916 3,653,357
ther minerals	4.	/U102;111	211,561	9,604 1,073,840 198,083 421,840	429,470	246,423 - 9,184 1,774',959 276,161 294,745	3,653,357
(Mata)	. 1	10.014:00:1			01 505:010		600,020 630
Total		13,914,823†	18,496,173†	18,233,938†		47,788,209	099,072,068
	# X7	ot probleble	, # I	covinad cinor	Jack idenia		

<sup>\*</sup> Not available.

<sup>†</sup> Revised since last issue.

#### COAL.

A description of the coal measures of New South Wales was published on pages 669 and 670 of the Year Book for 1937-38.

WAR-TIME CONTROL OF COAL MINING INDUSTRY.

An outline of the measures taken under National Security (Coal) Regulations, National Security (Coal Mining Industry Employment) Regulations, and the Coal Production (War-time) Act, 1944 to ensure adequate war-time supplies of coal throughout Australia and for the prevention and settlement of industrial disputes in the coal-unining industry is given at page 580 of the Year Book for 1941-42 and 1942-43. Control of the industry remained with the Coal Commissioner until 1st March, 1947, when the relevant section of the Coal Industry Acts, 1946 came into operation in New South Wales.

COAL INDUSTRY ACTS, 1946, AND JOINT COAL BOARD.

Parallel Coal Industry Acts enacted by agreement between the Commonwealth and New South Wales Governments were assented to on 15th August and 25th September, 1946. Under these Acts, a Joint Coal Board, comprising a chairman and two other members appointed for a maximum term of seven years, regulates the coal industry in New South Wales, but in matters of policy the Board is subject to direction by the Prime Minister in agreement with the Premier of New South Wales.

The powers of the Joint Coal Board are very wide. The Board is to ensure that sufficient New South Wales coal of the right quality to meet Australian and export requirements is produced, that coal resources are conserved and developed, and that coal is used economically and distributed to best advantage, and also is to promote the welfare of workers engaged in the coal industry of the State. It may give directions as to methods of mining (including mechanisation), grading and marketing, regulate prices of coal and profits in the industry, regulate employment (with power to exclude unsuitable persons), recruitment and training in the industry, and take measures to promote the health and welfare of mine-workers and toward the social and economic advancement of coal-mining communities. Workers' compensation insurance schemes may be established by the Board in which employers may be compelled to insure. The Board also may foster and undertake research activities, afford technical assistance to the industry, and make advances to assist in the establishment, development, and operation of coal mines and related enterprises. Coal may be acquired, held, and sold by the Board, which also may take control of, or acquire and operate any coal mine, mining plant, etc. It has power to establish new coal mines, land for which it may obtain by purchase, or with the approval of the Prime Minister and the Premier, by appropriation or resumption with compensation.

Administrative costs of the Board are to be borne equally by the Commonwealth and New South Wales Governments. The State also is to contribute one-half the expenditure from the Board's Welfare Fund, up to a maximum of £70,000 each year, on a pound for pound basis with the Commonwealth. All other welfare charges and other expenses are to be met by the Commonwealth, including subsidies and losses from production and trading activities. Provision of funds for advances and grants for capital purposes is the responsibility of the Commonwealth, which also may guarantee loans to the Board from the Commonwealth Bank.

Concentration upon increasing currently inadequate coal production has hindered the Board's advances towards its fundamental objectives, but a long-range production programme has been devised providing for the closing down of inefficient high-cost mines, the opening of new mines, and the expansion of the output of existing mines. The Board is to assist colliery proprietors who are prepared to expand output to the mutually selected target by hiring out plant and equipment purchased by the Board, by arranging advances on commercial terms and at commercial rates of interest, or by participation as an ordinary or preferential shareholder. Where a proprietor is unwilling to co-operate, the Board proposes to take over the colliery. A mechanisation programme was initiated by an Order issued on 18th July, 1947 requiring collieries, unless otherwise exempted, to introduce power-boring machines to replace manually-operated machines.

Mines may not be opened or re-opened nor operating mines closed without the approval of the Board. Permission to open mines is granted only where the owners can fully mechanise the mine and construct all necessary surface facilities before commencing operations and where the type and quantity of coal to be produced conform with the Board's long-range targets.

When the Joint Coal Board began operations on 1st March, 1947, it assumed control of the two collieries in New South Wales (Coalcliff in the Southern and Commonwealth No. 2 in the Western District) which had been controlled since 1944 by the Commonwealth Coal Commissioner under powers conferred by the Coal Production (War-time) Act, 1944. Ownership of the collieries remained with the proprietors, but the day-to-day management was determined by the Board and the proprietors became entitled to claim compensation for any resultant loss. Coalcliff Colliery was freed from control from 31st March, 1947; during the full period of control, the colliery proprietors received compensation payments amounting to £121,777. Commonwealth No. 2 continued to be subject to control and the Board assumed control over South Clifton Colliery in August, 1948.

An Operations Division of the Board, established on 1st January, 1948, and financed by interest-bearing advances amounting to £140,124 by 30th June, 1948, conducts the colliery operations (including the production and sale of coal) of the mines owned or controlled by the Board. It has also conducted drilling and proving operations on properties of the Board and treats and markets coal produced from several other small collieries.

Colliery proprietors are required to provide at their own expense pit amenities at the basic standards adopted by the Board, but may secure temporary advances on commercial terms for this purpose.

A medical service has been established to advise the Board on all health aspects of the industry (including the incidence of dust and its suppression) and to examine all persons seeking employment and, at regular intervals, all persons employed in the industry. Training and educational schemes have been developed to attract labour and to raise its technical and social status. The Board has also acquired the Mine Owners' Insurance Co. Pty. Ltd., and from 1st October, 1948, introduced a new scheme of workers' compensation insurance which is described in the Chapter "Employment" of this volume.

The Board grants financial assistance to coalfields local authorities. For predominantly coal-mining communities, the assistance comprises a grantin-aid of 1d. per ton of coal produced within the area (to be spent subject to certain conditions) and grants of 100 per cent. of the cost of approved

works completed before 31st December, 1949 without the use of materials in short supply and 60 per cent. of the cost of other approved works. Proportionately lower grants are made in respect of mixed communities. The Board's share of the cost of amenities projects approved by 30th June, 1948 is estimated to reach £750,000; the projects include colliery access roads, parks, recreation facilities, community and baby centres, and water supply. Miners' Co-operative Building Societies also are subsidised by the Board to encourage rising standards of housing.

#### COAL INDUSTRIAL ARBITRATION SYSTEM.

In terms of the National Security (Coal Mining Industry Employment) Regulations promulgated in February, 1941, the Commonwealth Government established the Central Reference Board and a series of subsidiary Local Reference Boards as the arbitration authority to deal with industrial matters affecting members of both the Miners' Federation and the other unions (known as the "craft unions") engaged in the industry. The jurisdiction of the Central Reference Board was restricted to the craft unions by an amendment of the Regulations in December, 1943, and a Central Coal Authority was established to deal with Miners' Federation matters. Under the Coal Production (War-time) Act, 1944, this authority was succeeded in March, 1944 by a Central Industrial Authority with the same jurisdiction, and subordinate Local Industrial Authorities were appointed for the Northern, Southern, and Western districts.

The separate industrial jurisdiction of the coal-mining industry was continued by the Coal Industry Acts, 1946. Under these Acts, industrial matters affecting members of the Miners' Federation are dealt with by a Coal Industry Tribunal and its subsidiary Local Coal Authorities and Mine Conciliation Committees. Awards of the Tribunal and the Local Authorities override inconsistent awards or orders of any court or other tribunal with parallel jurisdiction.

The Coal Industry Tribunal comprises a practising barrister or solicitor of not less than five years' standing, who is appointed for a term of seven years, and has all the powers of the Commonwealth Arbitration Court and the Industrial Commission of New South Wales to consider and determine any industrial dispute or matter in the industry. The Tribunal is required to act without regard to technicalities and legal forms, may make its own rules of procedure, and may appoint two assessors (one a Federation nominee and one a nominee of employers) to advise it in relation to a dispute. Except with leave of the Tribunal (or in its jurisdiction, of a local coal authority), counsel, a solicitor or a paid agent may not appear at hearings. Matters deemed to be local matters may be referred by the Tribunal to local coal authorities for settlement.

The Local Coal Authorities are appointed for a term of three years by the Tribunal. They have power to settle local disputes affecting members of the Miners' Federation and may refer disputes to Mine Conciliation Committees for settlement. These Authorities are required to report upon, and if so directed, to settle, any dispute or matter referred by the Tribunal, and, generally, to keep the Tribunal advised of disputes and matters arising or likely to arise. If the Joint Coal Board is of the opinion that a decision of a Local Coal Authority is likely to lead to industrial unrest in other localities, it may stay its implementation and direct the Tribunal to review it. The Tribunal may re-hear the matter if of like opinion, or, after review, certify that the Authority's decision may stand.

Mine Conciliation Committees comprise equal numbers representing members of the Federation and employers and may be appointed for any mine by the Board. They may deal with grievances and matters affecting production at the mine and seek by conciliation to maintain harmonious industrial relations. Where a Committee cannot agree, a dispute is to be referred to the Local Coal Authority and other matters to the Joint Coal Board.

Disputes and other industrial matters affecting members of the craft unions continue to be dealt with by the Central and Local Reference Boards established under the National Security (Coal Mining Industry Employment) Regulations, which have been continued in force to 31st December, 1947, 1948, and 1949, in turn, by the Defence (Transitional Provisions) Acts of 1946, 1947, and 1948. The Coal Industry Tribunal is at present chairman of the Central Reference Board.

Data of industrial disputes in the coal mining industry are provided in the chapter "Industrial Arbitration" of this volume.

COMMONWEALTH BOARD OF INQUIRY ON COAL MINING INDUSTRY.

The report of the Board of Inquiry on the Coal Mining Industry, 1946 is summarised on page 680 of the 50th edition of the Year Book.

## STATE GOVERNMENT COAL MINES.

Two collieries at Lithgow in the Western District and at Awaba in the Northern District are owned by the New South Wales State Government and operated by the State Coal Mines Control Board. The Lithgow mine was opened in September, 1916, and at 30th 1948 the mining property (including developmental work, machinery, etc.) was valued at £364,621. During 1947-48, 314,307 tons of coal were raised and £408,583 was realised from the sale of coal; operations resulted in a surplus of £5,631 after charging interest on the adjusted—see volume No. 50, page 681—capital debt (£12,604) and contribution to sinking fund for debt redemption (£2,327). number of employees at the mine was 393 in 1939, and increased steadily to 501 in 1946 and 502 in 1947. At the Awaba mine, operations began in October, 1947 but did not reach the trading stage by 30th June, 1948. During this period, expenditure on development amounted to £32,336 and 6,518 tons of coal were raised; the number of employees at the mine at the end of June, 1948 was 41.

In terms of the State Coal Mines (Amendment) Act enacted in December, 1948, the Control Board is to be reconstituted and renamed the State Mines Control Authority.

## Production of Coal.

The Commissioner who reported in 1946 on the coal industry in terms of reference to the Commonwealth Board of Inquiry estimated that approximately 14,500,000 tons of coal could be produced annually from existing underground and open cut mines in New South Wales with mechanisation and economical methods of working coal and that this output could be doubled by the introduction of a second productive shift. At that time he estimated the Australian demand for New South Wales coal, other than for export as cargo or in bunkers, at about 12,000,000 tons annually. The maximum output of coal in this State was 12,205,935 tons in 1942. Since that year, production from open cut mining has been developed and reached 958,654 tons in 1947.

The following table shows the gross quantity (excluding dirt and chitter) and the value (pit top basis) of coal raised in New South Wales in 1947 and selected earlier periods, the total production to the end of 1947 being 523,329,324 tons valued at £311,113,203. The data in this table have been derived from the records of the Mines Department, except that the quantity of coal produced in and since 1942 has been supplied by the Joint Coal Board and the value of coal, produced in and since 1929 has been derived from the returns collected under the Census Act, 1901. A graph illustrating trends in the extent and value of coal production in New South Wales since 1921 is published on page 139 of this volume.

Period. Northern District. Southern District. Western District. Mined Underground. Prom Cuts. Value at Pit Top.  To 1851 * * * * 583,000 583,000 254,000	Table 97.—Coal Raised in New South Wales.											
Period. District. District. Mined Underground. From Open Cuts. Value at Pit Top.  tons. tons. tons. tons. tons. tons. tons. &					To	tal, New Soi	ıth Wales.					
	Period.				Under-	Open						
To 1851   *   *   *   583 000   583 000   254 000		tons.	tons.	tons.		tons,						
		*	*	*	583,000		583,000	254,000				
1852-1873 * * * 11,557,449 11,557,449 5,099,591		*	*	*				5,099,591				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								31,962,324				
					71,541,928							
1001 05   05 005 00   10 10 000   5 100 05   5 1 15 10 10   5 1 15 10 10 10						1						
								39,270,272†				
1931-35   24,113,983   6,215,615   6,572,202   36,906,800     36,906,800   21,551,421				6.572.202								
				7,428,105			49,567,845	29,502,159				
1941-45†   38,127,055   10,434,989   8,102,281   55,777,994   886,331   56,664,325   47,199,129	1941-45†											
				1,496,717			10,051,519	5,541,611†				
			1,831,408		9,570,930			5,652,964†				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		7,365,981	2,160,717					7,027,035				
								6,360,541†				
								8,458,352†				
1942† 8,301,430 2,261,104 1,648,401 12,149,119 56,816 12,225,935 9,788,756												
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		7,824,286	2,150,588	1,498,625	11,413,335			9,788,787				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$												
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$												

Table 97.—Coal Raised in New South Wales.

The quantity of coal raised exceeded 10,000,000 tons in each year from 1920 to 1927, and in three of them exceeded 11,000,000 tons. A prolonged cessation of work in the northern mines in 1929 and 1930 was followed by the general depression, and the output in 1931 was the lowest since 1904. As industry revived, production rose year by year from 1932 and again exceeded 10,000,000 tons in 1937. The mines were idle for six weeks in 1938 and for ten weeks in 1940 owing to industrial strife. The record in production in 1941 was surpassed in 1942 when 12,206,000 tons were raised. The output declined in each of the next three years, when there were industrial dislocations, to 10,176,000 tons in 1945, but rose again, partly because of the rapid expansion of open cut mining, to 11,186,000 tons in 1946 and 11,683,000 tons in 1947.

Approximately 66 per cent of the coal raised in New South Wales is obtained from the Northern coal-fields; the balance is divided about equally between the Southern and Western fields, with the proportion from the Western field increasing during recent years. (See the inset to graph of production and value of coal in New South Wales on page 139).

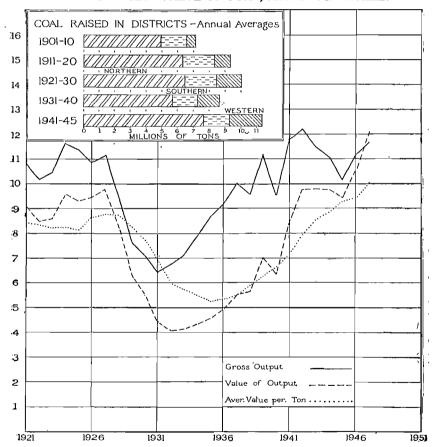
The production of coal from open cuts, by which coal is won after removal of the overburden, began in the Western district in 1940 and continued in a relatively small way until 1943, after which expansion was

<sup>\*</sup> Not available

<sup>†</sup> Revised since last issue.

rapid. In 1947 there were 13 open cut mines operating in the Northern and Western districts and steps towards developing other open cuts were in progress. The quantity of coal taken from open cuts formed 2 per cent. in 1944 and 8 per cent. in 1947 of the gross output of coal raised in New South Wales and increased from 45,000 tons in 1940 and 180,000 tons in 1944 to 959,000 tons in 1947. Underground mines produced 10,724,000 tons of coal in 1947, which was 3 per cent. more than in 1946 but 4 per cent. below 1939 and 12 per cent. below 1942. More than 55 per cent. of the total output of coal is drawn from tunnels, the balance coming from shafts and the open cuts.

# PRODUCTION AND VALUE OF COAL, NEW SOUTH WALES.



Number at side of graph represents output in millions of tons, value in £ million, and 2s. of average value per ton.

The next table shows the quantity of saleable coal and the average value per ton of coal raised in each district of the State in 1947 and earlier years. The saleable output of coal is the gross output (excluding dirt and chitter) less the quantity of coal used as fuel in operating collieries and miners' coal.

	Northern	District.	Southern	District.	Western	District.	Total, New Wal	w South
Ýear,	Quantity.	Average Value per tou.	Quantity.	Average Value per ton.	Quantity.	Average Value per ton.	Quantity.	Average Value per ton.
	tons.	s. d.	tons.	s. d.	tons.	s. d.	tons.	s. d.
1937	6,474,920		1,783,129		1,466,041		9,724,090	
1938	6,120,324	I2 0	1,724,195		1,414,064		9,258,583	12 0·
1939	7,171,171	12 7	2,058,866	14 5	1,634,783	10. 8	10,864,820	12 8
1940	6,139,021	13 6	1,709,267	15 0	1,409,005	11 6	9,257,293	13 6
1941	7,649,193	14 6	2,158,409	16 7	1,609,664	12 0	11,417,266	14 7
1942	8,070,981	15 11	2,211,495	18 8	1,614,322	13 6	11,896,798	16 1
1943	7,655,965	16 10	2,097,850	20 1	1,479,017	14 9	11,232,832	17 2°
1944	7,142,491	17 7	1,963,046	21 2	1,688,277	15 0	10,793,814	17 10·
1945	6,614,395	18 7	1,717,191	21 11	1,611,413	15 4	9,942,999	18 7
1946	7,531,025		1,693,544		1,734,251	15 7	10,958,820	18 10
1947	7,748,793	20 11	1,829,435	23 11	1.864,684	16 10	11.442,912	20 9

Table 98.-Saleable Coal Raised in New South Wales.

The quantity of saleable coal produced from each of the principal coal seams in the years 1939, 1942, and 1945 to 1947 was as follows:—

1939.	1942.	1945.	1946.	1947.
tons.	tons.	tons.	tons.	tons.
4,371,297	4,833,705	3,897,599	4,405,999	4,326,600
849,461	1,108,375	986,156	1,088,749	1,164,587
956,464	1,121,583	741,702	878,664	952,778
247,409	309,928	239,017	449,400	478,266
410,909	373,196	290,245	314,754	324,662
348,953	324,194	459,676	393,459	501,900
7,184,493	8,070,981	6,614,395	7,531,025	7,748,793
2,058,866	2,211,495	1,717,191	1,693,544	1,829,435
1,634,783	1,614,322	1,611,413	1,734,251	1,864,684
70.050.740	17.000 700	0.010.000	70.0%0.000	11,442,912
	4,371,297 849,461 956,464 247,409 410,909 348,953 7,184,493 2,058,866	4,371,297     4,833,705       849,461     1,108,375       956,464     1,121,583       247,409     309,928       410,909     373,196       348,953     324,194       7,184,493     8,070,981       2,058,866     2,211,495       1,634,783     1,614,322	4,371,297     4,833,705     3,897,599       849,461     1,108,375     986,156       956,464     1,121,583     741,702       247,409     309,928     239,017       410,909     373,196     290,245       348,953     324,194     459,676       7,184,493     8,070,981     6,614,395       2,058,866     2,211,495     1,717,191       1,634,783     1,614,322     1,611,413	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 99 .- Saleable Output of Coal from Principal Seams.

# Colliery, Working Days.

The next table shows the weighted average number of days worked by collieries in New South Wales, the maximum possible number of working days, and the proportion of days worked in 1947 and selected earlier years. The estimates of the number of colliery days worked are derived by multiplying the average annual number of employees in each mine by the number of days worked by the mine during the year and dividing the aggregate "man-days" so obtained by the number of mines; no account is taken of absenteeism.

	Northern District,	Southern District.	Western District.	75	New South Wa	les.
Year.	Days Worked.	Days Worked.	Days Worked.	Days Worked.	Maximum Possible Working Days.	Proportion of Days Worked.
1001	221	004	07.77	000	000	per cent.
1921		234	217	223	286	78.0
1925	197	194	257	202	286	70.6
1929*	79	228	244	132	272	48.5
1936	196	201	207	198	274	$72 \cdot 3$
1937	209	220	224	213	274	77.7
1938*	179	196	192	184	274	67.2
1939	205	216	216	209	266	78.6
1940*	166	166	182	168	244	68'9
1941	213	210	208	211	250	84.4
1942	231	227	$\frac{-35}{238}$	231	252	91.7
1943	221	222	233	223	254	87:8
1944	210	212	231	213	253	84.2
1945*	196	195	$\frac{231}{214}$	198	247	80.2
	$\frac{190}{215}$	203	229	214		
1946					246†	87.0
1947	214	219	227	216	252	85.7

Table 100 .- Colliery Working Days.

The number of working days was reduced during 1939 by the Federal Arbitration Court and the maximum possible number for the year was 266. In 1940, when the reduction was operative during the whole year, the number was 244 days. Following the outbreak of war with Japan in 1941, restrictions were imposed on annual holidays in essential industries and the maximum number of working days was increased. During 1946, there were approximately 246 working days (248 in the Northern and 243 in the Southern and Western Districts) and in 1947 the maximum possible number was 252, including 8 alternate Saturdays from 13th September to 20th December, when short (three-quarter) shifts were worked at penalty rates of pay.

The average number of colliery days worked rarely approximates the maximum possible number of working days, the intermittency of operations being due chiefly to industrial disputes and, in the early pre-war years, to irregularity of demand for coal. During 1947, the collieries worked, on an average, 216 days (including back Saturdays) or 85.7 per cent. of the possible number of working days, compared with 87 per cent. in 1946, a peak of 91.7 per cent. in 1942, and 78.6 per cent. in 1939. The number of days worked was markedly low in 1929, 1938, 1940, and 1945, when extensive industrial disputes occurred. As a rule the average number of colliery days worked in the Western District is greater than in the Northern and Southern Districts.

Data of industrial disputes in the coal mining industry are given in the chapter "Industrial Arbitration" of this volume.

<sup>\*</sup> Extensive industrial disputes occurred in these years. † Approximate,

# Output of Coal per Man-day.

"Output of coal per man-day" may be calculated on a number of alternative bases depending upon the facts which it is desired to elucidate. The following estimates are derived by multiplying the average annual number of employees in each mine by the number of days worked by the mine during the year and dividing the aggregate "man-days" so obtained into the total output for all mines. The resultant figures of "coal output per man-day" are approximations and must be read and defined consistently with the basis of calculation. The total "man-days" used as a divisor includes individual employees who were absent on days on which the mine worked, consequently the estimate of "coal output per man-day" reflects, among other things, variations in the incidence of absenteeism. Figures calculated thus are comparable from year to year on the basis adopted. They should not be compared with figures of similar import for other countries without assurance that the bases adopted are comparable.

The approximate average output of coal per man-day worked in underground mines, calculated in the manner indicated, is shown below for various years since 1913:—

Table 101.—Underground Collieries: Output of Coal per Man-day.

	Ave	erage per Ma Below (		rked	Average per Man-day Worked by All Employees.				
Year.	Northern District.	Southern District.	Western District.	New South Wales.	Northern District.	Southern District.	Western District.	New South Wales.	
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	
1913	3.25	2.75	4.01	3.18	2.44	2.12	3.29	2.41	
1917	3.36	2.88	4.29	3.33	2.46	$2.\overline{20}$	3.56	2.50	
1921	3.17	2.69	4.62	3.17	2.34	2.00	3.74	2.36	
1925	3.25	2.86	3.55	3.21	2.42	2.12	2.76	2.41	
1929	3.67	2.60	4.07	3.45	2.66	2.08	3.16	2.58	
1933	4.42	3.44	5.28	4.34	3.15	2.58	4.22	3.17	
1936	4.86	3.39	5.11	4.55	3.58	2.64	4.18	3.44	
1937	4.88	3.35	5.45	4.55	3.57	2.59	4.34	3.42	
1938	5.07	3.43	5.55	4.72	3.75	2.51	4.55	3.51	
1939	4.81	3.21	5.01	4.42	3.55	2.50	4.17	3.35	
1940	4.86	3.42	5.22	4.53	3.58	2.60	4.11	3.40	
1941	4.65	3.44	4.95	4.39	3.46	2.65	4.00	3.32	
1942	4.45	3.36	4.80	4.23	3.35	2.55	3.82	3.21	
1943	4.38	3.29	4.64	4.15	3.24	2.49	3.65	3.10	
1944	4.38	3.25	4.52	4.13	3.23	2.45	3.61	3.09	
1945	4.13	3.12	4.74	3.97	3.08	2.34	3.72	2.98	
1946	4.17	3.25	4.79	4.05	3.06	2.36	3.75	2.99	
1947	4.18	3.69	4.45	4.11	3.05	2.52	3.68	3.01	

In considering fluctuations in the annual average output per man-day, due allowance must be made for the frequent changes occurring through the closure of old mines and the opening of new mines with varying efficiency, and for the increasing age of workings. After 1930 depressed trade and substantially reduced prices tended to divert production to the more economical workings, but during and since the war the effort has been to keep all mines in production. Between 1939 and 1947, the average output per man-day worked in underground mines below ground declined by 7 per cent. (an increase of 15 per cent. in the Southern District partly

offsetting decreases of 13 per cent. and 11 per cent. in the Northern and Western Districts) and the average for all employees declined by 10 per cent. (decreases of 14 and 12 per cent. in the Northern and Western Districts and an increase of 1 per cent. in the Southern District).

The approximate average output of coal per man-day worked in open cut mines, calculated in the manner indicated, was 8.50 tons in 1944, 9.10 tons in 1945, 11.63 tons in 1946, and 11.76 tons in 1947. Data for the years 1940 to 1943 are not available for publication.

# Coal Cut and Filled by Machinery.

The quantity of coal cut by machines in underground mines exceeded 5,000,000 tons in only 1942, thereafter falling to 3,560,718 tons in 1945 and rising to 4,149,783 tons in 1947. The proportion of the gross output of coal mechanically cut declined from 30.4 per cent. in 1911 to 20.7 per cent. in 1926, rose steadily to 41.2 per cent. in 1942, and fell to 36.6 per cent. in 1946. In 1947, the proportion was 38.7 per cent. and the quantity of coal mechanically cut was 17 per cent. less than in 1942. Electrical tends to displace other power in the operation of coal-cutting machinery.

Owing to shortage of equipment, the majority of collieries was unable to comply with the Joint Coal Board Order (see page 135) regarding the introduction of power boring machines by 30th June, 1948.

Machinery for filling coal in underground mines was first used in 1935. The quantity of coal filled by mechanical means increased year by year to 2,585,000 tons in 1942 and, after declining to 2,168,184 tons in 1945, to 3,283,125 tons in 1947. The proportion of the gross output of coal machine-filled rose steadily from 3.0 per cent. in 1937 and 9.8 per cent. in 1939 to 21.3 per cent. in 1942 and 30.6 per cent. in 1947.

Table 102.—Underground Collieries. Coal Cut and Filled by Machinery.

		Coal cut by	Machinery.		Coal filled by Mechanical Means.		
Year.	Operated by Electricity.	Operated by Compressed Air.	Total.	Proportion of Gross Output.	Total.	Proportion of Gross Output.	
	tons.	tons.	tons.	per cent.	tons.	per cent.	
1911	2,075,000	563,000	2,638,000	30.4	• • •	•••	
1926	1,201,000	1,056,000	2,257,000	20.7	•••		
1931	842,000	536,000	1,378,000	21.4		•••	
1937	2,036,000	752,000	2,788,000	27.7	301,300	3.0	
1938	2,088,000	634,000	2,722,000	28.4	619,500	6.5	
1939	2,887,000	707,000	3,594,000	32.1	1,101,400	9.8	
1940	3,319,000	373,000	3,692,000	38.8*	1,332,100	14.0	
1941	4,014,490	697,859	4,712,349	40.3*	2,142,400	18.3	
1942	4,260,090	744,921	5,005,011	41.2*	2,585,000	21.3	
1943	3,965,020	452,842	4,417,862	38.7	2,514,114	22.0	
1944	3,645,491	453,736	4,099,227	37.7*	2,329,899	21.4	
1945	3,171,778	388,940	3,560,718	36.9*	2,168,184	22.5	
1946	3,463,519*	355,195	3,818,714*	36.6*	2,494,785	23.9	
1947	3,780,190	369,593	4,149,783	38.7	3,283,125	30.6	

<sup>\*</sup> Revised since last issue.

Disposal and Consumption of New South Wales Coal.

The following table shows the production and disposal of New South Wales coal in 1947 and selected earlier years. The data of coal exports oversea and interstate are in small part approximate, while the quantity and proportion of the gross output of coal shown as retained for consumption in New South Wales and Australia are balancing items. In the

years 1921 to 1926, the bunker coal loaded in Sydney Harbour into interstate steamers was not distinguished in the records from the coal taken by intrastate vessels and is therefore included as retained for consumption in New South Wales.

Table 103.—Disposal of N.S.W. Coal.

Year.	Retained for Consumption in N.S.W.	Exported to other Australian States, (Cargo, and Bunker.)	Retained for Consumption in Australia.	Exported to Oversea Countries. (Cargo and Bunker.)	Gross Output.
1921 1926 1931 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946	tons. 5,268,628 6,347,939 4,090,554 5,847,709 6,070,840 6,671,002 6,497,954 7,632,763 6,660,775 8,144,816 8,475,545* 8,001,79* 7,581,543* 6,977,831* 7,943,975* 8,584,132	3,120,980 3,157,179 2,899,992	tons. 8,021,438 9,088,509 5,630,970 7,821,988 8,288,290 9,129,004 8,660,058 10,322,748 8,932,208 11,238,054 11,608,197* 11,122,779* 10,738,722* 9,877,823* 10,879,459* 11,356,603	tons. 2,771,949 1,797,257 801,412 876,591 911,176 922,515 910,872 873,084 617,890 527,644 597,738 350,720 304,217 298,431 306,924 326,520	tons. 10,793,387 10,885,766 6,432,382 8,698,579 9,199,466 10,061,519 9,570,930 11,195,832 9,550,098 11,765,698 12,206,935* 11,473,499* 11,042,939* 10,176,254* 11,186,383* 11,683,123

## Proportion of Gross Output.

	per cent.	per cent.	per cent.	per cent.	per cent.
1.921	48.8	25.5	74.3	25.7	100
1926	58.3	25.2	83.5	16.5	100
1931	63,6	23.9	87.5	12.5	100
1935	67.2	22.7	89.9	10.1	100
1936	66.0	$24 \cdot 1$	90.1	9.9	100
1937	66.4	24.4	90.8	9.2	100
1938	67.9	$22 \cdot 6$	90.5	9.5	100
1939	68.2	24.0	92.2	7.8	100
1940	69.7	23.8	93.5	6.5	100
1941	69.2	26.3	95.5	4.5	100
1942	69.4*	25.7	95·1*	4.9	100
1943	69.7*	27.2	96.9*	3.1	100
1944	68.6*	28.6	97.2*	2.8	100
1945	68.6*	28.5	97.1*	2.9	109
1946	71.0*	26.3	97.3*	2.7	100
1947	73.5	23.7	97.2	2.8	100

<sup>\*</sup> Revised since last issue.

The proportion of the gross output of coal retained for consumption in New South Wales increased from 48.8 per cent. in 1921 and 63.6 per cent. in 1931 to 68.2 per cent. in 1939 and 73.5 per cent. in 1947, while the proportion exported as cargo and bunker coal to other Australian States rose from 25.5 per cent. in 1921 and 23.9 per cent. in 1931 to 28.6 per cent. in 1944 and fell to 23.7 per cent. in 1947. Oversea coal exports (bunker and cargo, but at the present almost exclusively bunker) steadily declined as a proportion of the output from 25.7 per cent. in 1921 to 12.5 per cent. in 1931, 7.8 per cent. in 1939, and 2.8 per cent. in 1947. The production of New South Wales coal is insufficient to satisfy all current demands of

Australian industry. The most urgent requirements have been met only by the virtual abandonment of oversea markets, by the use of alternative fuels, by the exploitation of coal resources in other States, by the severe depletion of stocks, and by control of coal supplies on a strict priority system.

Most of the New South Wales coal retained for consumption in the State is used as fuel and raw material in factories and for locomotive purposes on railways. The next table shows the quantity of New South Wales coal used for these purposes and the quantities exported during 1947-48 and recent years. The data in this table refer to financial years ending on 30th June and not to calendar years as in the previous table.

Table 104.-Purposes for which N.S.W. Coal was Used.

Coal Used.	1938–39.	1942–43.	1943-44.	1944-45.	1945–46,	1946–47.	1947-48,
In Factories in N.S.W.— Fuel—Electricity Works Other Factories	tons, 1,162,997 1,346,667	tons. 1,527,303 1,510,142	tons. 1,559,777 1,476,823	tons. 1,674,888 1,356,192	tons. 1,695,575 1,263,669	tons. 1,978,993 1,521,442	tons. 2,165,925 1,605,249
	2,509,664	3,037,445	3,036,600	3,031,080	2,959,244	3,500,435	3,771,174
Raw Material—Gas Works Coke Works	578,127 1,661,851	719,023 2,306,749	754,434 2,141,836	771,706 1,748,363	795,961 1,456,382	862,128 1,791,592	887,594 2,077,852
	2,239,978	3,025,772	2,896,270	2,520,069	2,252,343	2,653,720	2,965,446
Total in Factories (N.S.W.)	4,749,642	6,063,217	5,932;870	5,551,149	5,211,587	6,154,155	6,736,620
On Railways for Locomotive Purposes in N.S.W	994,371	1,447,122	1,462,085	1,329,000	1,321,606	1,348,298*	1,365,449
Total, Factories and Railways (N.S.W.)	5,744,013	7,510,339	7,394,955	6,880,149	6,538,193	7,502,453*	8,102,069
Exports— Interstate—Cargo Bunker	1,860,639 411,098	2,793,197 357,658	2,721,569 378,310	2,866,264 339,313	2;498,697 286,700	2,378,030 289,688	2,537,130 306,924
Total, Interstate	2,271,737	3,150,855	3,099,879	3,205,577	2,785,397	2,667,718	2,844,054
Oversea—Cargo Bunker	381,778 516,655	254,043 255,864	157,741 162,422	189,196 159,204	75,383 173,180	44,265 289,423	59,369 233,657
Total, Oversea	898,433	509,907	320,163	348,400	248,563	333,688	293,026
Total Exports	3,170,170	3,660,762	3,420,042	3,553,977	3,033;960	3,001,406	3,137,080
Total, Factories, Railways and Exports	8,914,183	11,171,101	10,814,997	10,434,126	9,567,153	10,503,859	11,239,149

<sup>\*</sup>Revised since last issue.

The quantity of coal used as fuel in factories has grown with the expansion of the secondary industries, and particularly of electric light and power works. The quantity used as raw material in coke works increased rapidly in the early stages of the war as the iron and steel industry expanded. Although coal supplies were restricted in 1947-48, New South Wales factories absorbed 42 per cent. more coal than in 1938-39 and 9 per cent. more than in 1946-47. Ordinarily the consumption of coal in railway locomotives fluctuates according to the volume of goods traffic, but latterly it has been governed partly by the availability of coal.

## PRICES OF COAL.

Movements in the prices of coal from 1916 to 1929 and a broad indication of their trends in the following ten years were illustrated at page 588 of the Year Book, 1941-42 and 1942-43. The quotations were given on the

basis of best large coal at the principal points of shipment from the three coal-mining districts in New South Wales, viz. Northern and Southern coal f.o.b., Newcastle and Port Kembla, respectively, and Western coal f.o.r., Lithgow, and therefore included certain handling and transport charges.

The trend in coal prices is indicated approximately by the average values per ton of coal at the pit head as derived from statistics collected under the Census Act shown in Table 98. Comparisons on this basis, as given below for the period 1927 to 1942, are subject to the qualification that the values stated are the general averages for all classes of coal (large, small and unscreened) and therefore may be affected in some degree by variations from year to year in the proportions of coal of differing qualities comprised in the total produced. Changes in the level of prices after 1942 cannot be revealed by these average values because in later years the value of output as returned by colliery proprietors includes subsidy received from the Commonwealth Government as well as the proceeds from the sale of coal.

Table 105.—Average Value of Coal at	Pit-top,	1927 t	o 1942.
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Year.	Averag	e Value of at Pit Top		Grades	Year.		e Value of at Pit Top		Grades
	Northern District.	Southern District.	Western District.	All Districts.	1041.	Northern District.	Southern District.	Western District.	All Districts.
1927 1928 1929 1930 1931 1932 1933 1934	s. d. 19 2 19 0 17 5 16 2 14 5 12 8 12 0 11 4	s. d. 12 6 13 1 14 2 13 8 12 6 13 8 12 6 13 8	s. d. 16 8 16 6 18 9 17 5 15 6 11 2 9 4 8 7	s. d. 17 7 17 6 16 10 15 9 14 2 12 6 11 10 11 2	1935 1936 1937 1938 1939 1940 1941 1942	s. d. 10 10 10 11 11 3 12 0 12 7 13 6 14 6 15 11	s. d. 12 10 12 8 13 0 14 0 14 5 15 0 16 7 18 8	s. d. 8 5 8 9 8 9 9 6 10 8 11 6 12 0 13 6	s. d. 10 9 10 10 11 2 12 0 12 8 13 6 14 7 16 1

After the outbreak of war in September, 1939, coal prices, though controlled, tended to rise as costs of production increased, and by the time of their stabilisation in April, 1943 under the Commonwealth price stabilisation plan, the average pit-head value of New South Wales coal of all grades had risen about 30 per cent. From the middle of 1943 until November, 1947, increases in colliery costs were met by the payment of subsidies by the Commonwealth Government and coal prices were virtually unchanged. In November, 1947, the basis of subsidy was altered so that the subsidy paid in the majority of cases was assessed at a fixed amount per ton of coal raised and increases averaging 4s. to 5s. in the Northern District, 7s. 5d. in the Southern District, 2s. 4d. in the Western District, and 4s. 11d. in New South Wales in all coal prices were granted. estimated average price at pit head was then about 60 per cent. higher than in September, 1939, the increases ranging from about 45 per cent. in the Western and 60 per cent. in the Northern to about 80 per cent. in the Southern Districts. After this major price adjustment, further increases in colliery costs were met by authorising individual price adjustments, and concurrently many of the fixed tonnage subsidies were withdrawn or reduced. The Joint Coal Board also began applying its policy of rationalizing the extremely uneven and complex pattern of coal prices which had existed since pre-war years.

The following	statement gives an	n indication of	the le	vel of N	Tew South
	s per ton at 30th				

Quotation.	Greta Field.	Newcastle Field.	Southern District.	Western District.	New South Wales.
f.o.r. Colliery f.o.b. Newcastle f.o.b. Port Kembla f.o.r. Sydney	 s. d. 26 0 34 0  46 6	s. d. 24 9 29 3  41 0	s. d. 33 0  39 0 43 9	s. d. 19 6  38 3	s. d. 25 9 

Prior to the price adjustment of November, 1947, certain State instrumentalities purchased coal at the subsidised prices and paid to the Commonwealth Government an amount equal to the additional amount which would have been paid if coal prices had not been subsidised. The following statement shows the gross subsidy payments to New South Wales collieries, the amounts recovered from the State authorities, and the net subsidy payments by the Commonwealth Government:—

Year.	Gross Subsidy Paid.	Amount Recovered.	Net Subsidy Paid.
	£	£	£
1942-43	636		636
1943-44	152,403	52,727	99,676
1944-45	252,366	102,091	150,275
1945-46	572,115	165,507	406,608
1946-47	826,715	279,078	547,637
1947-48	2,105,512	174,569	1,930,943

## OIL SHALE.

Oil-bearing mineral known as oil shale (a variety of torbanite or cannel coal) has been found in many localities in New South Wales, the most important deposits being in the Capertee and Wolgan Valleys.

The production of oil shale from the opening of the mines in 1865 to theend of 1947 amounted to 2,855,563 tons valued at £3,815,447. During the years 1925 to 1938 operations were intermittent and the output was only 5,904 tons, valued at £4,748. Production increased in later years, averaged 123,678 tons a year from 1941 to 1945, and was 121,654 tons in 1946 and 138,427 tons in 1947. Particulars are given in the following table:—

Table 106 .-- Oil Shale Mined in New South Wales.

Period	Period.		Quantity.	Value,	Peri	od.	Quantity.	Value,
1865 to 1924 1925 to 1938 1939 1940 1941 1942 1943			tons. 1,919,685 5,904 7,683 43,805 123,578 117,324 116,875	£ 2,690,710 4,748 13,322 43,805 96,671 142,343 160,215	1944 1945 1946 1947 Total	   1 to 194	 tons. 137,458 123,170 121,654 138,427 2,855,563	£ 165,285 164,648 139,902 193,798 3,815,447

In 1937, the Commonwealth Government made arrangements to assist a private company, the National Oil Pty. Ltd., in the development of the Newnes-Capertee shale oil field. The original capital structure of the Com-

pany was based on fully paid share capital of £166,667 and low-rate interest-bearing advances of £334,000 and £166,000 provided, respectively, by the Commonwealth and State Governments. Additional capital required in the course of trading and development was provided partly by further share issues and partly by further advances from the Commonwealth. The total share and loan capital at 31st December, 1947 was £3,982,735 and comprised proprietary (fully paid) share capital £325,000, advance by New South Wales Government £166,000, and advances by the Commonwealth £3,491,735 (including £325,229 towards the cost of the Fish River Water Supply Scheme). Losses were incurred in all years of trading. Since December, 1941, when operations advanced beyond the developmental stage, the accumulated losses have amounted to £2,032,883, including a loss of £425,106 in 1947. Developmental costs incurred before December, 1941 amounted to £397,896.

Among other concessions, tariff protection was provided for a period of fifteen years to the extent of 7.4d. per gallon over imported petroleum spirit and 5.5d. per gallon over petrol refined in Australia from imported crude oil. The production of petrol from the local crude oil was commenced at Glen Davis, near Newnes, in 1940, but there were no substantial sales until the following year. The operation of new processing plant enabled 3,696,981 gallons and 4,063,628 gallons of petrol to be produced during 1946 and 1947 respectively, compared with 1,043,821 gallons and 1,979,511 gallons during 1944 and 1945. In all years, however, the undertaking operated much below capacity. The yield of crude oil per ton of shale processed was 51 gallons in 1947, compared with 56 gallons in 1946 and 45 gallons in 1945, and the cracking of the crude oil resulted in these years in a petrol recovery of 45 to 50 per cent.

## Fish River Water Supply Scheme.

The Fish River Water Supply Scheme was adopted to serve this undertaking and to supply water to Lithgow Municipality, Blaxland and Oberon Shires, and minor consumers. Water is supplied to National Oil Pty. Limited and the councils in hulk at the rate of 2d., and to minor consumers at 2s., per 1,000 gallous; supplies commenced in 1946. In May, 1947, the total cost of the scheme was estimated as £1,252,000, to be shared thus: Commonwealth, £704,500 (including £325,229 chargeable against National Oil Pty. Ltd.); State, £380,000; Lithgow Municipality, £102,000; Blaxland Shire, £60,350; and Oberon Shire, £5,150. Expenditure on fixed assets to the end of 1947 amounted to £1,094,914, the principal items being the Oberon Storage Dam (£361,737), the Oberon-Glen Davis Pipeline (£602,111), and the Lithgow Branoh Line (£53,516).

## IRON AND IRON ORES.

Iron ore of good quality occurs in relatively small deposits in many parts of New South Wales. The most extensive deposits are at Cadia, where about 10,000,000 tons may be recovered economically, and at Carcoar, Goulburn, and Queanbeyan, each containing over 1,000,000 tons. At Wingello, there are about 3,000,000 tons of aluminous ore of low grade. It has been estimated that in the known deposits, apart from the Wingello ores, there are over 15,000,000 tons which may be recovered by open cut mining and that a much greater quantity may be recovered by more costly methods.

The quantity and value of pig iron produced from local ores in New South Wales, as estimated by the Mines Department, are shown in the following table:—

Table	107.—Pig	Iron Pro	duced in	New	South	Wale	es from	Local	Ores.
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Period.	Quantity.	Value,	Period.	Quantity.	Value.
1907-1920 1921-1929 1930-1940 1941-1945 1907-1945	tons. 716,025 693,703 4,580 644,223 2,058,531	3,290,882 4,202,553 18,320 3,241,554 10,753,309	1941 1942 1943 1944 1945	tons. 63,102 182,118 204;442 151,888 42,673	£ 254,000 819,531 1,124,431 835,384 208,208

Until 1907, the small quantity of iron ore mined was used mostly as a flux in the smelting of other ores, pig iron being obtained principally from scrap iron. After 1907, iron ore was produced more extensively, mainly from the Cadia and Carcoar deposits, for smelting at Eskbank Ironworks, Lithgow, and in the period 1907 to 1929 the output of pig iron obtained from these ores was 1,409,728 tons valued at £7,493,435. In 1928, the Lithgow works were transferrd to Port Kembla and production of local iron ore was suspended. The ore used in smelting at Port Kembla and Newcastle is normally imported from South Australia. During the years 1941 to 1945, however, the iron ore deposits of New South Wales were again worked to help maintain the war-time production of iron and steel and in this period 644,223 tons of pig iron valued at £3,241,554 were produced.

Further details of the operations of iron and steel works are given on page 105 of this volume.

#### SILVER, LEAD, AND ZINC.

The silver-lead-zinc mining industry in New South Wales is dominated by the silver-lead-zinc mines of the Broken Hill field. This field, which was discovered in 1883, is 699 miles westerly by rail from Sydney and 256 miles east-north-east of Port Pirie (South Australia) to which most of its products are despatched.

The Broken Hill lode is a massive silver-lead-zinc ore deposit. The main lode channel occupies a narrow shear zone, on both sides of which are arranged larger ore bodies in drag folds. The lode has been proved to be of economic value for a length of  $3\frac{1}{2}$  miles and both grade and dimensions are being maintained with depth. The ore body is formed of mixed sulphides of lead and zinc with a high silver content and, at the surface, oxides and carbonates of lead, with various silver minerals. The average grade of the ore is about 14 per cent. lead, 6 oz. silver per ton, and 12 per cent. zinc.

The ore is mined mainly by horizontal cut and fill methods, and square sets are necessary in many of the stopes. Level pillars are extracted by by underhand stoping. Classified sands from the concentrating plant residues are used for stope filling.

The sulphide ores are concentrated at Broken Hill by gravity and flotation methods. Of the total zinc in the ore, 86 to 90 per cent. is recovered in the flotation concentrate which contains 52.6 per cent. zinc, 31.7 per cent. sulphur, 1.2 per cent. lead, and 1.2 oz. silver per ton. From 96 to 97 per cent. of the total lead in the ore is recovered as a galena concentrate, which contains on the average 76 per cent. lead, 4 per cent. zinc, 30 oz. silver and 9 gr gold per ton, 0.22 per cent. antimony, and 0.64 per cent. copper.

Part of the zinc concentrate is exported oversea and part sent to Cockle Creek (N.S.W.), Birkenhead, Wallaroo, and Port Pirie (S.A.), and Risdom (Tas.) for pre-roasting prior to being treated at Risdom for the productions of electrolytic zinc. Sulphuric acid is a by-product made from the sulphur-dioxide given off during the roasting process. Silver-lead residues obtained at Risdom during the refining of the zinc concentrates are sent to Port Pirie-for realisation.

The lead concentrate is railed from Broken Hill to Port Pirie. It is then sintered and smelted to produce base lead bullion, which is subjected to a unique process of continuous lead refining. In this process, there is a continuous flow of bullion from one refining unit to succeeding units, the lead finally emerging as a market product assaying 99.9935 per cent. lead. During the refining process the silver and gold contained in the bullion are extracted in a high state of purity; a copper matte containing: 66 per cent. copper and 10 per cent. lead, and an antimonial slag containing about 25 per cent. antimony are also obtained. From the smelting, a slag dump assaying 17.6 per cent. zinc has accumulated; this zinc is available for future recovery.

Another important producing centre of silver-lead-zine is at Captain's Flat, which is some 20 miles southerly from Canberra and 204 miles by rail from Sydney. Here, the ore bodies occur as elongate lenses along a steeply dipping north-south line of pronounced shearing; the ore ranges in width up to 40 ft. and the maximum length of an ore shoot is 1,100 ft. The sulphide ore consists of an intimate mixture of pyrite, sphalerite, galena, and chalcopyrite and other metallic minerals in a quartzose gangue. No diminution is apparent in size or grade of the deposits to the deepest developed level. The ore deposits have been worked for silver-lead-zinc on a relatively large scale since 1938, the grade of ore mined averaging about 12.8 per cent. zinc, 7.3 per cent. lead, 0.7 per cent. copper, and 1.1 dwt. gold and 1.4 oz. silver per ton. The lead and zinc concentrates produced are exported to Belgium and the United Kingdom.

The Yerranderie mines are situated in the Burragorang Valley 60 miles west-south-west from Sydney. The ore bodies consist of lenses carrying rich silver-bearing galena which occur along narrow fissure lodes dipping at 24 to 40° to the south. No work has been done on the field since 1938, but from 1900 to that date production was fairly consistent.

Numerous other localities have contributed small and irregular production, the more important being Howell (near Inverell), Kangiara, Emmaville, Sunny Corner (near Lithgow), Cobar, Condobolin, and Drake.

The principal uses of lead are in storage batteries, in lead pigments (white and red lead, litharge), and in cable coverings. Other important uses include lead sheet and pipe, solder, bearing metal, type metal, terneplate, brass and bronze, collapsible tubes, chemicals and insecticides, automobile manufacture, foil, weights, caulking, and ballast. A considerable amount of secondary lead is obtained by the reclaiming of scrap lead (mostly from storage batteries) and is converted into antimonial lead.

Zinc is used mainly in galvanizing (including galvanized sheet iron, tubes, wire). Other important uses are in the manufacture of brass and as a constituent of some bronzes, solders, and other alloys, zinc oxide and other chemicals, and zinc strips and sheets for use in batteries, boiler plate, etc., in die-casting, and in silver-lead refining and gold extraction.

Most of the silver consumed is used for coins, the balance being for photographic materials, electroplating, and surgical equipment.

The following table shows the quantity and value of the silver and lead won in New South Wales from local silver-lead-zinc ores, and of the silver-lead and zinc ores and concentrates produced in New South Wales from local ores and exported interstate or overseas for further treatment. The value of the concentrates exported is an estimate by the Mines Department based on values declared by the several companies at the time of export.

Table 108.—Silver, Lead, and Zinc Produced in New South Wales.

Period,	Silver.	Lead; Pig, in Matte, etc.	Silver-lead Concentrates, Carbonate ore, etc.	Zinc Concentrates.
		Quantity.	-	
	oz.	tons.	tons.	tons.
To 1900	9,572,829	14.680	3,020,611	138,901
1901-1905	4,154,020	17,550	1,985,868	183,782
1906-1910	8,310,962	71,435	1,751,751	1,460,138
1911-1915	12,460,553	114,375	1,694,834	2,093,783
1916-1920	7,982,192	80,115	866,654	553,628
1921-1925	2,960,993	28,466	1,013,376	1,449,599
19261930	33,017	·	1,377,163	1,388,821
1931–1935	273,100	•••	1,092,253	1,115,356
1936-1940	347,273	•••	1,492,687	1,272,006
1941-1945	832,316	•••	1,297,466	1,366,970
1939	76,436	•••	306,225	278,540
1943	281,285	•••	249,484	283,964
1944	172,168	***	240,563	300,850
1945	131,309	•••	205,805	265,284
1946	122,364	•••	215,928	273,781
1947	112,471	•••	212,410	249,420
Total to 1947	47,162,090	326,621	16,021,001	11,546,185
<u></u>	·	Value.		
	£	£	£	
To 1900	1,562,501	274,585	28,924,613	157,066
1901–1905	445,051	255,366	8,910,586	440,402
1906–1910	892,414	996,646	11.561.794	3,761,223
1911-1915	1,302,510	1,899,601	14,302,570	6,861,489
1916-1920	1,426,886	2,358,625	12,920,076	2,195,599
1921–1925	471,312	657,574	15,360,784	5,171,152
1926-1930	3,259		15,498,294	5,263,786
1931–1935	24,788	l	9,793,901	1,391,969
1936-1940	31,508		18,890,575	1,717,881
1941-1945	99,148		20,973,518	3,899,494
1939	7,021		3,539,419	252,102
1943	29,741		3,722,931	781,737
1944	22,597		4,046,338	1,052,220
1945	20,703		4,604,962	1,073,340
1946	28,297	•••	6,971,256	1,379,183
1947	26,242	•••	10,554,416	1,774,95 <b>9</b>
Total to 1947	6,313,916	6,442,397	174,662,383	34,014,203

<sup>\*</sup> Includes 2,758 tons of spelter.

The data in this table demonstrate that the bulk of the ore produced from the silver-lead-zinc mines of New South Wales is exported as ores and concentrates for treatment in other parts of the Commonwealth or oversea. The Mines Department collects records of the quantities of silver, lead, and zinc metal extracted within the Commonwealth from these ores and concentrates and the metallic content (estimated on the basis of average assays) of those concentrates exported oversea. These records combined with the data of silver and lead metal won within the State, are summarised in the following table to show the total value of production, based on home consumption prices, accruing from the silver-lead-zinc mines of New South Wales.

Table 109.—Silver, Lead, and Zinc-Metal Extracted from N.S.W. Ores.

				monwealth uth Wales.	Concentrates from New South Wales Ores exported Oversea.					Total Value of
Year	F (mate)			Total				lic Contents by erage assay.		Produc- tion from Silver-lead- zine Mines
	Silver.	Lead.	Zinc.	Value,	Quantity	Silver.	Lead.	Zinc.	Assessed Value.	of New South Wales.
1929 1931 1936 1939 1941 1942 1943 1944 1945 1946	oz. fine. 3,624,413 7,619,884 6,177,863 7,778,514 8,910,129 9,192,833 8,640,871 7,543,746 6,592,326 6,438,608 5,785,991 6,034,539	tons. 47,426 165,364 129,819 157,755 198,776 212,665 205,630 179,919 154,281 153,973 136,961	53,832 57,744 44,965 55,094 55,473 51,266 57,311 65,263	£ 1,723,864 5,918,014 2,995,029 4,608,888 4,811,208 7,555,248 7,327,881 5,934,930 5,577,578 5,908,609 5,715,259 5,715,259	tons. 47,127 156,532 95,421 147,969 201,426 130,403 165,319 221,116 182,565 230,005 140,852 186,152	oz. fine. 617,477 835,697 460,958 779,289 647,620 164,001 464,450 286,023 474,302 247,713 171,731 273,818	tons. 6,539 7,009 13,405 18,569 17,636 7,775 17,144 8,024 18,589 7,904 6,858 9,941	tons. 19,272 76,619 43,629 68,011 109,346 62,971 68,387 113,494 67,293 105,406 70,101 80,327	£ 261,238 734,261 257,705 549,319 650,809 451,525 753,664 1,138,012 939,933 1,148,022 1,732,789* 2,048,646	£ 1,985,102 6,652,275 3,252,734 5,158,207 5,462,017 8,004,773 8,081,545 6,517,611 7,076,631 7,448,048* 8,004,746

<sup>\*</sup> Revised since last issue.

Particulars of war-time contracts for the supply of lead and zinc to the United Kingdom Ministry of Supply, which were terminated on 9th August, 1945, are given on page 693 of the 50th edition of the Year Book.

## COPPER.

Copper ores occur widely throughout New South Wales, but most deposits are low grade. Exploitation has been handicapped severely in many places by the high cost of transport to market and by widely fluctuating prices, and as a result operations have been intermittent. During World War II, increased supplies of copper were required for munitions production and there was a marked expansion in output. In recent years, the output has been obtained mainly from Cobar and from the treatment of silver-lead concentrates mined at Broken Hill and of copper concentrates from Captain's Flat.

The quantity and value of copper won in New South Wales to the end of 1947, as estimated by the Mines Department, are shown below:—

De-lea	Ingots, Matte	, and Regulus.	Ore and C	concentrates.	Total Value.	
Period.	Quantity.	Value.	Quantity.	Value.	Total value.	
1858–1900	tons. 95,501	£ 5,474,309	tons. 6,101	£ 92,651	£ 5,566,960	
1901–1905	33,989	2,011,609	8,578	104,533	2,116,142	
1906-1910	41,898	2,869,101	6,872	62,006	2,931,107	
1911-1915	36,305	2,169,508	9,870	108,226	2,277,734	
1916–1920	21,453	2,355,248	554	8,887	2,364,135	
1921-1925	3,863	259,926	129	1,822	261,748	
1926-1930	867	58,053	339	3,102	61,155	
1931–1935	3,304	123,951	208	4,026	127,977	
1936-1940	6,202	362,838	5,627	157,111	519,949 <sup>,</sup>	
1941–1945	*	770,078	*	619,488	1,389,566	
1939	1,382	77,031	543	28,376	105,407	

Table 110.-Copper Won in New South Wales.

187,500

198,700

145,000

186,732

177,275

1,525,859

379,800

309,900

305,000

344,682

290,905

18,252,060

192,300

111,200

160,000

157,950

113,630

16,726,201

1943

1944

1945

1946

1947

Total to 1947

# TIN.

The main uses of tin are in tinplate, solder, and bearing alloys. is restricted in its geographical and geological range and is the rarest of the common industrial metals. There are numerous small alluvial and vein deposits in New South Wales. The areas in which workable quantities of tin have been located are on the western fall of the New England Tableland, with Emmaville and Tingha as the chief centres, and at Ardlethan in the Southern district. Alluvial deposits of stream tin are exploited mainly by means of sluicing.

<sup>\*</sup> Not available on comparable basis.

The quantity and value of tin won in New South Wales to the end of 1947, as estimated by the Mines Department, are as follows:—

70 1.1	Ing	ots.	Ore, Conce	Total	
Period.	Quantity.	Value.	Quantity.	Value.	Value.
	tons.	£	tons.	£	£
1872-1900	67,055	5,879,803	18,581	908,130	6,787,933
1901-1905	4,319	557,855	1,994	142,977	700,83
1906-1910	5.244	816,061	3,947	377,620	1,193,68
1911-1915	4.268	793,550	7,262	806,815	1,600,36
1916-1920	4,346	1,053,645	6,953	1,005,841	2,059,480
1921-1925	3,629	805,294	2,005	204,073	1,009,36
1926-1930	4,654	1,120,122	<b>54</b>	1,733	1,121,85
1931-1935	4,941	1,050,080	56	7,419	1,057,49
1936-1940	5,908	1,622,534	97	16,370	1,638,90
1941-1945	5,252	1,865,301	•••	l	1,865,30
1939	1,286	365,403	5	735	366,13
1943	1,074	403,320	•••	l	403,320
1944	824	309,860		·	309,860
1945	776	291,788	•••		291,78
1946	674	257,153			257,153
1947	552	246,423	•••	•••	246,42
Total to 1947	110,842	16,458,856	40,949	3,470,978	19,929,83

Table 111 .- Tin Won in New South Wales.

The extent of the recovery of tin by sluicing in the northern districts of of the State is illustrated in the next table. The quantity of stream tin obtained to the end of 1947 was 37,038 tons, valued at £5,427,956.

Period.	Quantity.	Value.	Period.	Quantity.	Value.
1936-1940 1941-1945 1939 1943	tons. 3,339 2,544 972 461	£ 604,042 624,383 176,682 119,943	1944 1945 1946 1947	tons. 509 498 444 307	£ 138,078 132,740 118,150 127,349

Table 112.-Tin Won by Sluicing in New South Wales.

# CHROME ORE.

There are small and irregular chrome ore deposits in the regions from Tumut to Thuddungra, from Bingara to Nundle, and near Copmanhurst. The quantity of chrome ore produced falls far short of local requirements and is used for the manufacture of refractory bricks and linings for steel furnaces. To the end of 1947, 46,242 tons of chrome ore valued at £142,849 had been produced (with no production during 1946 and 1947), and this comprised almost the entire Australian output during the period.

#### Manganese.

Deposits of manganese occur in three main regions—the Grenfell-Cootamundra, Barraba-Tamworth, and Rockley-Rylstone districts—but the deposits are small and generally very shallow. Most of the manganese obtained is used for the manufacture of dry cells and batteries. Production is, however, very limited, although during the war several deposits in the

Tamworth district were exploited to meet war-time requirements. To the end of 1947, 46,561 tons of manganese ore valued at £135,129 were produced, including 1,587 tons (£12,642) produced in 1947.

#### MOLYBDENUM.

Numerous, but few workable, occurrences of molybdenite (the principal ore of molybdenum) occur chiefly in the widely separated New England, Yetholme (near Bathurst), and Whipstick districts. Production of molybdenite is now confined to small quantities recovered in the New England district as a by-product of other mining. The output of molybdenite to the end of 1947 was 993 tons valued at £227,412 and was used almost exclusively in the manufacture of molybdenum steel alloys.

## TUNGSTEN.

Small deposits of the tungsten ores, wolfram and scheelite, occur in many localities in New South Wales, generally in association with tin, bismuth, and molybdenite, the principal fields being in the New England district. Tungsten is used mainly in the manufacture of special steels, alloys, and tungsten carbide for cutting tools. The output in 1947 was 15 tons of scheelite valued at £6,847 and 23 tons of wolfram valued at £9,184. Total production to the end of 1947 was 1,910 tons (£259,490) of scheelite and 2,989 tons (£422,220) of wolfram.

#### CADMIUM.

Cadmium occurs in association with lead-zinc ore deposits and is recovered during the treatment of these ores. The cadmium produced in Australia is recovered at Risdon, Tasmania, as a by-product of the electrolytic refining of zinc mostly from zinc concentrates from Broken Hill. A large proportion of the Broken Hill concentrates however, and all the Captain's Flat zinc concentrates are exported, and their cadmium content is not recovered within the Commonwealth. Cadmium has a wide industrial application, principally in electroplating steel and other metals and in the manufacture of pigments and alloys for bearings, solders, etc. The quantity extracted from New South Wales ores to the end of 1947 was 3,921 tons valued at £1,241,112, of which 826 tons (£369,710) were recovered in the five years ended 1946 and 154 tons (£68,910) in 1947. Most of the Australian production of cadmium is exported.

## GOLD.

The gold in New South Wales is found mainly in alluvium, in auriferous reefs or lodes, and as a by-product of other mining, mainly lead-zinc and copper.

Though gold had been discovered in New South Wales in earlier years, its existence in payable quantities was proved by E. H. Hargraves only in 1851. The progress of gold mining in the State since that year has been described in earlier issues of the Year Book. A renewed expansion in the production of gold began during the early nineteen-thirties as a result mainly of the depreciation of Australian currency in terms of gold and the consequent rise in the price of gold. This expansion continued until 1940, when the yield (100,255 oz. fine) was the greatest since 1916. Subsequently operations were curtailed owing to war-time conditions and the yield declined to 32,009 oz. fine in 1946. In 1947 production recovered to 50,082 oz. fine but was still 38 per cent. below the annual average in the period 1936-1940.

The following table shows the quantity and value of the gold won in New South Wales to the end of 1947, as estimated by the Mines Department:—

Period.	Quantity.	Value.*	Period.	Quantity.	Value.*
1851-1900 1901-1910 1911-1920 1921-1925 1926-1930 1931-1935 1936-1940 1941-1945	oz. fine. 11,399,508 2,252,851 1,145,185 133,335 70,287 163,091 405,497 334,858	£ 48,422,001 9,569,492 4,864,440 566,375 298,557 1,295,008 3,820,282	1939 1942 1943 1944 1945 1946 1947	oz. fine. 87,189 77,249 63,779 62,610 43,129 32,009 50,082	£ 848,985 807,436 666,491 657,152 461,293 344,497 539,008
1941~1949	334,000	3,533,616	Total to 1947	15,986,703	73,253,366

Table 113.—Gold Won in New South Wales.

\* Value at contemporary Australian price.

Following the war-time increase in the price of gold, a tax was imposed as from the 15th September, 1939 on all gold produced in Australia and New Guinea. The tax was equal to half the amount by which the price of gold exceeded £A9 per fine oz. and was deducted by the Commonwealth Bank from payments made for gold received; further particulars are given on page 255 of the 50th edition of the Year Book. The tax was suspended as from 20th September, 1947 by the Gold Tax Suspension Act, 1947.

By proclamation under the Banking Act, 1945, all persons possessing gold are required to deliver it to the Commonwealth Bank or an agent of the Bank, and may not sell gold to any other buyer. This regulation does not apply to gold coins up to £25 in value or to wrought gold. The price of gold fixed by the Bank is based on the price realisable abroad (see page 161).

#### PLATINUM.

Platinum occurs in several districts in New South Wales, but practically no platinum has been won since 1938. The quantity produced to the end of 1947 was 20,244 oz. valued at £128,996.

## Iron Oxide.

Iron oxide is obtained in the Port Macquarie, Moss Vale, Newcastle, Milton, Nowra, and Goulburn districts, and is used in desulphurising gas and as a pigment. The output has increased in recent years and to the end of 1947 was 150,734 tons valued at £134,525.

# BISMUTH.

Bismuth occurs in small pipe-like deposits associated with molybdenum, the principal deposits being in the New England and Whipstick (South Coast) districts. The recovery of bismuth ores and concentrates from these deposits is mainly incidental to other mining. The quantity of bismuth produced to the end of 1947 was 18,086 cwt. valued at £253,807, and formed only a small proportion of the quantity required locally for use in the manufacture of chemical compounds and alloys.

## ZIRCON, RUTILE, AND ILMENITE.

All the zircon and rutile produced in New South Wales is derived from naturally concentrated sands on the coastal beaches north from Coff's Harbour. Ilmenite is also available, but the ilmenite concentrates are normally unsaleable because of the presence of chromium. Zircon is used

in the manufacture of ceramics and chemical equipment and as a refractory and insulating agent. Rutile and the titanium dioxide extracted from ilmenite are used in welding rods, steel, ceramics, paints, etc. The economic treatment of beach sands containing these minerals commenced in 1934, but only small quantities were separated before the war. During the war production increased substantially and in 1947 the value of zirconrutile-ilmenite concentrates produced was £276,161, compared with £142,037 in 1946, £198,083 in 1945, and an average of £134,159 in each year 1941 to 1944. Most of the production is marketed overseas.

## BAUXITE.

Reserves of bauxite ore have been proved to exceed 15 million tons containing 35 to 45 per cent. alumina. The main deposits are in the Tingha-Inverell-Emmaville and the Bundanoon-Wingello districts. These deposits are easily accessible, have little or no overburden, and can be mined cheaply by open cut methods. The Bundanoon-Wingello ore deposits, though lower in grade, have the advantage of proximity to the industrial centres of the State. The total recorded production of bauxite during 1947 was 2,363 tons valued at £555, compared with 1,415 tons (£187) in 1946 and 1,739 tons (£843) in 1939. Bauxite is used in the manufacture of aluminium chemicals and refractory bricks and large unrecorded quantities of low-grade bauxite have been used for road surfacing. As yet the local production of aluminium from bauxite (its principal ore) is only projected.

# MAGNESITE.

Deposits of magnesite are distributed widely throughout the State, but their exploitation depends largely on their location in relation to transport and centres of consumption. The principal deposits of economic size occur in the Attunga, Barraba, Bingara, Thuddungra, and Fifield districts, Fifield being at present the major producting centre. The magnesite is won generally by shallow quarrying methods, but power ploughing and scooping are used in working large widely-spread deposits. Production during 1947 was 35,751 tons valued at £51,432, compared with 24,809 tons (£34,217) in 1939 and an annual average of 35,613 tons (£60,056) during the war years 1941 to 1945. Known reserves are adequate for future local requirements. Most of the magnesite produced is used for refractory purposes in the Newcastle and Kembla steelworks; small quantities are used in the manufacture of chemicals and insulation and oxychlorite cement, and between 1941 and 1944 calcined magnesite was used in the production of magnesium.

## ANTIMONY.

There are small deposits of antimony ore in the Hillgrove, Macksville, Kempsey, and Bellingen districts of eastern New South Wales. The more important of these deposits have been largely worked out and output is derived from a few small mines. Another source is the antimony recovered as antimonial lead in the treatment at Port Pirie of lead concentrates from the Broken Hill mines; a further supply is obtained by reclaiming antimonial lead from batteries and other scrap. The principal use of antimony is as antimonial lead in the manufacture of batteries, and up to the present production has met requirements. The total output of antimony ore and concentrates (excluding antimonial lead recovered) to the end of 1947 was 22,013 tons valued at £442,090, of which 85 tons valued at £4,442 were produced in 1947.

The second secon

#### MERCURY.

Deposits of cinnabar, the most important ore of mercury, have been worked in several localities in the past, but are not sufficiently concentrated to be profitably exploited.

#### ALUNITE.

High grade alunite deposits occur at Bulahdelah, about 44 miles north-north-west of Newcastle, but the ore reserves of commercial value are believed to be limited. These deposits have been worked almost continuously since 1890, formerly by open cut, but since 1942 by underground mining methods. Production of alunite to the end of 1947 was 66,910 tons valued at £228,436, including 400 tons (£1,410) in 1947. Most of the alunite obtained is used in the manufacture of potash alum.

#### ASBESTOS.

Relatively small deposits of both chrysotile and amphibole asbestos occur in several localities in the State. The main deposits of chrysotile asbestos are at Baryulgil on the North Coast, at Wood's Reef near Barraba, and at Broken Hill, but the latter deposits have been worked only intermittently, and at present Baryulgil is the only producing centre. Amphibole asbestos has been won in the Gundagai and Orange districts, but there is no current output.

#### DOLOMITE.

The exploitation of the dolomite deposits of New South Wales is dependent on their accessibility and the means of transport available. Thus the largest known deposits, at Cudgegong, are 14 miles from the railway, and this has so far prevented their exploitation. The principal deposits worked are in the Mudgee-Capertee district and at Mount Fairy near Bungendore, the dolomite being won by quarrying methods. Dolomite is used mainly for refractory purposes, relatively small quantities being used in glass making and as fertilizer. Production recorded during 1947 was 30,355 tons valued at £12,692. The Mount Fairy deposits lie mostly within territory of the Commonwealth Government and the output from this section is not recorded as production in New South Wales.

#### LIMESTONE.

Immense reserves of limestone are distributed widely throughout the State, but the commercial value of the deposits depends mainly on their accessibility and proximity to market. The bulk of the limestone output is for the manufacture of cement in localities where coal is readily available.

#### MINERAL PIGMENTS.

The mining of mineral pigments in New South Wales is largely by opencutting and has been undertaken mainly by small-scale producers. The more important producing centres are Dubbo (yellow ochre), Glen Innes-(red oxide), and Gulgong (yellow ochre, red oxides and umber); deposits in other districts have been worked very sporadically. Most of the pigments are used in the manufacture of paints, small quantities being required for linoleum and rubber manufacture. During 1947, production amounted to 1,130 tons valued at £1,683, compared with 1,259 tons (£2,113) in 1944 and 440 tons (£636) in 1939.

#### DIATOMITE.

There are numerous deposits of diatomite (commonly called diatomaceous earth) in New South Wales. The principal deposits are in the Coonabarabran, Barraba, and Ballina-Lismore districts and have been worked fairly extensively for many years, largely by open-cut methods. Small deposits of commercial importance occur near Orange and Cooma. The diatomite recovered is especially suitable for the manufacture of insulating products. The output was 3,735 tons (£5,106) in 1946 and 4,366 tons (£4,618) in 1947, compared with an annual average of 3,557 tons (£3,769) during 1937 to 1941.

#### FELSPAR.

The principal centres of felspar production are the Broken Hill district (producing mainly potash felspar) and Eden district (mainly soda felspar). Potash felspar has also been produced intermittently from the Lithgow, Bathurst, and Nambucca districts. The output of felspar has been governed by local requirements and during 1947 amounted to 4,767 tons valued at £11,579; reserves are considerable. About two-thirds of the felspar produced is used in the manufacture of glass and the balance in ceramics and as an abrasive.

## TALC, STEATITE, AND PYROPHYLLITE.

The most important deposits of tale, steatite, and pyrophyllite in New South Wales are at Wallendbeen (steatite), Gundagai and Cow Flat (tale), and Mudgee, Cobargo, and Pambula (pyrophyllite). Production of these minerals during 1947 amounted to 1,639 tons valued at £3,260, compared with 602 tons (£833) during 1939. Reserves, though of low grade, are adequate for requirements. These minerals are used in the manufacture of cosmetics and in the rubber, paint, and foundry industries.

# GYPSUM.

Gypsum deposits are widely distributed throughout the State, but many are too low in grade or too remote for economic exploitation. In the Ivanhoe-Trida and Griffith districts, the major producing centres, operations are mechanised, the overburden being removed by bulldozers and the gypsum recovered by dragline excavators, tractors, and scoops. Gypsum is used mainly in the manufacture of plaster and cement. The recorded production of gypsum in 1947 was 64,070 tons valued at £50,253, compared with 44,423 tons (£31,495) in 1946 and 20,216 tons (£12,031) in 1944.

#### SULPHUR.

There are no workable deposits of native sulphur in New South Wales and the sulphur required for use is obtained as imported native sulphur or from locally produced pyrite and zinc concentrates. Part of the output of zinc concentrates from Broken Hill is used as a source of sulphur, but the much greater part is roasted to air in other States or exported overseas unroasted. A pyrite concentrate is obtained from Captain's Flat, but the whole of the zinc concentrate produced there is exported unroasted. The zinc and pyrite concentrates available are roasted to produce sulphur dioxide for acid manufacture, most of the acid produced being used in making superphosphate. The production of sulphur from local ores is encouraged by a bounty, but even with the war-time increase in price, shortage of shipping and foreign exchange difficulties, local production satisfied less than half local requirements.

#### DIAMONDS.

Diamonds and other gemstones occur in New South Wales, but not extensively. Records show that up to the end of 1905 the output of diamonds was 154,309 carats valued at £101,969. Progressively fewer diamonds were obtained in later years; recorded production was 47,819 carats (£42,483) from 1906 to 1925 and 4,660 carats (£5,865) from 1926 to 1945. With 50 carats (£115) in 1946 and 73 carats (£215) in 1947, the total recorded to the end of 1947 was 206,911 carats valued at £150,647. The unrecorded output, however was probably considerable.

#### OPALS.

The most important deposits of precious opal are at White Cliffs and Lightning Ridge, gems from the latter field being remarkable for colour, fire and brilliancy. Opals are also obtained at Tintenbar (North Coast) and these resemble the Mexican gems. The value of precious opal won in New South Wales, as estimated by the Mines Department, is shown in the following table:—

Period.	Value.	Period.	Value.	Value,	Period.
1890-1900 1901-1905 1906-1910 1911-1915 1916-1920	£ 456,599 476,000 305,300 154,738 105,547	1921–1925 1926–1930 1931–1935 1936–1940 1941–1945	£ 51,740 47,409 15,995 15,715 9,933	1944 1945 1946 1947 Total to 1947	3,020 3,000 3,500 1,000 1,643,476

Table 114.—Opal Won in New South Wales.

## QUARRIES.

The Hawkesbury formation in the Metropolitan district provides excellent sandstone for architectural use. The supply is very extensive, and the stone is finely drained, durable, and easily worked. Desert sandstone in the northwestern portion of the State and freestone in the northern coal districts also provide good building stone.

Syenite, commonly called trachyte, is found at Bowral. For building purposes it is solid and takes a beautiful polish.

Granite occurs at many places in the State, and has been quarried generally in places near the coast, whence transport is cheaper than from less accessible localities. The pylons of the Sydney Harbour Bridge are faced with granite quarried at Moruya.

Beds of marble of great variety of colouring and with highly ornamental markings are located in many districts of New South Wales. Much of the marble is eminently suitable for decorative work.

Basalt or blue metal, suitable for ballasting roads and railway lines and for making concrete, is obtained at Kiama and other localities.

Fireclays of good quality are found in the permo-carboniferous coal measures, and excellent clays for brick-making, pottery, etc. may be obtained in the State, chiefly in the Sydney and Wollongong districts.

The following statement shows the quantity and value, as estimated by the Mines Department, of the various types of building stone, gravel, clay, etc. produced in New South Wales during 1945, 1946, and 1947. The output of limestone used in the manufacture of Portland cement or lime is not included. The total quantity and value of building stone, road material, clays, and gravel produced to the end of 1947 are shown in Table 96.

Table 115.—Output of Quarries in New South Wales.

<b>T</b> 1	194	15.	194	16.	194	17.
Item.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Building Stone—	tons.	£	tons.	£	tons.	£
Basalt		88	1,000	600	174,271	73,339
Granite	1,635	5,272	1,359	6,188	2,178	8,73
Marble	50	400	925	1,839	315	1,76
Limestone	2,228	5,729	1,196	602	2,205	6,57
Sand and Sandstone	9,161	24,367	180,856	61,626	163,184	63,98
Syenite Volcanic Breccia	132	553	520	958	455	1,98
Loom		•••	•••	•••	14,937	8,58 65
Missellaneous		•••		•••	3,861 3,077	1,41
Jacadam, Ballast, etc.—		•••		•••	0,011	1,71
Basalt	603,451	181,035	750,589	225,175	409,820	147,24
Gravel	0.040 510#	408,504	2,564,605*	419,662	3,172,020*	634,40
Miscellaneous	640,580	111,933	746,132	129,297	462,650	73,31
clays—	1 1	-	-	· •	,	
Brick, Tile, Pipe, Pottery		82,652	935,160	170,482	1,293,192	231,69
Fire Clay	37,836	14,188	37,969	11,747	68,029	20,61
Clay Shale	59,904	11,981	61,394	6,756	82,798	12,85
Kaolin and White Clays	18,026	13,519	21,021	21,393	18,640	20,65
Total	.,,	860,121	•••	1,056,325		1,307,80

<sup>\*</sup> Cubic yards.

## PRICES OF METALS.

The average export prices of gold, silver, lead, zinc, tin and copper (in Australian currency) in 1948 and selected earlier years are shown in the following table. The prices for the year represent the mean of the average monthly prices, and for the months shown, the average of daily quotations. The prices shown for gold are the averages of prices paid for gold by the Commonwealth Bank of Australia; for other metals they are the prices f.o.b. at principal Australian ports of shipment.

Table 116 .- Export Prices of Metals, in Australian Currency.

		=				
Period.	Gold.	Silver (Standard).	Lead.	Zine (Electrolytic)	Tin (Standard).	Copper (Electrolytic Wire bars).
•	per fine oz. £ s. d.	per oz. s. d.	per ton. £ s. d.	per ton. £ s. d.	per ton. £ s. d.	per ton. £ s. d.
1929	4 5 0	2 0.6	21 14 5	25 19 5	200 11 5	84 10 11
1931	5 14 9	$1  \tilde{6} \cdot \tilde{7}$	14 19 7	17 3 10	147 13 10	53 0 8
1939	9 14 4	$\overline{2}$ $\overline{1\cdot4}$	17 12 1	19 15 3	268 3 6	59 15 <b>1</b>
1941	10 13 8	2 4.3	19 11 4	22 12 11	295 1 6	******
1942	10 9 1	2 4.7	21 9 9	22 2 11	285 9. 1	*******
1943	10 9 0	2 4.6	22 19 2	23 15 2	283 1 6	******
1944	10 10 1	2 4:6	26 3 0	24 9 4	335 7 2	*******
1945	10 13 10	2 10.6	34 10 10	37 6 4	350 9 0	••••••
1946	10 15 3	4 8.0	56 8 6	55 0 2	414 19 0	*******
1947	10 15 3	4 4.3	90 2 0	67 6 4	505 12 2	•••••
1939, Aug.	9 10 5	1 10.3	18 6 8	19 13 9	$273\ 15\ 11$	62 2 <b>0</b>
1944, June	10 9 5	2 4.6	26 10 5	29 4 4	325 11 4	•••••
1945, June	10 14 9	2 4.8	39 1 6	31 11 3	350 14 5	******
1946, June	10 15 3	4 2.9	53 14 6	50 10 7	425 2 11	******
1947, June	10 15 3	3 11.8	94 3 0	64 16 4	523 12 10	******
1948, June	10 15 3	5 3.1	109 16 2	79 10 0	<b>684 4</b> 6	
				l. I		

During the war years the export prices of Australian base metals were governed, as to lead and zinc, principally by the terms of contracts for sale to the United Kingdom, and as to copper and tin, by prices in London as determined by the United Kingdom Ministry of Supply. Since August, 1945 export prices have accorded with values ruling in world markets.

Prices of metals for use in Australia have been controlled since the outbreak of war in 1939 under the Commonwealth and later the State prices legislation described in the chapter "Food and Prices" of this volume. The low home market prices are made effective by the requirement of a licence to export these metals. The maximum basic prices per ton to Australian consumers for the principal commercial metals at smelters' works in forms, grades, and quantities as specified by the Prices Commissioner from time to time are shown below; the prices orders prescribe appropriate price margins for the metals in various other forms, grades, and quantities.

Lead. (Pig.)		Zine (Bars, Block,		Coppe (Bars, Blocks Pig.	s, Ingots,	Tin. (Ingots.)	
Date Price Fixed.	Price per ton.	Date Price Fixed.	Price per ton.	Date Price Fixed.	Price per ton.	Date Price Fixed.	Price per ton,
1939, Dec. 19 1940, Feb. 8   1949, Jan. 1	£ s. d. 20 17 6 22 0 0   35 0 0	1939, Dec. 19 1940, Feb. 8 		1945, Aug. 8 1946, Jnne 7 1947, May 29 1948, Jan. 1	76 0 0 78 10 0 86 10 0 105 0 0 100 0 0 95 0 0	1939, Oct. 6 1940, Feb. 16 1941, April 8 1942, May 1 1943, April 8 1946, Sept. 6 1947, April 23 Oct. 20 1948, Mar. 1 July 12	306 320 371 376 383 418 515

Table 117.-Prices of Metals in Australia.

#### ADMINISTRATION OF MINING LAWS.

The general supervision of the mining industry in the State and the administration of the enactments relating to mining are shared by the Mines Department, Joint Coal Board, Controller of Minerals Production, and the Bureau of Minerals Resources, Geology, and Geographics.

# OCCUPATION OF LAND FOR MINING.

The occupation of land for the purpose of mining is subject to the Mining Act of 1906 and its amendments. Any person may obtain a miner's right which entitles the holder, under prescribed conditions, to conduct mining operations on Crown land not otherwise exempted, and to occupy a small residence area. A holder of a miner's right may take possession of more than one tenement, but is required to hold an additional miner's right in respect of each tenement after the first of the same class. A holder may apply also for an authority to prospect on or to occupy exempted Crown lands, and, in the event of the discovery of any mineral, he may be required to apply for a lease of the land to continue prospecting operations. Such authority may be granted for any period not exceeding twelve months, but the term may be extended upon application to two years to enable completion of prospecting operations.

A business license entitles the holder to occupy a limited area within a gold or mineral field for the purpose of carrying on any business except mining, and confers the right to only one holding at a time.

The term of a miner's right or business license is not less than six months and not more than twenty years, renewable upon application and transferable by endorsement and registration. The fee for a miner's right is at the rate of 5s. per annum and for a business license £1 per annum.

Crown lands may be granted as mining leases, authorising mining on the land, or as leases for mining purposes, authorising the use of the land for conserving water, constructing drains, etc. and railways, erecting buildings and machinery and dwellings for miners, generating electricity, dumping residues, and for other works in connection with mining, but not allowing minerals to be mined or removed from the land. Except in the case of special leases, which may be granted in certain cases, the maximum area of a mining lease varies according to the mineral sought, viz. opal, acre; gold, 25 acres; coal, shale, mineral oils, petroleum, or natural gas, 640 acres; other minerals, 80 acres.

Private lands are open to mining subject to the payment of rent and compensation and to other conditions as prescribed. The mining wardens may grant to the holders of miner's rights authority to enter private lands, but, except with the consent of the owner, the authority does not extend to land on which certain improvements have been effected, e.g., cultivation, or the erection of substantial buildings. An authority may be granted for a period up to two years, and during its currency the holder may apply for a mining lease of the land.

Leases of private lands for mining purposes may be granted also. The maximum areas of private lands that may be leased are as follows:—opal, 150 ft. square; gold, 25 acres; coal and shale, 640 acres; and other minerals, 80 acres. The owners of private lands, with the concurrence of the Minister for Mines, may lease areas under agreement to holders of miner's rights.

Dredging leases may be granted in respect of Crown and private lands, including the beds of rivers, lakes, etc. and land under tidal waters.

Suits relating to the right of occupation of land for mining and other matters in regard to mining operations are determined by Warden's Courts under the sole jurisdiction of the Warden in each mining district.

The annual rent for mining leases of Crown lands is 2s. per acre and of private lands 20s. per acre in respect of the surface actually occupied. The rent for dredging leases is 2s. 6d. per acre in respect of Crown lands, and it is assessed by the wardens in open court in respect of private lands. Rentals received by the State from mining leases amounted to £17,027 in 1944-45, £16,032 in 1945-46, and £17,150 in 1946-47.

## MINING ROYALTIES.

Royalties are payable to the Crown in respect of the minerals won, except in certain cases where they have been obtained from private lands held without reservation of minerals to the Crown. The royalty on coal and shale is charged at the rate of 6d. per ton and on other minerals at the rate of 1 per cent. of the value.

Royalty in regard to mining on private lands held without reservation of minerals to the Crown is collected by the Department of Mines on behalf of the owner. The rates are 6d. per ton of coal and shale and  $1\frac{1}{5}$  per cent. of the gross value of other minerals, except gold. The Department

retains one-sixth and one-ninth, respectively, of these amounts and pays the balance to the owner of the minerals. The royalty on gold is payable to the Crown in all cases.

Royalty may be remitted under certain conditions as prescribed by the Mining Act, e.g. in the case of minerals other than coal and shale won from Crown land under mining lease, if the gross annual output does not exceed £500. In many cases rents may be deducted from the royalties.

Particulars of royalty collected in 1947-48 and recent years are shown in the next table. The amount of royalty payable reflects variation in the volume and value of mineral production and, in some cases, in mining profits. The royalty in respect of the silver-lead-zinc group of minerals is derived almost wholly from Broken Hill mining companies at a graduated percentage on profits earned and is therefore largely influenced by the prices of these minerals. Because of the high prices ruling for lead and zinc, royalty payments in 1947-48 were extraordinarily high and more than fourfold those in 1938-39.

Mineral.				Year en	ded 30th J	une.		
		1939.	1943.	1944.	1945.	1946.	1947.	1948.
Coal		£ 159,613	£ 262,167	£ 249,403	£ 261,131	£ 224,694	£ 256,013	£ 259,525
Silver, Lead, Zinc		70,411	82,346	38,894	53,785	86,087	193,319	871,05 <b>0</b>
Other		17,439	11,685	12,210	11,037	10,257	6,186	8,291
Total Royalty		247,463	356,198	300,507	325,953	321,038	455,518	1,138,866

Table 118.—Royalty on Minerals.

Coal royalties represented 64.5 per cent. and royalties paid in respect of silver-lead-zinc production constituted 28.5 per cent. of the total royalty collected in 1938-39, but because of the circumstances noted in the paragraph preceding the table, the proportions were reversed completely in 1947-48, when over 70 per cent. of the total royalty was paid in respect of silver-lead-zinc and less than 21 per cent. in respect of coal.

## CONTROL OF MINERALS PRODUCTION.

In terms of National Security (Minerals) Regulations, promulgated in 1942, a Controller of Minerals Production was appointed by the Commonwealth Government to ensure adequate production of minerals (apart from coal, for which other provision was made). To this end, the Controller was empowered to take possession of land and use it for the production and supply of minerals and to grant financial assistance. These regulations were continued in force to 31st December, 1947, 1948, and 1949, in turn, by the Defence (Transitional Provisions) Acts of 1946, 1947, and 1948.

#### ENCOURAGEMENT OF PROSPECTING FOR MINERALS.

Financial assistance is provided from State public revenues to encourage prospecting for minerals and to assist miners to open up new fields. Grants may be made to miners who satisfy the Prospecting Board that the locality

to be prospected and the methods to be used are likely to yield the mineral sought. The grants are made subject to refund in the event of the discovery of payable mineral by means of the aid.

The following statement summarises for the various minerals the grants allotted to prospectors since 1921. In each year, some of the prospectors fail to complete the works for which aid has been granted and the amounts allotted are not paid in full. For this reason, the amount actually paid as grants to prospectors in 1946-47 was £2,520. From 1931 to 1935, sustenance payments amounting to £46,966 were made to unemployed persons engaged in prospecting, but these have not been included as grants.

l able	119.—	-Grants	Allotted	to	Prospectors.
					· · · · · · · · · · · · · · · · · · ·

					Tospecio						
Period		Amounts allotted to Prospectors for—									
(years ended 30th June).	Gold.	Silver and Lead:	Copper.	Tin,	Coal.	Other Minerals.	Total.				
	£	£	£	£	£	£	£				
1921-1925	44,926	8,009	3,709	8,478	1,713	4,578	71,413				
1926-1930	36,780	12,027	3,582	12,293	1,055	6,395	72,132				
1931–1935	94,459	1,405	17	3,031	•••	2,486	101,398				
<b>1936–194</b> 0	79,983	5,030	257	10,755		7,793	103,818				
1941–1945	7,972	473	2,606	5,998		7,288	24,337				
1939	10,531	3,320		1,603	•••	781	16,235				
1943	34	248	457	1,259	•••	2,482	4,480				
1944	285	47	460	779		540	2,111				
1945	807	38		453		493	1,791				
1946	1,593	200	30	2,485		412	4,720				
1947	5,489	328	1,974	3,307	•••	1,481	12,579				

The Commonwealth Government also has provided financial assistance from time to time to encourage prospecting and the development of mineral resources—see pages 689 and 705 of volume No. 50, page 1018 of the 1938-39 edition of the Year Book, and page 1008 of the 36th (1944-45) edition of the Commonwealth Official Year Book.

## Inspection of Mines.

The inspection of mines with a view to safeguarding the health and safety of miners is conducted by salaried officers of the Department of Mines in terms of the Coal Mines Regulation Acts, which apply to coal and shale mines, and the Mines Inspection Acts, which apply to other mines. Certain provisions of the latter Acts were extended to quarries as from 1st August, 1945 and may be applied to dredges by proclamation by an amending Act of 1945.

The Coal Mines Regulation Acts prescribe that every coal mine must be controlled and directed by a qualified manager and be personally supervised by him or by a qualified under-manager. In mines where safety-lamps are used, a competent deputy must carry out duties for the safety of the mine, with particular regard to gas, ventilation, the state of the roof and sides, and shot-firing.

The Acts contain general rules for the working of coal mines in regard to such matters as ventilation, sanitation, the inspection and safeguarding of machinery, safety lamps, explosives, security of shafts, etc. It is provided that persons employed at the face of the workings of a mine must have had two years' experience or must work in company with an experienced miner. Special rules are established in each mine for the safety, convenience, and discipline of the employees.

The Governor may appoint a District Court judge, a stipendiary or police magistrate, or a mining warden to sit as a Court of Coal Mines Regulations to determine matters relating to the safe working of the coal mines. Courts have been proclaimed at East Maitland, Newcastle, Muswellbrook, Gunnedah, Sydney, Wollongong, Lithgow, and Mudgee.

The Mines Rescue Act makes provision for rescue operations in coal and shale mines by the establishment of rescue stations, rescue corps, and rescue brigades. In four districts, viz. the Western, Southern, Newcastle, and South Maitland, central rescue stations have been established, and the mine owners in each district are required to contribute to a fund for their upkeep. The rates of contribution for the year 1947 were as follow:—Western, 0.7d.; Southern, 1.1d.; Newcastle, 0.55d.; and South Maitland, 0.302d. per ton of coal raised during the preceding year. The amount contributed was £24,356 in 1947.

A Royal Commission appointed in August, 1938 to inquire into matters relating to the safety and health of workers in coal mines reported that the fatality rate in coal mines was not higher than in other mines in New South Wales and was more favourable in New South Wales than in Great Britain or the United States of America. About 50 per cent. of the serious accidents in New South Wales had been caused by falls of roof and sides and 7½ per cent. of the fatal accidents were connected with haulage. After this inquiry, the Coal Mines Regulation Act was amended in 1941 to require improved standards of ventilation and equipment, methods of safe working, and control of dust.

In the mines to which the Mines Inspection Acts relate, a qualified manager, exercising daily personal supervision, must be appointed if more than ten persons are employed below ground, and the machinery must be in charge of a competent engine-driver. General rules are contained in the Act, and the inspectors may require special rules to be constituted for certain mines. Additional requirements to increase the efficacy of these measures were imposed by the amending Act of 1945.

Certificates of competency to act in mines as managers, under-managers, deputies, engine-drivers, and electricians are issued in accordance with the Acts relating to inspection.

The records of the Department of Mines show the following particulars regarding persons killed or reported as seriously injured in accidents in mining and quarrying during the years 1937 to 1947.

The accident rates are not based on the number of employees as shown in Tables 87 to 90. They relate to the total number of persons who are subject to the provisions of the Mining Acts, including persons engaged in connection with treatment plant at the mines and in quarries. No allowance was made in calculating the rates for variations in the average number of days worked in each year. Particulars of the average time worked in coal mines are shown in Table 100.

						_		
		Accid	Ients.		Rate p	er 1,000 En Mining	iployees sul g Acts.	oject to
Year.	Coal and Shale Miners.			Miners arrymen.		Coal and Shale Other Miners Miners. and Quarrymen.		
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1937	26	68	19	250	1.74	4.54	1.26	16.58
1938	11	65	17	265	•69	4.10	1.10	17.17
1939	15	81	13	212	•90	4.86	•93	15.12
1940	20	60	16	260	1.15	3.46	1.12	18.15
1941	26	79	11	259	1.48	4.51	•93	21.87
1942	23	75	8	178	1.32	4.30	.77	17.24
1943	19	91	15	126	1.07	5.12	1.46	12.27
1944	26	69	6	80	1.47	3.89	·67	8.96
1945	14	82	7	112	.79	4.64	-83	13.29
1946	13	97	6	163	·74	5.20	-62	16.73
1947	16	82	8	78	.89	4.60	•81	7.86
		l						

Table 120.-Mining Accidents in New South Wales.

In the five years ended 31st December, 1947, casualties in mining and quarry accidents numbered 1,110, of which 130 were fatal, compared with 1,694 casualties, including 160 fatalities, in the preceding period of five years. In each of the years 1945 to 1947, the rate of fatal accidents was less than one per thousand employees subject to the Mining Acts.

Allowances paid to beneficiaries under the provisions of the Miners' Accident Relief Act relate to accidents which occurred prior to 1st July, 1917. The allowances amounted to £7,822 in 1945, £7,368 in 1946, and £6,503 in 1947, the beneficiaries at the end of 1947 comprising 94 widows, 2 sisters, and 77 permanently disabled persons.

Compensation in respect of accidents which occurred after June, 1917 and compensation for miners and quarrymen who contract industrial diseases such as silicosis or lead poisoning are payable under the Workers' Compensation Act and other Acts, of which particulars are shown in the chapter "Employment" of this Year Book.

A pension scheme for coal and oil shale mine workers in New South Wales which commenced in November, 1941 is described in the chapter "Social Condition" of this volume.

# **POPULATION**

## THE CENSUS.

THE number and characteristics of the population of New South Wales have been ascertained by census enumerations at intervals since 1828. Musters were held regularly during the first forty years of the existence of the colony, and the first actual census in 1828 was followed by census enumerations in 1833 and 1836, then at intervals of five years until 1861, and thereafter of ten years until 1921. The census which was due in 1931 was postponed for reasons of economy until 30th June, 1933, and because of the war the following census was not taken until 30th June, 1947.

Successive censuses up to 1901 were taken under the authority of the State Government, but upon establishment of the Commonwealth the census became a Federal function. The first Australian census under Commonwealth control was taken in 1911.

#### INTERCENSAL ESTIMATES.

In the periods between census enumerations the population is estimated at quarterly intervals. Reliable information as to the natural increase is ensured by the compulsory registration of births and deaths, and a careful system of recording arrivals and departures is maintained for purposes of estimation

In estimating the population of the war years 1914 to 1918, movements of troops were taken into account as migration, but in the war years 1939-45, members of the Australian defence forces were counted in the population of the State of enlistment, regardless of subsequent whereabouts, and statistics of migration were related to civilians only. Deaths of members of the defence forces overseas were taken into account when they were authentically recorded.

Allied defence forces, enemy prisoners of war and internees from oversea were excluded from the population, but refugees and evacuees were included.

## THE GROWTH OF POPULATION IN NEW SOUTH WALES.

From 1788 to 1856.

The growth of the population of New South Wales between 1788 and 1856 is traced on page 223 of the Official Year Book for 1922, and the area and population at each territorial readjustment are shown on page 1 of this volume.

## From 1861 to 1947.

With the exception of the territory ceded to the Commonwealth Government in 1911 and 1915, New South Wales (including Lord Howe Island)

has occupied its present boundaries since 1859. The regular census enumerations furnish a connected summary of the growth of population since that date as shown, with the latest estimate, in the following table:—

Table 121.-Growth of Population of New South Wales.

Census.	Population,	Index Number of Population,		se in Populatio previous Censu		Number of Persons
33-3-25,		(Census $1861 = 100$ ).	Numerical.	Proportional.	Average Annual Rate.	Persons per Square Mile.  1.12 1.62 2.42 3.63 4.37 5.32 6.79
		CENSU	JS RECORDS	3.		
7th April, 1861 2nd April, 1871 3rd April, 1881 5th April, 1891 31st March, 1901 3rd April, 1911 4th April, 1921 30th June, 1933 30th June, 1947	502,998 749,825 1,127,137 1,355,355 1,646,734 2,100,371 2,600,847	100 143 214 321 386 469 599 741 851	168,436* 152,138 246,827 377,312 228,218 291,379 453,637 500,476 383,991	per cent. 92.55* 43.36 49.07 50.32 20.25 21.50 27.55 23.83 14.76	per cent. 6.76* 3.67 4.07 4.16 1.86 1.97 2.46 1.76 .99	1·62 2·42 3·63 4·37 5·32
outh June, 1947	2,984,038			14.70	ן פפי ן	9.09
30th June, 1948	3,025,319	862	TIMATE.   40,481	13.56	1.36	9.78

\* Since 1851.

Aboriginals are excluded from the population shown above, but their number as enumerated at various dates is shown in Table 140. The population of the Australian Capital Territory is excluded in 1911 and subsequent years.

Steady growth of population until 1891 was succeeded by little progress during the twenty years 1891 to 1911, due to commercial and industrial stagnation following the crisis of 1893 and a heavy decline in the birth rate. Assisted immigration was in suspense from 1885 until 1905, except for the families of those already assisted by the State to immigrate.

Prosperity began returning early in the twentieth century, and the full weight of the revival was felt in the period 1911 to 1921, when the tide of population turned strongly toward the State. In this decade growth was more rapid than in either of the two immediately preceding it even though the war of 1914-18 caused the birth rate to fall, temporarily stopped immigration, and caused an exodus of men of reproductive ages, many of whom did not return, and notwithstanding deaths in the influenza epidemic of 1919.

The next intercensal period, 1921 to 1933, commenced with a recession from the post-war boom, which was followed by a period of steady progress with revival of immigration until 1928, and ended in years of severe depression and substantial emigration. The gain by natural increase decreased rapidly during the depression, births were fewer, and deaths began to increase as a result of the higher proportion of older people in the population.

The return to prosperity between 1933 and 1938 brought no significant acceleration of the rate of growth of population, nor was such an improvement to be expected during the war and early post-war years. Deaths continued to increase slowly throughout the intercensal period and were added to by war losses. The crude birth rate changed very little in post-depression years but births increased to record numbers in the late war years, mainly as a result of war-time marriages. During the intercensal period the net gain by migration was negligible; there was appreciable

pre-war migration of European refugees and the war-time inflow of refugees and evacuees was followed by their post-war repatriation.

The average annual rate of increase in population diminished from 2.46 per cent. (1911 to 1921) to 1.76 per cent. (1921 to 1933) and to 0.99 per cent. (1933 to 1947).

Particulars of the sources of increase in each year since 1933 are shown in Table 124.

The estimated population at the end of each year and the mean population for each year since 1933 are shown in the following table.

Table 122.—Population, Annual and Mean. (Adjusted in accordance with the preliminary results of the census of 30th June, 1947.)

	Estimated I	opulation at 31st	December.	Mean Population.		
Year,	Males.	Females.	Total,	Year Ended 31st December.	Year Ended 30th June.	
1933	1,324,945	1,288,691	2,613,636	2,601,807	2,590,840	
1934	1,335,450	1,301,115	2,636,565	2,623,784	2,613,173	
1935	1,344,857	1,313,381	2,658,238	2,646,008	2,634,68	
1936	1,356,234	1,326,325	2,682,559	2,668,516	2,657,06	
1937	1,369,484	1,342,369	2,711,853	2,695,626	2,681,53	
1938	1,381,422	1,356,149	2,737,571	2,722,722	2,709,97	
1939	1,393,798	1,373,068	2,766,866	2,750,617	2,735,77	
1940	1,402,696	1,388,659	2,791,355	2,778,328	2,764,66	
1941	1,410,805	1,402,555	2,813,360	2,800,900	2,790,49	
1942	1,428,067	1,420,411	2,848,478	2,831,415	2,813,71	
1943	1,436,519	1,434,544	2,871,063	2,857,894	2,846,14	
1944	1,449,933	1,451,498	2,901,431	2,886,576	2,871,80	
1945	1,465,114	1,468,322	2,933,436	2,917,823	2,901,84	
1946	1,481,172	1,481,760	2,962,932	2,945,724	2,932,80	
1947	1,504,350	1,503,232	3,007,582	2,985,315	2,963,62	
1948	1,531,990	1,530,354	3,062,344	3,029,573	3,006,48	

#### Sources of Increase Since 1861.

The following statement shows the extent to which natural increase and net immigration contributed to the growth of the population in New South Wales during each intercensal period since 1861.

Table 123.—Natural Increase and Net Immigration.

Totoroongel	Nı	ımerical Increa	180.	Average A	Annual Rate of Increase.			
Intercensal Period,	Natural.	Net Immigration.	Total.	Natural.	Net Immigration,	Total.		
1861-1871* 1871-1881* 1881-1891* 1891-1901* 1901-1911* 1911-1921* 1921-1933† 1933-1947‡	106,071 139,722 204,664 230,669 250,140 318,945 377,321 351,367	46,067 107,105 172,648 (—) 2,451 41,239 134,692 123,155 32,624	152,138 246,827 377,312 228,218 291,379 453,637 500,476 383,991	per cent. 2.68 2.48 2.44 1.90 1.71 1.79 1.36 .91	per cent.  1·24  1·95  2·09  (	per cent 3.67 4.07 4.16 1.86 1.97 2.46 1.76 .99		
1861-1947	1,978,899	655,079	2,633,978	2.22	1.23	2.51		

<sup>\*</sup> Period of 10 years.

<sup>†</sup> Period of 121 years.

<sup>‡</sup> Period of 14 years.

<sup>(-)</sup> Denotes net emigration.

Natural increase has been by far the greater factor in the growth of population in New South Wales since 1861, and in spite of a fall in rate, the average annual addition from this source increased in each decade up to 1921. The average annual addition declined in each of the next two intercensal periods, notwithstanding a sharp upturn in number for four years immediately preceding the 1947 census. The annual experience from 1933 to 1947 is shown in Table 124. There are further details of the natural increase on page 225. The growth in population of New South Wales and the rate of increase per thousand of population in each year since 1850 are illustrated graphically on the opposite page.

Intermittently immigration has provided considerable additions to the population, although in the period of eighty-six and one-quarter years between the censuses of 1861 and 1947, the net immigration amounted to only 655,080 or less than one-quarter of the total increase. Immigration declined so heavily during the 'nineties that between 1892 and 1904 there was a net loss of more than ten thousand inhabitants.

The rate of increase due to migration has been very variable; there was considerable gain in the years 1907, 1911 to 1914, and 1924 to 1928, but the subsequent average annual inflow of migrants was very small; the relatively large number in 1942 comprised mostly evacuees. In 1948, however, there began a new and accelerating inflow of migrants, including displaced persons in substantial numbers.

## Sources of Increase, 1933 to 1947.

Sources of increase in population in New South Wales (exclusive of aboriginals of full blood) during each year since 1933 were as follows:—

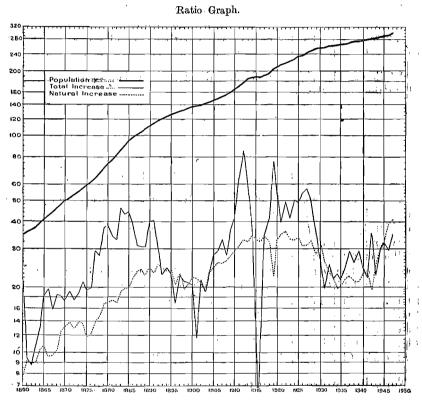
	, N	umerical Increase	•	Annual	Rate of Increa	se.
Year,	Natural.	Net Immigration,	Total,	Natural.	Net Immigration.	Total.
				per cent.	per cent.	per cent.
1933	21,873	32	21,905	- ∙85	.00	·85
1934	19,861	3,068	22,929	.76	12	-88
$1935^{\circ}$	20,129	1,544	21,673	.76	•06	-82:
1936	21,817	2,504	24,321	·82	.09	•91
1937	22,262	7,032	29,294	83	26	1.09
1938	21,214	4.504	25,718	-78	•17	•95
1939	21,180	8,115	29,295	.77	•30	1.07
1940	23,102	1.387	24,489	.84	.05	·89·
1941	23,049	(—) 1,044	22,005	-83	(—) ∙04	.79
1942	19,436	15,682	35,118	-69	` ´ •56	1.25.
1943	25,292	(-) 2,707	22,585	.89	() ·10	.79
1944	30,865	() 497	30,368	1.08	02	1.06
1945	32,146	(-) 141	32,005	1.11	<u>`</u> `_`	1.10
1946	38,472	(-) 8,976	29,496	1.31	(—) ·30	1.01
1947	40.949	(-) 427	40,522	1.37	(—) ·01	1.36

Table 124.-Natural Increase and Net Immigration.

<sup>(--)</sup> Denotes net emigration.

Net immigration grew rapidly though irregularly from 1921 until 1927, then a decline set in and there was a loss by emigration in 1930 and 1931. The decline was arrested in 1934, and reversed in 1937 under a plan encouraging migrants by the provision of assisted passages. Assisted immigration was interrupted by the outbreak of war in 1939. The net migration for the years 1939 to 1947 represents civilian movements only and reflects mainly the entry and subsequent repatriation of refugee and evacuee persons.

# NEW SOUTH WALES, POPULATION AND ANNUAL INCREASE.



Note.— (i) The numbers at the side of the graph represent 10,000 of population, 1,000 Total Increase and 1,000 Natural Increase.

(ii) In 1916 there was a decrease of 8,711 in the population owing to the departure of troops and the curve fell below the limits of the graph. See text on page 169.

The diagram is a ratio graph. The vertical scale is logarithmic, and the curves rise and fall according to the percentage of increase or decrease. Actual numbers are shown by means of the numbers at the side of the graph.

The natural increase in 1922 was, until then, numerically the greatest on record, and in 1934 it was the lowest since 1885, excepting 1898 and 1903. There was some improvement in the next three years due to an increase in births, which was not sustained in 1938 and 1939. In the years 1940 to 1947, the increase in births which followed the war-time increase in marriages offset war losses, and the numerical natural increase almost regained the record level of about twenty years earlier, surpassing it in 1947.

The natural increase shown above represents the excess of births over all deaths. Alternative figures showing the excess of births over civilian deaths only are shown in Table 176.

The rate of natural increase fell below 1 per cent. for the first time in 1932, and there was further decline to .76 per cent. in 1934 and 1935, and to .69 per cent. in 1942, the lowest rate yet recorded. The rate of 1.37 per cent. in 1947 was the highest since 1928.

The total rate of increase in the population in 1941 and 1943 (.79 per cent. in each year) was, next to 1931 (.78 per cent.) the lowest annual rate since New South Wales has been within its present boundaries, disregarding the years of the first World War when the transfer of large numbers of Australian troops overseas was reflected in the estimated population.

Details of migration to and from the State are shown on pages 197 to 203 of this Year Book.

#### DISTRIBUTION OF POPULATION.

At the 30th June, 1947, the city of Sydney contained 95,925 persons in a small area surrounded by an extensive group of suburbs with 1,388,079 inhabitants, making a total of 1,484,004 persons in the metropolis. The large mining and industrial centres of Greater Newcastle and Greater Wollongong had 127,138 and 62,960 persons, respectively, whilst similar though smaller centres were Broken Hill with 27,054 and Lithgow, 14,461. On the outskirts of the Metropolis there were 206,706 persons in the balance of Cumberland Division, a large proportion of whom gain their livelihood in the Metropolis, whilst in the similar though somewhat smaller area around Greater Newcastle—represented by the City of Maitland (19,151), Municipality of Cessnock (13,029) and the Shires of Lake Macquarie (42,288), and Kearsley (25,882)—there were 100,350 persons.

Thus, in the areas mentioned in and around Sydney, Newcastle and Wollongong, there were 1,981,158 persons representing 66 per ceut. of the total population, domiciled in 2,918 square miles, which is less than 1 per cent. of the area of the State. Distributed over the remainder of the State—99.1 per cent. of its area—were 996,159 persons, of whom 353,657 lived in towns incorporated as municipalities; and 627,914 were in shire areas with probably more than one-third of these in unincorporated towns of 500 or more persons. Only 14,588 persons were in the unincorporated portion of the Western Division, covering 40.5 per cent. of the area of the State. There were also 179 persons in Lord Howe Island, and a migratory population of 7,342 not geographically assignable.

The distribution of population at the 30th June, 1947, together with the proportion in each division and the average population per square mile, are shown in the following Table.

Table 125 .- Distribution of Population in New South Wales, 30th June, 1947.

District	4	Population (excluding full blood Aboriginals).			
Division,	Area.	Total. Proportion in each Division.		Average per sq. mile	
Sydney Suburbs of Sydney	sq. miles. 5 240	95,925 1,388,079	$\begin{array}{c}$	19,185·0 5,783·7	
Metropolis Balance of Cumberland	38 1,107 276 1,056 180,051	1,484,004 206,706 127,138 100,350 62,960 353,657 627,914 14,588 179 7,342 	49·7 6·9 4·3 3·4 2·1 11·9 21·0 .5 .0 .2 	6,057-2 165-1 3,345-7 90-7 228-1 334-9 3-5 -1 35-8	
Total, New South Wales	309,433	2,984,838	100.0	9.6	

Municipalities of Maitland and Cessnock and Shires of Kearsley and Lake Macquarie.
 † Municipalities of Wollongong and Illawarra North and Shires of Bulli and Illawarra Central.
 ‡ Shipping, railway and air travellers.
 § Portions in Coastal Divisions not included within Municipal or Shire boundaries.

The population of the metropolis, with the residents of adjoining areas who derive their livelihood in the city, represented more than one-half of the State's population. About one-fifth of the people resided in the larger towns including the industrial centres of Greater Newcastle and Greater Wollongong. Less than one-third of the population lived in the rural districts.

In 1947 the density of population in the metropolitan area of Sydney was 6,057 persons per square mile, whilst in the area within the confines of Greater Newcastle it was 3,346 per square mile. That part of County Cumberland outside the metropolitan area had a density of 165, and in the northern coalfields adjacent to Newcastle the average was 91 per square mile within the confines of the local government areas, but probably about 200 per square mile over the settled portions. In the Greater Wollongong area the average was 228 per square mile. The balance of the Coastal division where the principal industry is dairying, had a general average density of less than 11; the most populous portion being the North Coast with an average of 15 per square mile. In the Tablelands division where mixed farming, mining, and in the central portion, industrial activities, are carried on, the density was 6 persons per square mile. The average was 9 in the Central Tablelands. The Western Slopes (mixed farming) had a density of over 5, but in the Plains division, which is for the greater part beyond the western limit of commercial wheat growing, the density was slightly less than 2 persons per square mile, although in the Murrumbidgee Irrigation Area it was 36 per square mile. areas (from coast to plains) constitute the Eastern and Central Land Divisions of the State and the average density therein was 16 persons per square mile.

The extensive Western Division is likely to remain sparsely settled unless means are found to overcome the natural disability of a low average rainfall. At Broken Hill (near the far western border) rich silver-lead deposits support the fourth largest town in the State. The remainder of the division is under sparse pastoral occupation, and outside the incorporated towns had an average density of only one-person to every 8 square miles.

The average density of population in New South Wales was 9.6 persons per square mile.

TRENDS IN URBAN-RURAL DISTRIBUTION OF POPULATION.

The relative numbers and the areas involved in the urban-rural distribution of population in New South Wales as at 30th June, 1947 are shown in Table 125. Comparative census data on a similar grouping of areas disclose the trends behind the pattern of distribution displayed in that table. Such data is summarised, and trends examined, in Tables 126 to 128, commencing with the 1911 census which was the first census for which populations for statistical divisions were-based upon local government areas. In somewhat similar comparisons, but for divisions based upon counties, changes in the distribution of population between the censuses of 1891 and 1921 are traced on pages 234-237 of the Year Book for 1922.

Urban and rural population in New South Wales is not adequately defined by particulars for municipalities and shires respectively because of contrasts in status; some rural areas are incorporated as municipalities and in other cases numerous extensive urban areas are included in shires. Moreover many variations in local government areas have been made in recent years. Nevertheless the tables indicate broadly but clearly the changes which have taken place.

In the following table difficulties arising from changes and inconsistencies in local government areas have been avoided by showing separately the three major spheres of urbanisation outside the metropolis proper where they occur, viz.—Balance of Cumberland Division where the expansion of the metropolis has caused increasing urbanisation of former open areas; the northern coalfields area, where the shire populations are predominantly urban in character; and the present Greater Wollongong area where coalmining and heavy industries have given rise to large urban centres in shire areas. Other urban centres having a population of 500 or more which are within shire boundaries have been shown separately as quasi-urban.

In this comparison changes of boundaries as between municipalities, quasi-urban areas and shires have been met, wherever significant, by compiling the figures on the basis of the respective boundaries as they existed at 30th June, 1947; a number of small changes which have been ignored do not affect the comparative significance of the figures.

Table 126.—Urban and Rural Population.

Division.		Census.					
Division.	1911.	1921.	1933.	1947.	1911 to 1947.		
	, Por	ULATION.					
1. Metropolis	667,149	971,866	1,235,267	1,484,004	816,855		
2. Balance of Cumberland	46,603	80,893	124,148	206,706	160,103		
3. Greater Newcastle	54,603	84,372	104,485	127,138	72,535		
4. Newcastle-Maitland Coal-							
fields*		65,548	84,578	100,350	51,487		
5. Greater Wollongong†		32,381	42,853	62,960	38,020		
6. Other Municipalities		274,597	333,465	386,691	137,620		
7. Quasi-urban Localities of			100000	22222			
500 or more	169,000	171,000	186,000	215,000	46,000		
8. Total Urban	1,260,229	1,680,657	2,110,796	2,582,849	1,322,620		
9. Remainder of Shires	358,925	392,727	466,260	379,880	20,955		
10. Unincorporated Area	19,424	15,161	18,591	14,588	(-) 4,836		
<ol> <li>Lord Howe Island</li> </ol>	105	111	161	179	74		
12. Total Rural	378,454	407,999	485,012	394,647	16,193		
13. Migratory	8,051	11,715	5,039	7,342	(-) 709		
14. New South Wales	1,646,734	2,100,371	2,600,847	2,984,838	1,338,104		
PR	OPORTION OF	TOTAL PO	PUŁATION.				
	per cent.	per cent.	per cent.	per cent.	per cent.		
1. Metropolis	40.5	46.3	47.5	49.7	61.0		
2. Balance of Cumberland	2.8	3.9	4.8	6.9	12.0		

·	per cent.	per cent.	per cent.	per cent.	per cent.
1. Metropolis	40.5	46.3	47.5	49.7	61.0
2. Balance of Cumberland	2.8	3.9	4.8	6.9	12.0
3. Greater Newcastle	3.3	4.0	4.0	4.3	5.4
4. Newcastle-Maitland Coal-					
fields	3.0	3.1	3.3	3.4	3.9
5. Greater Wollongong	1.5	1.5	1.6	$2 \cdot 1$	2.8
6. Other Municipalities	15.1	13.1	12.8	13.0	10.3
7. Quasi-urban Localities of					
500 or more	10.3	8.1	7.2	7.2	3.4
8. Total Urban	76.5	80.0	81.2	86.6	98.8
9. Remainder of Shires	21.8	18.7	17.9	$\overline{12.7}$	1.6
10. Unincorporated Area	1.2	•7	.7	•5	(−) ·4
11. Lord Howe Island	.0	.0	.0	.0	.∙0
12. Total Rural	23.0	19•4	18.6	13.2 •	1.2
13. Migratory	-5	•6	-2	2	(-) ·0
14. New South Wales	100.0	100.0	100.0	100.0	100.0
				,	

<sup>\*</sup> Municipalities of Cessnock and Maitland and Shires of Kearsley and Lake Macquarie.
† Municipalities of Illawarra North and Wollongong and Shires of Bulli and Illawarra Central.
(-) Denotes decrease.

In the 364 years between the censuses of 1911 and 1947 the total population of the State increased by 81 per cent. Urban population as represented by item 8 increased by 105 per cent.; sectional increases being Metropolis 122 per cent., balance of Cumberland 344 per cent., Greater Newcastle 133 per cent., coalfields area adjacent to Newcastle 105 per cent., Greater Wollongong 152 per cent., other municipalities 55 per cent. and quasi-urban localities of 500 or more persons 27 per cent. Rural population represented by item 12 increased by only 4 per cent.

Developments in urbanisation are predominantly in the Cumberland, Newcastle and Coalfields, and Wollongong areas which have become almost wholly urban and which, together, cover less than 1 per cent. of the State. The urban-rural relationship in the remaining 99.1 per cent. of the State's area is examined in Tables 127 and 128. The territorial subdivisions used in these are those shown on the map in the frontispiece, except that the Hunter and Manning and South Coast divisions have been divided as indicated above. In Table 127 the component groups of municipalities and shires in each division except in the three spheres of wholly urban development are taken as broadly representing urban and rural populations respectively, but this has the disability that the quasi-urban populations of 500 or more are counted as rural and included in the total population of shires. The aggregate population of each division is also shown. Figures for individual municipalities and shires grouped in these divisions for each of these four census years are shown on pages 234 to 239 of the Statistical Register, 1945-46 and in subsequent issues.

Table 127.—Divisional Distribution of Population.

		Popul	ation.		Increase in Population.			
Division,	1911.	1921.	1933.	1947.	1911 to 1921.	1921 to 1933.	1933 to 1947.	
		MUNI	CIPALITIES.					
Coastal—						-		
Metropolis Balance of Cumberland North Coast Greater Newcastle and	667,149 22,718 25,901	$\begin{array}{c} 971,866 \\ 33,638 \\ 29,442 \end{array}$	1,235,267 46,775 38,401	1,484,004 76,657 48,376	304,717 10,920 3,541	$\substack{263,401\\13,137\\8,959}$	$\substack{248,737 \\ 29,882 \\ 9,975}$	
Coalfields Balance of Hunter and	72,082	106,780	132,244	159,318	34,698	25,464	27,074	
Manning Greater Wollongong Balance of South Coast Tableland—	10,830 9,817 16,488	13,492 12,796 18,831	19,167 19,181 22,097	22,598 29,926 25,763	2,662 2,979 2,343	5,675 6,385 3,266	$3,431 \\ 10,745 \\ 3,666$	
North Central South Western Slopes—	$\substack{18,521\\39,904\\16,322}$	19,439 52,160 19,854	22,653 54,732 24,634	25,574 65,616 27,638	918 12,256 3,532	3,214 2,572 4,780	$2,921 \\ 10,884 \\ 3,004$	
North Central South Central Plains—	16,597 15,825 27,430	16,004 17,329 33,002	20,548 23,917 44,243	23,315 27,013 52,867	(-) 593 1,504 5,572	$\substack{4,544\\6,588\\11,241}$	2,767 3,096 8,624	
North	5,445 5,834 10,233 39,741	5,378 6,197 11,317 32,152	7,266 8,401 14,003 33,403	8,435 8,731 14,230 36,535	(-) 67 363 1,084 (-) 7,589	1,888 2,204 2,686 1,251	1,169 330 227 3,132	
	1,020,837	1,399,677	1,766,932	2,136,596	378,840	367,255	369,664	
•		S	HIRES.	<u>'</u>	<u> </u>			
Coastal-							İ	
Metropolis Balance of Cumberland North Coast Greater Newcastle and	23,885 75,755	47,255 93,710	77,373 108,106	130,049 110,836	23,370 17,955	30,118 14,396	52,676 2,730	
Coalfields Balance of Hunter and	31,384	43,140	56,819	68,170	.11,756	13,679	11,351	
Manning Greater Wollongong Balance of South Coast Tableland—	69,514 15,123 37,984	79,460 19,585 87,538	93,782 23,672 40,867	93,308 33,034 41,094	9,946 4,462 (-) 446	14,322 4,087 3,329	(-) 474 9,362 227	
North Central South	33,248 79,239 27,879	31,901 77,835 26,315	31,428 86,511 25,322	25,889 78,372 22,270	(-) 1,347 (-) 1,404 (-) 1,564	(-) 473 8,676 (-) 993	(-) 5,539 (-) 8,139 (-) 3,052	
Western Slopes— North Central South	38,946 33,410 61,510	35,515 34,870 62,991	42,512 39,804 71,875	35,814 31,588 59,405	(-) 3,431 1,460 1,481	6,997 4,934 8,884	(-) 6,698 (-) 8,216 (-)12,470	
Central Plains—  North  Central  Riverina  Western Division	17,549 14,239 38,652 19,424	17,973 13,444 52,175 15,161	22,415 19,324 70,314 18,591	20,558 14,928 60,818 14,588*	(-) 795 13,523 (-) 4,263	4,442 5,880 18,139 3,430	(-) 1,857 (-) 4,396 (-) 9,496 (-) 4,003	
Total	617,741†	688,868	828,715	840,721†	71,127	139,847	12,006	

Table 127.—Divisional Distribution of Population—continued.

		Popul	ation.		Increase in Population.			
Division,	1911,	1921.	1933.	1947.	1911 to 1921,	1921 to 1933.	1933 to 1947.	
	<u> </u>	Тота	L POPULATI					
Coastal—	1				nt.			
Metropolis Balance of Cum-	667,149	971,866	1,235,267	1,484,004	304,717	263,401	248,737	
berland	46,603	80.893	124.148	206,706	34.290	43,255	82,558	
North Coast Greater Newcastle	101,656	123,152	146,507	159,212	21,496	23,355	12,705	
and Coalfields Balance of Hunter	103,466	149,920	189,063	227,488	46,454	39,143	38,42	
and Manning Greater Wollon-	80,344	92,952	112,949	115,906	12,608	19,997	2,95	
gong Balance of South	24,940	32,381	42,853	62,960	7,441	10,472	20,10	
Coast ,	54,472	56,369	62,964	66,857	1,897	6,595	3,89	
North	51,769	51,340	54,081	51,463	(-) 429	2,741	(-) 2,61	
Central	119,143	129,995	141,243	143,988	10,852	11,248	2,74	
South Vestern Slopes—	44,201	46,169	49,956	49,908	1,968	3,787	(–) ´4	
North	55,543	51,519	63,060	59,129	(-) 4,024	11,541	(-) 3,93	
Central	49,235	52,199	63,721	58,601	2,964	11,522	(-) 5,12	
South Sentral Plains—	88,940	95,993	116,118	112,272	7,053	20,125	(-) 3,84	
North	22,994	23,351	29,681	28,993	357	6,330	(-) 68	
Central	20,073	19,641	27,725	23,659	(-) 432	8,084	(-) 4,06	
Riverina	48,885	63,492	84,317	75,048	14,607	20,825	(-) 9,26	
Western Division	59,165	47,313	51,994	51,123	(-) 11,852	4,681	(-) 87	
	1,638,578	2,088,545	2,595,647	2,977,317	449,967	507,102	381,67	
Lord Howe Island	105	111	161	179	6	. 50	1	
figratory	8,051	11,715	5,039	7,342	3,664	(-) 6,676	2,30	
New South Wales	1,646,734	2,100,371	2,600,847	2,984,838	453,637	500,476	383,99	

<sup>\*</sup> Unincorporated Area.

Disproportionate growth in population is very evident. The three principal spheres of urban development, Cumberland including the Metropolis, Newcastle and Wollongong, made steady progress, but while in nearly all other divisions there was, up to 1933, some accretion of population it was accompanied by a shift to the towns at the expense of the rural areas. The steady growth of rural population over earlier periods up to 1933 was followed by a rapid loss of rural population between 1933 and 1947. The change in trend was so marked that in the shires in the central part of the State, i.e., in the Tablelands and Western Slopes divisions, the population was smaller in 1947 that it was twenty-six years earlier. These shires embrace 46 per cent. of the area of the State excluding the Western Division.

A steady redistribution of population may be regarded as a natural phenomenon associated with the economic development of the State. The heavy loss of country population in the last intercensal period was extraordinary, but in a measure it may have been closely allied to war and early post-war conditions and at this stage it is not possible to assess its long-term significance.

Growth of urban population is a concomitant of the development of secondary industry whereas mechanisation and increasing efficiency in rural industries tends to contraction of rural employment. It is improbable that a shrinking rural population would support the growth of dependent town populations and it is significant that whereas in the twelve.

<sup>†</sup> Includes Unincorporated Area.

and a quarter years, 1921 to 1933, there were substantial and parallel increases in shire and municipal populations, there followed in the fourteen years 1933 to 1947 almost general and considerable decline in shire populations, and the growth in municipal populations was much retarded compared with the previous period. In view of changes in working practice and living habits made possible by the development of motor transport it may be that some erstwhile rural proprietors and rural workers now maintain their families in the towns and therefore the true loss of population dependent directly upon urban pursuits in country towns may be greater than is apparent. Probably, where there has been substantial growth in country municipalities, the decentralisation and development of secondary industries has been the major factor.

The figures in Table 127, being confined to actual numbers recorded at each census, indicate only the net increase or decrease over the intercensal periods and mask the full extent of the changes taking place in the various areas. The data disclose that considerable emigration has occurred from most country districts over a lengthy period. To reveal the extent of these changes more clearly the net movement in each district, taking separate account of natural increase and net migration is shown in Table 128.

Table 128.—Population Changes: Increase by Natural Increase and by Migration.

	,	1911 to 1921.		ı	1921 to 1933.			
Division.	Natural Increase.	Net Immigration.	Total Increase,	Natural Increase.	Net Immigration.	Total Increase.		
Cumberland—  Metropolis  Balance of Cumberland	120,862 4,036 124,898	183,855 30,254 214,109	304,717 34,290 339,007	138,710 11,019 149,729	124,691 32,236 156,927	263,401 43,255 306,656		
Coast, Other—  North	26,490 42,799 14,260 83,459	(-) 4,904 16,263 (-) 4,922 6,437	21,496 59,062 9,338 89,896	31,542 53,408 14,636 99,586	(-) 8,187 5,732 2,431 (-) 24	23,355 59,140 17,067 99,562		
Tableland— North Central South	12,413 20,655 7,864 40,932	(-) 12,842 (-) 9,803 (-) 5,896 (-) 28,541	(-) 429 10,852 1,968 12,391	11,592 23,402 9,242 44,236	(-) 8,851 (-) 12,154 (-) 5,455 (-) 26,460	2,741 11,248 3,787 17,776		
Western Slopes— North Central South	10,479	(-) 14,687 (-) 7,515 (-) 10,889 (-) 33,091	(-) 4,024 2,964 7,053 5,993	12,292 13,358 23,810 •49,460	(-) 751 (-) 1,836 (-) 3,685 (-) 6,272	11,541 11,522 20,125 43,188		
Ceutral Plains—  North Central Riverina	4,268	(-) 5,212 (-) 4,700 2,756 (-) 7,156	357 (-) 432 14,607 14,532	$ \begin{array}{r} 6,344\\ 4,913\\ 15,734\\ \hline 26,991 \end{array} $	$ \begin{array}{ccc} (-) & 14 \\ & 3,171 \\ & 5,091 \\ \hline & 8,248 \end{array} $	6,330 8,084 20,825 35,239		
Western Division	. 8,879	(-) 20,731	(-) 11,852	7,319	(-) 2,638	4,681		
Lord Howe Island Migratory  New South Wales		3,664 134,692	$\frac{3,664}{453,637}$	,  377,321	(-) 6,676 123,155	(-) 6,676 500,476		

Table 128.—Population Changes: Increase by Natural Increase and by Migration—continued.

		1933 to 1947.		1911 to 1947.		
Division.	Natural Increase.	Net Immigration.	Total Increase.	Natural Increase.	Net Immigration.	Total Increase.
Cumberland— Metropolis Balance of Cumberland	114,751 17,747	133,986 64,811	248,737 82,558	374,323 32,802	442,532 127,301	816,855 160,103
	132,498	198,797	331,295	407,125	569,833	976,958
Coast, Other—  North  Hunter and Manning  South	34,960 45,694 18,206	(-) 22,255 (-) 4,312 5,794	12,705 41,382 24,000	92,902 141,901 47,102	(-) 35,346 17,683 3,303	57,556 159,584 50,405
	98,860	(-) 20,773	78,087	281,905	(-) 14,360	267,545
Tableland—  North  Central  Sonth	10,043 21,166 7,767	(-) 12,661 (-) 18,421 (-) 7,815	(-) 2,618 2,745 (-) 48	34,048 65,223 24,873	(-) 34,354 (-) 40,378 (-) 19,166	(-) 306 24,845 5,707
	38,976	(-) 38,897	79	124,144	(-) 93,898	30,246
Western Slopes— North Central South	11,830 12,836 21,713	(-) 15,761 (-) 17,956 (-) 25,559	(-) 3,931 (-) 5,120 (-) 3,846	34,785 36,673 63,465	(-) 31,199 (-) 27,307 (-) 40,133	3,586 9,366 23,332
	46,379	(-) 59,276	(-) 12,897	134,923	(-) 98,639	36,284
Central Plains—  North Central Biverina	6,560 5,489 14,128	(-) 7,248 (-) 9,555 (-) 23,397	(-) 688 (-) 4,066 (-) 9,269	18,473 14,670 41,713	(-) 12,474 (-) 11,084 (-) 15,550	5,999 3,586 26,163
	26,177	(-) 40,200	(-) 14,023	74,856	(-) <b>39,108</b>	35,748
Western Division	8,463	(-) 9,334	(-) 871	24,661	(-) 32,703	(-) 8,042
Lord Howe Island Migratory	14	2,303	18 2,303	19	(-) <sup>55</sup>	74 (-) 70 <b>9</b>
New South Wales	351,367	32,624	383,991	1,047,633	290,471	1,338,104

(-) Denotes net emigration.

The table reveals that over the period 1911 to 1947 emigration occurred from all divisions of the State with the exception of those embracing the major spheres of urbanisation described previously. The tendency slackened in the period 1921-1933 but recurred more strongly between 1933 and 1947. In the period 1911 to 1921 the divisions other than Cumberland, Hunter and Manning, and South Coast, gained 136,983 by natural increase but lost 94,423 or 69 per cent. of this number by emigration and in 1921-1933 the corresponding numbers and movements were 159,548, 35,309, and 22 per cent., but between 1933 and 1947 all the natural increase of these divisions of 154,955 together with 15,007 of other population was lost by emigration.

Divisions in which the loss, relative to natural increase, was the heavier over the full period of 36 years were Western Division which lost 8,042 more than its natural increase, the Tablelands divisions which together lost 76 per cent., Western Slopes divisions which lost 73 per cent., and Plains divisions, including Riverina, which lost 52 per cent. of their natural increase. Apart from the Western Division, the north-western portion of the State lost the greatest proportion; indeed the Northern Tablelands lost 306 more than its natural increase and thus had a population smaller than it had thirty-six years ago, and the North-Western

Slopes lost 90 per cent. The Riverina held its own natural increase and gained a further 7,847 by migration in the first two periods, no doubt due to closer settlement and the development of the Murrumbidgee Irrigation Area, but between 1933 and 1947 neither the Irrigation Area nor the balance of the Riverina Division held their full natural increase.

Over the full period reviewed the Cumberland division, including the Metropolis, gained 569,833 by migration, whereas the Hunter and Manning division embracing Greater Newcastle and the coalfields area, and the South Coast division embracing Greater Wollongong, little more than held the equivalent of their natural increase. The population of the Cumberland division had so grown that at 30th June, 1947 it contained 56.6 per cent. of the people in the State.

#### THE POPULATION OF THE METROPOLIS.

The metropolis, as constituted for statistical purposes since 1st January, 1933, embraces the City of Sydney, forty-eight other municipalities, portion of another, and the islands of Port Jackson. The municipalities are listed in the following table and comprise the district to which the population and vital statistics of the metropolis relate. The area (exclusive of Port Jackson and the quarantine area, which cover 19 square miles) is 245 square miles. The population was 1,484,004 at 30th June, 1947.

Areas contiguous with the metropolis which contain centres of population more or less suburban in character are listed at the end of Table 129.

The following statement shows the population of each municipality within the present boundaries of the metropolis, and of the contiguous areas mentioned above, at the censuses of 1911, 1921, 1933 and 1947. Shipping population and full blood aboriginals are not included.

The population of the metropolis was distributed unevenly. At the 30th June, 1947, the City of Sydney and the inner industrial suburbs, occupying only 9.5 per cent. of the area of the metropolis, contained 21.8 per cent. of the inhabitants. In slightly more than half of this area the density of the population ranged from 26 to 59 persons per acre. On the other hand, the density of the outlying suburbs was little more than one or two persons to the acre, but considerable development is taking place in these areas.

Densities shown above are calculated from total area used for all purposes. Calculated on the basis of land in residential areas the true density is much higher and ranges up to 200 per acre in the City and up to 30 per acre in the outer suburbs.

The population of most of the suburbs in the inner industrial area is either stationary or diminishing as dwellings are being replaced by industrial and commercial establishments. Improved transport facilities tend to encourage the movement of population from the more congested areas to the less thickly populated suburbs. Whereas the population in the City of Sydney and the inner industrial suburbs decreased by 5 per cent. between 1921 and 1947 there were marked increases in the other groups of suburbs, viz.—Inner western 55 per cent., northern 72 per cent., outer western 82 per cent., eastern 97 per cent., Illawarra-Bankstown 107 per cent., and contiguous areas 182 per cent.

The population in the city and eight of the nearer suburbs of Annandale, Balmain, Glebe, Erskineville, Newtown, Redfern, Darlington and Alexandria, decreased by more than 5,000 between 1911 and 1921, and by more

than 33,000 between 1921 and 1933, representing a total decrease of nearly 16 per cent. in the twenty-two and a quarter years. Between 1933 and 1947 the City gained 7,617, but in the nearby eight suburbs there was a loss of 344 persons. On the other hand, the aggregate population of the outlying suburbs of Bankstown, Canterbury, Concord, Dundas, Ryde, Homebush, Lane Cove, Kogarah, Vaucluse, Enfield and Randwick, increased from 59,381 in 1911 to 168,237 in 1921, to 311,442 in 1933 and to 405,412 in 1947, or by 583 per cent. in the 364 years. Despite this marked growth the density of population in these suburbs in 1947 was only 6.9 persons per acre, compared with 30.2 persons per acre in the city and the eight adjacent suburbs. On the whole, Sydney has a very low average density of population as compared with other cities of the British Commonwealts.

Table 129.—Population of Metropolitan Municipalities.

		Population		Proportional Increase	Average Number	
Municipality.	1911.	1921.	1933.	1947.	1911 to 1947.	of Persons per Acre, 1947.
City of Sydney	112,921	104,153	88,308	95,925	per cent. (—) 15	29.79
Inner Industrial—						
Alexandria	10,123	9,793	9,018	8,060	() 20	7.67
Annandale	11040	12,648	12,205	12,396	` 10	35.83
Balmain	32,038	32,104	28,272	28,398	() 11	29.07
Botany	4,409	6,214	8,287	9,462	115	4.36
Darlington	3,816	3,651	3,053	3,032	() 21	56.15
Erskineville	7,299	7,553	6,645	6,881	(-) 6	36.99
$Glebe \dots \dots$		22,754	19,874	20,510	(—) 7	39.59
Leichhardt		29,356	30,209	29,462	21	25.51
Mascot		10,929	14,363	17,984	208	8.09
Newtown	26,498	28,168	25,290	24,933	() 6	51.94
Paddington	24,317	26,364	24,674	24,681	1	58.62
Redfern		23,978	18,834	18,637	() 24	46.13
St. Peters		12,700	12,554	12,404	. 47	13.75
Waterloo	10,072	11,199	11,659	11,241	12	13.60
Total	214,682	237,411	224,937	228,081	6	19.47
Illawarra-						
Bankstown—	-				1	
Bankstown	2,039	10,670	25,384	42,646	1,992	$2 \cdot 22$
Bexley	6,517	14,746	20,539	26,862	312	14.06
Canterbury	11,335	37,639	79,050	99,396	777	12.03
Enfield		8,530	14,782	17,231	400	10.29
Hurstville		13,394	22,663	33,939	420	5.55
Kogarah		18,226	30,646	39,298	465	8.18
Marrickville		42,240	45,385	46,866	53	24.81
Rockdale	14,095	25,189	39,123	47,290	236	9.27
Total	81,569	170,634	277,572	353,528	333	7.22
Inner Western—						
Ashfield	20,431	33,636	39,356	44,761	119	21.85
Burwood	0.000	15,709	19,373	21,734	132	19.65
Concord	4,076	11,013	23,213	29,401	621	11.00
Drummoyne		18,761	29,215	32,985	280	16.63
Homebush		1,622	3,189	3,501¶		5.48
Petersham		26,236	26,941	29,451	36	34.65
Strathfield	4,046	7,594	12,147	15,751¶	289	8.58
Total	68,999	114,571	153,434	177,584	157	15.95

Table 129.—Population of Metropolitan Municipalities—continued.

Brandot 114	<u> </u>	Population	Proportional Increase	Average Number		
Municipality.	1911.	1921.	1933.	1947.	1911 to 1947.	of Persons per Acre 1947.
Outer Western—			ļ		per cent.	
Auburn	5,559	13,563	20,114	21,902	294	8.46
Granville	7,231	13,328	19,718	26,942	273	6.67
Holroyd*	2,082‡	4,626‡	8,426	12,966	523	5.89
Lidcombe	5,418	10,522	17,379	20,281	274	3.88
Parramatta	12,465	14,594	18,076	20,816	67	9.15
Total	32,755	56,633	83,713	102,907	214	6.30
Northern—						
70 1	1,136	3,523	6,017	7,635	572	2.80
Eastwood	968	2,133	3,025	4,108	324	1.39
Ermington and	900	2,100	0,020	4,100	324	1.99
Rydalmere	1,716	1,981	2,364	3,298	92	1.62
Hunter's Hill	5,013	7,300	8,989	11,497	129	8.12
Ku-ring-gai	9,458	19,209	27,931	39,874	322	1.97
Lane Cove	3,306	7,592	15.138	19,817	499	7.72
Manly	10,465	18,507	23,259	33,455	220	10.75
7/5	13,243	20,056	23,665	27,562	108	12.81
	34,646	48,438	49,752	60,379	74	23.55
TD .1.	5,281	14,854	27,861	36,418	590	5.23
Willoughby	13,036	28,067	42,511	51,945	298	9·48
Total	98,268	171,660	230,512	295,988	201	5.67
Eastern—						
TO 1 1 1	10.469	50,841	78,957	100,931	410	11.00
¥7 1	19,463		7,205		419	11.89
T071	1,672	3,727	55,902	9,138	447	11.47
	19,831	36,797		74,800	277	33.66
Woollahra	16,989	25,439	34,727	45,122	166	23.94
Total	57,955	116,804	176,791	229,991	297	17.17
Total, Metropolis Proper §	667,149	971,866	1,235,267	1,484,004	122	9.45
riopor 3 ···			2,200,201	1,101,001		
Contiguous Areas—						
Cabramatta and		9.100	0.105	10.000	000	1 40
Canley Vale Fairfield	1,181	3,106 5,303	6,107 8,709	10,966 15,987	829	1.40
	2,226				618	1.00
Holroyd †	1,850‡	4,111‡		11,163	503	1.50
Liverpool	3,938	6,302 15,287	6,315	12,642	221	•48
Hornsby	8,901	7,705	22,596 13,525	31,816	257 908	•25
Sutherland $\parallel$ Warringah $\parallel$	2,896 2,823	9,643	16,054	29,184 33,176	1,075	·32 ·51
Total	23,815	51,457	80,794	144,934	509	•42
Total, Metropolitan						
and Contiguous Areas	690,964	1,023,323	1,316,061	1,628,938	136	3.27

<sup>•</sup> Pitt and Merrylands Wards only. † Guildford and Wentworth Wards only. ‡ Estimated. {Present boundaries. ¶ Strathfield and Homebush Municipalities were amalgamated on 23rd May, 1947, but the census figures are shown for the former areas to preserve comparability. ■ Shire.

The population of the metropolis proper, excluding aboriginals and shipping, at each census since 1861, is shown in the following table, together with the proportion which the metropolitan population bears to that of the whole State.

To permit of more accurate comparison with previous censuses the figures for the 1933 census have been shown on the basis of the boundaries as they existed before and after 1st January, 1933.

Census.		Population	of M		Proportion of Males to Total	Proportion of	
census.	Males.	Females.	Total.	Numerical,	Propor- tional.	Popu- lation.	Population of State.
					per cent.	per cent.	per cent.
7th April, 1861	46,550	49,239	95,789	41,865*	77.64*	48.60	27.3
2nd April, 1871	66,707	70,879	137,586	41,797	43.63	48.50	27.4
3rd April, 1881	112,763	112,176	224,939	87,353	63.49	50.13	30.0
5th April 1891	103 753	180 580	383 333	158 394	70.42	50.54	34.0

481,830

629,503

899,059

1,117,884

1,235,267

1,484,004

98,497

147,673

269,556

218,825

336,206

248,737

Table 130.—Growth of Population of Metropolis.

31st March, 1901

3rd April, 1911

4th April, 1921

30th June, 1933†

30th June, 1947

245,812

323,775

465,567

585,982

644,163

236,018

305,728

433,492

531,902

591,104

714,821

25.69

30.65

42.82

 $24 \cdot 34$ 

37.41

20.14

48.98

48.57

48.22

47.58

47.85

48.17

35.6

38.2

42.8

43.0

47.5

49.7

The tendency of population to concentrate in the metropolis was very marked in the period 1871 to 1921. It slackened appreciably between 1921 and 1933, but gained impetus under war-time conditions.

At the census of 1947 there was an excess of four females in every hundred of the metropolitan population.

Sydney is the third largest city of the British Commonwealth, being exceeded in population by London and Calcutta.

The population of the capital cities (including suburbs) of Australia is shown below:-

	Area	Census, 1911.	Census, 1921.	Census, 1933.		Census, 1947.	
City.	at 1947 Census.	Population.	Population.	Population.	Population.	Proportion to Population of Whole State or Territory.	Average Number of Persons per Acre.
	acres.					per cent.	
Sydney†	156,968	665,067	967,240	1,235,267	1,484,004	49.7	9.5
Melbourne	198,525	588,971	766,465	991,934	1,226,409	59.7	$6 \cdot 2$
Brisbane	246,400	139,480	209,946	299,748	402,030	36.3	1.6
Adelaide	102,987	189,646	255,375	312,619	382,454	59.2	3.7
Perth	122,305	106,792	154,873	207,440	272,528	54.2	$2 \cdot 2$
Hobart	55,722	39,937	52,361	60,406	76,534	29.8	1.4
Darwin	2,880	958	1,399	1,566	2,538	23.4	9
Canberra	26,880		899	7,325	15,156	89.7	.6
	1						

<sup>\*</sup> Excluding aboriginals and shipping, † Population within the area embraced by the present boundaries.

<sup>\*</sup> Since 1851.

<sup>769,183</sup> † Same area as in 1921.

<sup>‡</sup> Area as extended on 1st January, 1933.

## THE CITIES AND TOWNS OF NEW SOUTH WALES.

Many variations in local government areas in New South Wales in recent years increase the difficulties of presenting population data of towns as distinct and individual localities. Convenient data are available only for those towns incorporated as municipalities, taking municipal boundaries as town limits. In the general movement toward larger administrative areas, many former municipalities have been absorbed into shires and, in addition, several extensive "City" areas embracing a number of localities have been created. These are the Cities of Greater Newcastle, Greater Wollongong, Maitland and Blue Mountains. Henceforth these "Cities" will be treated as single centres of population.

Development of iron and steel works and subsidiary industries in association with coal-mining led to the growth of two important industrial centres outside the metropolis. Greater Newcastle is the larger, with a population in 1947 of 127,138, and the other is Greater Wollongong with 62,960. The silver-lead mining town of Broken Hill had a population of 27,054. The City of Blue Mountains, a vast area comprising mainly tourist centres, contained 21,316, and the City of Maitland, situated near both coal mining and rich rural areas, had 19,151 persons. Goulburn is the centre of a thriving farming district with some industrial development, and had a population of 15,991. Wagga Wagga with 15,340 and Lismore with 15,214 have outgrown Lithgow which showed a transitory war-time gain but in 1947 had only 14,461 inhabitants. Cessnock, a coal mining town, lost population over the last intercensal period, and with 13,029 was replaced in order by Albury with 14,412 and Orange with 13,780.

Apart from the centres in the County of Cumberland dependent upon the city, there were at the census of 1947, fifteen country towns, including those already mentioned, with a population exceeding 10,000; thirteen between 5,000 and 10,000; and seventeen between 3,000 and 5,000.

The following table gives a comparison of the populations at the last six censuses of the cities and towns which had more than 3,000 inhabitants at the census of 1947. They are listed in the order of numerical importance at that date. Those municipalities contiguous to the Metropolis (as shown in Table 129) are omitted. Aboriginals and shipping population are not included.

The populations as shown represent the number of persons living within the boundaries of the municipalities; in some of the towns the residential area extends beyond these boundaries and the total population of such towns is greater than the figure stated in the table.

Some relatively large urban areas have not been incorporated as municipalities but are under shire administration. Many of these are virtually suburbs of Sydney though not embraced within the metropolitan district as defined on page 182. Others are associated with the industrial area of Newcastle and the northern coalfields. Port Kembla, Bulli, Corrimal and Thirroul have not been shown as they are embraced by the City of Greater Wollongong shown in Table 132. Only five of these towns owe their growth to rural development, viz., Griffith and Leeton in the Murrumbidgee Irrigation Area, Murwillumbah and Coff's Harbour on the North Coast, and Gosford, the centre of the State's principal citrus growing area.

Table 132.—Growth of Principal Cities and Towns of N.S.W.

								<del>''</del>
Municipal	1.4×r				Population (	at Census.		
m u merpur	iloy.		1891.	1901.	1911.	1921.	1933.	1947.
Sydney and St	ıburb	os	383,333	481,830	629,503*	899,059	1,235,267*	1,484,004
Greater Newca			49,910	53,741	54,603	84,372	104,485	127,138
Greater Wollon			Í	Í	24,940	32,371	42,853	62,960
Broken Hill			19,789	27,500	30,972	26,337	26,925	27,054
Blue Mountain	ıs		Í	Í	11,825	17,997	14,713	21,316
Maitland			11,352§	11,3618	12,377§	13,068		
Goulburn			10,916	10,612	10,023	12,715	14,849	15,991
Wagga Wagga			4,596	5,108	6,419	7,679	11,631	15,340
Lismore			2,925	4,378	7,381	8,700	11,762	15,214
Lithgow	•••		3,865	5,268	8,196	13,275	13,444	14,461
Albury			5,447	5,821	6,309	7,751	10,543	14,412
Orange	•••		5,064	6,331	6,721	7,398	9,634	13,780
Cessnock ¶			203	165	5,102	9,340	14,385	13,029
Tamworth"		•	4,602	5,799	7,145	7,264	9,913	12,071
Grafton & Gra			4,445	5,147	5,888	6,077	8,551	12,025
Bathurst			9,162	9,223	8,575	9,440	10,413	11,871
Dubbo	•••		3,551	3,409	4,452	5,032	8,344	9,545
Armidale			3,826	4,249	4,738	5,407	6,794	7,809
Parkes	•••		2,449	3,181	2,935	3,941	5,846	6,897
Casino			1,486	1,926	3,420	3,455	5,287	6,698
Inverell			2,534	3,293	4,549	4,360	5,305	6,530
Kempsey			2,194	2,329	2,862	3,613	4,824	6,330
Forbes			3,011	4,294	4,436	4,376	5,355	5,949
Cowra			1,546	1,811	3,271	3,716	5,056	5,473
Glen Innes			2,532	2,918	4,089	4,974	5,352	5,453
Taree			716	871	1,205	1,765	4.581	5,423
St. Marys			1,823	1.840	1,794	1.952	2,811	5,370
Cootamundra			2,026	2,424	2,967	3,531	4,683	5,250
Queanbeyan			1,262	1,219	1,273	1,825	4,019	5,033
Penrith			3,099	3,539	3,682	3,604	3,911	4,961
Wellington			1,545	2,984	3,958	3.924	4,320	4,723
Young	•••		2,746	2,755	3,139	3,283	4,011	4,656
Gunnedah			1,362	1,910	3,005	2,664	3,591	4,314
Narrandera	•••		1,815	2,255	2,374	2,985	4,119	4,186
Temora	•••		915	1,603	2,784	3,048	3,823	4,179
Mudgee			2,410	2,789	2,942	3,170	3,993	4,178
Junee			1,682	2,190	2,531	3,560	4,213	4,010
Singleton			2,595	2,872	2,996	3,270	3,668	3,940
Muswellbrook			1,298	1,710	1,861	2,152	3,287	3,939
Windsor		•••	2,033	2,039	3,466	3,808	3,247	3,853
Campbelltown			2,381	2,053 $2,152$	1,825	2,345	2,835	3,725
Deniliquin	•••	•••	$\frac{2,331}{2,273}$	2,644	2,494	2,660	3,192	3,668
Bowral			2,258	1,752	1,751	2,620	3,005	3,660
Nowra		•••	1,705	1,752	1,884	2,020	2,978	3,551
Richmond	•••		1,242	1,202	1,857	2,008	2,343	3,410
Narrabri		•••	1,977	2,286	2,514	2,008 2,358	2,343 $2,911$	3,329
Ingleburn **	•••		217	362	379	2,506 545	1,881	3,329
Yass	•••	•••	1,770	2,220	2,136	2,502	2,866	3,254
Ballina		•••	1,084	1,819	$\frac{2,130}{2,061}$	$\frac{2,302}{2,768}$	3,042	3,202
Shellharbour	•••	•••	1,587	1,919 $1,929$	1,512	$\frac{2,708}{1,527}$	1,877	3,202
Tenterfield		•••	2,477	2,604	2,792	$\frac{1,527}{2,493}$	2,622	3,046
TOUROUT	•••	•••	2,411	2,004	4,194	2,433	2,022	3,040
		ı		'			1	I

<sup>\*</sup> Area extended since previous census. † Area slightly extended in 1938. ‡ Not available. § Municipalities of East Maitland, West Maitland and Morpeth only. ¶ Incorporated 1926 and district enlarged. || Grafton South incorporated 1896. \*\* Incorporated 1896.

Table 133.—Population, Towns and Localities Not Separately Incorporated.

			Provincial Towns,			
Name. Population. 30th June, 1947.		Population. 30th June, 1947.	Name.	Popu- lation. 30th June, 1947.		
8,286	Kurri Kurri	5,440	Griffith	5,727		
7,330	Belmont	4,786	Murwillumbah	4,954		
$\mathbf{d}$	Cardiff South.	4,755	and Coff's			
	,,,,,,	0.174	Gosford	4,410		
	руаноса	,,11 <del>±</del>	Leeton Moss Vale	3,912 3,096		
	1ation. 30th June, 1947.  8,286  7,330  5,940  ad h. 4,775  4,475	Name.   Name	Name.   Station.   Solth June.   Solth Jun	Alation.   Name.   Station.   Name.   Station.   Stat		

<sup>\*</sup> Located within the shires shown as contiguous to the Metropolitan Area in Table 129.

The population of most of the larger towns has grown at a fairly uniform rate since 1891, and some towns have shown rapid increase in recent years.

Greater Newcastle, after twenty years of slow progress, has made rapid headway since 1911, largely on account of the growth of its manufacturing industries, as had the mining and industrial region of Greater Wollongong, but the population in the silver-lead mining town of Broken Hill has been virtually stable for about thirty years. Lithgow, a coal-mining and partly a manufacturing town, grew rapidly until 1927 when the ironworks were removed, and there has been little further permanent progress, a large war-time accession having been practically dispersed by 1947. The newly-created City of Maitland, dependent to a great extent on coal mining, had a population of 19,151 in 1947, but owing to changes in boundaries since the previous census the extent of its development cannot be stated.

By 1921 Goulburn, after twenty years of stagnation, had developed into the leading town of the interior not dependent on mining, and still narrowly occupies that place.

Between 1921 and 1947 the municipalities which showed the greatest percentage increases were Ingleburn, 500; Taree, 207; Queanbeyan, 176; St. Marys, 175; Shellharbour, 104; and Wagga Wagga, 100. Queanbeyan is within about six miles of Canberra, and its growth is connected with the development of the Australian Capital. The population of the Australian Capital Territory, most of whom reside in Canberra, increased from 2,572 in 1921 to 16,905 in 1947. Grafton, Casino, Dubbo, Albury and Orange almost doubled in population between 1921 and 1947.

#### SEX DISTRIBUTION OF POPULATION.

The distribution of population in sexes in New South Wales throughout past years reflects the demographic forces which have gradually brought about equality in numbers. Although in early years there was a marked preponderance of males the stage has been reached at which there is approximate equality of numbers of males and females.

The distribution of the sexes at each census from 1861 to 1947, and as estimated at 30th June, 1948, was as follows:—

	Distribution	of Population in	Sexes (excluding	Aboriginals).	
Census.	Num	aber.	Prop	ortion,	Males per 100 Females.
	Males.	Females.	Males.	Females.	
			per cent.	per cent.	
1861	198,488	152,372	56.57	43.43	130
1871	274,842	228,156	54.64	45.36	121
1881	410,211	339,614	54.71	45.29	121
1891	609,666	517,471	54.09	45.91	118
1901	710,264	645,091	52.40	47.60	110
1911	857,698	789,036	52.08	47.92	109
1921	1,071,501	1,028,870	51.01	48.99	101
1933	1,318,471	1,282,376	50.69	49-31	103
1947	1,492,211	1,492,627	50.00	50.00	100
1948*	1,513,563	1,511,756	50.00	50.00	100

Table 134.—Sexes of Population.

The great excess of males over females in the early years was due to several factors. The development of the colony was first stimulated by the "gold rushes" and later depended on the pastoral and mining industries. This, combined with remoteness from the Old World, led to far greater immigration of men than of women. In later years the predominance of males among immigrants tended to increase the disparity between the sexes. On the other hand, the higher rate of mortality among males renders the natural increase of females the greater, despite the excess of male over female births. As a consequence the excess of males diminished, and the diminution was hastened by the wars of 1914-1918, and 1939-1945 and the slender flow of immigrants since 1928.

The effects of these forces are seen clearly in the following table, which shows the excess of males in each quinquennial age group at each census from 1891 to 1947.

<sup>\*</sup> Estimate as at 30th June.

Age Group	Age Excess of Males. Males per 100 F Group.						.00 Fen	nales.			
(Years.)	1901.	1911.	1921.	1933,	1947.	1891.	1901.	1911.	1921.	1933.	1947.
	1,755 2,243 1,485 (-) 313 (-) 2,370 230 5,899 10,742	3,140 2,017 1,138 1,966 4,464 4,040 4,332 4,413		4,757 8,759 8,255 2,913 3,561 5,094 1,903 (-) 5,467		142	102 103 102 100 96 100 112 126	103 102 102 102 105 106 107 109	103 103 103 102 94 96 105	104 103 103 102 103 105 105 94	104 103 103 104 101 98 98 102
50-54 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84	11,494 9,337 6,288 4,258 4,541 3,768 2,570 734 309		4,510 3,996 6,648 6,843 5,283 3,606 1,013 268	1,867 5,025 4,580 1,549 1,054 1,659 1,145 83 (-) 412	5,074 189 (-) 5,002 424 (-) 1,822 (-) 3,959 (-) 5,164 (-) 3,798	142 145 154 155 163 142	134 139 133 128 137 141 149 126 120	117 124 131 132 122 118 124 127 122	107 108 116 120 119 120 168 104 101	102 108 107 103 103 105 105 101	102 105 100 94 101 97 92 85 83 82
85 and over Not stated	122 2,072	(-) 60 687	(-) 52 418	(-) 604 368 ———	189	150 	118	94	97	80	71
Total	*35,164	68,662	42,631	36,095	(-) 416	118	110	109	104	103	100

Table 135.—Masculinity of Population at Various Ages.

The censuses of 1861 to 1881 disclosed an excess of males at ages from the early 'twenties onwards. This was maintained by the greater net immigration of males than of females, especially in the period up to 1891. At the census of 1891 the excess was apparent from age 25, but more especially from age 30, and the higher ages reflected the cumulative effects of earlier migration. After 1891 migration had no appreciable effect on the population for twenty years, and when it again became prominent it was on a relatively lower scale. As a result the excess masculinity apparent in 1891 at ages 25 and over is noticeable at each succeeding census at progressively later ages, when the greater male mortality at higher ages also was asserting its influence. By 1921 the masculinity in each age group was assuming a more natural order. The excess of females at ages 20 to 29 in that year was the result mainly of the loss of men at the war and the excess of male deaths in the influenza epidemic of 1919, a further factor being the immigration of war brides. The effect of this disturbance was still apparent in the age group 30-44 years at the 1933 census, and in the group 45-59 years in 1947. A further loss of men in the war of 1939-45 resulted in an excess of females at each year of age from 25 to 35 in 1947. From 1921 also, there is increasing evidence of the effect of the higher male mortality after middle age, which, by 1947, had caused an excess of females at all ages from 48 years upwards, except at ages 57, 58 and 59 years, at which ages there was virtual equality of numbers.

The numerical increase in the excess of males at the earlier ages is due principally to an increase in the annual number of births. Births reached a peak in 1922, continued high until 1928, then declined and did not increase again until in the five years before the census of 1947. Births in those years in record numbers caused the excess of 6,188 males in the age group under five years.

The masculinity of the population reflects the average masculinity of births, which varies between 104 and 106 males per 100 females, and the higher death rate among male infants. At these early ages migration has little effect and a natural order is observable in ages under 20 throughout the whole period reviewed in the table.

<sup>\*</sup> Excludes half-caste aboriginals in a nomadic state who are included in Table 134.

(-) Denotes excess of females.

#### AGES OF THE POPULATION.

As in many other countries, the average age of the population of New South Wales is increasing. Although variations in the age constitution have been due, in part, to immigration and the loss occasioned by wars and epidemics, the weightier factors in this State are the decreasing birth rate and an increase in the average duration of life.

The following table shows the number of persons in quinquennial age groups as recorded at each of the last two censuses, exclusive of full-blood aboriginals.

Table 136.—Ages of Population.

Age Group.	300	th June, 193	3.	30t)	h June, 1947	· _	Increase, 1933-1947.
(Years.)	Males.	Females.	Total.	Males.	Females.	Total.	Total.
							,
0-4	117,281	112,524	229,805	149,627	143,439	293,066	63,261
<b>5</b> - 9	127,800	124,041	251,841	119,400	115,888	235,288	(-) 16 <b>,553</b>
10-14	126,664	123,409	250,073	108,465	105,017	213,482	(-) 36,591
<b>1</b> 5–19	123,438	120,525	243,963	120,089	115,369	235,458	(-) 8,505
20-24	116,312	112,751	229,063	123,695	$122,\!522$	246,217	17,154
25-29	105,279	100,185	205,464	118,166	120,197	238,363	32,899
30-34	93,247	91,344	184,591	116,942	118,936	235,878	51,287
35-39	87,139	92,606	179,745	111,100	108,846	219,946	40,201
40-44	91,077	89,210	180,287	97,488	92,414	189,902	9,615
<b>4</b> 5 <b>–4</b> 9	85,401	80,376	165,777	88,422	88,233	176,655	10,878
50-54	69,000	64,414	133,414	79,166	84,168	163,334	29,920
55-59	50,674	49,125	99,799	78,811	78,387	157,198	57,399
60-64	42,643	41,589	84,232	63,854	65,676	129,530	45,298
65-69	33,452	31,793	65,245	45,706	49,665	95,371	30,126
70-74	23,996	22,851	46,847	28,828	33,992	62,820	15,973
<b>7</b> 5–79	13,351	13,268	26,619	18,307	22,105	40,412	13,793
80-84	5,511	5,923	11,434	9,209	11,294	20,503	9,069
85 and over	2,389	2,993	5,382	4,283	6,015	10,298	4,916
Not stated	<b>3,</b> 817	3,449	7,266	10,653	10,464	21,117	13,851
Total	1,318,471	1,282,376	2,600,847	1,492,211	1,492,627	2,984,838	383,991

(--) Denotes decrease.

To eliminate a tendency to mis-statement at certain ages, and to distribute the unstated ages, the recorded figures need to be subjected to a process of graduation or smoothing. The resultant graduated number of persons at each age at the censuses of 1921 and 1933 is shown on pages 371 and 372 of the "Statistical Register" for 1935-36. Graduated numbers are not yet available for the census of 1947.

The sex distribution of the population at various ages is analysed in Table 135.

The changing age constitution of the population is illustrated in the following table, which shows the proportion of persons recorded in quinquennial age groups at each census since 1861.

Table 137.—Age Distribution of Population.

		_	Propo	rtion per	cent. of To	otal Popul	ation.*		
Age Group. (Years.)					Census.				
	1861.	1871.	1881.	1891.	1901.	1911.	1921.	1933.	1947.
0-4	16.22	16.30	14.84	14.66	11.75	12.26	11.40	8.86	9.89
5 <b>→</b> 9	12.10	14.02	13.22	12.76	12.29	10.27	11.11	9.71	7.94
10-14	10.38	11.47	11.81	10.92	11.95	9.59	9.79	9.64	7.20
15–19	9.77	8.48	10.11	9.62	10.44	10.01	8.37	9.41	7.94
20-24	9.69	8.41	9.95	9.85	9.41	10.38	8.22	8.83	8.31
25-29	10.00	8.67	8.08	9.45	8.31	9.08	8.53	7.92	8.04
30-34	7.80	7.55	6.76	7.86	7.34	7.58	8.62	7.12	7.96
35–39	5.82	6.56	6.19	5.99	6.95	6.46	7.43	6.93	7.42
40-44	5.74	5.15	5.28	4.75	5.80	5.76	6.17	6.95	6.41
45-49	4.17	3.61	4.18	4.04	4.24	5.14	5.04	6.39	5.96
50-54	3.39	3.54	3.27	3.33	3.33	4.23	4.39	5.14	5.51
<b>55–59</b>	1.81	2.26	2.00	2.43	2.59	2.96	3.67	3.85	5.30
60-64	1.71	1.85	1.85	1.81	2.14	2.22	2.97	3.25	4.37
<b>65</b> –6 <b>9</b>	.64	.97	1.11	1.06	1.65	1.73	1.90	2.51	3.22
70–74	.43	.72	.74	.77	.96	1.17	1.20	1.81	2.12
75-79	·18	•25	∙35	•42	· <b>4</b> 8	.73	.72	1.03	1.36
80-81	٦	1.0	0.0	∫ ·19	-26	.30	•32	•44	.69
85 a d over	} ·15	-19	•26	∫ .09	-11	•13	·15	•21	-36
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Under 15	38.70	41.79	39.87	38.34	35.99	32.12	32.30	28.21	25.03
15-64	59.90	56.08	57.67	59.13	60.55	63.82	63.41	65.79	67.23
$65 \mathrm{\ and\ over}$	1.40	2.13	2.46	2.53	3.46	4.06	4.29	6.00	7.74
21 and over	†	48.06	48.02	49.93	51.62	55.77	57.57	60.55	65.42

<sup>\* 1861-1911</sup> calculated from total population including aboriginals; 1921-1947 excluding aboriginals, † Not available.

The age constitution of the population in 1861 was rendered abnormal by the large influx of persons in early manhood during the gold rushes of the preceding decade and by the large number of births in the preceding quinquennium, but, thereafter, as the result of a more steady growth of the population, it became more uniform. The birth rate commenced to decline steadily in 1864, and although the effect of this influence is partly obscured by the effects of migration and reduced mortality, its extent is indicated broadly by the decline in the proportion of children at ages under 10 years at each succeeding census. The decline in the birth rate resulted

in an actual loss of numbers in the age group 0-4 years in 1933 as compared with 1921, but the recovery, due to war-time influences, in the number of births for some years prior to the 1947 census, caused the number in this age group to be 63,261 greater in 1947 than in 1933.

During the period of seventy-six years from 1871 to 1947, the proportion of children under 15 years of age to the total population fell from 41.8 per cent. to 25.0 per cent., and the proportion of aged persons over 64 years of age and of persons at what may be called the productive ages (15 to 64 years) increased considerably. The proportion of persons of dependent age, viz., those under 15 and over 64 years, decreased from 43.92 per cent. in 1871 to 32.77 per cent. in 1947, but the component age groups show opposing trends, and the proportion of persons 65 years of age and over actually increased more than five-fold in the 86 years covered by Table 137.

The proportion of adults in the population has grown very steadily since 1881.

#### CONJUGAL CONDITION OF THE POPULATION.

The proportion of married persons in New South Wales at the census of 1947 was 46.6 per cent., as compared with 39.6 per cent. in 1933 and 37.4 per cent. in 1921. The population (exclusive of aboriginals) at the census of 1947, arranged according to conjugal condition, was as follows:—

Table 138.—Conjugal Condition of Population, 30th June, 1947.

Conjugal C	andition			Number.		(st	Proportion. (stated condition.)			
Conjugui	onumon	•	Males.	Females.	Total.	Males.	Females,	Total.		
Never marrie	ed—					per cent.	per cent.	per cent.		
Under age	15		377,492	364,344	741,836	25.38	24.47	24.93		
Age 15 an	d over		364,588	293,007	657,595	24.51	19.68	22.09		
Married	•••	•••	691,343	695,466	1,386,809	46.47	46.72	46.€0		
Widowed	•••	•••	43,029	122,909	165,938	2.89	8.26	5.58		
Divorced	•••	•••	11,154	12,914	24,068	•75	⋅87	⋅80		
Not stated		•	4,605	3,987	8,592		•••			
Total		<b>.</b>	1,492,211	1,492,627	2,984,838	100.00	100.00	100.00		

Persons never married constituted 47.02 per cent. of the total population, but of these 741,836 (or 24.93 per cent. of the population) were under the age of 15 years. The males over the age of 15 years who had never been married numbered 364,588, and females 293,007. The proportion of

married persons to those over the age of 15 years rose from 49.2 per cent. in 1911 to 55.1 per cent. in 1921, declined to 54.9 per cent. in 1933, but at 61.8 per cent. in 1947 was much greater than ever before.

The proportion of males and females in each group as recorded at each census from 1861 to 1947 is shown below:—

_		M	ales.			Females.				
Census.	Pensus.  Never Married.		Widowed.	Divorced.	Never Married,	Married.	Widowed.	Divorced.		
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.		
1861	69.34	28.23	2.43	*	61.09	35.14	3.77	*		
1871	69.96	27.59	2.45	*	62.89	32.82	4.29	*		
1881	70.64	26.94	2.42	*	63.52	31.75	4.73	*		
1891	69.78	27.41	2.78	.03	62.87	32.11	5.00	.02		
1901	68.46	28.69	2.75	·10	62.43	32.00	5.46	•11		
1911	65.00	32.18	2.67	.15	59.30	35.03	5.52	·15		
1921	60.51	36.68	2.60	.21	55.70	38.16	5.91	•23		
1933	57.73	39.03	2.85	•39	52.49	40.16	6.89	•46		
1947	49.89	46.47	2.89	.75	44.15	46.72	8.26	.87		

Table 139 .- Proportionate Conjugal Condition of Population.

There has been a steady decline since 1881 in the proportion of males and females never married, and a corresponding increase in the proportion married. This has been due in a large measure to the altered age constitution of the population consequent on the declining birth rate. The proportion of widowers has shown no appreciable increase during the period, although the proportion of widows has increased continuously, attaining the high proportion of over 8 per cent. of the total female population in 1947. The increase in the proportion of divorced persons of both sexes has been relatively very rapid. The number and proportion of widowed and divorced persons are exclusive of those re-married.

## BIRTHPLACES OF THE POPULATION.

Broadly, nationality is determined in New South Wales by the common law principle of locality of birth, although it is provided also that, irrespective of place of birth, any child whose father was a British subject, or a child born on a British vessel, shall be deemed a British subject.

The nationality of the population of the State at the census of 1947 was preponderatingly British, no less than 99.5 per cent. of the inhabitants being of British allegiance. The proportion born in Australia was 89.8 per cent.

## ABORIGINALS.

The number of aboriginals in New South Wales during the first century after the date of settlement is not known accurately, but it is certain that they were never numerous.

<sup>\*</sup> Divorce proceedings were first permitted under Matrimonial Causes Act, 1873.

At the censuses of 1871 and 1881 aboriginals living a wild or semi-wild state were not enumerated. The first careful enumeration was made in 1891, when it was found that there were only 5,097 aboriginals of full blood. Since then their number has declined progressively. The number of aboriginals of full-blood enumerated at censuses since 1871 was as follows:—

Census.	Males.	Females.	Total.	Census.	Males.	Females.	Total.
1871	709	274	983*	1911	1,152	860	2,012
<b>1</b> 881	938	705	1,643*	1921	923	674	1,597
1891	2,896	2,201	5,097	1933	617	417	1,034
1901	2,192	1,586	3,778				
		l					

Table 140 .- Aboriginals (Full Blood).

The numbers of half-castes enumerated at successive censuses were as follows:—In 1891, 3,183; in 1901, 3,147; in 1911, 4,512; and in 1921, 4,588, of whom 2,367 were males and 2,221 females. There were 8,309 enumerated at the census of 1933, of whom 4,358 were males and 3,951 females.

Since 1924 endeavour has been made to obtain an annual census of aboriginals with the assistance of the Aborigines' Welfare Board and the police. Owing to the difficulty of tracing individuals, it is considered that these enumerations are not precise, but the figures may be regarded as reliable estimates. The number recorded at the annual collection of 30th June, 1933 was 195 greater than at the census enumeration of the whole population. At 30th June, 1941 the number of aboriginals of full blood recorded in this way was 594, of whom 375 were males and 219 females. Of the total 40 were nomadic, 112 were in regular employment, and there were 442 others. The number living in supervised camps was 314, excluding any who were in regular employment.

Half-castes recorded at the annual collection of 30th June, 1941 numbered 10,022 of whom 5,361 were males and 4,661 females. However, it is probable that this is a considerable overstatement through the inclusion of full-bloods, and possibly of quadroons and persons of lesser caste.

Of the half-castes recorded in 1941, 505 were nomadic, 2,057 were in regular employment, and there were 7,460 others. The number living in supervised camps was 3,403.

Owing to difficulties in collecting data the annual census of aboriginals has been suspended since 1941.

#### POPULATION OF AUSTRALIAN STATES.

The following table shows the population and the proportion of population of each State of the Commonwealth at the last three censuses. Aboriginals of full blood are excluded.

During the intercensal period 1933 to 1947, the population of New South Wales increased at an average annual rate of 0.99 per cent., which was faster than that of any other State of the Commonwealth, excepting

<sup>\*</sup> Excluding aboriginals in wild or semi-wild state.

Queensland, where the rate was 1.11 per cent. In order, rates in other States were:—Western Australia, 0.98 per cent.; Tasmania, 0.88 per cent., Victoria, 0.87 per cent.; and South Australia, 0.76 per cent. The average for the whole of Australia was 0.96 per cent.

Table 141.—Population of Australian States and Territories.

			Population.		Propos	rtion in each r Territory.	1 State
State or Territory		Census, 1921.	Census, 1933.	Census, 1947.	Census, 1921,	Ceusus, 1933.	Census, 1947.
				l:	per cent.	per cent.	per cent.
New South Wales	•••	2,100,371	2,600,847	2,984,838	38-67	39.23	39.38
Victoria		1,531,280	. 1,820,261	2,054,701	28.19	27-46	27.11
Queensland		755,972	947,534	1,106,415	13.92	14.29	14.60
South Australia		495,160	580,949	646,073	9.13	8.76	8.53
Western Australia	•••	332,732	438,852	502,480	6.06	6.62	6.63
Tasmania		213,780	227,599	257,078	3.91	3.43	.3.39
Northern Territory	•••	3,867	4,850	10,868	.07	.07	•14
Australian Capital	Ter.	2,572	8,947	16,905	.05	·14	22
Commonwealth	•••	5,435,734	6,629,839	7,579,358	100.00	100.00	100.00

#### POPULATION OF THE WORLD.

The ratio of the population of New South Wales to that of the rest of the world may be gauged by reference to the following table, derived from the Statistical Year Book of the League of Nations, 1942-44. Although based on the latest information available, comparisons should not be drawn between totals for continents (and some countries) published from year to year as the figures in some instances are mere approximations founded on estimates for which little data exist. Apart from such cases, the populations stated are estimates founded on the latest available census figures. The data relate to the year 1939 and therefore do not take account of the political changes which have occurred since then. Complete post-war population estimates related to present day political areas are not available from authoritative sources.

Table 142.—Population of World.

Region or Country,	Area in Square Miles (as at 31st	Estimated Population at 31st		rtionate bution.	Number of Persons
negion of Country.	December, 1939).	December, 1939.	Area.	Popula- tion.	per Square Mile.
'	thousands.	thousands.	per cent.	per cent.	
Continental Divisions—					
Europe*  Asia* U.S.S.R.† in Europe and Asia Africa  North and Central America  South America  Australasia and Oceania	2,079 10,348 8,176 11,699 8,742 6,938 3,301	402,000 1,154,000 172,000 158,000 184,878 88,500 10,800	4·1 20·2 15·9 22·8 17·0 13·6 6·4	18·5 53·2 7·9 7·3 8·5 4·1 ·5	193.4 111.5 21.0 13.5 21.1 12.8 3.3
World Total‡	51,283	2,170,178	100.0	100.0	42:3
Countries (including Dependencies)\$— British Commonwealth of Nations China¶	11,456 4,287 8,176 3,739 4,623 262 809 226 1,466 3,286 12,953	537,163 450,000 172,000 150,183 105,771 104,120 78,553 79,855 52,466 40,700 399,367	$22.3 \\ 8.4 \\ 15.9 \\ 7.3 \\ 9.0 \\ .5 \\ 1.6 \\ .4 \\ 2.9 \\ 6.4 \\ 25.3$	24·8 20·7 7·9 6·9 4·8 3·6 3·7 2·4 1·9 18·4	46·9 105·0 21·0 40·2 22·9 397·4 97·1 353·3 35·8 12·4 30·8
World Total‡	51,283	2,170,178	100.0	100.0	42.3

<sup>\*</sup> Excluding U.S.S.R.

## MIGRATION.

A large movement of population takes place each year between New South Wales and other Australian States, but is due more to the movement of tourists, business men, and persons following itinerant callings, than to immigration or emigration of a permanent nature:

Although a similar qualification applies to oversea movements, migration experience is governed by several factors and of these the principal is the arrival of migrants assisted by the State and of other permanent settlers who are attracted in large numbers in times of economic stability.

<sup>†</sup> Union of Soviet Socialist Republics (Russia).

<sup>‡</sup> Excluding Arctic and Antarctic Regions.

<sup>§</sup> Excluding Mandated Territories.

<sup>¶</sup> Including Manchukuo.

<sup>||</sup> Including the Saar Territory, Austria, Sudetenland and Memel.

The interstate and oversea movement of people to and from New South Wales is shown in the following table. Figures for war years relate to civilian movement only and include evacuees:—

	Arrivals in New South Wales.			Departu	res from Ne Wales.	w South	Excess of Arrivals over Departures, (Net Immigration.)			
Year.	Inter- state.	From Oversea Countries Direct.	Total.	Inter- state.	To Oversea Countries Direct.	Total.	Inter- state.	Oversea Countries Direct.	Total.	
1937	151,586	45,208	196,789	146,812	43,237	190,049	4,774	1,966	6,740	
1938	155,606	50,040	205,646	155,231	46,672	201,903	375	3,368	3,743	
1939	142,400	49,119	191,519	142,206	43,407	185,613	194	5,712	5,906	
1940	115,607	27,320	142,927	125,747	20,217	145,964	(-)10,140	.7,103	(-) 3,037	
1941	118,269	16,942	135,211	126,429	14,188	140,617	(-) 8,160	2,754	() 5,406	
1942	136,642	4,689	141,331	126,859	3,994	130,853	9,783	695	10,478	
1943	133,774	2,720	136,494	131,279	2,699	133,978	2,495	21	2,516	
1944	164,089	4,622	168,711	146,617	5,405	152,022	17,472	(-) 782	16,689	
1945	200,452	10,020	210,472	193,185	10,489	203,674	7,267	(-) 469	6,798	
1946	263,511	22,501	286,012	258,723	31,767	290,490	4,788	(-) 9,266	(~) 4,478	
1947	339,305	46,640	385,945	343,346	43,025	386,371	(-) 4,041	3,615	(-) 426	

Table 143.-Interstate and Oversea Migration.

Arrivals from and departures to "oversea countries direct" as shown above represent complete records of persons arriving or departing oversea direct. They include persons permanently transferring their residences as well as casual movements of Australians and of oversea visitors. The numbers are dissected into these categories in Table 144.

The records of interstate movement of population which are used for the purposes of migration statistics are restricted to the minimum required to determine the net migration and therefore do not represent the total numbers arriving or departing. Records for sea and air traffic do not distinguish those who hold return tickets and therefore they are included. Since 1st July, 1926 the movement by rail has been represented by single interstate rail tickets, disregarding return tickets.

Road movements, though considerable, are not recorded but probably do not affect the annual net migration materially.

Fluctuations in net migration generally, are due largely to the influence of economic conditions. The onset of depression in 1929 was marked by a heavy diminution in net immigration followed in 1930 and 1931 by substantial net emigration. With a recovery in economic conditions in the subsequent years, the State showed small annual gains of population by migration until war commenced.

Table 143, showing figures compiled on the basis described, illustrates the restrictive effect of war-time conditions on the movement of civilian population in recent years. The years 1945 and 1946 were affected in considerable degree by post-war readjustments.

<sup>\*</sup> Including movement of population to and from oversea countries via other States.

(-) Denotes excess of departures.

## OVERSEA MIGRATION.

The aggregate oversea movement of population shown in the last table may be analysed to distinguish between persons migrating for permanent settlement, Australians travelling abroad, and visitors from other countries.

Particulars of intention in regard to residence of persons arriving and departing oversea have been collected since 1st July, 1924. The classification is made according to intention declared upon embarkation or disembarkation and as intentions in some cases are changed subsequently, the figures do not show the actual movements precisely. In the classification, "permanent residence" denotes residence for one year or more. The following summary shows the number in the various categories in the years 1944 to 1947, comparing the totals for New South Wales with those for all Australia.

Table 144.-Migrants-New South Wales and Commonwealth.

Arrivals and	1	044.	11	945.	19	946.	1	947.
Departures Oversea Direct.	New South Wales.	Common- wealth,	New South Wales.	Common- wealth.	New South Wales,	Common- wealth,	New South Wales.	Common- wealth.
Arrivals—								
Permanent New Arrivals	1,492	2,460	4,557	7,143	9,561	18,217	16,530	31,765
Australians return- ing	1,431	2,025	2,654	3,760	4,830	6,330	15,216	18,305
Visitors	1,699	2,961	2,805	4,104	8,110	10,343	14,894	17,698
Evacuees*		51	4	369			•••	
Total arrivals	4,622	7,497	10,020	15,376	22,501	34,890	46,640	67,768
Departures— Australian residents departing per- manently†	1,801	4,272	5,479	10,785	19,210	29,806	<b>13,2</b> 55	19,579
Australians who intend to return	1,937	2,605	1,828	2,788	4,699	6,702	14,319	18,764
Visitors	1,667	2,803	3,182	4,432	7,858	13,530	15,451	18,814
Total departures	5,405	9,680	10,489	18,005	31,767	50,038	43,025	57,157

These totalled 3,080 in New South Wales and 12,586 in Australia in the years 1941-45.
 † Includes repatriating evacuees.

The New South Wales figures relate to persons leaving oversea ships at New South Wales ports, irrespective of the ultimate State of destination, and persons from other States joining oversea ships at New South Wales ports. The majority of travellers between Australia and other countries (particularly visitors from abroad) embark or disembark at ports in New South Wales (principally Sydney).

Grand Total

10,020

10,489 (-)

## Nationality of Oversea Migrants.

The following table shows the nationalities of persons who arrived in or departed from Australia via the ports of New South Wales in the last three years:-

1945. 1947. 1946. Racial Origin Excess Excess Nationality. Arri-Depar-Depar-Deparof Arriof Arriof Arrivals. tures. vals. tures. vals, tures. vals, 17,538 British 8.823 9,529 24,956 37,823 37,094 French 331 853 ... 271 German 2.9 37 235 192 43 522 251 ... . . . Italian 36 25 20 145 289 204 (-) Russian 160 129 United States of America ... 235 214 21 1,594 2,222 2,213 1,193 32 ( 7ugoslav 34 2,815 1,446Other European 425219  $20\bar{6}$ 1,408 10,389 (-) Total, European 9,867 522 -21,53330,688 (-)9,155 45,136 41,230 3,906 Chinese 27 378 533 (-) 795 1,113 318 Indian 38 (-) 428499 Japanese 5 (-) ···<sub>2</sub>|(-) ... ٠. 30 (-) Syrian 18 12 Other Asiatic 20  $1\bar{3}\bar{1}$ Polynesian, Melanesian, etc. Otlier Non-European 17 3 18 7 (-) 20 20 27 (-) 10 10 (-) 20 Total, Non-Enropean 153 100 53 968 1,079 (-) 111 1,504 1,795 (-) 291

Table 145.—Nationality of Oversea Migrants.

22,501

31,767 (-)9,266

46,640

The numbers in the table include visitors from oversea and Australian residents travelling abroad.

To better indicate the effect of migration upon the racial composition of the population, the above figures have been analysed according to intention as to residence expressed at the time of arrival or departure, and the net "permanent" movement of persons of certain nationalities since 1938 is shown in the following table. The figures represent the balance between those departing permanently and those who arrive intending to reside for one year or longer.

I able	146.—	-17	et Fe	ermane	nt	. 0	ver	sea	IATI	grai	101	ю	IAS	ttioi	nan	ty.		
Racial Orig National			1939.	1940.	1	941.	19	42.	19	43.	19	44.	19	45,	19	46.	19	47.
British German Greek Yalian Yngoslav United States of Other European Total Europ	America		(-) 435 2,706 288 544 114 57 1,216	119 68 156 41 46 407	(-) (-)	8 1 86 222	(-)	42	(-) (-)	99	(–)	308 1 3 1  30 26		,160 8 3 28 2 40 184		49 70 37 7 813 937	[_]	136 363 366 11 8 766 1,955
Chinese Natives of India Japanese Syrian Other Asiatic Other Non-Euro	, Ceylon		(-) 12 43 35 5	(-) 78 19 (-) 38 (-) 1 1	(-)	12 7		  4 5	(-) (-)	7  3 1	( <del>-</del> )	18 12  5 1	<u>`</u>	29 10  1 5 6	( <del>-)</del>		(-) (-)	220 25 3 3 31 10
Total Non-P Grand To	-	• • •	$\frac{149}{4,639}$		l`	$\frac{102}{1,905}$	I	37 186		7 198	( <u>-)</u> (-)	309	(-)		(-) (-)	195 9,649	<u>`</u>	168 3,3 <b>99</b>

<sup>469</sup> (-) Denotes excess of departures.

M.S.

## Immigration Restriction.

At Common Law aliens have no legal right of admission to any British country, and migration to and from New South Wales is regulated principally by statutes of the Federal Parliament, e.g., the Immigration Act, 1901-1948, and the Contract Immigrants Act, 1905.

Any person may be refused admission to Australia who fails to write from dictation by an officer not less than fifty words in any prescribed European language; any person who has not the prescribed certificate of health; any feeble-minded person; any person suffering from serious transmissible disease or defect, tuberculosis or certain other serious diseases; any person convicted of crime in certain circumstances; any prostitute or person living by prostitution; any advocate of revolution, assassination, or the unlawful destruction of property; or any person 16 years of age or over not possessed of a passport as prescribed. Should such persons gain admission, they may be deported. As a general rule persons formerly domiciled in the State cannot be excluded from return after temporary absence.

#### Registration of Aliens.

Regulations under the immigration laws of the Commonwealth provide machinery for checking and regulating the entry of aliens and for collecting comprehensive personal records upon entry into the Commonwealth, but until recently, except in war-time, there were no provisions for recording their movements within the Commonwealth.

The Aliens Act, 1947 (Commonwealth) which came into operation on 1st January, 1948 repealed the Aliens Registration Act, 1939, and superseded the National Security (Alien Control) Regulations. It provides for a Register of Aliens in each State or Territory of the Commonwealth, and that all aliens over the age of 16 years must register unless exempted under the provisions of the Act and notify change of their address or occupation to the responsible officer within seven days.

Upon registration, an alien receives a certificate of registration which he must produce upon demand by a competent authority and surrender before leaving the Commonwealth.

#### Assisted Migration.

Particulars of the history of assisted migration will be found in earlier issues of the Year Book.

Assisted immigration throughout the years has been intermittent. The degree of assistance afforded, types of persons to be admitted, method of choosing them and countries whence they came, as matters of Government policy, have been dependent to a very large extent upon local conditions.

After the war of 1914-18, Governments of the State, the Commonwealth and the United Kindgom co-operated in migration policy. Information relating to schemes in operation from 1919 to 1932 and from 1937 to 1939, the number of arrivals since 1832, and other particulars of assisted immigrants were published in the 1940-41 issue of the Year Book. Assisted migration was suspended upon the outbreak of war in September, 1939, and the last assisted immigrant under the 1937-39 scheme arrived in New South Wales early in 1941.

In March, 1945, an agreement was made between the Commonwealth and United Kingdom Governments for a scheme of free and assisted passages for British residents desirous of migrating to Australia, with provisions similar to those of the earlier schemes. The Commonwealth Government is to undertake recruitment, selection, medical examination and transportation, and the States will be responsible for reception, accommodation on arrival and after-care of migrants. Provision is made for individual and group nominations, and in connection with the latter, for the co-operation of auxiliary voluntary migration organisations. The scheme commenced in April, 1947, and is to operate only while conditions for settlement are favourable.

The United Kingdom Government will provide free passages for British ex-servicemen and women and persons with war-time service in the Merchant Navy, and, under its Empire Settlement Acts, will assist migration of other suitable British subjects normally resident in the United Kingdom. These latter, male or female, are to contribute £10 if of or above the age of 19 years and £5 if between the ages of 14 and 19 years toward the cost of passage. The remainder of the cost of passage of these, and the cost of free transport of children is to be shared equally by the two Governments.

The maintenance of British child migrants brought to Australia under the auspices of voluntary migration organisations is the subject of agreement between the Commonwealth and State Governments. The States are to pay 3s. 6d. per week for each child up to the age of 14 years (or 16 years if the child remains at school) subject to the concurrent payments of Commonwealth child endowment of 7s. 6d. (10s. from November, 1948) per week and of the United Kingdom Government's contribution of 5s. sterling (6s. 3d. Australian currency) per week.

The legal guardianship of British evacuee children still in Australia, and of migrant children brought to Australia otherwise than with, or who live under the care of their parents or relatives, is vested under the Immigration (Guardianship of Children) Act, 1946 in the Minister for Immigration. He may delegate his powers of guardianship to State authorities. Generally, those who sponsor the admission of such children are granted the custody of them.

The Commonwealth Government has arranged to grant assisted passages to British Empire and United States ex-servicemen and to persons of European countries, but aliens are to be admitted only in numbers and of classes as can be readily assimilated.

In an agreement with the International Refugee Organisation, a subsidiary of the United Nations Organisation, signed at Geneva on 21st July, 1947, Australia has undertaken to admit an annual quota of 12,000 displaced persons, to be selected by the Commonwealth, for each of which it will contribute £10 toward the cost of passage. The Commonwealth has agreed to increase the quota to 20,000 a year if the Organisation can provide the necessary ships. The first party of displaced persons arrived in November, 1947. These migrants spend the first month after arrival in reception and training centres to acquire a knowledge of the Australian way of life and to be prepared for their successful placement in the community.

## NATURALISATION.

Naturalisation is a function of the Commonwealth, and certificates of naturalisation are issued under Federal enactments. Until 26th January, 1949 a certificate of naturalisation as a British subject was issued under the provisions of the Nationality Act, 1920-1946, but on that date this Act was replaced by the Nationality and Citizenship Act, 1948 whereby the certificates relate to naturalisation as an Australian citizen. All persons possessing Australian citizenship are British subjects.

On account of the small non-British element in the population of New South Wales the number of naturalisations generally has not been large, but, in recent years, the relatively higher proportion of alien migrants who settled permanently has caused a proportionate increase in the number of naturalisations. In the 71 years, 1849 to 1919, there were 17,426 persons naturalised but in the 28 years 1920 to 1947 there were 16,006. There were 1,227 naturalised in 1944, 1,651 in 1945, 2,193 in 1946 and 805 in 1947. The following table shows the birthplaces of the persons naturalised in New South Wales since 1920:—

Birthplace		Number.	Birthplace.	Number.	Birthplace.	Number.
-	-	- <del></del>				
Italy		4,088	Czechoslovakia	351	Lithuania	. 70
Greece		2,292	Norway	301	Belgium	. 69
Germany	•••	1,928	Hungary	296	Turkey	. 54
Austria	•••	827	France	283	Bulgaria	. 34
$\mathbf{Russia}$		783	Finland	255	Portugal	. 10
Poland		761	United States	249	Servia	. 6
Yugoslavia		506	Switzerland	242		
Estonia		408	Holland	196	Other	655
Denmark		358	Latvia	105		

Table 147.—Birthplaces of Persons Naturalised, 1920 to 1947.

Figures showing birthplaces of persons naturalised each year are published in the Statistical Register.

100

Total

16,006

Roumania

Spain

Syria

Sweden

357

345

### PASSPORTS.

The Passports Act, 1938-1948 of the Commonwealth, which came into operation on 1st July, 1939, replaced an Act of 1920. It is uniform with similar legislation in other British countries. Under its provisions it is not compulsory for persons leaving Australia to be possessed of a valid passport. But in practice a passport usually is needed because it must be produced for entry into most British and foreign countries. Moreover it is prescribed by the Immigration Act, 1901-1948, that all persons over 16 years of age who desire to enter Australia must be in possession of a valid passport in addition to landing permit or other necessary authority even on return after temporary absence.

The fee for a Commonwealth passport is £1, and as a general rule it is endorsed as valid for five years from the date of issue. It may be renewed for any consecutive period from one to five years provided the total period does not exceed ten years; then a fresh passport must be obtained. A fee of 2s, is charged for each year of renewal.

British visas are added to the passports of aliens; the fees being 8s. for an ordinary visa and 2s. for a transit visa.

British subjects travelling to foreign countries must have their passports endorsed for travel to those countries, bearing, where required, the visa of the respective consular representatives. The necessity for consular visas has been dispensed with in respect of travel to some foreign countries.

# VITAL STATISTICS

REGISTRATION OF BIRTHS, DEATHS, AND MARRIAGES.

CIVIL registration of births, deaths, and marriages was inaugurated in New South Wales in March, 1856; when a general registry was established, and a Registrar-General appointed by the Governor. The law relating to registration is contained in the Registration of Births, Deaths, and Marriages Act, 1899-1948, and those relating to marriage in the Marriage Act, 1899-1948. For registration purposes New South Wales was divided into 125 registry districts from 1893 until 1st July, 1948 when the number was reduced to 97, each having a registry office in the charge of a district registrar. Some districts have additional registry offices with an assistant district registrar in charge. On 1st July, 1948 there were 197 registry offices.

The births of all children born alive are required to be registered within sixty days of the birth. After the expiration of sixty days a birth cannot be registered unless some person present at the birth, or the parent, makes a statutory declaration within six months of the birth. Prior to 1st April, 1935, no birth could be registered after the expiration of six months, but the amending Act, which came into operation on that date, provides for such registrations upon proper authority being obtained. A child is considered to have been born alive if it has breathed and has been wholly born into the world whether it has had an independent circulation or not. As a general rule, births are registered promptly in order to obtain the benefit of the maternity allowances.

The registration of stillbirths was commenced on 1st April, 1935, and the law requires that registrations be made within 21 days. For purposes of registration a stillborn child is one of seven months gestation or over not born alive, and includes any child not born alive which measures at least fourteen inches, but does not include any child which has actually breathed.

Before interment or cremation, notice of the death of any person must be supplied to the District Registrar by a relation of the deceased, or by the householder or tenant of the house or place in which the death occurs. Such notice must be accompanied by a proper certificate as to the cause of death. When a dead body is found, the death is registered by the coroner or by the nearest Justice of the Peace.

Marriages may be celebrated only by a minister of religion registered for that purpose by the Registrar-General, or by the District Registrar of the district in which the intended wife ordinarily resides. In the latter case the parties to be married must sign, before the District Registrar, a declaration that they desire to be married, and affirming the usual place of residence of the intended wife. Marriage of minors is permissible only with the written consent required by law: Marriage with a deceased wife's sister or a deceased brother's widow is valid in law in New South Wales.

In March, 1948 there were 2,850 persons registered as ministers of religion for the celebration of marriages in New South Wales. The distribution amongst the various denominations is shown below, viz.: 669 belonged to the Church of England, 952 were Roman Catholic, 318 Methodist, 327 Presbyterian, 84 Congregational, 133 Baptist, 94 belonged

to the Salvation Army, 104 were Seventh Day Adventists, 45 belonged to the Church of Christ, 16 to the Latter Day Saints, and 12 to the Jewish faith. There were 41 other religious bodies, represented by 96 ministers.

## MARRIAGES.

The following table shows the average annual number of marriages and the crude rates per 1,000 of the population since 1881:—

Period.	Average Annual Number of Marriages.	Rate per 1,000 of Population.	Period.	Number of Marriages,	Rate per 1,000 of Population
1861-65 1866-70 1871-75	3,384 3,654 4,242	9:04 8:04 7:77	1936-40 1941-45	25,295* 28,505*	9°29 9°97
1876-80 1881-85 1886-90	5,181 7,147 7,730	7·83 8·48 7·46	1937 1938	23,188 24,579	8.60 9.03
1891-95	7,985	6.65	1939	25,471 $80,364$ $29,983$ $84,583$	9*26
1896-00	9,093	6.93	1940		10*93
1901-05	10,485	7.40	1941		10*70
1906-10	12,745	8.23	1942		12*20
1911–15	16,745	9·31	1943	26,302	9·20
1916–20	16,756	8·03	1944	26,426	9·15
1921–25	18,041	8·20	1945	25,283	8·67
1926–30	19,253	7·86	1946	31,68 <del>1</del>	10.76
1931–35	18,742	7·20	1947	30,172	10.11

Table 148.-Marriages, New South Wales.

Marriage rates declined steadily for ten years prior to 1894, when the rate was only 6.25 per 1,000 of population. After that year an improvement, remarkable for its regularity, was experienced, until in 1912 the rate (9.56 per 1,000) was the highest rate recorded to that time. The rate was slightly higher in 1915, due to marriages of soldiers prior to their departure overseas. There was a sharp decline during the absence of many men of marriageable age, then an exceptional rise after their return from active service, the rate in 1920 being 9.76 per 1,000.

After the First World War the rate was fairly steady at about 8.11 per 1,000 until acute depression set in and it declined to its lowest level, 6.02 per 1,000, in 1931. Subsequently the rate rose slowly year by year until the early part of 1939 when there was a slackening in the post-depression increase. After the outbreak of war in September, 1939 there was a sudden change, and the number of marriages in the next four months was higher by 1,056 than in September to December, 1938.

In 1940 the number of marriages increased by 4,893 to 30,364 and the high level was maintained in 1941. In the following year there was a further exceptional rise to 34,533 marriages, representing 12.20 per 1,000 of population, and both number and rate far exceeded any previous record. In this year many Australian troops returned from war service abroad, and a large number of Allied forces arrived in Australia; moreover, prevailing economic conditions of industrial activity and heavy war-time expenditure favoured an increase in marriages. By 1943 the impetus of war-time factors weakened and the number of marriages from 1943 to 1945 was little above the pre-war average, but the number again increased sharply with the rapid return and demobilisation of servicemen after October, 1945. There were 31,684 marriages in 1946, and 30,172 in 1947.

<sup>\*</sup> Annual average.

Marriages of members of Allied forces in New South Wales are included in the years in which they were celebrated. Most of the marriages occurred in the years 1942 to 1946.

The following statement shows the marriage rate per 1,000 of the population in each State, the Commonwealth of Australia, and in New Zealand in 1947 compared with the rates of the previous five years:—

State or Cou	1942.	1943.	1944.	1945.	1946.	1947.	
New South Wales Victoria Queensland Sonth Australia Western Australia Tasmania Commonwealth New Zealand		 12·20 12·06 11·32 13·34 11·41 10·08 11·99 7·91	9·20 9·30 9·53 10·21 9·50 8·65 9·35 7·53	9·15 8·97 10·67 9·72 9·36 7·88 9·33 8·43	8·67 8·22 9·20 8·48 7·77 7·51 8·50 10·14	10.76 10.57 10.70 10.55 10.49 10.51 10.64 12.38	10·11 9·95 9·95 10·32 10·50 10·02 10·09

Table 149.-Marriage Rates, Australasia.

#### Conjugal Condition before Marriage,

The males married during the year 1947 were 26,722 bachelors, 1,338 widowers, and 2,112 divorced men. Of the females 26,651 were spinsters, 1,426 were widows, and 2,095 were divorced. The proportion of males re-married was 11.43 per cent. and of females 11.67 per cent.

The following table shows particulars relating to first marriages and re-marriages in quinquennial periods since 1891 and annually since 1942.

	Males	who wer	:е—	   Female	s who w	еге—				000 Marr	ied.	
							Bride	egroon	ıs	∬ Bri	ides.	
Period.	Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.	Bachelors.	Widowers.	Divorced.	Spinsters.	Widows.	Divorced.
1891-95 1896-00 1901-05 1906-10 1911-15 1916-20 1921-25 1926-30 1931-35 1936-40 1941-45 1942 1943 1944 1945 1946 1947	36,782 41,808 48,283 59,499 73,145 83,042 88,786 86,636 116,630 130,009 31,918 23,983 23,924 22,477 28,583 26,722	3,008 3,379 3,586 3,807 4,306 4,762 5,538 5,423 4,835 5,986 6,769 1,506 1,311 1,324 1,350 1,415 1,338	134 280 306 418 561 874 1,627 2,056 2,238 3,859 5,749 1,109 1,178 1,456 1,686 2,112	36,671 41,998 48,587 59,894 78,940 73,089 83,162 89,688 88,085 113,265 130,669 32,075 24,228 24,084 22,541 28,511 26,651	3,015 3,043 3,100 3,249 3,935 4,665 5,171 4,164 3,152 4,149 5,666 1,204 1,007 1,107 1,243 1,488 1,426	238 426 488 581 1,027 1,874 2,413 2,472 4,061 6,102 3,254 1,067 1,235 1,492 1,685 2,095	9,213 9,195 9,264 9,327 9,419 9,285 9,223 9,222 9,122 9,122 9,122 9,418 9,053 8,890 9,021 8,857	753 743 687 597 514 604 563 516 473 475 436 499 501 534 447 443	34 62 59 66 67 111 180 214 239 305 403 321 383 446 576 532 700	9,185 9,237 9,312 9,329 9,429 9,278 9,219 9,317 9,400 9,351 9,168 9,211 9,114 8,915 8,988 8,833	755 669 594 510 470 592 573 432 336 328 398 349 492 470 473	60 94 94 91 101 130 208 251 264 321 434 363 406 467 593 532 694

Table 150 .- Conjugal Condition at Marriage.

Re-marriage is greater among men than women. The proportion of widowers in the total marriages exceeded that of widows in each year after 1891 except for a short period after both World War I and World War II (1920 to 1922 and 1946 and 1947), when the variation was probably due to re-marriages of war widows. The excess of widowers over widows re-married increased after 1925, probably due, in part, to the introduction of widows' pensions in March, 1926.

In each year from 1893 to 1945 (except 1939) the proportion of re-marriages of divorced women exceeded that of divorced men but the proportions were equal in 1946, and in 1947 the male proportion was slightly the higher. Re-marriages of divorcees have increased and in the last three years were numerically greater than those of widowers and widows. The number of divorced persons re-married in 1943-47 compared with those in 1933-37 increased as regards males by 163 per cent. and as regards females by 149 per cent.

The proportion of re-marriages reached its lowest point among both bridegrooms and brides in 1915, and the subsequent increase was due mainly to the re-marriage of divorced persons. The increase among brides was not as great as among bridegrooms, the increase in the divorced women among the former being offset by a decrease in the proportion of widows.

# Age at Marriage.

The number of brides and bridegrooms in age groups in each of the last eleven years is shown in the following table. The ages recorded are those stated at marriage by the contracting parties, without verification, as representing age: last birthday.

	Total		Ages of B	ridegrooms		Ages of Brides.					
Year.	Number of Marriages,	Under 21, years.	21 to 29 years.	30 to . 44 years.	45 and over.	Under :21 years,	21 to 29 years.	30 to 44 years.	45 and over.		
1937	23,188	1,246	14,777	5,712	1,453	5,151	14,104	3,156	777		
$1938 \\ 1939$	25,471	1,263 $1,300$	$ 15,707 \\ 16,418$	6,095 $6,177$	$1,514 \\ 1,576$	5,380 5,439	$15,112 \\ 15,827$	$3,284 \\ 3,382$	803 823		
$1940 \\ 1941$		1,591 $1,784$	20,002 19,473	7,166 $6,961$	1,605 $1,765$	7,001 7,314	18,332 $17,461$	4,176 $4,217$	855 991		
$1942 \\ 1943$	34,533	2,214 1,907	22,525 16,753	7,715 5,829	2,079 1,813	8,758 7,289	19,986 14,368	4,698 3,644	1,141 1,001		
1944		1,986	16,966	5,710	1,764	7,479	14,252	3,696	999		
	1	B. 2,012	15,432	4,444	589	S. 6,973	12,714	2,544	-310		
1945	} :::	W D	. 70 : 231	374 860	.₁906 .₁365	W. 6 D. 10	261 487	434 814	542 188		
,	(25,283	T. 2,012	. I <del> </del>	5,678	1,860	T. 6,989	13,462	3,792	1,040		
1040	( ::: 6	B. 2,861 W	20,280	5,809 422	633 912	S. 8,708 W. 9	16,553 320	$\begin{array}{c c} 2.867 \\ 615 \end{array}$	383 544		
11946	<b>)</b>	D. 1	321	1993	'371	D. 14	557	906	208		
	(31,684)	T. 2;362 B. 2,080	20,682	$\frac{6,724}{4,939}$	1,916	T. 8,731 S. 8,441	17,430 15,206	$\frac{4,388}{2,625}$	379		
1947	<b>\}</b> ;	W	65	363 1,333	910 415	W. 4 D. 12	. 283 .767	563 1,104	576 212		
	30,172	$\frac{D.}{T. 2,081}$	20,494	6,635	1,962	T. 8,457	16,256	4,292	1,167		

Table 151.-Age at Marriage.

B, Bachelors; S, Spinsters; W, Widowed; D, Divorced; T, Total,

Futher details of the ages and conjugal condition of persons married each year are published in the Statistical Register of New South Wales.

In 1947 approximately 79 per cent. of first marriages among men and 89 per cent. among women were celebrated before attaining age 30, and the majority of marriages of persons over 45 years of age were re-marriages of one or both of the contracting parties, the proportion of such marriages being 68 per cent. among men and 68 per cent. among women.

The following statement shows the average age at marriage of bridegrooms and brides in various years since 1906. The difference between the ages at marriage of bachelors and spinsters is slightly less than 3 years, the males being the older. It has been reduced by almost half a year during the last 15 years. Men who re-marry are, on the average, between 5 and 6 years older than women who re-marry.

of—
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$24 \cdot 4$
$24 \cdot 3$
24.2
$24 \cdot 1$
24.2
24.0
23.9

Table 152-Average Age at Marriage.

The average age at marriage shows little variation from year to year though the average of both bachelors and spinsters fell by about 10 months between 1939 and 1947.

# MARRIAGES OF MINORS.

The number of minors married at each individual age is shown annually in the Statistical Register. The number of brides at each age under 21 in 1947, was 5 at 14, 48 at 15, 319 at 16, 916 at 17, 1,817 at 18, 2,571 at 19, and 2,781 at 20 years. The corresponding numbers of bridegrooms were 6 at 16, 62 at 17, 238 at 18, 617 at 19, and 1,158 at 20 years.

The following are the numbers and proportions of brides and bridegrooms married under the age of 21 years:—

	Minors.		Proportion to Total Marriages.			Min	ors.	Proportion to Total Marriages.	
Period.	Bride- grooms.	Brides.	Bride- grooms,	Brides.	Period.	Bride- grooms;	Brides.	Bride- grooms.	Brides.
			per cent.	per cent.			Ì	per cent.	per cent.
1876-80	691	7,401	2.67	28.57	1941–45	9,908	37,829	6.95	26.54
1881 - 85	908	9,607	2.54	26.88					
1886-90	881	9,605	2:28	24.85.	1937	1,246	5,151	5.37	22.21
1891-95	905	9,814	2.27	24.58	1938	1,263	5,380	5.14	21.89
1896-00	1,284	10.830	2.82	$23^{\circ}82$	1939	1,300	5,439	5.10	21.35
1901-05	1,809	12,327	3.47	23.63	1940	1,591	7,001	5.24	$23.06^{\circ}$
1906-10	2,861	15,061	4.49	23.63	1941	1,784	7,314	5.95	24.39
1911–15	3,577	18,265	4.27	21.82	1942	2,214	8,758	6.41	25.36
1916-20	3,368	15,861	4.28	20.13	1943	1,907	7,289	7.25	27.71
1921-25	5,139	20,703	5.70	22.95	1944	1,986	7,479	7.52	28.30
1926-30	7,110	25,916	7.39	26.92	1945	2,012	6,989	7.96	27.64
1931–35	6,680	24,642	7.13	26.30	1946	2,362	8,731	7.45	27.56
1936-40	6,712	28,237	5.31	22.33	1947	2,081	8,457	6.90	28.03

Table 153.-Minors Married.

The proportion of minors among bridegrooms trended upwards, except during the First World War, until 1931, when the proportion was 9.12 per cent. There was a decline in each subsequent year to 5.10 per cent. in 1939, then an upward trend to 7.96 per cent. in 1945 and then a downward trend to 6.90 per cent. in 1947.

Among brides the proportion of minors has always been much larger than among bridegrooms, but it declined continuously for a long period until it fell below 20 per cent. in the post war years 1919 and 1920. Then the proportion increased rapidly to 30.55 per cent. in 1931, the highest level since 1875. It declined in each of the eight years 1932 to 1939, but rose during the war years to 28.30 per cent. in 1944 and remained relatively high in the years 1945 to 1947.

## MARK SIGNATURES IN MARRIAGE REGISTERS.

In 1860 the proportion of signatures made in the marriage register with marks was as high as 264.7 per 1,000 persons married, but it fell rapidly to 69.4 in 1881, to 13.4 in 1901, 2.3 in 1921, and since 1934, excepting only in 1936 it has been less than 1 per 1,000. The number of persons who signed in this way was only 12 in 1947, equal to 0.2 per 1,000 persons married in the year.

#### MARRIAGES ACCORDING TO DENOMINATION.

Of the marriages performed in New South Wales in 1947, 26,843, equivalent to 88.7 per cent. of the total, were celebrated by ministers of religion licensed under the authority of the Registrar-General. The number contracted before district registrars was 3,329, being 11.03 per cent. of the total.

The following table gives particulars of marriages according to denomination during the ten years, 1938 to 1947, and each of the last three years.

Danie alle Mari	1938-47.		1945.		194	6.	19	17.
Denomination or Registry.	Marriages.	Pro- portion.	Marriages.	Pro- portion.	Marriages.	Pro- portion.	Marriages,	Pro- portion.
		Per cent.		Per cent.		Per cent.		Per cent.
Church of England	116,262	40.81	10,467	41.40	13,231	41.76	11,978	39.70
Roman Catholic	58,442	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	5,035 3,010	19·92 11·91	6,282 3,818	19.82 12.05	6,112	20·25 12·46
Presbyterian Methodist	33,366 31,714	11'12	2,827	11.18	3,512	11.08	3,759 3,324	11.02
G	5,171	1.82	483	1.91	496	1.57	519	1.72
Danking"	4,776	1.68	435	1.72	479	1.51	461	1 53
Church of Christ	1,365	1.48	122	1.48	143	45	123	41
Salvation Army	1,142	40	94	•37	114	36	102	.34
Hebrew	1,123	39	89	35	206	.65	124	.41
All Other Sects	3,072	1.08	253	1,00	252	.80	341	1.13
Total Denominational	256,433	90.04	22,815	90.24	28,533	90.05	26,843	88.97
Registrar's Offices	28,364	9.96	2,468	9.76	3,151	9.95	3,329	11.03
Total Marriages	284,797	100.00	25,283	100.00	31,684	100.00	30,172	100.00

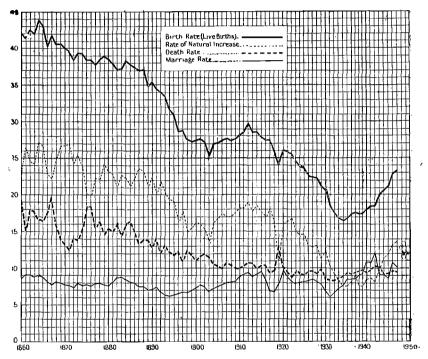
Table 154.—Denominational and Civil Marriages.

#### DIVORCES.

The number of marriages dissolved annually by divorce and decree for nullity has increased rapidly and represents a substantial ratio to the number of marriages celebrated. The number dissolved by decrees for divorce and nullity of marriage made absolute in 1947 was 3,821, being in the proportion of 12.7 per cent. to the number of marriages celebrated during the year.

Particulars of the duration of marriages dissolved and number of issue are shown in the chapter, "Law Courts" of this Year Book.

# RATES OF BIRTHS, DEATHS, MARRIAGES, AND OF NATURAL INCREASE.



(The numbers at the side of the Graph represent rates per 1,000 of mean population.)

## BIRTHS.

# LIVE BIRTHS.

The crude birth rate showed a steady downward tendency from 1864 to 1888. It fell sharply from 1888 until 1903, then there was an improvement until 1912. During the war years (1914-1919) coincident with the decline in the marriage rate, there was a very rapid falling-off in the birth rate, with a recovery in 1920. After 1920, despite a temporary revival in the marriage rate until 1927, the birth rate declined in each year until 1934 when it was the lowest on record. Subsequently there was a slow increase in the birth rate coincident with a rapid increase in the marriage rate after 1931. The upward trend accelerated in the last five years and the crude birth rate in 1947 was the highest since 1929.

The following table shows the average annual number of live births and the crude birth rate per 1,000 of the total population since 1881:—

Period.	Average Annual Number of Live Births.	Birth rate per 1,000 of Population.	Period.	Average Annual Number of Live Births.	Birth rate per 1,000 of Population.
1861-65	15,992	42.71	1931-35	44,967	17:29
1866-70 1871-75	18,528 21,309	40.77 .39.05	1936-40 $1941-45$	47,679 56,583	17·51 19·79
1876-80	25,514	38.54	1937	47,497	17.62
1881-85	31,793	37.74	1938	47,319	17.38
1886-90	37,660	36.36	1939	48,003	17.45
1881 - 95	39,513	32.93	1940	49,382	17.77
1896-00	36,716	27.98	1941	51,729	18.47
1901-05	37,969	26.94	1942	52,647	18.59
1906-10	42,994	27.77	1943	57,265	20.04
1911-15	51,661	28.73	1944	59,612	20.65
1916-20 1921-25	51,549	26·27 24·74	1945	61,662	21.13
1921-25	54,449 53,318	21.77	$1946 \\ 1947$	67,247 69,398	22·83 23·24

Table 155.—Live Births, New South Wales.

The rates shown above are calculated by the usual "crude" method of relating the births to the total population.

Rates calculated in the same way for the Commonwealth, each State and New Zealand, for the last six years are shown in the following table. No allowance has been made for the differences in sex and age constitution of the respective populations.

State or Country.	1942.	1943.	1944.	1945.	1946.	1947.
New South Wales	 18.59	20.04	20.65	21•13	22.83	23.24
Victoria	 18.33	19.82	19.78	20.53	23.05	23.06
Queensland	 20.43	22.19	23.10	24.81	24.79	25.66
South Australia	 18.51	21.43	21.49	22.37	24.89	25.24
Western Australia	 20.77	21.98	22.57	21.88	24.56	25.59
Tasmania	 22.00	23.04	21.17	23.27	27.15	27.70
Commonwealth	 19.05	20.63	20.98	21.73	23.62	24.06
New Zealand	 21.73	19.70	21.59	23.22	25.24	26.42

Table 156.—Live Births, Australasia.

# RELATIVE FERTILITY.

Crude birth rates may not truly indicate the trend in fertility over a period of time, and they are of limited use in comparisons with other States or countries. To obtain rates suitable for such purposes it is essential to eliminate the effects of changing age and sex constitution of the population and changes in the conjugal condition.

Fertility rates may be calculated by relating nuptial births to the number of married women; ex-nuptial births to single, widowed and divorced women; and total births to all women; or, for each of these groups, the specific fertility at each year of age, or the general fertility for the whole of the reproductive ages combined (approximately 15 to 44 years), may be calculated. Data for precise calculations are available only in census years and years for which reliable estimates of age distribution of female population are available.

To determine the trend in fertility for long-term comparisons, it is convenient to relate total births to the number of women (irrespective of

conjugal condition) at each age and at the combined reproductive ages. This has been done in the following table which shows the fertility rate per 1,000 women in age groups from 15 to 44 years in each census year, 1891 to 1947 and in the immediate pre-war year 1939.

Table 157.—Births per 1,000 Women of Reproductive Age.

Age Group, (Years).	1891.	, <b>1</b> 901.	1911.	1921.	1983.	1939.	1947.
15-19	35·30	30:87	33·75	32·72	29·73	$\begin{bmatrix} 25.28 \\ 112.30 \\ 131.49 \end{bmatrix}$	32·52
20-24	170·90	134:65	141·45	146·57	106·05		161·17
25-29	247·48	177:95	187·35	169·99	119·68		175·98
30–34	238 81	168·42	161·20	140·18	94·39	92·78	122·69
35–39	196 15	136·60	122·27	101·71	59·23	54·28	68·13
40–44	96 61	70·79	54·51	43·78	24·04	17.83	20·96
15 <b>-44</b>	161.74	117:46	118:50	109.84	72.57	74.11	101:37

There has been a decline of 37.3 per cent. in the general fertility rate since 1891. The decline has been general in all age groups but it is more pronounced as the age advances. The contrast in experience in regard to the first and last quinquennia of the normal years of child-bearing is particularly striking. Whereas the birth rate for women at ages 40 to 44 years in 1891 was 174 per cent. greater than the rate for those aged 15 to 19 years, the corresponding proportion in 1921 was only 34 per cent. greater and in 1947 it was 36 per cent. lower. The fluctuations in the age groups 20-24 years and 25-29 years are probably the result of trends in the marriage rate. This is particularly noticeable in the year 1933 in a period of economic depression. The marriage rate in 1931 was the lowest ever recorded and the increase in marriages in subsequent years did not cause recovery in the birth rate until 1935. Because of this the 1933 figures were at an unusually low level.

Indeed an outstanding feature of the comparison is the rapidity with which the downward trend of the birth rate gathered momentum between 1921 and 1933. The relative decline during these twelve years was greater than the decline during the previous thirty years—1891 to 1921. It was most marked in the group 20 to 24 years, the fall being 27.6 per cent. between 1921 and 1933 as compared with 14.2 per cent. between 1891 and 1921. The rise in fertility rates shown for 1947 was due mainly (and perhaps wholly) to transient causes. The relative decline of births to women of reproductive age in each group is shown below:—

Table 158.—Decline in Birth Rates.

Age	Proportionate Decrease in Birth Rates.										
Group. (Years).	1891 to 1921. (30 years.)	1921 to 1933. (12 years.)	1933 to 1947. (14 years.)	1921 to 1947. (26 years.)	1891 to 1947 (56 years.)						
	per cent.	per cent.	per cent.	per cent.	per cent.						
15-19	7.3	9,9	+ 9.4	•6	~ 7·9						
20-24	14.2	27.6	+52.0	+10.0	5.7						
25-29	31.3	29.6	+47.0	+ 3.5	28.9						
<b>3</b> 0–34	41.3	32.7	+30.0	12.5	48.6						
35-39	48.1	41.8	+15.0	.33.0	65.3						
40-44	<b>54·7</b>	45·1	12.8	52.1	78.3						
15-44	32.1	33.9	${+39.7}$	7.7	37.3						

The crude birth rate for New South Wales was 25.0 per cent. lower in 1921 than in 1891, 34.5 per cent. lower in 1933 than in 1921 and 36.8 per cent. higher in 1947 than in 1933. The rate, calculated on the basis of the number of women of reproductive age, was lower by 32.1 per cent. and 33.9 per cent. in 1921 and 1933 respectively, but was 37.3 per cent. higher in 1947 than in 1933.

The particulars in Table 157 are not adequate to indicate differential fertility by age, for within age groups the rates change rapidly with each year of age. This is illustrated in Table 159. The fertility measured by female births only is added to the table for the purpose of calculating reproduction rates.

Table 159 .- Births per 1,000 Women at Each Age.

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	'03 ·26 '19 1·26 '62 4·10 2·90 11·98 8·80 21·52 19·59 32·29 31·87 39·87 48·88	1920-22.		1945-47.	ve Births.	Total Li		Ago		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	·03 ·26 ·19 1·26 ·62 4·10 2·90 11·98 8·80 21·52 19·59 32·29 31·87 39·87 48·88	·10 ·32		1945-47.	Total Live Births.					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	·26         ·19           1·26         ·62           4·10         2·90           11·98         8·80           21·52         19·59           32·29         31·87           39·87         48·88	•32		, ,	1932–34.	1920-22.	1910–12.			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1·26	•32	1 •07	.10	.09	.20	-13	13		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4·10     2·90       11·98     8·80       21·52     19·59       32·29     31·87       39·87     48·88	1			•53					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11.98     8.80       21.52     19.59       32.29     31.87       39.87     48.88	•96	1.36	1.39	2.57	1.87	2.78	15		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11.98     8.80       21.52     19.59       32.29     31.87       39.87     48.88	3.95			8.37		10.08	16		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	21·52 19·59 32·29 31·87 39·87 48·88									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	32·29 31·87 39·87 48·88									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		47.75	47.20	98.87	81.95	97.69	97:06	20		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	48.08   62.53									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	54.83 74.55									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	56.74 82.17									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	59.68 86.90									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	58.81 87.16	86.14	90.34	179.84	120.96	176.79	185:72	25		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	60.13 86.23									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	59.11 81.77									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	55.36 81.13									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	55.91 73.90									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	50.60 68.39	74.82	85-64	143.41	103.98	155.18	176.02	30		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	52.00 64.03							31		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	46.26 59.37							32		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39.07 55.22									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	41.47 50.37							34		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	35.46 44.58	56.91	68.77	92.32	72.85	115.83	141.43	35		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	32.42 39.27	52.39	66.23	80.80	66.66	106.55	135.99	36		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	30.01 32.23	49.52	63.62	67.73	61.70	99.51	130.86	37		
40 83.66 62.22 36.12 37.29 40.67 30.59	26.03 30.00	45.78	53.91	60.44	53.59	93.90	110.82	38		
==   0   0   0	21.64 22.70	<b>3</b> 9·5 <b>4</b>	53.06	46.44	44.52	81.76	109.25	39		
	17.55 17.94	30.59	40.67	37.29	36.12	62.22	83.66	40		
41   63.20   47.74   32.31   27.16    30.72   22.92	15.75 13.11	22.92	30.72	27.16	32.31	47.74	63.20	41		
$42 \mid 59.70 \mid 44.00 \mid 24.67 \mid 18.85 \mid 28.95 \mid 21.92$	11.99 9.53	21.92	28.95		24.67	44.00	59.70	42		
43   44·10   $32\cdot45$   $17\cdot35$   $13\cdot97$   $21\cdot50$   $16\cdot27$	8.48 7.15	16.27	21.50	13.97	17:35	32.45	44.10	43		
44   26·08   18·79   12·24   8·38   12·74   9·92	5.95 3.84	9.92	12.74	8.38	12.24	18.79	26.08	<b>4</b> 4		
<b>4</b> 5   17·33   11·39   6·29   5·12   8·36   5·60	3.03 2.55	5.60	8.36	5.12	6.29	11.39	17:33	<b>4</b> 5		
<b>46</b>   9·08   5·86   <b>3</b> ·62   2·51   4·42   2·88	1.75 1.51						9.08	46		
47   4·34   2·49   1·68   ·62   2·10   1·25	84 29						4.34	47		
48   1.96   1.23   69   44   .91   .57	. Ja   ∠∂									
49 86 64 27 08 43	31 21			.08	.27		.86	49		

Specific female fertility rates shown above form the basis of gross and met reproduction rates, which are used as a measure of the potential reproductive capacity of the female population based on the specific birth rates of any year.

The sum of each column of specific female birth rates may be taken as the number of female children born to 1,000 mothers who live right through the child-bearing period and at each year of age experience the fertility rates shown.

If these female children were to live through the child-bearing age and were to reproduce female children at the same rate as they themselves were produced, then, on the 1910-12 level, 1,753 female children would result from 1,000 mothers; on the 1920-22 level 1,550, on the 1932-34 level 1,061, and on the 1945-47 level 1,352. Reduced to unity these represent gross reproduction rates of 1.753, 1.550, 1.061 and 1.352 respectively.

From the life tables for New South Wales, however, it is possible to ascertain how many of these females would have survived to each year of the child-bearing age on the level of mortality prevailing in the periods specified. If the specific female birth rate at each age is applied only to the number, who, from 1,000 females born, would live throughout that year of age, the actual reproduction which would occur on the level of experience for each period can be measured. The summation of these results and reduction to unity in the manner described above gives the net reproduction rates. For New South Wales, in the periods shown, such rates were: 1910-12, 1.449; 1920-22, 1.349; 1932-34, .968; and 1945-47, 1.235. The figure for 1945-47 was calculated by using the 1932-34 life table.

It is emphasised that these rates are an index only and would not be actually experienced unless the age distribution of the population remained similar to that of the life table used, and the fertility rates remained at the same level as in the years specified. Nevertheless, the index is of value in illustrating the effect of a set of specific fertility rates on growth of population.

Both the gross and net reproduction rates for New South Wales shown above may be compared with those for the countries listed below, which have been calculated in the same manner. These figures are derived mainly from the Statistical Year Book of the League of Nations, 1942-1944.

Country.	Year.	Gross.	Net.	Countr	у.	Year.	Gross.	Net.
Africa— Union of South Africa (white population)	1940	1.495	1.346*	Europe—continue Estonia Finland France	ed	1938 1938 1938	·976 1·179 1·035	*790* *960*
America— Canada United States (whites)	1940–42 1942	1·416 1·270	1·274* 1·189*	Germany Hungary Italy Netherlands		1936 1938 1935–37 1942	1.063 1.210 1.425 1.305	*934 1*000* 1*131 1*196*
<b>A</b> sia→ Japan	1937	2.145*	1.440*	Poland Scotland		$\frac{1936}{1941}$	1.069 1.057	914 895
Belginm Bulgaria Czechoslovakia Denmark	1935 1941 1933-36 1929-32 1943 1940	*804 1.673 1.204 1.289 *850	·64 ·672* 1·192 ·939 1·140 ·753*	Oceania— Australia New Zealand		1944 1943	1·289 1·158	1·198 1·677

Table 160.—Gross and Net Reproduction Rates, Various Countries

<sup>\*</sup>Approximate data.

From the figures given in the preceding table it appears that the net reproduction rate in Australia in 1944 was considerably higher than in most European countries for which relatively recent data are available, closely matched that of the United States of America, and was appreciably below that of Canada and of the white population of the Union of South Africa. In making this comparison regard should be paid to the differences in years and the effects which the incidence of war had on the birth rates of the respective countries.

## LIVE BIRTHS TO MOTHERS AT INDIVIDUAL AGES.

The number of live births to married and unmarried mothers in age groups during 1946 and 1947 is shown in the following table. These figures should be distinguished from the number of confinements given in Table 174. The summary contained in Table 173 shows the relationship between the two sets of figures:—

Table 161.	Live	Births,	Age	of	Mother.
------------	------	---------	-----	----	---------

Age Group	Nupt	ial Live B	irths.		Ex-nupt ive Bir		A	ll Live Bir	ths.
(years),	Males.	Females.	Total.	м.	F.	Total.	Males.	Females.	Total.
	_		19	46.					
Under 15 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over Not stated	1 1,365 9,030 10,421 7,315 3,893 1,037 72  33,134	1,192 8,576 9,843 6,942 3,579 936 94 1 	2,557 17,606 20,264 14,257 7,472 1,973 166 1	4 328 537 305 207 131 42 2 	1 308 490 258 168 125 38 6 	5 636 1,027 563 375 256: 80 8 	1,693 9,567 10,726 7,522 4,024 1,079 74  34,690	1 1,500 9,066 10,101 7,110 3,704 974 100 1 	3,193 18,632 20,827 14,632 7,728 2,053 174 
		_	19	47.					
Under 15 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50 and over Not stated	1,662 9,809 10,816 7,354 3,675 935 76	1,484 9,211 9,963 7,022 3,585 958 65	3,146 19,020 20,779 14,376 7,260 1,893 141	8 343 453 297 191 123 32 	9 297 459 274 162 102 30 2	17 640 912 571 353 225 62 2 	2,005 10,262. 11,113 7,545 3,798 967 76 	9. 1,781 9,670 10,237 7,184 3,687 988 67 	17 3,786 19,932 21,350 14,729 7,485 1,955
Total	34,327	32,288	66,615	1,448	1,335	2,783	35,775	33,623	69,398

Similar information for single years of age is published in the Statistical Register of New South Wales.

# BIRTH RATES-METROPOLIS: AND REMAINDER OF THE STATE.

Data distinguishing the births in the metropolis from those in other districts are not available on a comparable basis prior to 1st January, 1927, because only since that date have births been allocated according to the usual address of the mother and not as formerly according to the district in which the birth occurred. Within the period covered by the following table the metropolitan boundary was extended (in 1933) and for the purpose of comparison the figures for the metropolis and the remainder of the State for years prior to 1933 have been adjusted to the present boundaries.

Average Annual Number of Live Births. Live Births per 1,000 of Population. Year. New South Remainder Remainder New South Metropolis. Metropolis. of State. Wales. of State. Wales. 1927-30 1931-35 1936-40 1941-45 1937 30,554 \* 27,448 \* 28,931 22,812 \* 17,519 \* 18,748 19·53\* 14·31\* 14·85 21.56 17.29 17.51 53,366 23.38 \* 44,967 47,679 19:03 \* 19.79 17.62 17.38 30,504 29,339 56,583 47,497 20.63 20.35 26,079 18.89 18,158 18,559 14·48 14·73 19.68 1938 28,760 28,680 47,319 17.45 17.77 19:34 19,323 19,942 1039 48,003 15.24 15:53 17:06 17:26 1940 29,440 29,363 49,382 10.70 19.71 22,366 26,220 51,729 52,647 1941 19.81 29.427 1942 18:59 26,989 30,276 57,265 19.5220.53 21.32 59,612 61,662 67,247 69,398 28,318 29,50131,294 32,161 1044 19:96 20.65 21.13 20.42 1946 31,769 21:68 23.97 22:83 21.51 1947 31,918

Table 162.—Live Births, Metropolis and Country.

The age and sex constitution of the metropolitan population differs considerably from that of the remainder of the State, therefore, comparisons of crude birth rates are to be taken with reserve. The birth rate per 1,000 women aged 15 to 44 years in 1933 was 54.66 in the metropolis and 92.19 in the remainder of the State. The proportion of married women amongst those of child bearing age was 51 per cent. in the metropolis and 57 per cent. in the remainder of the State in 1921—the latest date for which the information is available.

# THE SEXES OF CHILDREN.

Of the 69,398 children born during 1947 (exclusive of those still-born), 35,775 were males and 33,623 were females, the proportion being 106 males to 100 females. As far as observation extends, the number of female births has not exceeded that of males in any year, although the difference has sometimes been very small.

Over the last twenty years the ratio of male to female births was highest in 1927 when it was 106.9 and least in 1944 when it was 103.8 per 100.

The table below shows the number of males born alive to every 100 females born alive, both in nuptial and ex-nuptial births, since 1881:—

		Table 10	JLive	Dirtino, Mic	ascuminty.		
Period.	Nuptial Live Births.	Ex-Nuptial Live Births.	All Live Births,	Period:	Nuptial Live Births.	Ex-Nuptial Live Births.	All Live Births.
1881-85 1886-90 1891-95 1896-00 1901-05 1906-10 1911-15 1916-20 1921-25 1926-30	104.9 105.3 105.8 105.0 104.4 105.0 105.0 105.3 104.4 105.7	103·8 99·2 107·4 103·2 102·7 105·1 104·3 106·3 107·1 106·5	104·8 105·0 105·9 104·9 104·3 105·3 105·0 105·3 104·5 105·7	1931-35 1936-40 1941-45 1942 1943 1944 1945 1946 1947	105·5 104·4 105·1 106·7 104·4 103·8 106·5 106·3 106·3	102·8 106·1 105·2 103·5 106·0 103·0 109·0 111·6 108·5	105·4 104·5 105·1 106·6 104·5 103·8 106·6 106·6

Table 163.-Live Births, Masculinity.

<sup>\*</sup> On the basis of boundaries as existing from 1933.

# EX-NUPTIAL LIVE BIRTHS.

The number of ex-nuptial live births in 1947 was 2,783, equal to 4.01 per cent. of the total live births and 0.92 per 1,000 of population. A statement of the ex-nuptial live births in New South Wales since 1881 is given below:

Table	164.—	-Ex-nuptial	Live	Births.
-------	-------	-------------	------	---------

Period.	Average Annual Number of Ex-nuptial Live Births.	Ratio per cent. to Total Live Births.	Crude Rate per 1,000 of Population.	Year.	Number of Ex-nuptial Live Births.	Ratio per cent. to Total Live Births.	Crude Rate per 1,000 of Population
1881–85	1,390	4.37	1.65	1937	2,106	4.43	78
1886-90	1,879	4.99	1.81	1938	1,983	4.19	•73
1891-95	2,375	5.72	1.98	1939	1,989	4.14	.72
1896-00	2,524	6.91	1.92	1940	1,877	3.80	.67
1901-05	2,658	7.00	1.89	1941	2,035	3.93	.73
1906-10	2,912	6.77	1.88	1942	2,045	3.88	.72
1911-15	2,829	5.48	1.57	1943	2,260	3.95	.79
1916-20	2,571	4.99	1.31	1944	2,554	4.28	-88
1921-25	2,681	4.92	1.22	1945	2,726	4.42	.93
1926-30	2,682	5.03	1.09	1946	2,950	4.39	1.00
1931 - 35	2,244	4.99	·86	1947	2,783	4.01	.92
1936-40	2,010	4.22	.74				
1941-45	2,324	4.11	.82				

The proportion of ex-nuptial to total live births declined in each period from 1905 to 1920, remained fairly constant until it declined between 1936 and 1940, and then increased appreciably between 1940 and 1947.

A more precise measure of the rate of ex-nuptial births is obtained by relating the total number of such births recorded to the number of unmarried women of child-bearing age. This can be done satisfactorily only from census data which indicate that the proportion of ex-nuptial children born, per 1,000 unmarried women aged 15 to 44 was 18.41 in 1891, 14.18 in 1911, and 8.20 in 1933, a decrease of 55 per cent. since 1891.

#### Previous Issue.

Summarised data of the previous issue of women who gave birth to children in 1946 and 1947 are as follows:—

Table 165.—Previous Issue and Age of Mother.

Age of Mother.					Previou	ıs Issue						Total	Average Number
(Years).	0	1	2	3	4	5	6	7	8	9	10 & over.	Mothers	of Children.
						1946.							
Under 15 15-19 20-24 25-29 30-34 35-39 40-44 50 and over Total Proportion per cent, of total	$\begin{bmatrix} 2,191 \\ 10,534 \\ 7,144 \\ 3,021 \\ 1,086 \\ 212 \\ 13 \\ \dots \\ \hline 24,202 \\ \end{bmatrix}$	4,976 7,030 4,185 1,508 256 13	3,428 8,199 1,597 301 15	1 361 1,382 1,709 1,133 279 18  4,883	98 645 859 659 224 18 2,503	 17 264 528 470 166 12  1,457	4 118 275 328 126 13 864	33 155 227 127 13 	 7 71 142 88 15  32?	  41 97 71 9 1	25 115 97 27 		1·55 2·15 2·84 3·72 4·88
Mothers.	38.07	28.77	15.75	7.68	3.94	2.29	1.34	•87	•51	•34	.42	100.00	

Table 165.—Previous Issue and Age of Mother—continued.

Age of Mother. (Years.)	0	1	2	3	Previou	s Issue.	6	7	8		10 & over.	Total Mothers	Average Number of Children
						1947.							
Under 15 15-19 20-24 25-20 30-34 35-39 40-44 45-49 50 and over	2,711 11,982 7,524 3,020 1,060 229 12	393 4,935 7,109 4,275 1,493 245 11	26 1,497 3,478 3,225 1,569 283 10	1 868 1,451 1,701 1,083 249 11	 87 566 919 643 200 14	 13 257 486 424 171 21	 2 117 274 305 131 13	 37 145 236 113 10	 15 87 141 87 15	 3 38 81 56 4	23 111 109 20	3,131- 18,884 20,557 14,193 7,146 1,873 141	1.51 2.13 2.84 3.69
Total	26,538	18,461	10,088	4,864	2,429	1,372	842	541	345	182	263	65,925	2.31
Proportion per cent. of Total Mothers.	40.26	28.00	15.30	7.38	3.68	2.08	1.28	-82	•52	·28	•40	100.00	

<sup>\*</sup> Existing marriage only; including children born at present confluement.

Details for each year of age are published annually in the Statistical Register.

This information was recorded for the years 1894 to 1907 and was then discontinued until 1938. A comparison prepared from the available data is as follows:—

Table 166.—Age of Mother and Average Number of Children.

Year.	15–19	20-24	l	Age Grou	p.		-							
	15-19	20-24	07.00	Age Group.										
		I	25-29	30-34	35-39	40-44	45-49	All Ages						
1894	+	†	+	1 1	1	†	+	4.28						
1896	†	†	l †	l †	<b>†</b>	†	†	4.19						
1901	1.20	1.81	2.86	4 45	6.38	8.39	9 61	3.90						
1906	1.22	1.81	2.78	4.12	5.80	7.81	9.20	3.58						
1938	1.23	1.69	2.28	3.15	4.37	5.86	7.55	2.60						
1939	1.22	1.66	2.23	3.10	4.31	5.83	7.54	2.54						
1940	1.22	1.64	2.22	3.02	4.22	5.75	7.14	2.51						
1941	1.19	1.60	2.15	2.97	4.10	5.55	6.84	2.43						
1942	1.18	1.58	2.16	2.93	4.02	5.46	7.53	2.41						
1943	1.19	1.53	2.11	2.88	3.89	5.16	6.99	2.36						
1944	1.18	1.57	2.17	2.89	3.78	5.17	6.34	2.43						
1945	1.16	1.56	2.19	2.88	3.70	5.04	6.07	2.42						
1946	1.16	1.55	2.15	2.84	3.72	4.88	6.45	2.38						
1947	1.15	1.51	2.13	2.84	3.69	4.86	6.35	2.31						

<sup>\*</sup> Existing marriage only; including children born at present confinement.

† Not available for age groups.

In 1894, 51 per cent. of the children born represented the fourth or later child. In 1941 such proportion was only 19.15 per cent. and in 1947 only 16.44 per cent. Since 1894 there has been an increase in the proportion of first and second children; the proportion of third children has remained almost constant, but a decrease is apparent for the fourth child and this becomes greater as the number of previous issue increases.

## FIRST LIVE BIRTHS.

A record has been kept of the number of first live births in each year since 1893. By first live birth is meant the first child born alive to a mother since marriage and includes only the first born alive of twins and triplets. The figures are restricted to births to married mothers as details as to other issue of the mother are not recorded in registrations of ex-nuptial births.

In the following table are shown details of married mothers confined for their first live birth, related to total confinements at which a child was born living.

	Confiner	ments of Married A	Iothers.	Proportion of first	
'Period.	For first live Birth.	For other live Birth.	Total.	Confinements to Total.	
				per cent.	
1896-00	35,603	133,546	169,149	21.0	
1901-05	42,284	132,383	174,667	24.2	
1906-10	51,000	147,195	198,195	25.7	
1911-15	68,205	173,161	241,366	28.3	
1916-20	64,225	177,847	242,072	26.5	
1921-25	72,949	183,237	256,186	28.5	
1926 - 30	76,602	173,888	250,490	30.6	
1931 - 35	67,289	144,171	211,460	31.8	
1936-40	85,023	140,981	226,004	37.6	
1941-45	105,659	162,702	268,361	39:4	
1940	18,261	28,754	47.015	38.8	
1941	19,981	29,174	49,155	40 6	
1942	20,452	29,612	50,064	40:9	
1943	22,646	31,782	54,428	41:6	
1944	20,937	35,494	56,431	37.1	
1945	21,643	36,640	58,283	37.1	
1946	24,202	39,378	63,580	38.1	
1947	26,538	39,387	65,925	40:3	

Table 167.-First Live Births.

The number of first births moves in direct ratio to the marriages contracted in immediately preceding years, but the persistent rise in the proportion of first births is not due to an increased marriage rate so much as to a declining proportion of children after the first, a result of family limitation. Indications are that the proportion of first births to relevant marriages declined over the past twelve years so that the decline in births after the first was greater than in first births.

Further evidence of this trend is seen in the birth rates in age groups, as shown in Table 157, which indicate that between 1891 and 1947, the decrease in birth rates in quinquennial age groups became progressively greater as age advanced, and was smaller at lower ages when first births are most frequent.

Particulars in the following table show that the proportion of first births to total births is much higher in the metropolis than in the remainder of the State; the information is available from 1936 only. The proportions shown for the State as a whole differ slightly from those in Table 167 which were calculated on the basis of confinements instead of total births in order to give greater precision.

Table 168.—First Live Births—Metropolis and Country.

Division.			Proporti	on per cen to Total	t. of Eirst Births.	Births	
	:	1942.	1943.	1944.	1945.	1946.	.1947.
Metropolis Remainder of State State		49:3 33:4 40:4	33.8 41.2	43·9 30·2 36·7	43.5 30.6 36.7	43·8 32·1 37·6	45·0 35·4 39·8

In comparisons of fertility in the metropolis and country, allowance should be made for a varying incidence of marriage and different proportions of newly-married couples in the respective areas.

Details of the interval between marriage and first live birth in relation to the age of the mother are published in the "Statistical Register."

Summaries for 1946 and 1947 are as follows:-

Table 169.—First Live Births, Age of Mother and Interval Since Marriage.

										Inte	rval.							
Age of Mother.	-						M	onths					Years.				Total.	
(Years.)	0-1	1-2	2 <sub>2-3</sub>	3-4	4-5	5-6	6–7	7 8	8-9	9–10	10–11	11-12	1–2	2-3	3-4	4–5	5 and over.	
										1946								
Under 15 15-19 20-24 25-29 30-34 35-39 40-44 45-49 Total	21 40 12 6 7 1 	37 11 10 4 2 1	61 24 10 5	91 27 5	167 37 .24 11 3	27 8 1 1	337 423 114 36 10 1 1 1	470 116 37	510 178 66 27 3	975 392 132 34 9	693 292 123 41	243 79 22 4	3,417 1,628 550 183 40	1,255 354 117 31 2	782 1,058 352 99 17	264 877 338 85 13	824 872 406 81 4	1 2,191 10,534 7,144 3,021 1,086 212 13 24,202
,										1947.								
Under 15 15-19 20-24 25-29 30-34 35-39 40-44 45-49	30 36 16 16 5	42 57 28 19 5	76 27 12 4 2	121 39 13 4 	162 45 12 6 4	68 28 4 	 435 602 134 38 21 6	339 615 152 57 20 4	164 588 204 53 15 3	243 1,185 453 141 60 4	176 972 410 132 43 1	136 812 332 132 28 8	671 221 50 3	 43 1,446 1,074 307 116 22	 676 851 258 69 21	 269 728 266 76 18	97 941 865 363 86 6	2,711 11,982 7,524 3,020 1,060 229
Total	103	151	184	295	407	698	1,236	1,187	1,027	2,086	1,734	1,448	7,376	3,008	1,881	1,359	2,358	26,598

## STILLBIRTHS.

The number of stillbirths registered in New South Wales in 1947 was 1,466. Of these 826 were males and 640 females, the masculinity (129 males to 100 females) being considerably higher than amongst the live births (106 males to 100 females).

Amongst ex-nuptial births the frequency of stillbirth is usually higher than amongst the nuptial births. In 1947 the respective proportions were 25.90 ex-nuptial and 20.47 nuptial stillbirths to 1,000 of all births (live and still).

Of the total stillbirths 618 were in the metropolis and 848 in the remainder of the State, the proportion per 1,000 of all births (live and still) being 18.63 in the former and 21.74 in the latter.

Compulsory registration of stillbirths became effective on 1st April, 1935. Details for each year from 1937 to 1947 and in quinquennial periods since 1936 are as follows:—

		Numi	ber of	Stillbirths	3.		per 1,000 (live and	Proportion of	Male Stillbirthe		
Year.	Nug	otial.	Ex-nuptial.			37. 11.1	Ex-	m-4-1	Ex-auptial to total Still-	per 1,000 Female Still-	
	Males.	Females	Males.	Females	Total.	Nupuai	nuptial.	Total.	births.	births.	
								[	Per cent.	Ī	
1936-40	3,827	2,860	191	168	7,046	28.45	34.49	28.71	5.10	1,327	
1941-45	3,909	3,092	215	175	7,391	25.16	32.47	25.46	5.28	1,262	
1937	818	571	28	35	1,452	29.69	29.05	29.66	4.34	1,396	
1938	765	633	38	37	1,473	29.91	36.44	30.19	5.09	1,199	
$1939 \cdot$	741	542	48	29	1,360	27.13	37.27	27.55	5.66	1,382	
1940	727	554	33	28	1,342	26.26	31.48	26.46	4.55	1,306	
1941	770	629	32	33	1,464	27.38	30.95	27.52	4.44	1,211	
1942	750	581	41	39	1,411	25.63	37.65	26.10	5.67	1,276	
1943	752	631	48	34	1,465	24.53	35.01	24.94	5.60	1,203	
1944	824	597	51	39	1,511	24.30	34.04	24.72	5.96	1,376	
1945	813	654	43	30	1,540	24.29	26.08	24.37	4.74	1,251	
1946	819	638	43	47	1,547	21.18	29.61	$22 \cdot 49$	5.82	1,258	
1947	784	608	42	32	1,466	20.47	25.90	20.69	4.37	1,291	
1541	104	000	14	32	1,100	20 11	20 00	20 00	<del>1</del> 91	1,291	

Table 170.—Stillbirths, New South Wales.

A comparison of the experience of New South Wales with that of other Australian States where stillbirths are registered and New Zealand is shown below. Victorian figures represent notifications only, but the number not notified is considered to be very small.

State on Country			Numbe	er.		Per 1,000 of all Births (live and still).					
State or Country.		1944.	1945.	1946.	1947.	1944.	1945.	1946.	1947.		
New South Wales		1,511	1,540	1,547	1,466	24.72	24.37	22.49	20.69		
Victoria		924	981	1,021	951	22.94	23.26	21.40	19.68		
South Australia		336	338	416	387	24.62	23.52	25.63	23.17		
Western Australia		274	224	293	304	24.59	20.56	23.63	23.07		
New Zealand (exclu	ıdes										
Maoris)		799	685	931	911	23.23	22.84	21.75	19.92		

Table 171.—Stillbirths, Australasia.

## PLURAL BIRTHS.

Prior to 1935 cases of plural births with only one child born alive were often recorded as single births. Since the introduction of compulsory registration of stillbirths (from 1st April, 1935) all cases of plural births are recorded.

During the year 1947 there were 777 cases of plural births. They consisted of 769 cases of twins and 8 cases of triplets. The live children born as twins numbered 1,456 (754 males and 702 females), and 82 were

stillborn; the live children born as triplets numbered 19 (14 males and 5 females), and five were stillborn. Of the plural births, 25 cases of twins were ex-nuptial, with no cases in which both were stillborn.

The following table shows the number of cases of twins and triplets born in New South Wales during the years 1945 to 1947 distinguishing nuptial and ex-nuptial; there was no case of ex-nuptial triplets in 1947:—

Table 172.—Plural Births.

		anie i	12.—1	iurai i	oirtiis.	1			
		1945.			1946.			1947.	•
Particulars.	Nup-	Ex- Nup- tial.	Total.	Nup- tial.	Ex- Nup- tial.	Total,	Nup- tial.	Ex- Nup- tial.	Total.
Cases of Twins-									
Both living	634	24	658	711	26	737	678	23	701
One living, one stillborn	58	1	59	49	2	51	52	2	54
Both stillborn	10		10	8	1	9	14		14
Total Cases of Twins	702	25	727	768	29	797	744	25	769
Cases of Triplets—									
All living	8		8	3	1	4	6		6
Two living, one stillborn	3	1	4						
One living, two stillborn				1		1	1		1
All stillborn			,•••	•…			1		1
Total Cases of Triplets	11	1	12	4	1	Б	8		8
Total Cases of Plural Births	713	26	739	772	30	802	752	25	777

The number of cases of plural births recorded in 1947 represented 11.09 cases per 1,000 confinements, while the number of children born at plural births was 2.20 per cent. of all births (both live and still).

There were 3,652 cases of twins, and 36 cases of triplets in the five years 1943-1947. In this period the number of confinements was 318,989 and the rates per 100,000 confinements were 1,145 cases of twins and 11 cases of triplets. Otherwise stated, there were 12 cases of plural births in every 1,000 confinements. In the five years 1938 to 1942 plural births occurred in the cases of 12 in every 1,000 confinements.

Seven cases of quadruplets have been recorded; five between 1877 and 1897, one in 1913, and the last in 1930.

# SUMMARY OF LIVE BIRTHS AND STILLBIRTHS.

The following table shows the number of confinements, live births, still-births and plural births in the year 1947:—

	Confine	ments.			c	hildren.			
Class of Birth.		Un-	Born L	iving.	Stillborn.		All Births.		
	Married Mothers.	married Mothers.	Nuptial.	Ex- nuptial	Nuptial.	Ex- nuptial.	Nuptial.	Ex- nuptial.	Total.
Single Births	66,495	2,807	65,188	2,735	1,307	72	66,495	2,807	69,302
Twins— Both living	678	23	1,356	46	•••		1,356	46	1,402
One living, one stillborn Both stillhorn	52 14	2	52	2	52 28		104 28		108 28
Total Twins			1,408	48	80	2	1,488	50	1,538
Triplets— All living Two_living, one	6		18				18		18
stillborn One living, two	• •••	•••	•••	•••		•••	•••	•••	•••
stillborn All stillborn	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$			•••	$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$		$\frac{3}{3}$		3 3
Total triplets			19		5		24		24
$_{ ext{Total}}$	67,247	2,832	66,615	2,783	1,392	74	68,007	2,857	
10tal 3	70,	079	69	,398	1,4	66			70,864

The number of confinements to married and unmarried mothers in age groups in 1946 and 1947 is shown below. Details for single years of age are shown in the Statistical Register:—

Table 174.--Confinements, Ages of Mothers.

		1946.		1947.			
Age Group, (Years),	Num	ber of Confinem	ents.	Num	ber of Confiner	nents.	
	Married Mothers.	Unmarried Mothers.	Total.	Married Mothers.	Unmarried Mothers.	Total.	
Under 15	1	5	6		17	17	
15-19	2,596	655	3,251	3,178	648	3,826	
20-24	17,723	1,048	18,771	19,175	924	20,099	
25-29	20,397	571	20,968	20,879	576	21,455	
30 - 34	14,414	375	14,789	14,523	363	14,886	
35-39	7,615	263	7,878	7,383	231	7,614	
40-44	2,053	82	2,135	1,949	69	2,018	
<b>45–49</b>	177	9.	186	160	3	168	
50 and over	2-	•••	$_2$				
Not stated		1	1		1		
Total	64,978	3,009	67,987	67,247	2,832	70,079	

## LEGITIMATIONS.

In 1902 an Act was passed to legitimise children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Act, any child who comes within the scope of its purpose born before or after the passing thereof, is deemed to be legitimised from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. The total number of registrations under the Act up to the end of the year 1947 was 17,220. The number in decennial periods and each of the last eleven years is shown in the following table:—

Period. Number. Period. Number. Period, Number. 294 1902-1910 1,743 1938 .371 1944 1911-1920 4,0161939 .3851945 269 1921-1930 4,749 1940 .548 1946 282 1931-1940 475 1947 258 4,518 19411942 .371 1937 463 1902-1947 17,320 1943 .345

Table 175.—Legitimations.

# NATURAL INCREASE.

Statistics of natural increase as shown below indicate the extent to which the population of New South Wales has increased by the excess of births over deaths. The annual rates are based on total population and allowance has not been made for the effect of the changing age distribution of the people on the number of births and deaths. Therefore the rates do not provide a satisfactory indication of the normal trend in natural increase. Particulars regarding net reproduction rates are shown on earlier pages.

The following table shows the natural increase of population since 1881. Figures for 1939 and subsequent years are shown on a dual basis, viz., excess of births over civilian deaths and over all deaths (including those of defence personnel overseas). For the war years 1914-18 deaths of defence forces overseas were not included in the calculation of natural increase.

Table 176.-Natural Increase, New South Wales.

Period.		ncrease→Who Births over I		Annual Rates per 1,000 of Population			
	Males.	Females.	Total.	Births.	Deaths.	Natural Increase	
1881-85	42,658	50,204	92,862	37.74	15.69	22.05	
1886-90	54,753	62,090	116,843	36.36	13.80	22.56	
1891-95	56,834	63,930	120,764	.32.93	12.80	20.13	
1896-00	48,692	67,107	115,799	27:98	11.85	16.13	
1901∸05	51,179	59,163	110,342	26.94	11:28	15.66	
1906-10	64,249	71,215	135,464	27.77	10.27	17.50	
<b>1</b> 911–15	77,202	86,918	164,120	28.73	10,48	18:25	
1916-20	71,947	81,788	153,735	26.27	10.60	15.67	
1921+25	80,815	89,523	170,338	24.74	9.26	15.48	
1926-30	72,380	80,693	153,073	21.77	9:27	12.50	
1931-35	51,557	60,294	111,851	17:29	8.69	8.60	
1936-40*	49,092	60,628	109,720	17.51	9.45	8.06	
1941-45*	68,071	75,809	143,880	19.79	9.73	10:06	

Table 176.—Natural Increase, New South Wales—continued.

Period.		ncrease—Whol f Births over		Annual Rate	es per 1,000 of	Population
	Males.	Females.	'emales. Total.		Deaths.	Natura Increas
	Exe	ess of Births	over Civilian	Deaths.		
1939	9,441	11,747	21,188	17.45	9.75	7.7
1940	10,289	12,950	23,239	17.77	9.41	8.3
1941	11,187	13,242	24,429	18.47	9.75	8.7
1942	10,698	12,730	23,428	18.59	10.32	8.2
1943	13,316	15,079	28,395	20.04	10.10	9.9
1944	15,866	17,094	32,960	20.65	9.23	11.4
1945	17,004	17,664	34,668	21.13	9.25	11.8
1946	18,652	20,016	38,668	22.83	9.70	13.1
1947	19,743	21,206	40,949	23.24	9.53	13.7
	E	xcess of Birth	s over All D	eaths.		
1939	9,433	11,747 (	21,180	17.45	9.75	1 7.7
1940	10,153	12,949	23,102	17.77	9.46	8.3
1941	9,808	13,241	23,049	18.47	10.24	8.2
1942	6,704	12,727	19,431	18.59	11.73	6.7
1943	10,220	15,072	25,292	20.04	11.19	8.8
1944	13,783	17,082	30,865	20.65	9.96	10.6
1945	14,487	17,659	32,146	21.13	10.12	11.0
1946	18,461	20,011	38,472	22.83	9.77	13.0
1947	19,743	21,206	40,949	$23 \cdot 24$	9.53	13.7

<sup>\*</sup>Excess of Births over Civilian Deaths.

The general decline in the rate of natural increase since 1890 has been due to a greater decline in the birth rate than in the death rate. An improvement in both birth and death rates during the decennium 1906 to 1915 is reflected in the rate of natural increase. In 1919 deaths were increased by the influenza epidemic, and the birth rate was low. After 1921 the birth rate declined rapidly until 1935 and despite lower death rates the rate of natural increase fell to a very low level. A rise in birth rate since 1939 has more than offset deaths of members of the Forces.

Although there are more males born than females, the increase of population from the excess of births over deaths is greatly in favour of the latter, since the death rate is higher among males. During the ten years ended 1947 the number of females added to the population by excess of births over civilian deaths was 17,854 or 13 per cent., more than the corresponding number of males.

The increases in population from natural and migratory causes are shown in Chapter "Population" of this Year Book.

The table below shows the rates of natural increase per 1,000 of population in the Australian States and New Zealand. Figures for war years represent excess of births over civilian deaths.

Table 177.—Natural Increase, Australasia.

State or Country.	1942,	1943.	1944.	1945.	1946	1947.
New South Wales	8.27	9.94	11.42	11.88	13.13	13.71
Victoria	7.12	9.01	9.48	10.32	12.42	12.62
Queensland	11.14	12.09	14.26	16.02	15.02	16.51
South Australia	7.49	10.86	11.83	12.73	14.72	15.62
Western Australia	10.12	12.36	13.27	12.22	14.92	16.20
Tasmania	11.92	12.64	11.02	13.56	17.04	18.53
Commonwealth	8.57	10.33	11.46	12.23	13.62	14.37
New Zealand	10.68	9.23	11.29	12.78	15.18	16.74

# DEATHS.

Although for purposes of record stillbirths are registered as deaths as well as births, they are excluded from the deaths shown in the Year Book and in the Statistical Register of New South Wales.

In 1940 and 1941 the recorded deaths include Australian defence personnel who died in New South Wales but not those who died elsewhere. The deaths in 1942 to 1947, inclusive, relate to civilians only.

Known deaths of Australian defence personnel enlisted in New South Wales recorded to the end of 1947 numbered 13,433. This figure is exclusive of deaths of those who remained posted as "missing" or "prisoner of war" and is subject to revision as additional information becomes available.

Civilian deaths (excluding stillbirths) during 1947 numbered 28,449 equal to a rate of 9.53 per 1,000 of the mean population. Of the total, 16,032 were males and 12,417 females, the rate for the former being 10.74 and for the latter 8.32 per 1,000 living. The average annual number of deaths since 1861 with the rate per 1,000 of population, in quinquennial periods, was as follows:—

	• •	LOIC X . C.	Dogers,	iicii bouti	1 11 (1.00)		
Period.		nual Number uding Stillbirt		Deat	h rate per 1,0 Population.	000 of	Proportion per cent. of Male to
T GITGOT.	Males.	Females.	Total.	Males.	Fernales.	Total.	Female Rate.
1861–65	4,010	2,502	6,512	18.35	15.00	16.86	122
1866-70	4,356	2,938	7,294	17.51	14.29	16.05	123
1871-75	4,835	3,344	8,179	16.27	13.47	14.99	121
187680	6,278	4,373	10,651	17.41	14.50	16.09	120
1881–85	7,738	5,483	13,221	16.72	14.45	15.69	116
1886-90	8,337	5,954	14,291	14.73	12.68	13.80	116
1891-95	8,955	6,405	15,360	13.88	11.54	12.80	120
1896-00	9,058	6,499	15,557	13.01	10.55	11.85	123
1901-05	9.146	6,754	15,900	12.43	10.03	11.28	124
1906-10	9,203	6,698	15,901	11.44	9.00	10.27	127
1911-15	11,020	7,817	18,837	11.69	9.13	10.48	128
1916-20	12,052	8,750	20,802	12.14	9.02	10.60	135
1921-25	11,660	8,721	20,381	10.39	8.08	9.26	129
1926-30	12,925	9,779	22,704	10.35	8.14	9.27	127
1931 - 35	12,760	9,837	22,597	9.67	7.67	8.69	126
1936-40	14,542	11,193	25,735	10.58	8.30	9.45	128
1941-45	15,383	12,424	27,807	10.75	8.70	9.73	124
1940	14,881	11,262	26,143	10.65	8.16	9.41	131
1941	15,209	12,091	27,300	10.82	8.67	9.75	125
1942	16,461	12,758	29,219	11.60	9.04	10.32	128
1943	15,944	12,926	28,870	11.14	9.06	10.10	123
<b>1944</b>	14,494	12,158	26,652	10.04	8.42	9.23	119
1945	14,808	12,186	26,994	10.16	8.35	9.25	122
1946	16,038	12,541	28,579	10.90	8.51	9.70	128
1947	16,032	12,417	28,449	10.74	8.32	9.53	129
	,	1 '	,	II .	1	I	l

Table 178.—Deaths, New South Wales.

The death rate declined continuously for both sexes up to 1932, when it was lowest at 8.28 per 1,000. The decline was faster for females than for males and the rates have risen slightly, for males from 9.16 in 1931, and for females from 8.28 per 1,000 in 1932 to 10.74 and 8.32 per 1,000 respectively in 1947, reflecting the increasing age constitution of the population. However, as shown above, the rate for both sexes combined during the five years 1861-65 was 57 per cent. higher than in the five years

1943-47. Many causes are responsible for this improvement, such as the enforcement of Health Acts, the advance of science, and the better education of the people. The effect of these factors on the death rates of the population in the early years of life is discussed later in connection with deaths of children under 1 year and under 5 years of age.

A table of the death rates per 1,000 of mean population in each of the Australian States and New Zealand from 1942 to 1947 is shown below:—

State or Country.	1942.	1943.	1944.	1945.	1946.	1947.
New South Wales	10.32	10·10	9.23	9.25	9.70	9.53
Victoria	11.21	10.81	10.30	10.21	10.63	10.44
Queensland	9.29	10.10	8.84	8.79	9.77	9.15
South Australia	11.02	10.57	9.66	9.64	10.17	9.62
Western Australia	10.65	9.62	9.30	9.66	9.64	9.39
Tasmania	10.08	10.40	10.15	9.71	10.11	9.17
Commonwealth	10.48	10:30	9.52	9.50	10.000	9.69
New Zealand	11.05	10.47	10.30	10.44	10.06	9.68

Table 179.—Death Rates, Australasia.

This comparison is based on crude death rates, and differences in the age and sex constitution of the individual populations have not been taken into account; therefore the rates are not strictly comparable with each other nor do they show the true incidence of mortality in the various States.

Such a comparison can be made by applying the rates of mortality in age and sex groups to a standard population embodying a fixed distribution according to age and sex. The resultant rates constitute an index of mortality or weighted average death rate which, in effect, shows what would have been the death rate if the age and sex distribution of the population concerned had been in accordance with the standard adopted. The standard used is identical with that provided by the International Statistical Institute in Part II, p. viii of the Annuaire International de Statistique, 1917.

The following table shows, for the census years 1921 and 1933, the comparison between the crude death rates for each of the Australian States, and the standardised rates as described above.

Table 180;-Comparison of "Crude" and "Standardised" Death Rates.

Year.	N.S.W.	Vic.	Q'landı	S. Aust.	W. Aust.	Tas.	Australia
"Crude	' Death Ra	te (deaths	at all ages	combined	per 1,000 of	total po	pulation).
1921 1933	9·50 8·58	10·52 9·59	9·37 8·84	10·02 8·44	10.42 8.64	10·30 9·60	9.91
	"Standard	ised" Dea	th Rate (c	alculated a	s described :	in text).	
192I 1933	10·35 8·52	10·79 8·74	10·24 9·10	10·38 7·66	11.88 8.74	10·83 8·86	10.58 8.62

Data as to age distribution of population in individual States are now available for the census of 30th June, 1947, but standardised rates by States cannot be calculated for the year 1947 until data as to age at death are available. The standardised rate for Australia in the years between 1933 and 1947 indicates that there has not been any significant change.

# DEATH RATES-AGE AND SEX.

Variations in the proportion of persons in the various age groups as shown on page 192 have a considerable bearing on the crude death rate of the whole population.

Again, the death rate of males is much higher than that of females. Consequently the increase in the proportion of females which has occurred in recent years is reflected in a corresponding decrease in the general rate.

In the following table death rates are given for each sex in the principal age groups during the three years around each census 1881 to 1933.

Table 181-Specific Mortality, All Causes.

			010 101	Decin	c Morta	HEY, AII	Causes.		
Age Group	(Ye	ears).		Death ra	te per 1,000	O Living—A	All Causes,		Reduction per cent. 1880-82 to
			1880–82,	1890-92.	1900-02.	1910-12,	1920-22.	1932–34.	1932-34.
					MALES.	,			·
0-4			47.45	38.70	33:88	24.69	21.49	12.52	74:
5-9	•••		3.13.	3.51	2.16	2.05	1.85	1.41	55
10-14			2.45	2.21	2.01	1.70	1.58	1.23	50
15–19			3.85	3.33	3.43	2.43	2.17	1.68	56
20-24			5.79	4.74	4.71	3.32	2.70	2.28	61
25-34		•••	7.64	6.50	5.56	4.31	3.75	2.49	67
35-44			12.25	9.92	8.77	6.98	6.02	4.56	63-
45-54			18.99	16.23	14.56	12.45	10.86	9.56	50
55-64	•••		35.50	29.76	27.59	25.13	23.04	21.31	40
65-74	•••	•••	67.23	61.89	60.13	55.69	51.61	49.26	27
75 and over	•••	•••	162:71	146.35	149.50	144.47	142.99	128.48	21
All Ages (Cr	ude	Rate)	16.72	14.24	12.90	11.59	10.72	9.60	43
Rate in									
1880-82	=	100	100	85	77	69	64	57	•••
		_	,	]	FEMALES.				
0-4			42.19	33.45	30.37	20.71	16.94	10.06	76
5- 9	•••	•••	2:77	3,26	1.99	1.76	1.64	1.18	57
10-14	•••	•••	2.22	1.75	1.69	1.37	1.20	-83	63
15–19	•••	•••	3.56	3:03	2.49	1.92	1.61	1/34	62
20–24	•••	•••	5,31	4.14	3.82	3,17	2.43	2.03	62
25-34	•••	•••	7.90	6.07	5.44	4.21	3.65	2.64	67
35-44	•••	•••	11.10	8.86	7.53	5.96	4.88	3.99	64
45-54	• • •	•••	15.09	11.86	10.36	9.06	7.90	7.03	53
	•••	•••	26.83	22.56	20.02	17.60	15.73	14:21	47
55-64 65-74	•••			52.69	46.18		39.11	36.45	•
75 and over	•••		56.95	142.28	134.48	$\begin{array}{r r} & 44.46 \\ & 125.29 \end{array}$	124.53	107:40	22
	•••		138.58						
All Ages (Cru	ıde	Raté)	14.07	11.82	10.23	9:09	8.23	7.57	46
Rate in		100	140	١				ي ا	
1880-85	. =	100	100	84	73	65.	58	54	•••
				]	Persons.				_
0-4			44.86	36.12	32.15	22.74	19.25	11.31	75
5-9			2.95	3.39	2.08	1.91	1.75	1.30	56
10-14	•••		2.33	1.98	1.85	1.54	1.39	1.03	56
15-19		• • • • • • • • • • • • • • • • • • • •	3.70	3.18	2.96	2.18	1.90	1.51	59
20-24		• • • • • • • • • • • • • • • • • • • •	5.57	4.45	4.26	3.24	2.56	2.16	61
25÷34		•••	7.75	6.32	5.50	4.26	3.70	2.56	67
35-44	•••	•••	11.79	9:49	8.23	6.50	5.47	4.27	63
45-54	•••	•••	17.54	14.48	12.79	10.97	9,46	8.33	52
55-64	•••	•••	32.07	26.98	24.34	21.84	19.71	17.81	44
65-74	•••	•••	63.37	58.07	54:43	50.61	45.81	43.02	32.
75 and over	•••	•••	154 09	144.72	142 78	135.86	133.86	117.72	24
All Ages (Cr			15.52	13.13	11.63	10.40	9.50	8:60	45
Rate in		<u> </u>						ļ	
1880-82	2 =	100	100	85	75	67	61	55	ļ. <u></u>

There was a steady reduction in the death rates throughout the period, the improvement being greatest at ages under 5 years, then in the group 25 to 34 years. The rates for females were reduced to a greater extent than the rates for males in every age group up to 75 years, except at ages 25 to 34 years. It is noticeable that the reduction at ages 10 to 14 years was 63 per cent. amongst females and only 50 per cent. amongst males, the difference in the rate of reduction amongst males and females being greatest in this group and at ages 65 to 74 years. Above that age improved conditions naturally had less effect. Mortality is lowest at approximately 10 years of age.

## EXPECTATION OF LIFE.

The effect of the improvement in death rates on the duration of life in Australia is indicated in the following statement, which shows the average expectation of life at specified ages according to the Australian mortality experience of the decades from 1881 to 1910 and the three years around the censuses of 1921 and 1933. Life tables based on the mortality experience of the three years around the census of 1947 have not yet been prepared.

			Males.			Females.						
Age.	1881–90.	1801- 1900.	1901–10.	1920–22.	1932-34.	1881-90.	1891- 1900.	190110.	1920–22.	1932-34		
Yrs.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.		
0	47.20	51.08	55.20	59.15	63.48	50.84	54.76	58.84	63.31	67.14		
10	48-86	51.43	53.53	56.01	58.01	51.95	54.46	56.39	59.20	1.602		
<b>2</b> 0	40.58	42.81	44.74	46.99	48.81	43.43	45.72	47.52	50.03	51.67		
30	33.64	35.11	36.52	38-44	39.90	36-13	37.86	39.33	41.48	42.77		
<b>4</b> 0	26.50	27.65	28.56	30.05	31.11	29.08	30.49	31.47	33.14	34.04		
<b>5</b> 0	19.74	20.45	21.16	22.20	22.83	22.06	22.93	23.69	24.90	25.58		
<b>6</b> 0	13.77	13.99	14.35	15.08	15.57	15.39	15.86	16.20	17.17	17.74		
<b>7</b> 0	8.82	8.90	8.67	9.26	9.59	9.70	9.89	9.96	10.41	10.97		
80	5.11	05.0	4.96	5.00	5.22	5.27	5.49	5.73	5.61	6.01		
90	2.91	2.91	2.64	2.60	2.98	2.98	3.07	2.99	2.91	3.05		
100	1.32	1.29	1.18	1.17	1.10	1.37	1.23	1.24	1.24	1.02		

Table 182 .- Expectation of Life, Australia.

# DEATHS-METROPOLIS AND REMAINDER OF THE STATE.

A summary of the annual deaths and death rates in the metropolis (i.e., the area within existing boundaries) and in the remainder of the State since 1927 is shown on the next page, the deaths being allocated according to the usual residence of the deceased persons.

The death rate appears to be higher in the metropolis than in the country, but crude rates should be used with caution, owing to differences in the proportions of each sex and in the age composition of the population of these divisions.

	Metro	polis.	Remainder	of the State.	New Sout	New South Wales.		
Year.	Average annual Number of Deaths (excluding Stillbirths).	Rate per 1,000 Living.	Average annual Number of Deaths (excluding Stillbirths).	Rate per 1,000 Living.	Average annual Number of Deaths (excluding Stillbirths).	Rate per 1,000 Living.		
1927-30	9,386*	10.04*	8,880*	8.49*	18,266	9.23		
1931-35	11,596*	9.42*	11,001*	8.02*	22,597	8.69		
1936-40	13,277	10.51	12,458	8.23	25,735	9.45		
1941–45	14,763	10.69	13,044	8.82	27,807	9.73		
1942	15,404	11.45	13,815	9.30	29,219	10.32		
1943	15,465	11.18	13,405	8.08	28,870	10.10		
1944	14,300	10.08	12,352	8.42	26,652	9.23		
1945	14,350	9.94	12,644	8.58	26,994	9.25		
1946	15,289	10.43	13,290	8.98	28,579	9.70		
1947	15,370	10.36	13,079	8.71	28,449	9.53		

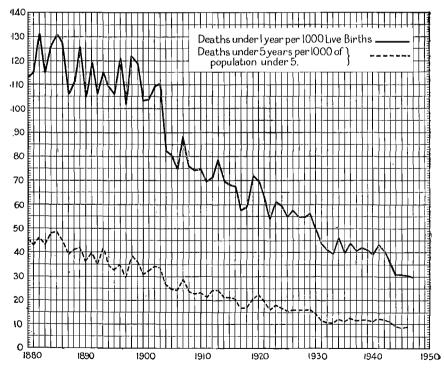
Table 183 .- Deaths, Metropolis and Country.

#### THE MORTALITY OF INFANTS.

DEATHS OF CHILDREN UNDER 1 YEAR OF AGE (EXCLUDING STILLBIRTHS).

During the year 1947, the children who died before completing the first year of life (excluding stillbirths) numbered 2,069, equivalent to a rate of 29.81 per 1,000 live births.

# INFANTILE MORTALITY.



The death rate is higher for male infants than for females, the rates in 1947 being 34.2 and 25.2 per 1,000 live births, respectively. The rates for

<sup>•</sup> On basis of boundaries as existing from 1933.

each sex are shown in the following table in quinquennial periods since the year 1881.

Table 184 .- Infantile Mortality.

	1 350	les.	Fem	ales	To	tal
Period.	Annual Average Deaths under 1.	Rate per 1,000 Live Births.	'Annual Average Deaths under 1.	Rate per 1,000 Live Births,	Annual Average Deaths under 1.	Rate per 1,000 Live Births:
1881-85	:2,136	131.28	1,806	116:34	3,942	123.98
1886-90	2,358	122-27	1,961	106.72	4;319	114.68
1891-95	2,414	118.81	1,972	102.73	4,386	111.00
1896-00	2,274	118.51	1,890	105:44	4,164	113.40
1901-05	2,015	103.94	1,669	89.81	3,684	97.02
1906-10	1,854	84.09	1,478	70.59	3,332	77.51
1911–15	2,062	77:94	1,627	64.55	3,689	71.41
1916-20	1,918	72.54	.1,447	57.64	3,365	65:28
1921-25	1,798	64.61	1,384	51.98	3,182	58.43
1926-30	1,655	60.41	1,266	48.83	2,921	54.78
1931-35	1,075	46.59	811	37.05	1,886	41.95
1936-40	1,109	<u>,</u> 5·52	854	36.64	1,963	41.18
1941-45	1,147	39.55	887	32·16	2,034	35.95
1942	1,204	44.33	912	35.78	2,116	40.19
1943	1,161	39.68	911	32.53	2,072	36 18
1944	1,050	34:58	779	26.63	1,829	30.68
1945	1,055	33·16	834	27.94	1,889	30.63
1946	1,195	34.44	837	25.71	2,032	30.22
1947	1,223	34.19	846	25·16	2,069	29.81

In 1930 the rate was less than 50 deaths per 1,000 live births for the first time on record; it fell below 40 per 1,000 in 1933 and below 30 per 1,000 in 1947 when it was the lowest ever recorded.

During the period reviewed the excess of the male rate over the female rate has been pronounced consistently and it has grown greater. In the ten years 1881 to 1890 the excess was 19 per cent., and in the five years 1943-47 it was 35 per cent.

The remarkable improvement which has taken place in the infantile mortality rate in the period covered by the table is due in a large degree to the measures adopted to combat preventable diseases by health laws and by education, and to the establishment of baby health centres and other means to promote the welfare of mothers and young children. Particulars of these are given in chapter "Social Condition" of this volume.

## INFANTILE MORTALITY BY AGE.

Of the total number of deaths of infants under 1 year of age in 1947, 61 per cent. occurred within a week of birth, 72 per cent. within the first month, and 80 per cent. within three months. The following statement shows the number of deaths at various ages under 1 year in the metropolis and in the whole State and the rates per 1,000 live births.

Table 185 .- Infantile Mortality, Metropolis and State; Age.

			_				1						
			Me	tr <b>o</b> polis					New So	uth Wale	es.		
Age at Death.		Number of Deaths,			Deaths per 1,000 Live Births.			Number of Deaths.			Deaths per 1,000 Live Births.		
	1945.	1946.	1947.	1945.	1946.	1947.	1945.	1946.	1947.	1945.	1946.	1947.	
Under 1 week 1 week 2 weeks 3 ,,	505 55 28 26	519 30 13 10	532 45 31 21	17·12 1·86 ·95 ·88	14.78 .86 .37 .28	16.67 1.41 .97 .66	1,127 127 53 37	1,266 121 43 47	1,264 121 54 50	18·28 2·06 •86 •60	18·83 1·80 ·64 ·70	18·22 1·74 ·78 ·72	
Total under 1 month	614	572	629	20.81	16*29	19.71	1,344	1,477	1,489	21.80	21.97	21.46	
1 month 2 months 3 , 4 , 5 , 6 , 2 , 9 , 9 , 10 , 11 , ,	43 17 18 16 24 12 21 10 9 13 16	28 20 23 23 13 24 23 15 19 8	42 17 33 20 20 12 15 18 19 12	1.46 .58 .61 .54 .41 .71 .34 .31 .44	*80 *57 *66 *66 *37 *68 *66 *43 *54 *22 *51	1·32 ·53 1·03 ·63 ·63 ·38 ·47 ·56 ·59	100 50 49 48 64 41 47 33 38 37	88 59 57 57 45 59 49 43 43 43 37	100 57 76 53 45 30 38 51 52 38 40	1.62 .81 .79 .78 1.04 .76 .53 .62	1·31 ·88 ·84 ·84 ·67 ·88 ·73 ·64 ·64 ·27 ·55	1·44 ·82 1·10 ·76 ·65 ·43 ·55 ·73 ·75 ·55	
Total under 1 year	040	786	856	27:56	22:39	26.82	1,889	2,032	2,069	30.63	30.22	29.81	

Although there has been a remarkable improvement in the mortality rates after the first week of life, only a slight improvement has occurred in the death rate during the first week of life. But the ratio of neo-natal deaths (under one week) to live births does not provide a valid basis for determining changes in mortality during this period, when the deaths are due almost exclusively to pre-natal causes which are also a common source of stillbirths. It is probable that under improved conditions of pre-natal care and obstetric technique many infants who formerly would have been stillborn are now born alive, but die within a week of birth. Available information regarding stillbirths (see Table 170) suggests that the proportion of stillbirths is declining and the combination of stillbirths and neonatal deaths (as in Table 193) shows that there has been some saving of life among the new born.

More skilful attention after birth may decrease the number of infants who die from pre-natal causes, but it is recognised that the rate of mortality among infants in the first week of life will not be reduced appreciably except through increased pre-natal care, and considerable attention is being given to the care and instruction of expectant mothers.

<sup>\*2087—3 ¶</sup> 

The following table shows the rates of mortality among infants in age groups during the first year of life in quinquennial periods since 1901, and annually since 1937:—

Table	186Infantile	Mortality,	Age.
-------	--------------	------------	------

		Rate of	Mortality pe	r 1,000 Live	Births amor	ng Children	aged—	
Period.	Under 1 week.	1 week and under 1 month.	1 month and under 3 months.	3 months and under 6.	6 months and under 12.	Total under 1 month.	Total under 3 months.	Total under 1 year.
1901-05 1906-10 1911-15 1916-20 1921-25 1926-38 1931-35 1938-40 1941-45 1938 1939 1940 1941 1942 1943 1944 1944 1944 1944 1944 1944 1944	21:84 21:73 23:08 24:28 22:94 23:31 22:67 22:77 20:02 22:80 23:42 22:96 21:12 23:65 20:97 19:61 18:30 18:28	11·27 9·70 8·70 8·18 7·30 6·56 5·10 4·97 4·33 5·58 4·48 4·48 4·48 6·97 4·52 4·23 3·66 3·52	18*26 13*31 10*76 9*47 8*33 6*39 3*90 3*46 3*22 3*10 2*48 3*85 4*23 3*97 3*56 2*16	20'93 16'02 12'09 9'68 8'27 7'08 3'64 3'48 3'32 3'05 3'46 3'56 3'56 3'56 3'56 3'56 3'54 3'54 3'54 3'54 3'54 3'54 3'54 3'54	24·72 17·66 16·69 13·67 11·59 11·44 6·64 6·50 5·06 6·15 6·68 7·54 5·97 5·84 6·46 5·36 4·18	38-11 31-52 31-87 32-46 30-24 29-87 27-77 27-74 24-35 28-88 27-90 27-44 25-58 29-52 25-49 23-84 21-96 21-80	51·37 44·83 42·63 41·93 38·57 36·26 31·67 31·20 27·57 31·48 31·70 29·92 20·43 33·76 22·46 27·40 24·12 24·12 24·12	97.02 77.51 77.41 65.28 58.43 54.78 41.95 41.18 35.95 40.68 41.84 41.02 39.02 43.77 40.19 36.18 30.68 30.68
1946 1947	18:82 18:22	3·14 3·24	2·19 2·26	2·37 2·51	3·70 3·58	21 <b>·</b> 96 21 <b>·</b> 46	24·15 23·72	30·22 29·81

The improvement has been greatest in the age group 6 to 12 months, then at ages 3 to 6 months and 1 to 3 months. There has been substantial improvement also in the group 1 week and under 1 month.

Infantile Mortality in Metropolis and Remainder of State.

The number of deaths of children under one year of age in the metropolis in 1947 was 856 or 26.82 per 1,000 live births, and in the remainder of the State 1,213 or 32.36 per 1,000 live births.

The following table shows the number of deaths of children under one year of age in the metropolis and in the remainder of the State, and the rate per 1,000 live births since 1927. The basis of the tabulation as to locality is the usual residence of the mother:—

Table 187.-Infantile Mortality, Metropolis and Country.

	Metro	polis.	Remainder	of State.	New Sou	th Wales.
Year.	Average Annual Deaths under 1.	Rate per 1,000 Live Births.	Average An nual Deaths under 1.	Rate per 1,000 Live Births.	Average Annual Deaths under 1.	Rate per 1,000 Live Births.
1927–30	970	53·14	1,339	54.78	2,309	54·08
1931–35	702	40·11	1,184	43.12	1,886	41·95
1936–40	716	38·18	1,247	43.12	1,963	41·18
1941–45	848	32·52	1,186	38.87	2,034	35·95
1937	703	38·72	1,229	41·89	1,932	40.68
1938	714	38·47	1,266	44·02	1,980	41.84
1939	663	31·31	1,306	45·54	1,969	41.02
1940	758	38·01	1,169	39·71	1,927	39.02
1941	942	42·12	1,322	45·02	2,264	43.77
1942	877	37·77	1,239	42·10	2,116	40.19
1943	860	31·86	1,212	40·03	2,072	36.18
1944	749	26·45	1,080	34·51	1,829	30.68
1945	813	27·56	1,076	33·46	1,889	30.68
1946	786	22·39	1,246	38·77	2,032	30.22
1947	856	26·82	1,213	32·36	2,069	29.81

In the following table the rates of infantile mortality in the Australian States, in New Zealand, and in various other countries are compared. The rates quoted for 1946, being for a single year (and therefore likely to be affected by transient factors) should be read in conjunction with those for the period 1931-35:—

Table 188.—Infantile Mortality, States and Countries.

				_						
State or Cou	intry.		Deaths un Year pe Live B	r 1,000	Co	Country.				der one r 1,000 irths.
			Average, 1942+46.	1946.			•		Average, 1931–35.	1946,
New Zealand	•••	<del></del> .	28.67	26.10	*South Africa			<u> </u>	63	36
South Australia	•••		31.65	27.07	Eire				68	63
Queensland Western Australia	•••	•••	32·35 32·43	29·27 31·06	Denmark				71	46
Victoria	•••	•••	32.52	27.16	France				73	73
New South Wales	•••		33.30	30.22	Germany				74	‡
Tasmania Australia	•••	•••	35·39 32·79	30·23 <b>29·01</b>	Canada				75	47
erustrana	•••	•••	82 19	29 01	Northern Irel				78	54
					Scotland				81	54
			Average.	1946.	Belgium				82	71
		İ	1931÷35.	1040.	Argentina		•••	•••	94.	82†
					Italy				105	84
New Zealand			39	26	Spain				113	85†
Australia			41	29	Japan				120	‡
New South Wales	•••	•••	42	30	Czechoslovak				130	109
Norway Netherlands	•••	•••	45 45	39	Mexico				134	117
Switzerlands	•••	:::	48	39	Hungary	•••	•••	/	157	120
Sweden			50	26	, .	•••	•••		182	
United States	•••	•••	59	36	Ceylon	•••	•••	•••		132
England and Wales	•••	••••	62	43	Rumania	•••	•••	•••	182	164

<sup>\*</sup> White people only.

†1945.

‡ Not available.

The New Zealand infantile mortality rate excluding Maoris is lower than in any of the Australian States, but in the New Zealand figures persons with any trace of Maori blood are grouped as Maoris whereas in Australia only full-blood aboriginals are excluded in the statistics and half-castes and lesser castes are included in the general population. It is probable that on the basis of total population the Australian rates generally are lower than the New Zealand rate. The rates for Australasia generally are greatly superior to those prevailing in most other countries, but lack of international comparability, due to diversity of definitions of "stillbirft" and the consequent effect upon the number of live births and deaths under one year, renders difficult a true assessment of the relative mortality of infants in various countries. Allowance should also be made for wide differences in climate and economic conditions.

# Causes of Infantile Mortality.

A table published annually in the Statistical Register shows the rates of infantile mortality from each of the principal causes in the last forty-eight years. This indicates that there has been a great decline in the mortality from diarrhœa and enteritis and other digestive diseases, nervous diseases, tubercular diseases, and bronchitis, accident, and general diseases. There has also been a decline in congenital debility, but a proportionate increase in deaths from malformation, premature birth, and diseases of early infancy due to the deaths of children born alive who, under conditions prevailing in earlier years, would have been stillborn. The mortality from epidemic diseases fluctuates considerably with a tendency to decline.

The following table shows the incidence of mortality caused by the principal diseases among infants at various periods during the first year of life in 1946 and 1947, showing the experience in the metropolis in comparison with that in the whole State:—

Table 189.-Infantile Mortality, Causes of Death.

	Dea	ths of Ch	ildren und	er one Y	ear of Ag	e per 1,00	0 Live Bi	rths.	
Cause of Death.		Metro	opolis.		State.				
Cause of Death.	Under 1 week.	1 week and under 1 month,	1 month and under 1 year.	Total.	Under 1 week.	1 week and under 1 month.	1 month and under 1 year.	Total.	
			1946.						
Tuberculosis Syphilis Other Parasitic and In-						:::	·12 ·03	·12 ·03	
fections Diseases Meningitis	  .41	·13    ·18 ·06	.76 .22 .03 .09 1.84 .57	·89 ·28 ·03 ·09 2·43 ·63	·04 ·04 ·03 ··· ·37 ·06	·12 ·04 ·01 ··· ·30 ·09	1.09 •19 •12 •15 2.36 •61	1·25 ·27 ·16 ·15 3·03 ·76	
Malformations Congenital Debility Premature Birth Injury at Birth Other Diseases of Early Infancy	2·30 ·22 7·49 3·15	·57 ··28 ·13	1.44 .06 .09 .06	4·31 ·28 7·86 3·34 2·49	2·31 ·36 9·27 3·33 2·60	·82 ·10 ·66 ·22	1.44 .18 .18 .09	4.57 .64 10.11 3.64 3.30	
All Other  Total	16.33	·13 	.6.74	24.74	18.82	3:14	8.26	30.22	
			1947.		<u> </u>		<u> </u>		
Tuberculosis			•16	.16			•13	•13	
Other Parasitic and Infectious Diseases  Meningitis	······································	 .09 .13  .03 .69 .22 .75 .09 .53 .16	 .73 .31 .03 .16 .134 .47 1.88 .16 .22 .09	 .88 .50 .03 19 2.66 .69 4.35 .38 8.62 3.54 3.10 1.72	··01 ·06 ·06 ···························	···01 ·06 ·09 ··· ·58 ·12 ·73 ·16 ·66 ·29 ·36 ·17	.03 .80 .36 .04 .17 1.99 .75 1.80 .18 .19 .13	92 •51 •04 •18 3·03 •87 4·45 •61 9·76 3·86 1·94	
Total	16.67	3.04	7.11	26.82	18.22	3.24	8.35	29.81	

In the State in 1947, 95 per cent. of the deaths during the first week after birth and 74 per cent. of the deaths which occurred during the first year after birth were due to exclusively pre-natal causes, and diseases of early infancy or syphilis. Deaths from these causes during the first year of life represented 22.19 per 1,000 live births during the year. The incidence of diarrhoea and enteritis was comparatively light among children under the age of one month.

## DEATHS OF EX-NUPTIAL CHILDREN UNDER 1 YEAR.

During 1947 there were 66,615 nuptial and 2,783 ex-nuptial children born alive. During the same period the deaths of nuptial children under 1 year of age numbered 1,930 and of ex-nuptial children 139.

The infantile mortality rate of ex-nuptial children was 73 per cent. higher than the rate for nuptial children, partly owing to premature birth, infantile debility and inherited diseases, but to an equally great extent to causes arising from neglect. The mortality rates from various causes among ex-nuptial children are shown annually in the Statistical Register.

How these causes combined to produce a comparatively high death rate among ex-nuptial children is shown in the following table which relates to the years 1946 and 1947 and the quinquennia 1942-1946 and 1943-1947.

Table 190.—Infantile Mortality, Nuptiality and Age.

	_		Deat	hs per 1,000	) Live Birth	s.	-	
		Ex-n	uptial,		JI I	Ex-n	uptial.	
Age at Death,	Nuptial.	Rate.	Per cent of Nuptial Rate.	Total.	Nuptial.	Rate.	Per cent of Nuptial Rate.	Total.
		1	946.		1942 to 1946.			
Under 1 week 1 week 2 weeks 3 ,,	18*43 1*84 *65 *64	27·45 1·02 •34 2·03	149 55 52 317	18·82 1·80 ·64 ·70	18.66 2.08 .88 .76	29·92 2·71 •95 1·52	160 130 108 200	19:14 2:10 :88 :79
Total under 1 month	21.56	30.84	143	21.96	22:38	35.10	157	22.91
1 month 2 months	1·21 ·84 ·76 ·89 ·59 ·87 ·74 ·67 ·58 ·28 ·56	3·39 1·69 2·72  2·37 1·02 ·34  2·03 	280 201 358  402 118 46  350  61	1·31 ·88 ·85 ·84 ·67 ·88 ·73 ·64 ·64 ·27 ·55	1.66 1.05 1.03 .94 .84 .87 .70 .80 .77 .63	3·03 1·91 2·48 1·76 2·07 1·91 ·64 ·48 1·04 ·64	183 182 241 187 246 220 81 60 135 102 88	1.72 1.09 1.09 .98 .89 .92 .78 .78 .78
Total under 1 year	29.55	44.74	151	30.22	32•49	51.70	159	33.30
		19	947.			1943 to	1947.	
Under 1 week 1 week 2 weeks 3 ,,	17:80 1:67 :78 :65	28·03 3·59 ·72 2·51	157 215 92 386	18•22 1·74 •78 •72	18·17 1·96 ·82 ·67	29'01 3'01 '75 1'66	160 154 91 99	18.62 2.01 .81 .71
Total under 1 month	20.90	34.85	167	21.46	21.62	34.43	159	22.15
1 month 2 months	1.37 .78 1.05 .75 .66 .45 .55 .72 .71 .54	3·23 1·80 2·16 1·08 ·36  1·08 1·80 ·72 2·51	236 231 206 144 55  65 150 254 133 512	1·44 ·82 1·10 ·76 ·65 ·43 ·55 ·73 ·75 ·55 ·55	1'49 '91 '95 '85 '74 '73 '70 '71 '74 '54	3·16 1·51 2·19 1·13 1·73 1·43 •60 •23 1·28 •60 •90	212 166 231 133 234 196 86 32 173 111 145	1.56 .94 1.00 .86 .78 .76 .70 .69 .76 .54
Total under 1 year	28.97	49:95	173	29.81	30.60	49.19	161	31.38

The number of ex-nuptial children who die during one year is comparatively small, consequently the rates of mortality for such children based on the experience of a single year are unstable.

A more reliable comparison is obtained by using figures based upon the quinquennial period. The experience of the five years 1943-1947 shows that the largest proportional excess of deaths of ex-nuptial children over those of nuptial children is not immediately after birth, but usually two months or more later. The mortality of ex-nuptial children exceeded that of nuptial children by 59 per cent. in the first month of life, 112 per cent. in the second, by 66 per cent. in the third, 131 per cent. in the fourth, 33 per cent. in the fifth, 134 per cent. in the sixth and 96 per cent. in the seventh. The excess of the ex-nuptial rate was rather less pronounced in later months.

The following table shows the number of births and deaths and the rate per 1,000 live births of ex-nuptial as compared with those of nuptial children in New South Wales since 1901.

	Motol Tt-	re Births.	Dea	ths under	г 1 тог	nth.	Deaths under 1 year.			
Period.	TOTALITAL	e Births.	Nuptial.		Ex-N	Ex-Nuptial.		ptial.	Ex-Nuptial.	
	Nuptial.	Ex- Nuptial,	No.	Rateper 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.
1901-05	176,555	13,289	*	*	*	*	15,273	86.51	3,146	236'74
1906 - 10	200,408	14,562	6,000	29.94	775	53.22	13,997	69.84	2,666	183.08
	244.160	14,144	7,496	30.70	737	52.11	16,261	66.60	$2,\!184$	154 41
1916-20	244,887	12,857	7,690	31.40	678	52.73	15,140	61.82	1,686	131-13
1921 - 25	258,838	13,407	7,653	29.57	580	43.26	14,549	56.21	1,359	101.36
1926-30	253,183	13,409	7,338	28.98	626	46.69	13,222	52.22	1,382	103.07
1931-35	213,613	11,222	5,726	26.81	518	46.16	8,612	40.32	819	72-98
1936-40			6,148	26.92	466	46.37	9,087	39.80	$729^{\circ}$	2.54
1941-45	271,295	11,620	6,446	23.76	441	37.95	9,515	35.07	655	56.37
1942	50,602	2:045	1,262	24.94	80	39.12	1,982	39.17	134	65.53
1943	55,005	2,260	1,272	23.13	93	41.15	1,953	35.51	119	52.65
1944	57,058		1,226	21.49	83	32.50	1,706	29.90	123	48.16
1945	58,936		1,251	21.23	93	34.12	1,749	29.68	140	51.36
1946	64,297		1,386	21.56	91	30.84	1,900	29.55	$\overline{132}$	44.75
1947	66,615		1,392	20.90	97	34.85	1,930	28.97	139	49.95

Table 191.—Deaths under 1 Month and 1 Year.

The table shows that the ex-nuptial death rates are uniformly high compared with the nuptial rates, but they have improved considerably in the period covered by the table. In 1901, one out of every four ex-nuptial children died within a year of birth; the rate in 1947 was one in twenty.

# DEATHS OF CHILDREN UNDER 5 YEARS.

Apparently there has been a general improvement in the death rate of all groups of children under 5 years of age, though the improvement has not been so marked at ages over 1 year as in the rates of infantile mortality.

The following table shows the mortality of children under 5 years of age:—

<sup>\*</sup> Not available.

Deaths under 5 years. Deaths under 5 years, Period. Average Period. Average Rate per 1,000 Living. Rate per 1,000 Living. Annual annual Number. Number. 6,174 5,558 4,910 1936-40 1941-45 1891-95 36.74 1896-00 1901-05 1906-10 33.85 2,621 10.58 30:25  $\frac{1942}{1943}$ 2,780 2,678 11.71 10.93 24.34 1911-15 5,002 22:55 1916-20 1944 2,368 1921-25 1926-30 17·12 15·71 2,382 2,519 4,246 1015 8.88 8.91 3,995

Table 192.- Deaths under 5 Years.

The rate of mortality in the quinquennium 1943-1947 compared with that of 1891-95, represents an annual saving of 40 lives in every 1,000 children under 5 years of age in the State.

1931-35

Children are more susceptible to the attacks of disease in the earlier years of life than later, and the death rate decreases steadily until the age of 10 years is reached. The high death rate for preventable diseases in earlier years was due partly to parental ignorance of the proper food or treatment required, and improvement in the rate may be attributed in a large measure to more widespread knowledge of infant hygiene and mothercraft.

# INFANTILE MORTALITY AND STILLBIRTHS.

As pre-natal causes are a common factor in both stillbirth and the mortality of infants subsequent to birth, it is of interest to note the combined rate for stillbirths and deaths of children who were born living In 1947 there were 1,466 stillbirths and 2,069 deaths under one year of age, making a total loss of 3,535 infants out of 70,864 live births and still-births. This represents a rate of 49.88 per 1,000 of all births. The rate on this basis was 35.35 in the metropolis and 41.22 in the remainder of the State—the difference between the rates being a little greater than the difference in the respective death rates of live-born children only.

Particular significance is attached to the combined rate in respect of neo-natal deaths (deaths of live-born children within one week of birth) and stillbirths. This is shown in the following table:—

Mortality per 1,000 Live Births and Stillbirths Combined. Deaths under one week plus Stillbirths. Deatlis under one year plus Stillbirths. Year. Remainder New Remainder Metropolis. South Metropolis. South State. State. Wales. Wales.  $\substack{1936-40 \\ 1941-45}$ 50:10 51.29 50.82 69.79 68.70 60.49 43.38 46.32 44.97 57:23 63.28 69:13 1937 68.97 69:24 70.77 51°23 47°02 53.98 51.80 72.46 1938 52.90 68.15 1939 49.88 61,60 67.44 64.45  $1940 \\ 1941$ 46.94 48.96 47.07 51.53 47.02 64.88 64:15 69 29 70 69 70.08 50:42 85:24 46 17 46.52 63.11 66:93 63:36 44.07 42.57 1943 42:38 45.57 56.71 59.02 57.23 54.64 54.25 44.63 49.80 40.29 1945 40.82 43.46 42.20 51·01 45·71 57 67 53 77 52 02 43.94 40.89 35.35 45.30 49.88

Table 193 .- Infantile Mortality and Stillbirths.

The year 1936 is the first for which figures are available on this basis.

# CAUSES OF DEATH.

The classification used in tabulating causes of death is in accordance with the International List of Causes of Death, with slight modifications for use throughout Australia. The fifth decennial revision of the list was first used in 1940.

The complete list of causes of death is published in the Statistical Register of New South Wales, which shows the number of deaths from each cause according to age, sex, and month of occurrence.

The table published below is a summary of the principal individual causes of death in 1946, compared with the average annual number in the period 1941-45, adjusted to the population of the year 1946. The proportion to the total in the five years 1942-46 is also shown:—

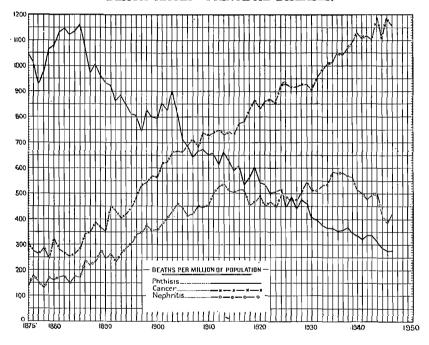
Table 194.--Causes of Death.

Causes of Death.	Adjusted Average, 1941–45.	Number, 1946.	Proportion of Total, 1942-46.	Causes of Death,	Adjusted Average, 1941–45.	Number, 1946.	Proportion of Total, 1942-46.
			per				per
			cent.	x 4 .9 6 11	17		cent.
Typhoid and Paratyphoid Fevers	5	3	.01	Infantile Convulsions Other Diseases of the Ner-	17	14	.06
Cerebro-spinal (Meningo-	5	۱ "	01	vous System	384	375	1.36
coccal) Meningitis	79	29	.24	Diseases of the Heart	8,871	9,262	31.23
Scarlet Fever	9	4 44	.03 19	Arteriosclerosis and other Diseases of the Arteries	535	612	1.93
Whooping-cough Diphtheria	69 93	57	28	Other Diseases of the Cir-	000	012	1.99
Erysipelas	7	6	.02	culatory System	77	116	•31
Tetanus	20	27	.07	Bronchitis	$\frac{264}{1,414}$	224	*88
Tuberculosis of Respira- tory System	909	818	3.06	Pneumonia Other Diseases of the Re-	1,414	1,254	4.81
Tuberculosis of Meninges	000	0.0		spiratory System	308	311	1.08
and Central Nervous		-00	.09	Diseases of the Stomach	159	142	•54
System Other Tuberculous Di-	26	28	-08	Diarrhœa and Enteritis (under 2 years of age)	149	66	•41
seases	49	42	.16	Diarrhœa and Enteritis			
Dysentery	25	8	·08	(over 2 years of age)	119 171	80 138	139
Syphilis Influenza-with respiratory	133	125	40	Appendicitis Hernia, Intestinal Obstruc-	1/1	130	.26
complications specified	86	37	.27	tion	252	266	•90
Influenza-without respirat-				Cirrhosis of the Liver	98 26	$\frac{94}{14}$	*31
ory complications speci- fied	59	31	<b>·</b> 18	Other Diseases of the Di-	20	14	.08
Measles	33	37	.13	gestive System	347	299	1.14
Acute Poliomyelitis and				Nephritis	1,324	1,235	4.51
Acute Polioencephalitis notifiable	13	52	.07	Other Diseases of the Genito-Urinary System	398	336	1.32
non-notifiable		5	.01	Criminal Abortion	30	11	-09
Acute Infectious Encephal-	i l	·	-	Puerperal Septicamia and			
itis (Lethargic or Epi- demic) notiflable	3	7	.01	Post-abortive Septi-	31	10	.09
demic) notiflable non-notiflable		. 1	.01	Puerperal Thrombophle-	91	10	09
Other Infective and Para-	\	_		bitis, Embolism and	4.0		
sitic Diseases Cancer	$\frac{97}{3,344}$	80	·33	Sudden Death (Sepsis) Other Puerperal Diseases	19 114	$\frac{11}{79}$	·06
Diabetes Mellitus	558	$\frac{3,412}{529}$	1.94	Congenital Malformations	323	353	1.14
Other General Diseases	424	383	1.43	Congenital Debility	89	43	•25
Vitamin Deficiency Dis- eases	2		•01	Premature Birth Other Diseases Peculiar to	668	679	2.28
Discuses of the Blood	225	229	-80	the First Year of Life	429	467	1.50
Chronic Poisoning and				Senility	1,068	1,057	3.80
Intoxication	38	55	'13	Suicide	249 1,317	279 1,473	-89 4·62
Encephalitis & Meningitis Cerebral Hæmorrhage	126 1,947	82 2,034	7:00	Accident Other Violence	10	37	14
Cerebral Embolism, Throm-		2,001		All other	171	163	.59
bosis, Softening and		00-	0.00				
Hemiplegia Apoplexy and other Intra-	793	897	2.88				
cranial Effusion	9	17	.04	ll .			
				Total	28,651	28,579	100.00
							}
			_				

The general experience in New South Wales is that mortality from tuberculosis, bronchitis, diarrhea and enteritis, diphtheria, and typhoid fever is decreasing and, on the basis of crude death rates, the mortality from diseases of the heart, cancer, diabetes and nephritis is increasing.

The figures in the foregoing table cannot be compared as absolute numbers of the same relative importance because of the limitations of a system of classification depending upon a large number of independent observers with varying degrees of diagnostic equipment, and because the age incidence is very different for the several diseases. Some diseases of the heart and diseases of the arteries, etc., affect persons of advanced years, and from the standpoint of rate of natural increase are relatively less important than are diseases like tuberculosis and pneumonia, which cause heavy mortality between ages 20 and 65.

#### DEATH RATES—PRINCIPAL DISEASES.



Interesting features of the table are that 6.04 per cent. of all deaths in the quinquennium of 1942-46 were due to the following diseases, which are generally diseases of early childhood:—Diarrhæa and enteritis (under 2 years), malformations, diseases of infancy, whooping-cough, convulsions of infants, measles, and poliomyelitis. Of the remaining deaths, more than half were due to five major causes, diseases of the heart, cancer, pneumonia, tuberculosis and nephritis. Deaths from violence represented 5.65 per cent. of the total.

In the pages which follow, the experience in respect of a number of individual diseases is traced. Where a lengthy period is covered, due allowance must be made for the effect of improvements in methods of diagnosis and classification and the general advance of medical knowledge. In some cases, these factors have exercised a considerable influence upon the trend of the figures.

Apart from the records obtained by the compulsory notification by medical practitioners of certain infectious diseases, reliable statistics are not available to show the number of cases of the various diseases occurring annually, but statistics have been collected of the occurrence of communicable diseases among school children since 1913. These show that epidemics of diseases such as measles, whooping cough, scarlet fever, and diphtheria are of periodical recurrence, and, from time to time, assume large proportions. A large proportion of the deaths from these diseases are among children under school age, but the rate of mortality from them rises and falls with the recurrence of epidemics among school children.

## TYPHOID FEVER.

The number of cases of typhoid fever is small in comparison with the experience of earlier years. Only 133 cases were notified in the last five years, as compared with 16,406 in the years 1899 to 1903. The number of deaths was 20 and 1,787 in the respective periods.

The decrease may be attributed to the operation of the Dairies Supervision Act which became law in 1889, the extension of sewerage services and greater efficiency in sanitary inspection and garbage disposal. The compulsory notification by medical practitioners of cases of typhoid fever has been in force since the 1st January, 1898.

The number of cases notified and deaths from typhoid fever, and the equivalent annual rates in the last thirteen years are stated below:—

	Cases N	otified.		Deaths.									
Period.	,	Rate	Males.		Fem	ales.	Total						
	Number.	per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.					
1933-37	752	•57	72	.10	32	.05	104	•08					
1938-42	289	•21	43	•06	13	.02	56	•04					
1941	40	14	6	.04	2	·01	8	•03					
$\boldsymbol{1942}$	31	11	5	.04	1	•01	6	•02					
1943	24	.08	4	.03			4.	•01					
1944	24	.08	3	.02	2	'01	5	•02					
1945	29	10	• • •		<b>2</b>	.01	2 3	.01					
1946	25	.08	2	•01	1	•01	3	•01					
	Į	l 1		ì l				I					

Table 195 .--- Typhoid Fever.

#### SMALLPOX.

There have been no deaths from smallpox in New South Wales since the year 1915.

Vaccination is not compulsory in this State, and the precaution is rarely adopted unless epidemics threaten, as in the year 1913, when about 425,000 persons voluntarily submitted themselves to vaccination.

# MEASLES.

Although measles is a common complaint, the resultant mortality is comparatively very small. The following statement shows the deaths from this cause, and the rate for each sex in recent years:—

	TM s	les.	Fen	nales.	Total.		
Period.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Bate per 10,000 living.	
1933–37 1938–42	101 131	·15 ·19	91 129	·14 ·19	192 260	·15 ·19	
1941 1942 1943 1944 1945 1946	5 63 8 2 3 13	·04 ·45 ·06 ·01 ·02 ·09	3 67 5 2 2 2	·02 ·48 ·04 ·01 ·01 ·16	8 130 13 4 5	·03 ·46 ·05 ·01 ·02 ·13	

Table 196 .- Measles.

Measles is a disease chiefly affecting children, and is periodically epidemic.

# SCARLET FEVER.

In 1946 the number of deaths from scarlet fever was 4, equivalent to a rate of 0.01 per 10,000 of the population. Of these 1 occurred in the metropolis, and 3 in the remainder of the State. The rate of mortality from this cause is very low, owing to the effectiveness of treatment. The number of cases notified and the deaths from scarlet fever and the equivalent annual rates have been as follows:—

	Cases 1	votified.		Deaths.									
Period.		Rate	Males.		Fen	nales.	Totai.						
	Number.	10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.					
1899-03	10,940	15.97	84	.23	114	:35	198	29					
1904-08	14,239	19.16	88	.23	91	.26	179	$\cdot \overline{24}$					
1909-13	13,220	15.70	41	•09	57	.14	98	$\overline{12}$					
1914-18	20,864	21.95	112	.23	161	·35	273	.29					
1919-23	6,732	6.39	34	.06	38	.07	72	.07					
1924-28	25,119	21.38	142	.24	185	•32	327	.28					
1929 - 33	23,260	18.21	115	·18	165	.26	280	$\cdot 22$					
1934-38	13,457	10.08	47	.07	45	.07	92	.07					
1939-43	15,130	10.83	21	.03	33	.05	54	.03					
1941	3,384	12:12			·6	.04	6	.02					
1942	1,576	5.59	5	.04	4	.03	9	03					
1943	3,940	13.87	6	.04	7	.05	13	.05					
1944	5,618	19.57	5	.03	6	.04	11	.04					
1945	6,977	24.07	2	.01	4	.03	6	.02					
1946	3,090	10.49	4	.03			4	.01					

Table 197.—Scarlet Fever.

Like measles, scarlet fever is an epidemic disease which mainly affects children, the rate generally being somewhat higher for females than for males. Of the deaths during 1946, 3 were of children under 10 years of age, all males. Though not nearly so prevalent as formerly, scarlet fever recurs sporadically.

## WHOOPING-COUGH.

Whooping-cough is another disease which mainly affects children, and to which, like scarlet fever, females are more susceptible than males. The number of deaths and rates of mortality for each sex since 1899 are shown below.

Period.	Males.		Females.		Total.	
	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1899-03 1904-08 1909-13 1914-18 1919-23 1924-28 1929-33 1934-38 1939-43	573 369 377 335 440 390 285 285 182	1·59 ·95 ·86 ·69 ·82 ·65 ·44 ·42 ·26	726 445 436 382 497 462 363 356 212	2·23 1·25 1·09 ·82 ·96 ·80 ·58 ·54 ·30	1,299 814 813 717 937 852 648 641 394	1·90 1·10 ·97 ·75 ·89 ·72 ·51 ·48
1941 1942 1943 1944 1945 1946	59 23 50 8 18	·42 ·16 ·35 ·06 ·12 ·07	55 31 58 12 22 33	$^{\cdot 40}$ $^{\cdot 22}$ $^{\cdot 41}$ $^{\cdot 08}$ $^{\cdot 15}$ $^{\cdot 22}$	114 54 108 20 40 44	·41 ·19 ·38 ·07 ·14

Table 198 .- Whooping-cough.

Whooping-cough is a recurring ailment of infancy and childhood. The table shows that mortality from this cause has been reduced greatly, although epidemic outbreaks still occur. Owing to the seasonal nature of the disease the figures for calendar years do not cover each epidemic completely. It is shown in Table 224 that whooping-cough is most fatal during the months of January and August to December.

Records kept since 1913 show that epidemics of whooping-cough among school children are only second in magnitude to those of measles.

# DIPHTHERIA.

The death rate from diphtheria was very high in the earlier years shown in the next table, but the death rate fell sharply after the introduction of diphtheria antitoxin in 1894.

Compulsory notification by medical practitioners of cases of diphtheria was instituted from 1st January, 1898, but in the first ten years the notifications were not complete.

Diphtheria caused 57 deaths in 1946, viz., 18 in the metropolitan area and 39 in the remainder of the State. The following table shows the number of cases notified and deaths and the equivalent annual rates since 1884:—

- I	4 0 0	T. 1 . 1	
Lable	199	—Diphth	eria.

	Coses	notified.	Deaths.						
Period.	0		Ma	les	Females.		Total.		
	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living,	Number.	Rate per 10,000 living.	Number.	Rate per 10,000 living.	
1884-88	*	*	1,069	4.04	980	4:51	2,049	4.25	
1889-93	*	 	1,433	4.65	1,399	5.36	2,832	4.98	
1894-98	*	*	712	2.10	710	2.39	1,422	2.24	
1899-03	4,360	6.36	310	.86	299	.92	609	.89	
1904-08	7,298	9.82	367	.95	338	.95	705	.95	
<b>1</b> 909-13	24,012	28.51	604	1.37	640	1.59	1,244	1.48	
1914-18	29,213	30.74	659	1.36	682	1.47	1,341	1.41	
1919-23	22,297	21.17	583	1.09	509	.99	1,092	1.04	
1924 - 28	18,841	16.03	448	·75	394	.68	842	.72	
1929-33	20,979	16.42	434	·67	454	.72	888	.70	
1934-38	26,334	19.72	467	·69	439	.66	906	.68	
1939-43	12,737	9.12	280	•40	285	•41	565	.40	
1941	3,064	10.98	60	•43	61	.44	121	.43	
1942	1,454	5.16	40	.28	39	•28	79	.28	
1943	2,268	7.98	49	•34	50	.35	99	.35	
1944	1,402	4.88	30	•21	39	•27	69	24	
1945	1,478	5.10	43	•30	41	.28	84	.29	
1946	1,279	4.34	33	.22	24	·16	57	·19	

<sup>\*</sup> Notifiable throughout the State from 1st January, 1898.

Mortality from diphtheria was heaviest during two lengthy periods, viz., from 1881 to 1898, and omitting the year 1919, from 1909 to 1921, although the rate was much lower in the latter period than in the former.

The experience of the quinquennial period 1942-1946 shows the disease to be most fatal during the months of May, June and July. Ninety-one per cent. of the persons who died from diphtheria during 1946 were under 10 years of age, and 77 per cent. were under 5 years of age.

Measures are taken by the Department of Public Health, in co-operation with municipal and shire councils, to encourage the immunisation of children at ages 1 to 14 years. The Department pays the cost of the anatoxin used at the councils' depots, and certain other expenses. Immunisation is voluntary, and children may be treated at public depots or by private medical practitioners.

#### Influenza.

During 1946 there were 68 deaths due to influenza, the rate of mortality being 53 per cent. lower than the average of the previous five years. There was a severe epidemic in 1919, when 6,387 persons died from the

disease. An analysis of the experience of that year is contained in the 1920 issue of the Year Book. The mortality was high in 1923, 1929 and 1935.

In the following table the deaths at each outbreak are shown together with those in the intervening periods:—

Table	200,—	Influenza.

D 1 1		Annual Rate		
Period,	Males.	Females.	Total.	per 10,000 living.
		[: ]		
1875-1890	388	322	710	.53
1891	<b>549</b> °	439	988	8.65
1892-1917	2,799	2,397	5,196	1.27
1918	218	154	372	1.91
1919	3,851	2,536	6,387	31.93
1920-1922	460	420	880	1.39
1923	268	243	511	2.32
1924-1928	637	5.62	1,199	1.02
1929	293	248	541	2.16
1930-1934	612	529	1,141	∙88
1935	316	262	578	2.18
1936	127	87	214	.80
1937	101	77	178	.66
1938	178	176	354	1.30
1939	166	169	335	1.22
1940	80	.51	131	•47
1941	62	.88	150	•54
1942	126	117	243	·86
1943	90	73	163	•57
1944	43	36	79	•28
1945	36	33	69	•24
1946	43	25	68	.23

Prior to 1919 influenza was regarded as a disease fatal to young children and persons past 45 years of age, but in the severe world-wide epidemic of that year the disease was most fatal to persons in the prime of life (25 to 44 years). A comparison of the deaths from 1920 to 1934 with those of 1914-18 and 1919 in age groups representing approximately the different stages of life was published in the 1933-34 issue of the Year Book. This indicated that the character of the disease reverted to the type experienced prior to 1919.

#### Tuberculous Diseases.

The number of deaths ascribed to the several classified forms of tuberculous disease during 1946 was 888 or 3.11 per cent. of the actual mortality in the State, and equal to 3.02 per 10,000 living—a rate 10 per cent. below the average for the preceding quinquennium.

A comparison of death rates from tuberculous diseases in the Australian States and New Zealand for the last six years is given on the next page.

The rates are stated per 1,000 of the total population, and do not take account of differences in the distribution of age and sex which have a material influence on the rates.

Table	201	—Tuber	culous	Diseases,	Australasia.
-------	-----	--------	--------	-----------	--------------

State or Country.	Death-rate	from Tube	rculous Dis	eases per 1,0	000 of Total	Populati
States of Country's	1941.	1942.	1943.	1944.	1945.	1946.
New South Wales .	*36	•37	*34	*31	-30	•30
Victoria ,	146	•45	. *38	.38	. '36	•35
Augustan J.	•80	32	•33	•28	•31	•29
South Australia	•37	41	, •35	. 30	32	•29
Western Australia .	'44	•41	•32	'31	*33	•35
Tasmania	. 46	· •54	•47	•42	•47	•47
Commonwealth	•38	. •39	'35	•33	. 33	'32
New Zealand	.90	•39	•37	98	•38	•34

Mortality from tuberculous diseases is usually lower in New South Wales than in any other Australian State except Queensland.

# Tuberculosis of the Respiratory System.

Tuberculosis of the respiratory system, or phthisis, was the cause of 818 deaths, or 92 per cent. of the number due to tuberculosis during the year 1946. The mortality rate was 10 per cent. lower than in the previous quinquennium. The male rate in 1946 was 3.73 per 10,000 of population, and the female rate 1.83.

The following table shows the number of deaths from tuberculosis of the respiratory system and the rates for each sex since 1884:—

Table 202.—Tuberculosis of Respiratory System.

	Ma	les.	Fen	ales.	To	tal.
Period.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate pe 10,000 living.
1884-88	3,132	11.83	2,022	9.30	5,154	10.69
1889-93	3,269	10.61	1,925	7.38	5,194	9.13
1894-98	3,191	9.43	1,983	6.68	5,174	8.15
1899-03	3,322	9.24	2,304	7.08	5,626	8:21
1904-08	2,985	7.72	2,184	6.13	5,169	6:96:
1909-13	3,220	7.31	2,236	5.69	5,506	6.5A
1914-18	3,373	6.95	2,194	4.72	5,567	5.86
1919-23	3,484	6.49	2,173	4.21	5,657	5.37
1924-28	3,337	5.57	2,217	3.85	5,554	4.73
1929-33	3,094	4.77	2,013	3.20	5,107	4.00
1934-38	2,996	4.44	1,790	2.71	4,786	3.58
1939–43	3,001	4.28	1,595	2.29	4,596	3.29
1941	630	4.50	304	2.19	934	3.35
1942	629	4.45	329	2.34	958	3.40
1943	572:	4.02	318	2.24	890	3.13
1944	548	3.81	277	1.93	825	2 87
1945	521	3.59	282	1.95	803	2.77
1946	549	3.73	269	1.83	818	2.78

The general rate in the last 5 years has decreased by 77 per cent. in comparison with the first quinquennium shown; the rate for females slightly more than for males. The female rate ranged from 49 per cent. of the male rate in the year 1941 to 79 per cent. during the periods 1904-08 and 1884-88.

The improvement in the death rate is due to many factors, such as the regulation of immigration and conditions of employment, etc., the enforcement of the health laws, but principally to improved methods of medical treatment.

Notification of cases of pulmonary tuberculosis by medical practitioners has been compulsory throughout the State since 1st March, 1929.

The table below shows the death rates from tuberculosis of the respiratory system or phthisis according to age and sex during the three years around each census from 1891 to 1933.

Table 203.—Tuberculosis of Respiratory System, Specific Mortality.

has Grane (TV and		Death R	ate per 10,000	Living.	,
Age Group (Years),	1890-92,	1900-02.	1910–12.	1920–22.	1932-34.
		ALES.		<u>,                                     </u>	
0-4	.] .63	2.04	•57	-57	•09
5-9		-47	•31	.25	•08
10-14	1 00	-28	•49	.25	-08
15-19	0.00	3.22	2.31	2.28	•75
20-24	10.50	10.56	5.99	5.12	2.80
25-34	1 = 01	14.37	9.72	9.18	4.66
35-44	90.01	18.15	12.55	11.07	6.92
45-54	90.07	19.79	15.49	12.97	10.06
55-64	10.00	17.74	17.06	14.17	10.99
65-74	1 7 04	19.24	13.37	10.27	9.36
75 and over	0.05	7.84	7.81	5.21	4.68
All Ages (Crude Rate)		9.48	7.17	6.44	4.43
Rate in $1890-92 = 100$		91	69	62	43
	FE	MALES.			
0-4	. 93	1.43	•63	.42	.09
5 0	-49	•48	.24	•35	.05
10.14	-00	1.20	•59	.39	•27
1 2 10	5.90	5.46	3.80	2.40	1.90
00.04	10.47	7.99	7.74	5.92	5.21
OF 04	10.49	13.56	10.00	7.12	5.20
O = 11	15.04	13.41	9.80	6.46	4.24
15 51	10.05	10.96	7.75	5.63	3.72
FF 04	0.01	11.96	8.34	5.32	3.29
OE MA	11.17	7.31	10.60	6.14	3.52
#F . 1	4.10	2.59	3.84	3.19	2.55
All Ages (Crude Rate). Rate in $1890-92 = 100$ .		6.95 93	5·64 75	$\begin{array}{c} 4.02 \\ 54 \end{array}$	2·91 39
	PE	RSONS.	<u>,                                      </u>	·	
0-4	•78	1.74	-60	·50	•09
	.41	48	.27	30	.07
10.14	00	•73	.54	.32	•17
15 10	4.50	4.34	3.04	2.34	1.32
00 01	77.54	9.26	6.84	5.53	3.98
0" 04	17 00	13.98	9.86	8.15	4.93
0 2 44	10.40	16.09	11.27	8.84	5.57
18 81	18 18	16.06	12.10	9.50	6.99
FF 04	17.17	15.26	13.25	10.13	7.20
OF 51	10.00	14.36	12.12	8.35	6.51
75 and over	2.02	5.49	6.03	4.21	3.59
		8.28	6.44	5.25	3.68
All Ages (Crude Rate).			71	58	41
Rate in $1890-92 = 100$ .	100	91	11	00	++1

The rate improved to a greater extent amongst males than amongst females between 1890-92 and 1910-12, but in later years there has been a greater reduction amongst females.

A comparison of the death rates from phthisis in the various age groups shows a remarkable difference in respect of men and women. Excluding the age groups below 15 years where mortality is comparatively light, the rates for females are the higher in the groups up to 35 years and above that age there is a large excess of deaths amongst males, the rate amongst men in the group 55-64 years being more than three times the corresponding rate amongst women. In this group the male death rate from phthisis reaches the maximum. Amongst females the rate has generally been highest at ages 25 to 34 years, then decreases up to ages 55 to 64 years, but in the group 65-74 years it rises slightly.

#### Other Tuberculous Diseases.

Of the 888 deaths during 1946 from tuberculosis, only 70 were from tuberculosis of organs other than the respiratory system, and of these 22, or 31 per cent., were of children under 5 years of age. Taking the age group under 5 years, and all ages, the following table shows the great improvement in the death rates since the decennium 1891-1900:—

Table	204 0+1	her Tuberc	ilane	Disassas
Lable	204.—-Ut)	ner Luberci	uious	Diseases.

Period.	A	ges under 5 Yea	rs.		All Ages.	
	Males.	Females.	Total.	Males.	Females.	Total
1891–1900	15.93	13:41	14.69	2.76	2.62	2.69
1901-1910	7.11	5.98	6.55	1.70	1.51	1.61
1911-1920	3.13	2.96	3.06	1.00	·86	.95
1921-1930	1.85	1.67	1.76	.63	•52	•58
1931–1940	1.26	1.02	1.14	•42	.30	•36
1941	*85	.87	.86	.24	.24	•24
1942	1.33	1.03	1.18	•29	.28	.29
1943	1.28	1.16	1.22	.26	.30	-28
1944	1.07	.72	.90	.24	.24	•2
1945	⋅88	.66	.75	•24	.19	•22
1946	.55	1'01	•78	.20	·27	•24

#### CANCER.

In 1946 the deaths from cancer numbered 3,412, equal to a rate of 11.58 per 10,000 living. The average mortality in the five years 1942-46, measured by crude death rates, was much higher than in any preceding period, being 11.44 per 10,000 living as compared with 3.30 for the period 1884-88. The total for 1946 included 1,719 males and 1,693 females, the rates being 11.68 and 11.49 per 10,000 living of each sex respectively.

Classified according to the parts of the body affected (according to the grouping of the International List) and arranged in order of fatality, cancer caused the following deaths in 1946; stomach and duodenum 675,

other of digestive tract, 548, intestines 476, female genital organs 350, breast 317, respiratory organs 219, male genital organs 184, male and female urinary organs 140, buccal cavity 137, skin 111 and other organs 255. Details of the particular sites grouped under these headings are shown in the Statistical Register of New South Wales.

The following table shows the deaths and crude rates of each sex since 1884:—

Table 205 .-- Cancer.

	M	ales.	Fer	uales.	T	otal.
Period.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.	Deaths.	Rate per 10,000 living.
1884-88	859	3.25	732	3:37	1,591	3.30
1889-93	1,262	4.10	1,038	3 98	2,300	4.04
1894 98	1,719	5.09	1,387	4.68	3,106	4.89
1899-03	2,295	6:38	1,877	5.77	4,172	6.09
1904-08	2,671	6.91	2,418	6.78	5,089	6.85
1909-13	3,362	7.63	2,860	7.12	6,222	7:39
1914–18	3,886	8.00	3,458	7.44	7,344	7.73
1919-23	4,738	8.82	4,292	8.31	9,030	8.57
1924-28	5,790	9.66	5,068	8.80	10,858	9.24
1929-33	6,501	10.01	5,704	9.08	12,205	9.55
1934-38	7,242	10.73	6,810	10,32	14,052	10.52
1939-43	8,086	11.52	7,718	11.10	15,804	1:1:33
1941	1,627	11.61	1,499	10,48	3,126	11;20
1942	1,633	11.55	1,489	10.60	3,122	11,08
1943	1,669	11.72	1,698	11.98	3,367	11.85
1944	1,505	10.47	1,676	11.69	3,181	11 08
1945	1,675	11.56	1,755	12.10	3,430	11.83
1946	1,719	11.68	1,693	11:49	3,412	11.58

Although fatal cancer occurs at all ages, the disease is one of advanced age, and 98 per cent. of the persons who died from cancer in 1946 were 35 years or over. This fact, taken in conjunction with the increasing proportion of persons of advanced age in the population makes it difficult to draw valid conclusions from comparisons of crude rates as shown above.

The following table shows the death rates for cancer in age groups and the standardised rate for "all ages," which represents the death rate which would have resulted if the age and sex constitution of the male and female population had been the same as it was at the census of 1933. Crude rates are shown also in order to emphasise the fact that these greatly exaggerate the increase in death rates from cancer.

Table 206 .- Cancer, Specific Mortality.

Age Gr	oun (Ve	10 TC)		Cancer—De	ath Rate per 1	0,000 Living.	_
Age Gr	oup(10	a15).	1900-02.	1910–12.	1920–22,	1932–34.	1941-43.
				MALES.			
25-29			.70	•64	•91	.85	-00
30-34	•••	•••	H 0.94	1,31		1.14	·63 1·13
35-39	•••	•••	غنة ا	2.53	97 2-82	2.13	2.19
40-44	•••			6.06	4.55	4.12	3'71
45-49	•••		0.04	9.68	8.57	8.90	7.51
50-54	***		10.40	17.99	19.83	14/91	15.36
55-59	•••	***	00.75	30.89	29 59	27.96	25.59
60-64	•••		122	44.55	48.74	46.22	40.94
60-64 65-69	•••	***	1 00	72.04	69-63	69-23	64.82
70-74	***		00 71	79.20	90.07	108.98	37.73
75–79	•••			86.39	115.48	122.48	134.14
80-84	***	•••	, 76.40	113.03	109.64	139.18	130.27
85 and o	ver	•••	.J 93·57	116.17	135.95	142-92	161.35
All .	Ages-—(	trude	6.46	7.67	8.74	10.53	11.60
	St	andardised	9.16	9.90	10.39	10.53	9.93
			FE	MALES,		<u> </u>	
						1	
25-29	•••		•59	-86	.76	•66	•75
30-34	***	•••	1.55	2.24	2.17	1.89	1.08
35-39	•••		4.28	4.84	4.05	4.34	4.33
40-44	•••	•••	9.47	9.42	9.03	8.45	7.29
45-49	•••	•••		15.77	15.97	13.67	11.64
50-54	•••	•••		21.52	21.58	20.67	17.50
55–59 60–64 65–69	•••	•••		32.26	31.33	29.00	24.66
00-04 85 80	•••	•••	45.00	39·41 58·05	41.55 61.08	38·25 46·89	36.72
70–74	•••	•••	M / 4 P	62.11	73.99	67.85	50·95 69·78
75-79	•••	•••	l ===	95.00	100.49	82.82	90.42
80-84	•••			89.86	100.26	104.18	104.22
85 and o	zer		97.56	97.35	128.55	120.91	124.54
	Ages—C		5.57	7.12	8.36	9.48	11.10
	-	andardised	9.52	10.12	10.58	9.48	9.17
			Pı	ersons.	,		
07.00			-0.4	75	.00	-70	-07
25-29	•••	•••	1.40	·75	*83	76	-69
30-34 35-39	•••	•••	1.46	1.76	1·56 3·42	$\frac{1.51}{3.27}$	1.55
35-39 40-44	•••	•••	3·26 7·30	3·64 7·60	6·71	6.26	8'24 5'51
45-49	•••	•••	13.01	12.39	12.13	11.21	9.59
50-54	•••	•••	17.46	19.51	20.37	17:64	16.43
50-54 55-59	•••	•••	29.02	31.48	30.38	28.47	25.13
60-64			43.67	42.25	45.45	42.28	38.82
65–69	•••		58.19	65.65	65.74	58.35	57.67
70-74	•••		70.88	71.42	82-36	89.06	83 14
75–79	***	•••	77:26	90.17	108-12	102.72	111.38
80-84			73.03	102.68	104.98	121 04	116.20
85 a <b>nd ov</b>		•••	95.39	106.48	132.20	130.69	139.99
All A	ges—Ci	ude	6.04	7.41	8.55	10.01	11.35
		dardised*	9.34	10.01	10.48	10.01	9.56

<sup>\*</sup> Standardised for sex as well as age distribution,

The death rate from cancer is higher amongst females than males up to 55 years, but the male rate is the higher in later ages. It is for this reason that the crude rate is higher for males than for females. The standardised rate, however, shows that the female mortality from cancer was the higher in the first thirty years covered by the table, but the standardised male rate was higher in the period 1932-34 and has apparently remained so.

This change may be due to the operation of two factors, viz., (1) the success of operations upon the relatively more accessible cancers of females; and (2) the better diagnosis of the less accessible cancer of females as a consequence of improved medical appliances and knowledge.

The crude rate for males increased by 80 per cent. between 1900-02 and 1941-43 and the crude rate for females increased by 99 per cent. during this period. When correction is made for change in the age structure of the population as outlined above, the standardised rate for males shows an increase of only 8 per cent., and the standardised rate for females a decline of 4 per cent.

In all countries for which records are kept the crude death rate from cancer has been increasing and great attention is being given to the problem of the control of cancer.

Co-ordination of action throughout Australia is made possible by the Australian Cancer Conference, convened annually (except during the war) by the Commonwealth Department of Health. Through this department, also, cancer workers in Australia are kept in touch with investigations in other countries. Treatment and research are concerned principally with surgery, X-ray and radium. The Commonwealth X-Ray and Radium Laboratory in Victoria cares for the radium purchased by the Commonwealth Government and conducts research regarding the use of X-rays and radium. Radium and radon are issued to approved hospitals and private practitioners throughout Australia.

In the following table the rates of mortality from cancer are given for the Australian States and New Zealand. The comparison is upon the crude basis of total population and is uncorrected for age and sex incidence.

State on Country	C	ancer Deatl	ı rate per 1,	000 of Tota	ıl Populatio	n.	
State or Country.	1941.	1942.	1943.	1944.	1945.	1946.	
New South Wales	1·12	1.11	1·19	1.11	1.18	1.16	
Victoria	1.38	1.35	1.38	1.33	1.37	1.40	
Queensland	•99	1.00	1.07	1.03	1.04	1.09	
South Australia ,	1.26	1.25	1:31	1.27	1.23	1.29	
Western Australia	1.25	1.30	1.15	1.17	1.15	1.11	
Tasmania	1.27	1.18	1.17	1.10	1.13	1.18	
Commonwealth	1.19	1.18	1.23	1.17	1.21	1.22	
Now Zooland	1.32	1.31	1.17	1.40	1.39	1.38	

Table 207,-Cancer, Australasia.

#### DIABETES.

Although diabetes is responsible for only 2 per cent. of the annual number of deaths the rate of mortality from this cause has increased, the average of the last five years being 120 per cent. higher than that for the period 1906-10.

The deaths due to diabetes in 1946 numbered 529 equal to a rate of 1.80 per 10,000 living. The rate for males was 1.32 and for females 2.27 per 10,000 living of each sex. Most of the deaths occurred after middle life, 489 out of 529 deaths in 1946, or 92 per cent. being persons over 45 years of age.

#### MENINGITIS.

The diseases included under the above heading—encephalitis (non-epidemic), simple meningitis, and non-epidemic cerebro-spinal meningitis—caused 82 deaths during 1946, the corresponding rate being 0.28 per 10,000 living. Of this number 48 were males and 34 females, and the rates per

10,000 living of each sex were 0.33 and 0.23 respectively. The deaths in the metropolis and country numbered 40 and 42 respectively. Of those who died during 1946, 33, or 40 per cent., were under 5 years of age.

# CEREBRAL HAEMORRHAGE AND OTHER INTRACRANIAL LESIONS.

Owing to changes in certification and classification of deaths from cerebral hæmorrhage during recent years comparable statistics are not available concerning mortality from this disease.

Under the revised classification introduced in 1940, all intracranial lesions of vascular origin are grouped together and deaths are assigned to this group whether the lesion was stated to be, or not to be, due to arteriosclerosis or arterial hypertension.

The following table shows the number of deaths and the rates as recorded for these types of lesion since 1941.

	Ma	les.	Fen	ales.	To	Total.		
Year.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.		
1941	1,074	7.67	1,297	9.33	2,371	8.49		
1942	1,236	8.74	1,439	10.25	2,675	9.49		
1943	1,196	8.40	1,495	10.55	2,691	9.47		
1944	1,198	8.33	1,532	10.69	2,730	9.51		
1945	1,316	9.08	1,558	10.75	2,874	9.91		
1946	1,314	8.93	1,634	11:09	2,948	10.01		

Table 208 .- Intracranial Lesions of Vascular Origin.

# Convulsions of Children.

Mortality ascribed to this cause shows a remarkable decline, having fallen from 721 deaths per annum in the five years 1880-84 to an average of 16 in 1942-46.

Deaths, however, are not included in this category if the cause of the convulsions is recorded and the figures reflect increasing skill in diagnosing the diseases of children.

Only deaths of children under 5 years of age are listed under this heading and the deaths in 1946 represent 0.50 per 10,000 children in this age group as compared with 0.64 in the previous quinquennium. Of the deaths in 1946, 11 occurred during the first year of life, the equivalent rate being 0.16 per 1,000 births.

## DISEASES OF THE HEART.

Statistics of mortality from diseases of the heart are of limited value, because there are important factors connected with the mode of certification and classification which affect the numbers from year to year.

Causes classified as diseases of the heart include pericarditis, endocarditis and other valvular diseases, diseases of the myocardium, angina pectoris, and, in 1931 and subsequent years, diseases of the coronary arteries.

The extraordinary increase in mortality from diseases of the heart as shown in the following table is largely a result of more highly specialised biological knowledge and greater attention to pathological diagnoses and to changes in the classification of causes of death, e.g., the inclusion of deaths from diseases of the coronary arteries from 1931. Moreover, as deaths attributed to more than one cause are classified to one disease only, the measure of preference given to diseases of the heart may have operated in the direction of swelling the increase in the number of deaths ascribed to this group of diseases. It is not practicable, however, to gauge the effects of the various changes which occur over a period of years.

A further factor contributing to the apparent increase is the changing age composition of the population. A larger proportion of the people is reaching the ages at which the death rate from diseases of the heart is highest. An analysis of the deaths according to age is shown in Table 210. Comparisons of the rates for any particular age-group from period to period are subject to the factors mentioned above.

Table 209.—Diseases of the Heart.

	Ma	les.	Fen	ıales.	То	tal.
Period.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	2,149	8.12	1,390	6.39	3,589	7.34
1889≒93	2,250	7.30	1,357	5.20	3,607	6.34
1894-98	2,434	7.19	1,478	4.98	3,912	6.16
1899-03	2,917	8.11	1,932	5.94	4,849	7.08
1904-08	3,791	9.81	2,727	7.65	6,518	8.77
1909-13	5,054	11.47	3,633	9.04	8,687	10.31
1914-18	5,950	12.26	4,168	8.97	10,118	10.65
19194-23	6,901	12.85	5,384	10.42	12,285	11.66
1924-28	9,360	15.61	7,377	12.81	16,737	14.24
1929-33	12,070	18.59	9,245	14.72	21,315	16.69
1934-38	17,794	26-36	12,612	19.10	30,406	22.77
1939–43	23,802	33.92	16,704	24.02	40,506	28.99
1941	: <b>4</b> ,616	32.94	3,454	24.85	8,070	28.91
1942	5,351	37.85	3,623	25.79	8,974	31.84
1943	5,241	36.81	3,697	26 09	8,938	31.46
1944	4,838	33.66	3,557	24.81	8,395	29.24
1945	5,074	35.01	3,598	24.82	8,672	29.91
1946	5,555	37:74	3,707	25:15	9,262	31.44

Of the persons who died from diseases of the heart during 1946, 96 per cent. were 45 years or over.

In the following table are shown the death rates for each sex in age groups during the three years around each census since 1891.

Table 210.—Diseases of the Heart, Specific Mortality.

			Disease	s of the Heart	;—Death Rate	per 10,000 Li	ving.
Age Group	(Years).	'	1890-92.	1900-02.	1910-12.	1920-22.	1932-34
· <u>-</u>	*****		······································	Males.		<u> </u>	
0-4			•75	1.96	.92	•49	•17
5-9			•91	1.05	1.22	•90	. •60
10-14		•••	1.59	1.61	1.56	1.43	.74
15–19		•••	2.07	1.82	2.23	1.49	1.21
<b>2</b> 0-24		•••	2,11	I.73	1.90	1.71	1.17
25-34	• •••	•••	3.21	2.14	2.84	2.80	1.70
35-44	• •••	•••	7.44	5.70	5.97	5.30	5.62
<b>4</b> 5–54	• •••	•••	15.96	13.45	15.03	13.48	19.19
55-64	• •••	•••	40.05	31.61	39.92	38.61	58.52
65-74	• •••	•••	77.02	77.12	105.21	107.23	160.11
75 and over	r	•••	101.80	123.89	228 18	293.63	433.83
All Ages	(Crude I	Rate)	7.78	8.10	11.73	12.78	21.82
Rate in 1	1890-92	<b>=</b> 100	100	104	151	164	280
			F	EMALES.			
0-4			•65	1.55	•70:	·51	•30
5-9			1.16	•77	.75	1.33	•56
10-14			.76	1.61	2.06	1.47	•8]
15-19			1.52	1.63	2.10	1.60	1.21
20-24		•	2.05	1.63	2.25	1.45	1.33
25-34		•••	3.48	2.57	2.75	2-21	1.98
35-44			7.29	5.63	5.77	5.17	4.55
45-54		•••	11.46	10.88	13.67	10.24	11.90
55-64			26.57	25.48	31.53	29.86	33.93
65-74		•••	62.78	61.41	94.64	88-82	118.67
75 and over	r	•••	91.86	104.09	190.99	248.91	367.98
$\mathbf{All} \ \mathbf{Ages}$	(Crude E	Rate)	5.29	5.92	9.33	10.10	16.56
Rate in 1	1890 92	= 100	100	112	176	191	313
			P	ERSONS.			
0-4			•70	1.76	.81	·50	•23
5- 9			1.03	-91	.99	1.11	•58
10-14		•••	1.18	1.61	1.81	1.45	.77
15-19		•••	1.79	1.73	2.17	1.55	1.21
20-24		•••	2.08	1.68	2.07	1.58	1.25
25-34		•••	3.33	2.35	2,80	2.51	1.84
35–44		• • • •	7.38	5.67	5.88	5.24	5.08
45-54		•••	14.16	12.37	14.43	11.95	15.66
55-64	• • • • • • • • • • • • • • • • • • • •	•••	34.84	28.97	36.25	34.62	46.41
65–74		•••	71.11	70.70	100.43	98.68	139.92
75 and ove	r	•••	97-82	115.04	211.48	$\frac{271\cdot51}{}$	400.22
Δ11 Δ mag	(Crude 1	Rate)	6.64	7.07	10.59	11.47	19.23
An Ages	(	,					

Although the crude rate for all ages has increased nearly threefold during the period reviewed, the increase is confined to ages 45 and over, due to causes explained on page 254. The rates in all groups below 45 years have declined since 1890.

Under the age of 35 there is very little difference between the rates of males and females, thereafter the male rate is much higher, the result, no doubt of the more strenuous life of males.

## Bronchitis.

Bronchitis caused 224 deaths during 1946, equal to a rate of 0.76 per 10,000 living. Of the total, 136 were males and 88 females, the corresponding rates per 10,000 of each sex being 0.92 and 0.60. The rate for the State was 15 per cent. lower than during the previous five years.

Deaths in the metropolis numbered 105 and there were 119 in other parts of the State. Of the total deaths, 55 were caused by acute bronchitis, 157 cases were recorded as being due to the disease in its chronic form, and 12 were unspecified. Of those persons who died of acute bronchitis, 2 per cent. were under 1 year of age, and 65 per cent. were 55 years or over, whilst 87 per cent. of those who succumbed to chronic bronchitis were 55 years of age and over.

Experience shows the disease to be most prevalent during the months of June, July, August and September.

#### PNEUMONIA.

Pneumonia, including broncho-pneumonia was the cause of 1,254 deaths during 1946, the equivalent rate per 10,000 of population being 4.26, which was 11 per cent. below the average for the preceding quinquennium. Of the total, 690 were males and 564 females. The rates for males and females per 10,000 living were 4.69 and 3.82 respectively. The deaths in the metropolis numbered 652 and those in the remainder of the State 602.

An analysis of the deaths according to age shows that the majority of cases are children under 5 years of age and adults over 55 years; these represented 22 per cent. and 61 per cent. respectively of the total number in 1946. The rate of mortality from pneumonia is lowest among children between 10 and 14 years of age, then it increases with advancing age.

The following table gives deaths and rates, according to sex, since the year 1884:—

	М	ales.	Fer	nales.	T	otal.
Period.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
188488	2,032	7.68	1,301	5.98	3,333	6.91
1889-93	2,158	7.00	1,373	5.26	3,531	6.21
189498	2,514	7.43	1,528	5.15	4,042	6.37
1899-03	3,191	8.87	2,000	6.15	5,191	7.58
1904-08	2,816	7.28	1,824	5.12	4.640	6.24
1909-13	2,983	6.77	1,931	4.81	4,914	5.83
1914-18	3,779	7.78	2,402	5.17	6,181	6.50
1919-23	4,217	7.85	3,042	5.89	7,259	6.89
1924-28	4,810	8.02	3,498	6.08	8,308	7.07
1929-33	4,318	6.65	3.205	5.10	7,523	5.89
1934-38	5,028	7.45	3,574	5.41	8,602	6.44
1939-43	4,270	6.08	3,229	4.64	7,499	5.37
1941	740	5.28	634	4.56	1,374	4.92
1942	905	6.40	700	4.98	1,605	5.69
1943	906	6.36	630	4.45	1,536	5.41
1944	693	4.82	525	3.66	1,218	4.24
1945	618	4.26	512	3.53	1,130	3.90
1946	690	4.69	564	3.83	1,254	4.26

Table 211.—Pneumonia.

The greatest mortality from pneumonia occurs in the cold weather and early spring.

The following table shows the death rates for each sex in age groups, during the three years around each census since 1891:—

Table 212.—Pneumonia, Specific Mortality.

			1	PneumoniaD	eath Rate per	10,000 Living	
Age Gro	up (Year	'8) <b>.</b>	1890–92.	1900-02.	1910–12.	1920-22,	1932-34
			M.	ALES.	·		
0-4	•••		18.14	24.18	19.69	21.12	15.42
5—9	•••		1.22	1.64	1.41	1.60	1.12
l0–14	•••		∙69	-80	•78	∙83	•53
5-19	•••		2.55	3.49	1.25	1.79	1.02
0-24	•••		3.02	5.25	2.46	2.30	1.20
5-34	•••		3.77	6.09	3.03	2.94	1.42
5-44	•••		7.49	8.27	4.99	5.07	2.96
5-54	•••	•••	10.86	13.01	8.16	8.52	5.65
5-64	•••	•••	16.71	22.60	11.94	13.07	11.31
55-74	•••	•••	26.76	36.90	24.99	28.61	23.68
5 and over	•••	•••	26.50	57.50	43.45	58.36	72.41
All Ages	(Crude	Rate)	7.22	9.78	6.85	7.55	6.03
Rate in 1	890-92	= 100	100	135	95	105	84
-			FEN	IALES.			
0-4			15.64	20.66	17.88	17-60	12.50
5—9	•••	••• •••	1.07	1.09	1.14	1.35	.99
0-14	•••		.70	1.61	92	-88	.86
5–19		•••	1.88	2.15	.61	1.30	•96
0-24	•••	•••	2.23	2.80	1.03	1.30	1.12
5-34			3.48	3.66	1.46	2.34	1.42
5-44		•••	4.88	5.89	2.68	2.87	2.37
5-54		•••	7.61	5.63	3.10	3.93	3.72
5-64		•••	9.81	15.07	8.08	7.66	6.15
5-74	•••	•••	21.18	25.34	14.69	21. 7	18.41
5 and over			19.83	48.49	44.10	65.22	55-69
All Ages	(Crude	Rate)	5.46	6.62	4.74	5.52	4.63
Rate in 1	890-92	= 100	100	121	87	101	85
			Рег	asons.		_	
0-4	•••	•••	16.91	22.45	18.80	19.39	13.99
5 <b>—</b> 9	•••		1.15	1.37	1.28	1.48	1.0€
.0–14	•••		•70	1.20	•85	•86	-69
5–19	•••		2.22	2.82	•93 ♣	1.55	•99
20-24	•••			4.01	1.76	1.79	1.16
25-34	•••			4.91	2.27	2.64	1.42
5-44	•••			7.23	3.91	4 01	2.66
5-54	•••	•••		9.89	5.94	6.35	4.7
5-64	•••			19.37	10.25	10.60	8.77
35-74	•••			32 18	20.33	25.21	21.11
5 and over	•••	•••	23.83	53.47	43.74	61.76	63.88
All Ages	(Crude	Rate)	6.41	8.28	5.84	6.56	5.34
J							

The male death rate is higher than the female rate at all ages excepting 10-14 years. The rates have fluctuated, but show a general decline

of about 17 per cent. during the period under review, and the fall is apparent at all ages, except 75 and over. Probably this increase is due to more information being available as to cause of death.

# DISEASES OF THE DIGESTIVE SYSTEM.

Diseases of the digestive system caused the deaths of 621 males and 478 females during 1946, the respective rates per 10,000 living being 4.22 and 3.24. The rate corresponding to the total deaths from these diseases in the State was 3.73 per 10,000 living, and was 17 per cent. below that experienced during the previous five years. Deaths resulting from diseases of the digestive system are caused mainly by diarrhea and enteritis, appendicitis, hernia and intestinal obstruction, ulcer of the stomach or duodenum, diseases of the gall bladder and ducts, and cirrhosis of the liver. Some of these causes are discussed later.

## Diarrhaa and Enteritis.

The incidence of these diseases is mainly upon young children, the deaths under 1 year of age from these causes in 1946 being 51—26 males and 25 females. In 1946 there were 146 deaths from these causes at all ages, equivalent to a rate of 0.50 per 10,000 of the general population, the rate for males being 0.56 and for females 0.43. The combined rate was 46 per cent. below the average for the preceding quinquennium. The following table shows the number of deaths and the rates since 1899, distinguishing between the sexes:—

Femeles. Total. Rate per 10,000 Living. Rate per 10,000 Rate per 10,000 Period. Deaths. Deaths. Deaths. Living. Living. 1899-03 4,422 12.29 3,901 11.99 8,323 12.15 1904-08 3,714 3,000 6,714 9.61 9.038.41 1909-13 4,257 9.663,471 8.64 7,728 9.183,622 2,957 6,579 1914-18 7.466.36 6.921919-23 7.10 3,813 3,039 5.886,852 6.50 1924-28 2,436 2,036 4.063.54 4,472 3.81 1929–33 1934–38 2,351 1,353 2.08998 1.59 1.84 634 .94 558 .85 1,192 .89 1939-43 813 1.16 719 1.03 1,532 1.10 1941 184 1.31 132.95 316 1.13 1942 155 1.10 1.06 304 1.08 149 269 1943 134 .94 135.95 .95 1944 111 .77 84 .59 195 .68 1945 98 .68 118 .81 216 .75 1946 83 .56 63 .43 146 .50

Table 213.-Diarrhoea and Enteritis.

Probably the low mortality in recent years is due in a large measure to the work of the baby health centres previously mentioned. Seasonal conditions may have helped also, but the effects of this factor are difficult to determine for the State as a whole. A comparison of rates calculated on the population at all ages is not satisfactory because those who die from this cause are mainly children in the early years of life and the proportion of the population under 5 years of age has declined considerably since 1871. This has been an important factor in the decline in the rates shown in Table 213. In 1946, 45 per cent, of those who died were under 2 years and 52 per cent, were under 5 years of age.

The following table shows the deaths from this cause, of children under 2 years of age and under 5 years of age. The rates are based upon the population living in these age groups.

	Under 2 ye	ears of Age.		Under	5 years of Age
Year.	Deaths.	Rate per 10,000 Living.	Year.	Deaths.	Rate Per 10,000 Living.
1881	733	335.0	1935	143	6:5
1891	985	147.6	1936	172	8.0
1901	1,165	181.0	1937	165	7.6
1911	963	112-1	1938	174	8.0
1921	988	100.8	1939	226	10.2
1931	283	29.4	1940	218	9.6
1941	208	21.9	1941	232	10.0
1942	170	17.2	1942	189	8.0
1943	143	14.0	1943	168	6.9
1944	91	8.3	1944	116	4.5
1945	112	9.7	1945	132	4.9
1946	66	5.5	1946	76	2.7

Table 214.—Diarrhoea and Enteritis, Specific Mortality.

In the five years 1942-46, 38 per cent. of the deaths from diarrhea and enteritis occurred in the summer, 24 per cent. in the autumn, 22 per cent. in the spring and 16 per cent. in winter.

# Appendicitis.

To this cause 138 deaths were ascribed in 1946, the rate being 0.47 per 10,000 living, which is 20 per cent. lower than the average of the preceding quinquennium. Appendicitis is more fatal to males than to females, the rate for the former in 1946 being 0.58 and for the latter 0.36 per 10,000 living.

# Cirrhosis of the Liver.

Information relating to mortality from cirrhosis of the liver is of interest in connection with alcoholism.

Deaths from cirrhosis of the liver in 1946 numbered 94—62 males and 32 females, the rate being 0.32 per 10,000 living—5 per cent. below the average for the previous quinquennial period. This disease is more prevalent among males than females—the rate for the former in 1946 being 0.42 and for the latter 0.22 per 10,000 living of each sex.

#### NEPHRITIS.

Nephritis, or Bright's disease, has grown from a comparatively infrequent cause to a prominent position among the major causes of death the incidence of which falls upon the general population.

During 1946 there were 1,571 deaths due to diseases of the genito-urinary system, of which 1,235 were caused by all forms of nephritis. The rate for nephritis was 4.19 per 10,000 living, and for males and females 4.71 and 3.68, respectively, the general rate being approximately 7 per cent. below that experienced during the previous quinquennium. The deaths due to these diseases in the metropolis were 623 and in the rest of the State 612. Experience shows that the fatality of these diseases increases slightly during the winter months.

The number of the deaths and the rates of mortality due to nephritis are shown below:—

	Ma	les.	Fem	ales.	To	tal.
Period.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884-88	626	2.37	386	1.78	1,012	2.10
1889-93	907	2.94	570	2.18	1,477	2.60
1894–98	1,291	3.81	821	2.77	2,112	3.33
1899-03	1,659	4.61	996	3.06	2,655	3.88
1904-08	2,056	5.32	1,199	3.36	3,255	4.38
1909-13	2,649	6.01	1,539	3.83	4,188	4.97
1914–18	3,080	6.34	1,682	3.62	4,762	5.01
1919-23	2,914	5.43	1,886	3.65	4,800	4.56
1924-28	3,391	5.66	2,324	4.04	5,715	4.86
1929-33	3,841	5.92	2,902	4.62	6,743	5.28
1934–38	4,315	6.39	3,375	5.11	7,690	5.76
1939-43	3,842	5.47	3,094	4.45	6,936	4.96
1941	758	5:41	574	4.13	1,332	4.77
1942	772	5·46	620	4.41	1,392	4.94
1943	750	5.27	666	4.70	1,416	4.98
1944	652	4.54	518	3.61	1,170	i d∙08
1945	631	4.35	486	3.35	1,117	3.85
1946	693	4.71	542	3.68	1,235	4.19
				I		

Table 215 .- Nephritis.

During the period covered by the foregoing table the rates of mortality (unadjusted for changing age constitution) both for males and females have about doubled. The rate for males in the last five years was 24 per cent. higher than that for females. Comparatively few persons under 35 years of age die from nephritis, the proportion in 1946 being 6 per cent. of the total.

A more reliable indication of the trend of the death rate from nephritis is provided by the following table which shows the death rates for each sex in age groups during the three years around each census since 1891:—

Table 216.-Nephritis, Specific Mortality.

				, ~ <sub>F</sub>	fic Mortali	·y.	
1 G	- /37		1	Tephritis.—D	eath Rate per	10,000 Living	•
Age Group	p (xears)		1890–92.	1900-02.	1910–12.	1920–22,	1932-34
			Ma	LES.			
0-4			1.30	2.00	.99	·71	•57
F 0	••		·59	·23	•42	·31	•29
10.14				28	•37	·51	·18
15–19			·11 ·67	·75	·78	·63	•38
00 04	•• ••		•74	·89	1.34	1.11	1.00
	•• ••		1.44	2.11	1.78	1.36	1.19
	•• ••						
35-44		• •••	4.22	4.49	4.13	3.00	2.96
45-54	•• ••	• • • • • • • • • • • • • • • • • • • •	5.83	9.45	10.76	8.96	7.54
	•• ••	• •••	11.67	19.09	24.16	20.16	15.32
	•• ••	• •••	22.12	35.96	47.60	39.55	38.30
75 and ove	r	• • • • • • • • • • • • • • • • • • • •	17.43	40.77	71.58	73.99	104.24
All Ages	(Crude	Rate)	2.77	4.57	5.98	5.42	6.14
Rate in	1890–92	2 = 100	100	165	216	196	222
_			Fran	ALES.			
			1010	·		<u>-</u>	
0-4			1.34	1.13	.93	.51	•47
~ ^	•• ••		.60	.28	•35	-35	•30
10-14	•• ••		-22	-33	.42	•59	-32
15-19	•• ••		.67	-61	61	.57	•58
00 04			1.30	1.22	1.54	1.12	.97
05 04			1.90	1.90	1.46	1.66	1.37
0 = 44	•• ••		4.01	4.44	3.72	3.06	3.36
45-54	•• ••		5.53	7.84	8.29	6.38	5.92
FF 04		• •••	5·55 7·85	11.60	15.55	11.15	11.02
	•• ••						29.29
65-74			16·18 9·39	22·83 30·39	31.35	$25.99 \\ 49.25$	70.06
75 and ove	er	• •••			41.04	49.20	
All Ages	•	,	2.17	3.01	3.87	3.63	4.8
Rate in	1890-92	2 = 100	100	139	178	167	2 <b>24</b>
			PER	sons.			
			1.32	1.57	-96	•61	•55
0 4	•• ••		·60	.26	.39	•33	.29
0-4.			.00	-20			•28
5-9				.21	.20	.55	
5- 9 10-14		• •••	·16	·31	·39 ·70	•55 •60	
5- 9 10-14 15-19		• •	·16 ·67	•68	.70	•60	-48
5- 9 10-14 15-19 20-24	·· ··	· ···	-16 -67 1-01	•68 1•06	·70 1·44	·60 1·11	•48 •99
5- 9 10-14 15-19 20-24 25-34	·· ··	• •••	-16 -67 1-01 1-64	$^{ullet 68}_{1\cdot 06}_{2\cdot 01}$	$.70 \\ 1.44 \\ 1.62$	·60 1·11 1·51	•48 •99 1·28
5- 9 10-14 15-19 20-24 25-34 35-44	·· ··	· ···	16 -67 1-01 1-64 4-14	·68 1·06 2·01 4·47	·70 1·44 1·62 3·94	·60 1·11 1·51 3·03	·48 ·99 1·28 3·16
5- 9 10-14 15-19 20-24 25-34 35-44 45-54			.16 .67 1.01 1.64 4.14 5.71	·68 1·06 2·01 4·47 8·77	·70 1·44 1·62 3·94 9·68	·60 1·11 1·51 3·03 7·74	•48 •99 1•28 3•16 6•76
5-9 10-14 15-19 20-24 25-34 35-44 45-54	·· ··		.16 .67 1.01 1.64 4.14 5.71 10.19	·68 1·06 2·01 4·47 8·77 15·87	·70 1·44 1·62 3·94 9·68 20·39	·60 1·11 1·51 3·03 7·74 16·05	•48 •99 1·28 3·16 6·76 13·20
5-9 10-14 15-19 20-24 25-34 35-44 45-54 55-64 65-74			-16 -67 1·01 1·64 4·14 5·71 10·19 19·66	·68 1·06 2·01 4·47 8·77 15·87 30·59	·70 1·44 1·62 3·94 9·68 20·39 40·25	·60 1·11 1·51 3·03 7·74 16·05 33·25	•48 •99 1·28 3·16 6·76 13·20 33·91
5-9 10-14 15-19 20-24 25-34 35-44 45-54			.16 .67 1.01 1.64 4.14 5.71 10.19	·68 1·06 2·01 4·47 8·77 15·87	·70 1·44 1·62 3·94 9·68 20·39	·60 1·11 1·51 3·03 7·74 16·05	•48 •99 1·28 3·16 6·76 13·20 33·91
5-9 10-14 15-19 20-24 25-34 35-44 45-54 55-64 65-74	·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··		-16 -67 1·01 1·64 4·14 5·71 10·19 19·66	·68 1·06 2·01 4·47 8·77 15·87 30·59	·70 1·44 1·62 3·94 9·68 20·39 40·25	·60 1·11 1·51 3·03 7·74 16·05 33·25	-26 -48 -99 1-28 3-16 6-76 13-20 33-91 86-80

Although the total rates show a decided increase during the period reviewed, it is only in the oldest group, 75 years and over, that the rate in 1932-34 was higher than twenty years earlier. The death rates for each sex increase rapidly after age 34 years. From age 45 years the rates for males show a marked excess over the rates for females.

## PUERPERAL CAUSES.

The word "puerperal" is here used in the broadest sense, and the causes of death classified in this group are arranged in the following general order:—Abortion (gestation less than 28 weeks), ectopic gestation, conditions of pregnancy (death before delivery), conditions of childbirth and the puerperium (death during or after delivery, gestation 28 weeks or more). The principle of classification which distinguishes deaths of mothers before delivery, from deaths during or after delivery was introduced in 1940.

Details of the causes arranged in this order are not shown in the Year Book but are published annually in the Statistical Register with particulars of age, duration of marriage, previous issue, locality and conjugal condition. In the tables which follow, the causes of maternal deaths do not distinguish the general grouping mentioned above but are arranged for purposes of comparison according to the grouping used prior to 1940.

In 1946 the deaths of 111 women—8 single and 103 married—were due to puerperal causes. The ages of the single women ranged from 18 years to 34 years, 4 being under 21. The ages of the married women ranged from 18 years to 45 years, with 9 under 21 years. The age at marriage of these mothers ranged from 15 to 42 years. In 7 cases the duration of marriage was 20 or more years, but 8 mothers died within a year of marriage. In 43 cases there was no previous issue and in 18 of these cases the death occurred within two years of marriage; in one case, 14 children survived the mother.

The incidence of deaths from puerperal causes falling only upon women bearing children, the rates of mortality are not quoted as a proportion of general population, but have been related to the live births as being the nearest approximation to the number of pregnancies. The method gives useful, but not precise results where live births only are recorded.

Commencing with 1936, however, it is possible to calculate the rates for New South Wales in two further ways giving a greater measure of precision. The deaths may be related to the live births and stillbirths combined or to the number of confinements calculated from such figure by allowing for plural births. These rates, shown on a later page, are still not an absolute measure, because the deaths include women dying from conditions associated with abortion or miscarriage or dying in an undelivered state, whereas non-fatal abortions, etc., are not recorded and the number cannot be estimated. This shortcoming, however, is general in the statistical records of all countries.

In order to preserve uniformity with former years and with other States and countries which adopt the same method, rates are stated in the table as per one thousand live births. The general trend of such rates was downwards until 1922. In the next fourteen years the rate was on a higher level,

but an improvement occurred in 1937 and has continued. The following table provides a summary for the period under review:—

Table 217.-Maternal Deaths.

	N	fumber o	of Deaths.		1	Rate per	1,000 L	ive Birth	8,	
Period.	Crimi	Including Ex- Criminal C Abortion. A			] 4	ncluding Criminal Abortion		Excluding Criminal Abortion.		
	Married.	Single.	Married.	Single.	Married.	Single.	Total.	Married.	Single.	Total.
	On	Basis (	OF CLASSI	FICATION	IN .USE	TO END	of 1930	<b>.</b>		
1896-00 1901-05 1906-10 1911-15 1916-20 1921-25 1926-30 1933-35 1936-40 1941-45 1948 1944 1945 1946	1,238 1,190 1,225 1,341 1 355 1,340 1,405 1,197 1,040 846 173 163 128 102	138 147 132 140 130 119 182 158 125 80 21 19 7	1,192 1,312 1,295 1,214 1,272 1,040 892 740 156 141 113 95	 110 114 93 75 70 85 60 42 11 10 5	7:24 6:74 6:11 5:49 5:55 5:60 4:55 3:16 3:15 2:86 2:17 1:59	10.93 11.07 9.06 9.90 10.11 8.88 9.84 14.08 12.44 6.97 9.29 7.44 2.57 2.71	7:50 7:04 6:31 5:73 5:76 5:36 5:77 6:03 4:89 3:32 3:39 3:05 2:19 1:64	5.95 5.37 5.29 4.69 5.02 4.87 3.91 2.77 2.84 2.47 1.92 1.48	7.55 8.06 7.23 5.52 7.57 5.97 3.70 4.87 3.92 1.83 1.34	6:06 5:52 5:39 4:73 5:03 5:00 3:99 2:81 2:92 2:53 1:91 1:47
	0	n Basis	OF CLASS	SIFICATIO	N Intro	DUCED I	ท 1940.	•		
1941–45	858	81	752	43	3.20	7.19	3.36	2.80	8.79	2.83
1940 1941 1942 1943 1944 1945	192 192 192 175 167 132 103	17 17 17 21 19 7 8	166 172 160 158 145 117 96	9 5 12 11 10 5 4	4.04 3.86 3.79 3.18 2.93 2.24 1.60	9·06 8·35 8·31 9·29 7·44 2·57 2·71	4·23 4·04 8·97 3·42 3·12 2·25 1·65	3.49 3.46 3.16 2.87 2.54 1.99 1.49	4.79 2.46 5.87 4.87 3.92 1.83 1.34	3.54 3.42 3.27 2.95 2.60 1.98 1.49

<sup>\*</sup> Difference due to inclusion of deaths from acute yellow atrophy of liver.

Details as to conjugal condition, etc., have been recorded annually since 1893. Throughout the ensuing period the maternal death rate was always higher among single than among married women—particularly if criminal abortion is taken into account. During the last ten years half the deaths of single women in this group was due to criminal abortion, as compared with 13 per cent, of the deaths of married women.

A comparison of deaths in childbirth in New South Wales with those of other countries must be made with caution. Apart from possible differences in the method of calculating the rate (as indicated above) and in the definition of "live birth" a further difference arises in the classification of criminal abortion (illegal operations). In the International List of Causes of Death in use up to the end of 1939 these are classified with homicide, but in the revised List which came into use in 1940, criminal abortion is grouped with other deaths due to pregnancy, childbirth or the puerperium. In the next table, deaths from this cause are included to show the total deaths incidental to childbirth, and totals excluding criminal abortion are shown to enable comparison to be made on this basis.

Two further departures from past procedure are (1) the addition of deaths from acute yellow atrophy of the liver associated with pregnancy or childbirth, not formerly included in maternal deaths; and (2) a change in the classification of maternal deaths so that puerperal thrombophlebitis,

† Total, including Criminal

embolism and sudden death are now grouped as "infection" (septicaemia). In the following table the comparison is made according to the new arrangement.

_	DIC 21	O. 1112	icoi iiui	Douth	••			
	Deaths	, 1944.	Death	8, 1945.	Death	s, 1946.	Deaths,	1942-46
Cause of Death,	No.	Rate per 1,000 Live Births.	No.	Rateper 1,000 Live Births.	No.	Rate per 1,000 Live Births.	No.	Rate per 1,000 Live Births.
Accidents of Pregnancy	15	.25	21	.34	13	1 .19	93	.31
Puerperal Hæmorrhage	23	-39	$\tilde{17}$	27	16	.24	110	•37
Puerperal Septicemia	13	.22	7	$\cdot \tilde{i}i$	8	12	72	24
Post Abortive Septicemia	13	.22	ė	10	$\tilde{2}$	.03	58	20
Thrombophlebitis, Embolism,			v	•				
Sudden Death*	23	-39	13	.21	11	.16	79	.27
Albuminuria and Eclampsia	54	.90	39	.63	38	•57	210	.70
Other Casualties of Childbirth	14	.23	19	'31	12	18	96	•32
† Total, excluding Criminal								
Abortion	155	2.60	122	1.97	100	1.49	718	2.41
Criminal Abortion	31	•52	17	•28	11	•16	123	•41
				l		·		·

Table 218.-Maternal Deaths.

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2.25

More than any other cause of death during childbirth, puerperal septicæmia (including post-abortive sepsis) can be classed as a preventable disease. In the last five years 15 per cent. of the total deaths (excluding criminal abortion) were due to this cause, compared with over 30 per cent. in 1931-35.

The annual rates of mortality of mothers in childbirth per 1,000 live births in the Metropolis and the remainder of the State since 1927 were as follows:-

Table	• 219.—N	/latern	al Deat	hs, Metro	polis a	nd Cou	ntry.		
Deatl	s from Puer	peral	Total De	eaths of Mo	thers in C	hildbirth j	er 1,000 Liv	e Births	
Septice	mia per 1,00 Births.	0 Live	Includir	ng Criminal	Abortion.	Excluding Criminal Abortion.			
Metro- polis.	Remainder of State.	State.	Metro- polis.	Remainder of State.	State.	Metro- polis.	Remainder of State.	State.	
	On Basis	OF CLA	SSIFICATIO	N IN USE T	O END OF	1939.			
2.00	1.51	1.71	6.56	5.47	5.90	5.39	5.04	5.18	
1.81	1.34	1.52	7.03	5.39	6.03	5.07	4.96	5.00	
1.23	1.19	1.20	5.44	4.53	4.89	4.01	3.98	3.99	
.80	.90	·85	3.14	3.47	3.32	2.41	3.15	2.81	
	On Basi	is of Ci	ASSIFICAT	ION INTROD	UCED IN 1	1940.			
.94	1.09	1.02	3.93	4.12	4.04	3.00	3.75	3.42	
1.03	-85	.93	3.70	4.18	3.97	2.63	3.77	3.27	
.93	1.29	1.12	3.08	3.73	3.42	2.45	3.40	2.95	
·81	.83	.82	3.25	3.00	3.12	2.61	2.59	2.60	
•37	•47	•42	2.03	2.46	2.25	1.56	2.36	1.98	
-19	•42	.31	1.20	2.06	1.65	1.04	1.89	1.49	
	Death Septics:    2.00   1.81   1.23   .80     .94   1.03   .93   .81	Deaths from Puer Septicæmia per 1,00 Births.	Deaths from Puerperal Septicæmia per 1,000 Live Births.	Deaths from Puerperal Septicæmia per 1,000 Live Births.	Deaths from Puerperal Septicæmia per 1,000 Live Births.	Deaths from Puerperal Septicæmia per 1,000 Live Births.	Deaths from Puerperal Septicæmia per 1,000 Live Births.	Netropolis   State   Netropolis   State   Netropolis   State   Netropolis   State   Netropolis   State   Netropolis   State   Netropolis   State   Netropolis   Netropolis   State   Netropolis   Netr	

<sup>3.12</sup> \* See paragraph above the table. † Inclusive of deaths from acute yellow atrophy of liver.

Rates of maternal deaths for the year 1946 calculated by the two additional methods mentioned earlier are shown in the following table. The rates on one basis are not comparable with those on any other.

Table 220 .- Maternal Deaths, Special Rates, 1946.

Cause of Death,	All	Deaths per 1,000 All Births (Live and Still).			Deaths per 1,000 Confinements.		
	Married.	Single.	Total.	Married.	Single.	Total.	
Accidents of Pregnancy	•18	•33	.19	·19	•33	•19	
Puerperal Hæmorrhage	.23	•33	•23	•23	•33	•24	
Puerperal Septicæmia	·12		•12	•12		·12	
Post Abortive Septicæmia	.03		.03	.03		.03	
Thrombophlebitis, Embolism, Sudden Death.	·16	•33	·16	•15	•33	•16	
Albuminuria and Eclampsia	•56	.33	•55	.57	•33	•55	
Other Casualties of Childbirth	·18		•17	·19		·18	
Total, excluding Criminal Abortion	1.46	1:32	1.45	1.48	1.32	1.47	
Criminal Abortion	•11	1.31	•16	·11	1.33	•16	
Total, including Criminal Abortion	1.57	2.63	1.61	1.59	2.65	1.63	

Note-See notes under Table 218, also text.

The proportion of maternal deaths due to each cause in 1945 and 1946 is shown below in comparison with the average for the five years 1942-46.

Table 221.-Maternal Deaths, Proportion in each Cause.

·	Proportion per cent. due to each Cause.									
Cause of Death.	•	1945.			1946.			1942-46.		
	Mar- ried.	Single.	Total.	Mar- ried.	Single.	Total.	Mar- ried.	Single.	Total.	
Accidents of Pregnancy Puerperal Hæmorrhage Puerperal Septicæmla Post Abortive Septicæmla Thrombophieltis, Embolism, Sudden Death  Albuminuria and Eclampsia Other Casualties of Child- birth	3.03 9.85 28.79	14·29 14·29  28·56  14·29	15·11 12·23 5·03 4·32 9·35 28·06 13·67	11.65 14.56 7.76 1.94 9.71 35.92 11.66	12.50 12.50  12.50 12.50	11·71 14·41 7·21 1·80 9·91 34·24 10·81	10·92 13·66 8·84 6·37 9·76 26·01 12·35	12·50 6·94 5·56 12·50 5·55 13·89	11.06 13.08 8.56 6.90 9.39 24.97 11.41	
Total, excluding Criminal Abortion  Criminal Abortion	88·64 11·36	71.43	87.77	93.20	50.00	90.09	87:91	58·33 41·67	85·37 14·63	
Total, including Criminal Abortion	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

<sup>\*</sup> Note—See notes under Table 218; also text.

In the five years 1942-46, criminal abortion caused 42 per cent. of the purposal deaths of single women.

#### DEATHS FROM VIOLENCE.

Deaths from violence are deaths from accident (including deaths in respect of which "open verdicts" were recorded at Coroners' inquests), suicide and homicide. In proportion to the population the annual number of suicides has not shown any marked variation. Deaths from homicide have remained fairly constant in number, and their proportion to the population has decreased.

Deaths from violence in 1946 numbered 1,789 or 6.3 per cent. of the total deaths in the year. This number includes 279 suicides, 1,473 accidents and 37 homicides. The rate, 6.07 per 10,000 living, was 10 per cent. above the rate in the preceding quinquennium, which was 5.48. In the year 1946 the males numbered 1,231 or 8.36 per 10,000 living, and the females 558 or 3.79 per 10,000, which is 45 per cent. of the male rate.

# Deaths from Suicide.

The number of persons who took their own lives in 1946 was 279 and the rate, 0.95 per 10,000 living, was 9 per cent. above the average for the preceding quinquennium. The number of suicides by males was 190, and the rate, 1.29 per 10,000 living, was 115 per cent. greater than the rate amongst females, 0.60 per 10,000 living.

The number of deaths from suicide and the rates since 1899 are shown in the following table:—

	Ma	des.	Fen	ales.	To	tal.
Period.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1899-03	651	1.81	142	.44	793	1.16
1904–08	719	1.86	160	49	193 879	1.18
1904-08	857	1.95	238	•59	1,095	1.30
1914-18	888	1.83	223	48	1,111	1.17
1919-23	887	1.65	244	.47	1,131	1.07
1924-28	1,100	1.84	269	1 .47	1,369	1.16
1929-33	1,244	1.92	301	48	1,545	1.21
1934-38	1,235	1.83	367	•56	1,602	1.20
1939-43	1,008	1.44	348	•50	1,356	•97
1941.	184	1.31	63	•45	247	-88
1942	179	1.27	74	53:	253	•90
1943	168	1.18	50	•35	218.	•77
1944	150	1.04	88	.61	.238	•83.
1945	183	1.26	71	•49	254	.88
1946	190	1.29	89	.60	279	95

Table 222.—Suicide.

The means usually adopted for self-destruction by men are either shooting, poisoning, cutting, or hanging. Women, as a general rule, avoid weapons, and resort mostly to poison. Of every 100 cases of suicide during the five years 1942-46, 18 were by the agency of poison, 19 by shooting, 18 by gas, 11 by cutting, 15 by hanging, 8 by drowning, and 11 by other means.

Experience indicates that the suicidal tendency is probably influenced by the seasons. During the last ten years, 1937-46, the proportion of male suicides per 1,000 was approximately as follows:—In spring, 251, summer, 259, autumn, 245, and winter 245. Female suicides, being numerically smaller, give more variable results as to seasonal trends; in the last ten years the proportion per 1,000 was—spring, 258, summer, 265, autumn, 247, winter, 230.

## Deaths from Accident.

During the year 1946, the number of deaths due to accident was 1,473, viz., 1,017 of males and 456 of females, giving rates of 6.91 and 3.09 per 10,000 living of each sex, and the general rate was 5.00 per 10,000 living.

The number of deaths from accident and the rates since 1884 are shown in the table below. The figures for 1927 and later years include deaths in respect of which an "open verdict" was given.

	M	ales.	Fen	nales.	Total.	
Period.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.	Deaths.	Rate per 10,000 Living.
1884–88	3,550	13.41	944	4.34	4,494	9.32
188993	3,666	11.90	966	3.70	4,632	8.14
1894-98	3,498	10.33	1,095	3.69	4,593	5.23
1899-03	3,432	9.54	1,103	3.39	4,535	6.62
190408	3,145	8.13	1,056	2.96	4,201	5.65
1909-13	3,894	8.84	1,119	2.79	5,013	5.95
1914-18	3,821	7.87	1,088	2.34	4,909	5.17
1919-23	3,677	6.85	1,102	2.13	4,779	4.54
1924 – 28	4,860	8.11	1,363	2.37	6,223	5.30
1929 - 33	4,748	7.83	1,389	2.21	6,137	4.80
1934 - 38	5,082	7.53	1,588	2.41	6,670	5.00
1939-43	5,272	7.51	1,823	2.62	7,095	5.08
1941	1,049	7.49	335	2.41	1,384	4.96
1942	990	7.00	355	2.53	1,345	4.77
1943	853	5.99	353	2.49	1,206	4.24
1944	859	5.98	359	2.50	1,218	4.24
1945	853	5.89	387	2.67	1,240	4.28
1946	1,017	6.91	456	3.09	1,473	5.00
	<u> </u>			<u> </u>		

Table 223.-Accident.

The figures in the table include deaths due to inattention at birth, and, prior to 1896, injury at birth and traumatic tetanus.

The experience of the five years ended 1946 shows that out of every 1,000 fatal accidents 259 are due to road transport accidents, 95 to drowning, 274 to falls, 89 to railway or tramway accidents, 58 to burns or scalds, and 20 to accidents in mines and quarries. Fatalities due to weather, i.e., excessive cold or heat, or lightning were responsible for 16 in every 1,000 but this number fluctuates appreciably according to the severity of seasonal conditions.

Out of 442 deaths caused by road transport accidents in 1946, 401 were due to accidents in which a motor vehicle was involved, and 33 to tram accidents.

Details relating to fatal and non-fatal traffic accidents are published in the chapter "Trade, Transport and Communication" of this volume.

### THE SEASONAL PREVALENCE OF DISEASES.

The following table shows for each month of the year the proportion of deaths due to each of nine principal causes. The figures are based on the experience of the five years 1942-46, and in order to make the results of the computation comparable, adjustments have been made to correct the inequality of the number of days in each month:—

Table 224.—Seasonal Prevalence of Diseases, 1942-46.

Month.	Typhoid Fever.	In- fluenza.	Diph- theria and Croup.	Whoop- ing. Cough.	Tuberculosis of the Respiratory System.	Pneu- monia.	Bron- chitis.	Diarrhœa, Enteritis, and Dysentery.	Neph- ritis.
		Deaths in	n month	(adjuste	ed) per 1,00	00 deaths	s from ca	use,	
January February March April May June July August September October November December	49 416 49 145 49  49 49 49  96	46 35 32 44 28 229 169 182 101 58 43 33	81 119 93 102 121 96 93 58 65 43 78	140 126 88 38 48 37 66 122 133 65 99	80 80 76 74 78 96 98 91 83 83 87 74	66 64 59 61 83 101 123 132 105 78 72 56	54 54 46 60 93 129 147 141 100 79 58 48	134 130 99 63 69 60 56 59 62 79 79	76 68 67 83 81 99 97 101 90 85 81 72
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

In interpreting the foregoing table comparison should be made vertically and not horizontally; the figures are proportions per thousand and not absolute numbers.

The chief feature of the foregoing table is the contrast between the figures relating to typhoid fever, and diarrhea and enteritis on the one hand, and to influenza, pneumonia, and bronchitis on the other. In the first group the influence of the hot weather is the controlling factor; in the second, the cold. The warmest months in the year are January, February, and December; the coldest, June, July and August. The morbidity from tuberculosis of the respiratory system varies little throughout the year, but it is somewhat higher in the colder months. Nephritis also shows a higher mortality during the cold weather.

# RURAL INDUSTRIES

A brief résumé of the early settlement of New South Wales and of the groblems of rural settlement was published at page 679 of the Year Book for 1928-29. Stages, in the development of land settlement policy, a statement of progress in the alienation of land, and a brief outline of the subsisting forms of land occupation are given in the chapter "Land Settlement" of this volume.

During the economic depression, which affected rural industries very severely from 1930 to 1936, the problem of rural settlement became that of maintaining existing settlement rather than of promoting new development. The policy of closer settlement was resumed towards the end of 1937, but operations were suspended again upon the outbreak of war in 1939.

To meet war-time needs, special measures were taken to expand the production of fodder crops, vegetables and certain other foodstuffs, but wheat farming was restricted in the seasons 1941-42 to 1944-45. Current provisions for rural settlement, including that, of ex-service personnel, are described in the chapter "Land Settlement."

# STATISTICS OF RURAL INDUSTRIES.

To speed the supply of data required by authorities concerned with wartime problems of food supply, organisation of manpower, etc., the collection and compilation of rural statistics in 1941-42 was expedited and since that year information regarding major items of production has been available within five months of the close of each season. This is made possible by the co-operation of landholders in furnishing their returns promptly and of the police in collecting them.

Similar action has been taken in the other Australian States, and the forms used have been standardised in regard to items, period to which the details relate and date of collection. For the greater part the statistics relate to natural seasons and cover farming operations for the years ended 31st March.

## RURAL HOLDINGS.

The land of New South Wales which is occupied in rural holdings consists either of alienated\* lands, lands in course of alienation, leased Grown lands, or various combinations of these tenures, while a considerable area remains as Grown reserves. At 31st March, 1948, the number of agricultural and pastoral holdings of one acre or more in extent was 74,669, embracing a total area of 169,198,035 acres.

The area of the State not embraced within such holdings is approximately 28,000,000 acres and includes approximately 3,000,000 acres covered by rivers, lakes, harbours, etc.; 5,000,000 acres of rugged land unfit for

<sup>\*</sup>The term. "alienated land" as used in this chapter and chapter "Agriculture" refers to the areas so returned by landholders, and includes perpetual leases, homestead selections, etc., as well as land actually alienated or in course of alienation.

<sup>\* 4255—1</sup> 

The second secon

occupation of any kind; town lands and holdings less than one acre in extent; land embraced in State forests and not otherwise occupied; and unoccupied reserves for necessary public purposes, such as commons, travelling stock and water reserves, roadways and railway enclosures. Most of the land unsuitable for settlement is in the coastal and tableland divisions, but proportionately smaller areas are found in all divisions.

An approximate classification of the main purposes for which rural holdings of one acre and upwards were used in 1911-12 and various years to 1945-46 (the latest year for which it is available) is shown below and the diagrammatic map on page 10 of this edition illustrates the regions devoted to the principal forms of rural production. As from 1928-29 holdings on which agricultural operations were confined to production of fodder for the livestock on the holding were classified under the heading "grazing" or "dairying" or "grazing and dairying." A certain proportion of the holdings classified according to the main purposes shown below was used also for subsidiary activities, such as poultry, pig and bee farming.

Table 225.—Rural Holdings, Classification According to Purposes.

Main Purpose for which			Num	ber of Hol	dings.		
Holdings are used.	1911–12.	1925–26.	1930-31.	1935–36.	1939–40.	1944–45.	1945-46,
Agriculture	2,099	11,435 9,766 25,428 5,624 18,084 1,794 1,734 1,526	10,806 14,484 24,154 3,371 15,969 1,148 1,146 1,630	10,293 14,969 21,970 4,066 15,995 1,445 1,834 2,786	10,373 14,210 20,578 3,752 18,144 1,309 1,433 2,540	9,497 12,473 22,101 3,821 16,341 1,639 1,239 4,527	10,447 12,157 21,590 3,578 17,051 1,341 1,028 3,973
Total Holdings of one acre and upwards used mainly for Agricultural and Pastoral Purposes	0 540	75,391	72,708	73,358	72,339	71,638	71,165

Note-The basis of classification was amended in 1928-29.

In addition to those classified above, small holdings—mostly less than 30 acres in extent, which numbered 3,008 in 1945-46—were used partly for agriculture and pastoral purposes, but mainly for residential and other purposes, or were unoccupied at the time of collecting the returns. The particulars in the table do not indicate the actual number of settlers occupying the land—because some holdings are held conjointly, and a number of landholders own more than one holding.

Between 1930-31 and 1939-40 there was a definite trend towards mixed farming. Single purpose holdings declined in number and those used for two or more classes of activity increased. Apart from holdings classified as pig, poultry or bee farms, the number of single purpose holdings used for agriculture, dairying or grazing was 49,444 or 69.6 per cent. in 1930-31 and 45,161 or 64.7 per cent. in 1939-40; on the other hand, holdings used for a combination of these activities increased from 21,634 or 30.4 per cent. in 1930-31 to 24,638 or 35.3 per cent. in 1939-40. During the next six years the number of single purpose holdings declined further to 44,194,

but the proportion rose to 65.8 per cent. as a result of a reversal of the trend in respect of grazing activities, and the proportion of multiple purpose holdings, numbering 22,998, declined to 34.2 per cent.

The number and proportion of holdings used for each of the main rural activities, singly or combined, in 1930-31, 1939-40 and 1945-46 is shown below. A holding is not classified as agricultural if the cultivation is confined to fodder crops for the livestock thereon; consequently the number of cultivated holdings (those with at least one acre of cultivation), viz., 49,391 in 1930-31, 53,251 in 1939-40 and 49,743 in 1945-46, exceeds the number of agricultural holdings as stated in this table:—

Table 226.-Rural Holdings used for Agriculture, Dairying and Grazing.

_	Num	ber of Hole	lings.	Proportion of Total.			
Purpose.	1930–31.	1939-40.	1945-46.	1930–31,	1939–40.	1945-46.	
Agriculture—				%	%	%	
Single Purpose	10,806	10,373	10,447	34.5	30.8	32.2	
Combined with Grazing	15,969	18,144	17,051	51.0	53.8	53.1	
With other Purposes	4,517	5,185	4,606	14.5	15.4	14.4	
Total	31,292	33,702	32,104	100.0	100.0	100.0	
Dairying—							
Single Purpose	14,484	14,210	12,157	71.9	68.7	67:2	
With other Purposes	5,665	6,494	5,947	28.1	31.3	32·8	
Total	20,149	20,704	18,104	100.0	100.0	100.0	
Grazing—							
Single Purpose	24,154	20,578	21,590	56.9	49.6	52·6	
Combined with Agriculture	15,969	18,144	17,051	37.7	43.8	41.6	
With other Purposes	2,294	2,742	2,369	5.4	6.6	5.8	
Total	42,417	41,464	41,010	100.0	100.0	100.0	

In 1945-46 the proportion of single purpose holdings was highest in dairying, 67.2 per cent., and lowest in agriculture, less than 33 per cent. The holdings used for agriculture and grazing combined represented 53 per cent. of those classified to agriculture and 41.6 per cent. of the holdings used for grazing. There had been an appreciable increase since 1939-40 in the number and proportion of holdings used exclusively for grazing.

WHEAT-GROWING IN CONJUNCTION WITH OTHER RURAL ACTIVITIES.

To reveal the extent to which wheat-growing is undertaken in conjunction with sheep grazing, dairy farming and pig raising, special tables were compiled from statistical data collected in respect of the years 1932-33, 1935-36 and 1947-48. The results, with details for each statistical division, are published in the Statistical Registers, 1933-34, 1935-36, and 1947-48.

The number of holdings devoted exclusively to wheat-growing is not revealed, but the tables indicate that many wheat-growers derive a substantial proportion of their livelihood from other farming activities, and that on many holdings the cultivation of wheat is a minor enterprise. In 1947-48 there were only 2,302 holdings on which wheat for grain was grown on which there were no sheep, and of these holdings only 196 had a total area of or exceeding 500 acres of wheat for grain.

Wheat for grain was grown on 17,682 holdings in 1947-48. On 15,380 of these 33.8 per cent. of the sheep in the State were depastured; on 949 of them with registered dairies, 3.2 per cent. of all cattle in registered dairies were found, and the number of pigs on the 3,215 holdings which produced both wheat and pigs represented 216 per cent. of all pigs in the State at 31st March, 1948. Some wheat-growers engaged also in two or more of these activities. The extent to which beef cattle raising, poultry farming, bee farming, etc., was combined with wheat-growing (for grain), with or without sheep grazing, dairying and/or pig farming was not ascertained, but probably was appreciable.

The following table summarises the data regarding wheat-growing for grain in combination with either sheep grazing, dairy farming or pig raising in New South Wales, exclusive of the Coastal division, where wheat for grain was grown on only 120 holdings in 1947-48.

Table 227.—Wheat-growing for Grain in Association with Sheep Grazing, Dairying and Pig Raising: New South Wales, exclusive of Coastal Division.

Particulars (Item and Unit).	Nu	mber or A	rea.	Proportion of Total in State excluding Constal Division.*		
	1932-33.	1935 <i>-</i> 36.	1947–48.	1932–33.	1935–86	<b>1947-4</b> 85
1. Holdings with Wheat for Grain 2. Area of these Holdings 3. And depasturing Sheep 4. And having Registered Dairies 5. And raising Pigs 6. Sheep on these Holdings 7. Dairy cows in the above Dairies 8. Pigs on these Holdings 7. No.	14,562 2,283	15,861 24,338 13,605 1,740 5,418 13,382 49,371 58,934	17,562 30,786 15,307 899 3,173 16,971 31,967† 78,715	41.5 16.9 81.4 12.8	per cent. 37-6 15-2 85-8 11-0 34-2 26-4 30-5 49-1	per cent. 41.3 19.5 87.2 5.1 18.1 37.7 26.57 .63.1

<sup>•</sup> For items 1 and 2, of all rural holdings; Items 3, 4 and 5, of holdings with wheat for grain; and tems 6, 7 and 8 of all sheep, cows (or cattle) in registered daries, and pigs. † Dairy cattle.

Exclusive of the Coastal and Western divisions in which very little wheat is grown, 43.3 per cent. of the holdings with 37.2 per cent. of the total area of holdings had wheat for grain in 1947-48.

Many wheat-growers who turned to dairying and pig raising as means of augmenting their income during the depression of the 'thirties, when wheat prices were very low, have since relinquished those activities, but the practice of combining sheep with wheat farming has become even more general. The higher proportion of the pigs in inland districts on wheat holdings may reflect the decline in dairying in those districts and the inability of non-wheat growers to raise pigs profitably with wheat at current high prices.

# TENURE OF HOLDINGS.

The tenure of land-holdings in New South Wales is principally of two classes—freehold and leasehold from the Crown. Only a small proportion of the total area occupied is rented from private owners, although the

area held on lease from the Crown is very large. Tenancy, as understood in older countries, therefore, is uncommon, and a very large proportion of the total alienated area is occupied by its owners.

Particulars of the area occupied in each division of New South Wales, according to the class of tenure at 31st March, 1941, as returned by landholders are shown below; later information has not been collected, but apart from the major exception noted below the table, the nature of land-holding is probably little different from that indicated. The territorial and statistical divisions of the State are distinguished in the map forming the frontispiece of this volume.

Table 228.—Area and Tenure of Rural Holdings, 1941.

Division.	Alienated*   or virtually Alienated.	Leased from Orown with full Rights of Conversion into Free- hold.	Leased from Crown with limited Rights of Conversion into Free- hold.	All other Leases held from Crown.	Total Area in Holdings.
Coastal	acres. 9,503,742 15,194,867 22,064,700 30,699;563 15,731,152 (98,194)024	1,369,804 3,290,352 1,902,407 5,046,518 146,321	Agres, 198,826 441,602 286,367 490,741 506,040 1,923,576	997;132 1,295,010 1,081,089 2,080,706 61,632,305	(acres. 12,069,504 20;231,731 25,334,563 38;317;528 (77,015;818 (176;869;144

<sup>\*</sup> See footnote, page 269.

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In the Western Division allarge extent of western lands leases has been converted to leases in perpetuity in terms of legislation enacted in 1982 and Records of the Department of Lands indicate that of a total area of 77 million acres of western lands leases more than 47 million acres had been gazetted as perpetual leases at 30th June, 1941. In the statistics of rural holdings compiled from landholders' returns, less than 16 million acres were classified in 1941 as alienated or virtually alienated (as defined at foot of page 269) and more than 30 million acres converted to perpetual leasehold were still returned as western lands leases and classified (in Table 228) with all other leases held from Crown. At 30th June, 1948, the area of perpetual leases in this division was 54,326,000 acres.

The area occupied in holdings of various classes in 1941 is expressed in the following table as a proportion of the total area of each division:

Table 229.—Proportionate Area of Rural Holdings in Divisions, 1941.

Division.	Allenated* or virtually Alienated.	Crown with full Rights of	Leased from Crown with limited rights of Conversion into Freehold.	All other Leases	Proportion of Area in rural holdings to Total Area.
Coastal Tableland Western Slopes Central Plains and Riverina Western*	per cent. 42.7 58.7 78.4 74.2 19.6	per cent. 6-1 12-8 6-8 12-2 0-2 5-9	.per .cent. 0-9 1-7 1-0 1-2 -0-6	per cent. 4.5 5.0 3.8 5.0 76.6	per cent. 54-2 78-2 90-0 9246 97-0

<sup>\*</sup> See footnote, page 269, and paragraph below Table 228.

In 1941, almost 88 per cent. of the total area of the State was occupied in holdings of one acre and upwards used for agricultural or pastoral purposes. The highest proportion of alienation had taken place in the Western Slopes, viz., 73.4 per cent., and in the Central Plains and Riverina, 74.2 per cent. of the area of the division.

The greater intensity of settlement in the more easterly districts necessitates the allocation of a large proportion of land for public purposes, and a very considerable proportion of the remaining Crown land in the Eastern Division is so rugged or wooded as to be unfit or unprofitable for occupation. This is specially the case in the South Coast division, which in parts is very mountainous; only 38 per cent. of its total area is in rural occupation, as compared with 68 per cent. in the North Coast division and 57 per cent. in the Hunter and Manning.

# SIZE OF HOLDINGS.

Information as to the classification of rural holdings in size groups has been ascertained at irregular intervals. The particulars in this regard for the year ended 31st March, 1948, summarised below and given in greater detail in the Statistical Register, 1947-48, show the number of holdings in statistical divisions in area series, with the aggregate areas comprised in holdings of each size group. They relate to the total area of holdings, including alienated and Crown lands. Corresponding information for the year 1924-25 may be derived from data published on page 752 of the Official Year Book, 1925-26, and a table on page 683 of the 1928-29 edition gives similar information for the year 1926-27.

The number, area and value of alienated lands in rural holdings, last collected in respect of the year ended 31st March, 1941, are shown in area series on page 689 of the Year Book for 1940-41.

Between 1926-27 and 1947-48 the total number of rural holdings decreased by 3,711 from 78,380 to 74,669. Those of less than 100 acres decreased by 1,633; those of from 100 to 500 acres by 3,089, and those of from 500 to 1,000 acres by 844 (a total decrease of 5,566 in these smaller holdings), but holdings of from 1,000 to 5,000 acres increased by 1,464, those of from 5,000 to 20,000 acres by 289, and those exceeding 20,000 acres by 102.

The smaller holdings embraced an area almost 1,850,000 acres smaller in 1947-48 than in 1926-27, whereas the total acreage in holdings of from 1,000 to 5,000 acres was about 3,365,000 acres greater, and in those of from 5,000 to 20,000 acres about 4,230,000 acres greater. In holdings of over 20,000 acres there was a notable reduction of nearly 7,400,000 acres and the average area of such holdings decreased from about 74,500 acres to about 63,500 acres.

The decrease in the lastmentioned group was due partly to the subdivision for new settlers of some very large holdings in the Western Division, where the acreage in the group was reduced by over 1,700,000 acres and there were 136 more holdings of from 20,000 to 50,000 acres. In the Coastal, Tablelands and Western Slopes divisions, however, the number of holdings in this bracket decreased from 195 to 108 and their combined area was halved, decreasing by over 3,500,000 acres. There were 35 fewer holdings in this group in the Central Plains and Riverina division and the group aggregate area was about 2,135,000 acres smaller than in 1926-27.

The movements generally reflect trends toward elimination of uneconomic small holdings, closer settlement activities, and developments in mixed farming, which requires holdings of medium size.

The following statement summarises the information regarding size of holdings in the year ended 31st March, 1948:—

Table 230.—Number and Size of Holdings: Classified in Area Series in Divisions, 1947-48.

Coastal Division.	Tablelands Division.	Western Slopes	Plains and		
		Division.	Riverina Division.	Western Division.	New South Wales.
		·			
7,622 57,018	546 5 228	663 6 471	366 3 285	222 1 759	9,419 73,754
3,125 101,935	869 28,662	738 23,779	723 23,375	204 5,969	5,659 183,720
$3,246 \\ 238,139$	911 $64,964$	$672 \\ 48,528$	440 28,190	2,906	5,313 382,727
6,187 883,386	1,087 <b>1</b> 54,608	890 126,593	216 31,258	14 1,757	8,394 1,197,602
2,227,717	744,701	746,947	283,779	8,441	12,379 4,011,585
1,710,090	1,750,514	2,896,565	1,555,975	20,410	11,063 7,933,554
$1,308 \\ 1,780,755$	2,676 $3,785,478$	3,825 $5,299,999$	$1,871 \\ 2,636,475$	58,300	9,721 13,561,007
678	2,155	2,537 7,713,529	2,259	68	7,697 23,761,858
162	515	573	1,196	94	2,540 17,095,734
53	145	169	499	269	1,135 15,402,236
19	33	45	178	547	822
· 4	4	3	49	286	25,990,050 346
243,027	226,652	200,149	15	166	23,837,340
			2,282,434	33,484,434	35,766,868
$32,\!174$ $11,\!578,\!212$	$\substack{13,561 \\ 19,497,127}$	$16,163 \\ 24,366,055$	10,759 37,562,130	2,012 $76,194,511$	74,669 169,198,035
99 997 451	95 847 100	28 189 505	A1 971 676	80 949 915	198,012,046
	57,018 3,125 101,985 3,246 2,381,389 6,187 883,386 7,265 2,227,717 1,710,090 678 2,027,721 1,074,422 1,074,422 530,760 4243,527  32,174	57,018 5,228 3,125 869 101,985 28,662 9,11 288,139 64,964 6,187 883,386 7,265 2,210 7,44,701 2,505 2,210 1,710,090 1,750,514 2,676 2,027,721 6,475,190 1,074,422 3,455,363 702,742 1,923,309 530,760 882,558 244,527 32,174 11,578,212 1,923,309	67/018         5,228         6,471           3,125         869         23,779           3,246         911         672           238,139         64,964         48,528           6,187         1,087         890           883,386         154,608         126,593           7,205         2,210         746,947           2,505         2,410         746,947           2,505         2,410         3,932           1,710,090         1,750,514         2,896,565           1,780,755         3,785,478         5,299,999           2,027,721         6,475,190         7,713,529           1,074,422         3,455,363         3,782,219           1,074,422         3,455,363         3,782,219           53         145         109           702,742         1,923,309         2,239,867           30         530,760         882,558         1,281,379           4         243,527         226,552         200,149	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

<sup>\*</sup> Exclusive of Lord Howe Island, harbours and rivers, and Quarantine area (25,074 acres).

Holdings of small size preponderate in the Coastal division where dairy farming and intensive cultivation characterise rural activities. Holdings tend to be considerably larger in the Tablelands and Western Slopes divisions, but even so, more than one-half the number are of less than 1,000 acres, though about 38 per cent. of them are in the group 1,000 to 5,000 acres, and 59 per cent. are from 500 to 5,000 acres. The existence of irrigation settlements accounts for most of the small holdings in the Plains and Riverina and the Western divisions. Holdings of medium size, adapted for agriculture and mixed farming, are the more numerous in the former, and the largest size groups (as dictated by the sparse pastoral occupation which alone is practicable in that region) preponderate in the latter of these divisions.

The position in relation to the rural occupation of the respective divisions in 1947-48, is illustrated in the following table which shows the proportion of the number of holdings in each of several size groups and the proportion

of the aggregate area comprised in each of these groups in relation to the number and area of all holdings in each division:—

Table 231.—Relative Proportion of Holdings: Classified in Area Series in Divisions, 1947-48!

Size of Holdings—	Coastal Division.	Tablelands Division.	Western Slopes Division.	Plains and Riverina Division.	Western Division,	New South Wales.
	, N A.	N. A.	N. A.	N. A.	N. A.	N. A.
Acres.	Prop	ortion, per cen	t. of total num	ber or area of l	oldings.	
Under 100	43.5   3.4	17.1   .5	12.8	14.2   .2	23.4	27/3
100 to 499	41.8 26.9	24-3 4-6	18-6 3-6	910 8	2.0	27.9 3.1
500 to 999	7.8 14.8	17.8 9.0	24.3 11:9	20.3. 4:1	1:5	14-8. 4.7
1,000 to 4,999	6.1 32.9	35-6 52-6	39.4 53.4	38.4 26.5	5.44	23.3 22.0
5,000\to\19,999	. 7 15.3.0	4.9 27.6	4.67 24.7	15.8 39.3	1810 610	4.9 19.2
20,000 and over	1 647	3 5.7	3 61	2.2 29.1	47.7 93.6	1.8 50.6

N-Number; A-Area of holdings.

Exclusive of the Western Division the proportions of holdings in the successive size ranges shown in the table were 27.4, 28.5, 15.2, 23.8, 4.6 and 0.5 per cent., the total area in each group representing 0.7, 5.6, 8.5, 39.8, 30.0 and 15.4 per cent., respectively. In the part of the State comprising the Eastern and Central Territorial Divisions holdings of an area of less than 500 acres accounted for 56 per cent. of the number but only 6.3 per cent. of the total area of rural holdings; 39 per cent. ranged in area from 500 to 5,000 acres and embraced 48 per cent. of the total area, and 45.4 per cent. of the area in all holdings was comprised in 5.1 per cent. of the total number.

In the interval from 1926-27 to 1947-48, the average area of holdings of between 100 and 20,000 acres increased from 1,433 to 1,567 acres, the average of those in the Eastern and Central Territorial Divisions being built up from 1,352 to 1,491 acres.

#### VALUE OF ALIENATED RURAL LANDS.

Information as to the unimproved and improved capital value of lands was first collected for statistical purposes in 1920-21. The particulars relate to the value, on a freehold basis, of lands absolutely alienated, in course of alienation, or held in perpetuity, as homestead farms or homestead selections, etc., and used for agricultural and pastoral purposes.

The unimproved capital value is defined as the amount which the land might be expected to realise if sold under such reasonable conditions as a bonx fide seller would require, assuming that the actual improvements had not been made, and the improved capital value as the value of the land with all improvements and buildings thereon under similar conditions of sale.

Where particulars of unimproved value were not available from owners, collectors were instructed to obtain them from the records of shire councils, so that the unimproved values quoted may be taken as representing local government assessments, except in the Western Division, where no shires exist.

Very few shires assess improved values, and particulars of improved capital value of rural lands are obtained from the owners.

In 'the table which follows, therefore, the unimproved capital value represents in most cases the shire valuation, but the improved values were obtained from the owner's assessment of the value of the land and its improvements. It is not possible to deduce the value of the improvements from the figures.

The following table shows in divisions of the State (on the basis of Local Government areas) the distribution of alienated and Crown lands occupied in holdings of one acre and upwards for agricultural and pastoral purposes, together with the total and average value of the alienated lands at 31st March, 1941, the latest information available:—

Table 232.—Area and Value of Rural Holdings in Divisions, 1941.

		Alienațed* I	and in Occuj	pation in Hol	dings of one a	cre and over	
Division,	Area.		ed Capital of Land.	Improved Capital Value.		Area of Crown Land	
	21100,	Total.	Average per acre.	Total.	Average per acre.		
		thousand	£ thous.	£	£ thous.	£	thousand
,Coastal—		acres.				1 :	acres.
North Coast		3,336	12,125	3:63	30,322	9.09	1,396
Hunter and Man	ning	4,110	9,293	2.26	25,837	6.29	667
Metropolitan	,	273	3,117	11:42	7,702	28:21	7
South Coast	•••	1,785	4,654	2.61	12,170	6.82	496
Total	•••	9,504	29,189	3.07	76,031	8:00	.2,566
Tablelands—		<del></del>					
Northern		4,614	5,653	1.22	14,850	3.22	1,994
Central	•••	6,333	10,137	1.60	32(663	5:15	1.424
Southern	•••	4,248	5,951	1.40	17,258	4.06	1,619
Total		15,195	21,741	1.43	64,771	4.26	5,037
Western Slopes-							
North		6.937	10.968	1.58	28,141	4:06	1.407
Central		6,349	.9,700	1.53	30,671	4.83	619
South	•••	8,779	16,074	1.83	50,403	5.74	1,243
Total		22,065	36,742	1.66	109,215	4.95	3,269
Plains—		_		-			
North-central		5.754	6,647	1.16	15,914	2:77	1.999
Central		10,660	9,125	0:86	21,757	2.04	3.278
Riverina	,	14:285	21,792	1.52	54,018	3.78	2,341
Total		30,699	37,564	1.22	91,689	2.98	7,618
Western Division	•••	15,731†	1,748	0;11	4,318	0:27	62,185
Whole State	!	93,194	126,984	1:36	346;024	3.71	80,675

<sup>\*</sup> See footnote en page 269.

Particulars of the rainfall, productivity, and population of each of the divisions are shown in Table 233 and the diagrammatic maps on pages 9 and 10 illustrate the relationship between rainfall and the type of rural enterprise. The average value per acre is closely related to these factors.

<sup>&#</sup>x27;+'See paragraph below Table 228.

The greater part of alienated lands in the Western Division is comprised in perpetual leases, but there is a considerable area of freehold land in the eastern confines, and naturally there are marked variations in value per acre between the accessible and the more remote parts of this vast region.

The unimproved value of the alienated portions of rural holdings in value series as at 31st March, 1941 is shown on page 692 of the Year Book for 1940-41.

# CHARACTER OF SETTLEMENT.

The nature and pattern of rural settlement in New South Wales have been determined largely by the configuration and varying quality of the land, rainfall, and accessibility to markets, and by local factors, such as water supply, forest stands and means of communication, which undergo important changes as economic development proceeds.

The pastoral industry was the basis of initial settlement throughout the State. It is still nearly State-wide but the Western Division is the only portion given over almost solely to grazing activities. There, land occupation retains its early characteristics of sparse settlement on large holdings with but a few widely scattered small towns and hamlets. Although progress of agriculture in the Central division, particularly in the 15 to 20 inches rainfall belt, at first caused substantial displacement of sheep grazing, widespread adoption of mixed farming during the past two decades has arrested and reversed that trend. Progressive development of schemes of water supply and irrigation, and better means of communication have been material factors in promoting closer settlement within this division. Dairying and agriculture have tended to displace sheep east of the Great Dividing Range.

The density of settlement throughout the State increases in a general way from west to east. Within the wheat belt (defined on the map on page 10 of this volume) rural holdings also gain in density as latitude increases, and this belt supports many flourishing towns of which a number range in population from 10,000 to 15,000.

Large tracts of very rugged, and often densely wooded or poor country militate against settlement in the tablelands and southern coastal districts but there are extensive relatively densely settled areas. Favoured with abundant rainfall, the northern and central portions of the coastal region are, by far, the most densely occupied; in this region dairying and intensive agriculture on well compacted holdings characterise the fertile lands of the many river basins, and the more rugged and less accessible districts are devoted to cattle raising. Sheep are few and wheat growing is negligible. Disregarding the metropolis and the cities of Newcastle and Greater Wollongong, the density of population in these coastal regions is much greater than in any other part of the State.

The following analysis of the State, according to natural divisions on the basis of Local Government areas, shows the rainfall, population, area, and

major items of production. A map showing these divisions is published as a frontispiece to this Year Book:—

Table 233.-Rainfall, Population, Area and Production, in Divisions.

Division.			Range of	Popu-		Annual Production, 1947-48,					
		Average Annual Rainfall.	lation at 30th June, 1947.	Total Area, *	Wool,	Wheat.	Butter.	Mining,	Manu- factures.		
Coastal— North Coast			inches.	thous- ands. 159	thous. acres. 6.965	thous. lb.	thous. bushels.	thous. lb. 51,761	£'000.	£'000. 3,543	
Hunter and Ma	nning		20-61	343	8,414	5,612	103	10,945	8,166	23,086	
Metropolitan	•••	• • •	28-45	1,691	959	112	1	293		167,448	
South Coast	•••	•••	29-58	130	5,949	3,706	•••	6,548	2,261	10,016	
Total				2,323	22,287	9,450	104	69,547	10,700	204,093	
Tablelands— Northern Central Southern		···	01 50	51 144 50	8,087 10,699 7,061	21,951 42,796 33,474	350 6,561 96	1,310 914 308	171 1,899 831	687 3,615 1,283	
Total				245	25,847	98,221	7,007	2,532	2,901	5,585	
Western Slopes— North Central South			20-31 17-26 17-38	59 59 112	0,200 7,724 11,239	37,500 34,257 55,568	11,775 21,503 24,452	807 445 5,282	125 16 41	636 813 2,356	
Total				230	28,163	127,325	57,730	6,534	182	3,805	
Central Plains— Northern Central Riverina			15-20	29 24 75	9,579 14,812 16,981	30,383 44,673 53,649	6,262 3,806 20,267	104 142 1,167	} 49 51	$ \begin{cases} 376 \\ 158 \\ 1,481 \end{cases} $	
Total				128	41,372	128,705	30,335	1,413	100	2,015	
Western Division			8-18	51	80,343	58,559	51	40	10,996	3,113	
Whole State				2,977	198,012	422,260	95,227	80,066	24,879	218,611	

<sup>\*</sup> Excluding area of Lord Howe Island and harbours not included in local government areas. † Calendar year, 1947. 

† Value added in process of manufacture.

The five principal topographical divisions are strips of territory running from the northern to the southern boundary in a south-westerly direction, embracing, respectively, the coastal belt, tablelands, western slopes, central western plains and Western Division or far western plains. Except the far western plains, each is divided into three portions—northern, central and southern—which, with the inclusion of a special metropolitan district, makes fourteen subdivisions, each presenting fairly uniform natural features and affected by uniform physiographic factors.

In the north the region of high average rainfall extends further inland than in the south, with the result that the isohyetals run in a general north and south direction. The south-western extremity of the Riverina lies about 100 miles further from the coast than does the north-western extremity of the northern plain, and, as the average annual rainfall diminishes with increasing rapidity towards the west, the northern subdivisions shown above generally receive more rain than the central, and the central more than the southern subdivisions.

Roughly about 40 per cent. of the total area of the State receives average rains exceeding 20 inches per year, and over about three-fifths of it the average exceeds 15 inches per year. Where the rainfall is greatest conditions generally favour the dairying industry, the areas with moderate rainfall being more suitable for sheep and wheat. In the dry western areas woolgrowing is the only important rural industry.

Not only the quantity, but the seasonal incidence and reliability of the rainfall, and the amount of evaporation are important considerations in determining the productive possibilities of any region. Intermittent rainfall operates powerfully to the detriment of the western hinterland. The meteorological conditions of the respective divisions are discussed in greater detail in the chapter "Climate" of this Year Book, which contains a diagrammatic map showing the configuration and rainfall distribution of the State.

Factories are not extensive outside the metropolitan, Newcastle, Greater Wollongong and Littigow districts, though there are many dairy factories in the coastal districts and sawmills throughout the eastern half of the State, and ore treatment works at Broken Hill in the Western Division. In recent years, partly the result of the establishment of munitions, etc., factories during the war (now converted to civilian production), there has been a measure of industrial development in a number of the larger country towns, some particulars regarding which are given in the chapter "Factories" of this volume.

#### VALUE OF PRODUCTION OF RURAL INDUSTRIES.

Information regarding the value of production of rural and other industries is published in the chapter "Production" of this Year Book and a summary of the gross farm value of rural production in various years since 1901 is shown below. The net value since 1925-26 is shown also; this is estimated by deducting from the gross value such costs as fodder for livestock, seed, fertilisers, dips, sprays and water for irrigation.

Table 234.—Estimated Value of Production—Rural Industries.

Year.		Gro	ss Value.	Net Value.		
		Amount.	Per Head of Population.	Amount.	Per Head of Population.	
		£000	£ s. d.	£000	£ s. d.	
1901		22,695	16 12 1		*******	
1911			22 2 10	·	*******	
1920-21		69,156	33 1 7		********	
1925-26		66,933	28 17 0	60,952	$26 \ 5 \ 5$	
1928–29		74,594	30 0 6	68,079	27 8 1	
1930-31		42,202	16 11 8	37,751	14 16 8	
1931–32		45,403	17 13 8	41,617	16 4 2	
1932-33		50,309	19 8 4	45,408	17 10 6	
1933-34		60,677	23  4  4	55,826	21 7 3	
1934–35		51,977	19 14 7	46,886	17 15 11	
1935–36		64,549	24 6 0	58,404	21 19 8	
1936-37		78,314	29 4 3	71,172	26 11 0	
1937–38		71,800	26 10 1	62,679	23 2 9	
1938-39		59,712	21 16 10	50,161	18 6 11	
1939-40		72,992	26 8 10	65,921	23 17 7	
1940-41		67,822	24 7 6	59,888	21 10 6	
1941–42		72,372	25 16 6	62,998	22 9 7	
1942–43		90,035	31 16 1	79,726	28 3 3	
1943-44		100,430	35 3 7	88,608	31 0 9	
1944-45		86,095	29 16 10	75,031	26 0 2	
1945-46		107,453	36 7 10	94,984	32 12 2	
1946–47		107,001	<b>36</b> 2 1	94,130	31 15 3	
1947–48		188,900	62 16 7	172,877	57 10 0	

Details regarding estimates of the value of production in the rural industries are shown in the following chapters.

# MACHINERY USED ON RURAL HOLDINGS.

Since 1943 farmers have supplied particulars of machinery on their holdings at 31st March of each year. The details of machinery were extended somewhat in 1946 and 1947, but even so the particulars are not sufficiently detailed in respect of many items to enable precise appraisal of the progress in farm mechanisation. For example, ploughs are classified merely as single furrow and multiple furrow; consequently a decrease in the number of multiple furrow ploughs could be the result of replacement of ploughs of few furrows by a smaller number having a greater aggregate number of furrows, giving increased ploughing capacity despite the smaller number of such ploughs.

Similar considerations apply in respect of certain other machinery. Milking and shearing machinery, motor vehicles and tractors, however, are so stated as to give the numbers comparative significance.

The particulars of machinery shown below are as given in farmers' returns as at 31st March of each of the last six years:—

~			Num	ber at 31:	st March-	-	
Type of Machine,		1943.	1944.	1945.	1946.	1947.	1948.
Milking machines—Stands (units) Shearing machines—Stands Ploughs—single furrow Cultivators—All disc, springtooth and rigid Other, including rotary hoes Harrows—Number of leaves Fertiliser distributors and broadcasters Grain drills (Combine and other) Maize planters Headers, strippers and harvesters Reapers and binders Mowers Chaff cutters Spraying plants (power driven) Fruit graders Tractors—Wheeled type	tyne	18,365 43,395 * * 4,928 22,956 14,342 15,541 20,964 * 13,181	22,108 * * * 4,839 23,670 8,70 17,457 14,375 16,585 23,659 2,000 13,174	25,177 * * * * 5,111 23,733 ,5319 17,273 14,361 16,901 24,116 2,993 1,911 15,145	27,157 * 41,292 * 146,454 5,114 23,702 9,895 13,803 * 2,937 16,112	28,861 45,107 51,129 43,686 37,405 155,615 6,161 25,266 13,705 17,560 13,705 17,942 24,377 3,553 1,939 17,793	29,921 45,700 50,808 40,803 44,066 38,214 156,774 6,572 25,427 10,834 13,902 18,407 23,850 3,910 2,081 18,659
Crawler or track type Motor trucks, utilities and lorries Stationary engines		22,908 40,148	1,156 24,548 *	1,214 27,282 44,192	1,418	1,456 29,157 46,201	1,599 31,259 48,662

Table 235.-Machinery on Rural Holdings.

In the period of five years the stands (units) provided by a greater number of milking machines increased by 62 per cent., doubtless reflecting reactions of dairy farmers to the shortage and increasing cost of farm labour; factors which, with higher rural incomes, probably operated to induce increases in several other types of machinery such as shearing machines, grain drills, planters, etc. Growth in the number of fertiliser distributors and broadcasters and mowers may be associated with developments in pasture improvement and fodder conservation, dealt with later in this chapter. There has been a marked increase in the use of tractors on rural holdings, details regarding which are given on pages 330 et seq. of this volume.

## Value of Machinery Used on Rural Holdings.

A comparison of the value of agricultural, pastoral, and dairying implements and machinery in use on rural holdings during various years between 1920-21 and 1940-41 is shown in the following table, allowance being made for depreciation. The information has not been collected since 1940-41.

<sup>\*</sup> Complete figures not available.

Season.	Agriculturai,	Dairying.	Pastoral.*	Total Value.†
	£	£	£	£
1920-21	7,120,380	910,260	3,141,030	11,171,670
1928-29	10,883,550	1,214,670	5.067.940	17.166,160
1930-31	10.526.390	1,171,000	4.676,920	16,374,310
1931 - 32	9,526,396	1,149,387	4.125,417	14,801,200
1935-36	9,039,026	1,218,672	4,163,797	14,421,495
1936-37	9,949,677	1,191,124	4.001,702	15,142,503
1937-38	11,050,645	1,224,242	4,239,795	16,514,682
1938-39	11,516,668	1,275,622	4,205,752	16,998,042
1939-40	11,479,732	1,408,270	4,295,827	17,183,829
1940-41	11,679,833	1,502,849	4,416,062	17,598,744

Table 236 .- Value of Rural Machinery.

In 1940-41 the value of machinery used on holdings devoted to poultry, pigs and bees amounted to £389,375, as compared with £148,274 in 1931-32 and £334,163 in 1939-40.

The following table indicates the approximate value of rural holdings, exclusive of the value of Crown lands leased to landholders, and of machinery and live stock thereon, in various years between 1929 and 1941:—

Table 237.-Value of Rural Holdings, Machinery and Stock.

At 31st March.	Value of Alienated Land and	Value of Farm Machinery	Value of Livestock	Total.	Average Value of Alienatedland per acre (as returned)			
	Improve- ments thereto.	and Implements.	on Farms.*	10000	Unimproved.	Improved.		
	£000.	£000.	£000.	£000.	£ s.	£ s.		
1929†	353,100	17,200	62,000	432,300	1 14	4 18		
1930†	353,700	17,000	44,800	415,500	1 14	4 17		
1931†	343,600	16,400	45,500	405,500	1 13	4 13:		
1932	332,200	14,800	45,600	392,600	1 13	4 12		
1936	324,700	14,400	60,600	399,700	1 10	4 2		
1937	334,200	15,100	66,300	415,600	1 9	3 18		
1938	343,200	16,800	44,800	404,800	1 6	3 12		
1939	346,400	17,300	54,800	418 500	1 6	3 12		
1940	346,500	17,500	64,200	428,200	1 6	3 12		
1941	346,000	18,000	61,800	425,800	1 7	3 14		

<sup>\*</sup> Includes in many cases farming implements used on pastoral holdings.

<sup>†</sup> Excludes machinery, etc., used for poultry, pig and bee-farming.

## PERSONS RESIDENT ON HOLDINGS.

In each year 1939 to 1942, and in 1948, farmers were required to state the number of persons of all ages residing at 31st March on each holding, excluding guests, visitors and residents of schools, institutions, etc.

Persons residing on rural holdings at 31st March numbered 349,000 in each 1939 and 1940 but decreased as men were drawn from farms into the armed services and into war factories to 337,000 in 1941 and to 317,000 in 1942. In 1948 the number was 302,000, comprising 166,000 males and 136,000 females.

# EMPLOYMENT IN RURAL INDUSTRIES.

Statistics of persons over the age of 14 years permanently engaged in farm work on rural holdings one acre or more in extent have been collected annually since 1921-22; particulars as to temporary employees also have been collected in recent years, but those for 1945-46 and 1946-47 are not comparable with earlier years. Information regarding the number of women working on the holdings is not entirely satisfactory because, as a general rule, their duties are partly domestic and it is difficult to distinguish those whose principal activity is rural work.

# Number Working on Rural Holdings-Census Data.

At the census of 4th April, 1921 the number of persons returned as being occupied in agricultural, pastoral and dairying industries was 160,077 comprising 157,123 males and 2,954 females. Of the total 94,508 were classified to agricultural and 65,569 to pastoral and dairying occupations. A more detailed industry classification was used for the censuses of 30th June, 1933 and 30th June, 1947 and the following statement provides a comparison of the number and sex of persons occupied in each major rural activity other than forestry as ascertained at those dates. Because of seasonal factors and the inclusion in census tabulations of casual workers it is not possible to make direct comparison between this census data and the statistics of persons working on rural holdings at 31st March in each year as compiled from farmers' annual returns.

Table	238.—Persons	Occupied	in	Rural	Industries—Census	Data.
-------	--------------	----------	----	-------	-------------------	-------

	(Per	sons (inclu	ding Owne	rs, etc.) er	nployed in	Farming :	Industrie	s.
Industry.	At Censu	18, 30th Ju	ne, 1933.	At Censu	ıs, 30th Ju	ne, 1947.	As Proportion of total Popu- lation (Persons)	
	Males.	Females.	Persons.	Males.	Females.	Females. Persons.		1947.
Agriculture and Mixed					İ		per cent.	per cent.
Farming Grazing Dairying	81,999 43,049 34,329	1,740 1,153 2,296	83,739 44,202 36,625	66,965 38,403 27,909	2,347 1,828 2,753	69,312 40,231 30,662	3.22 1.70 1.41	2·32 1·35 1·03
Pig Farming Poultry Farming Bee-keeping Other Farming	3,720 405	363 14 23	149 4,083 419 7,173	400 4,754 823 1,098	10 595 17 37	410 5,349 840 1,135	0·01 0·16 0·01 0·27	0.01 0.18 0.03 0.04
Total Farming	170,799	5,591	176,390	140,352	7,587	147,930	6.78	4.96
Total Population	1,318,471	1,282,376	2,600,847	1,492,211	1,492,627	2,984,838	100.00	100.00

In reviewing the figures it is to be remembered that economic conditions were in sharp contrast at these respective census dates. Acute depression prevailed in 1933; many persons normally following other occupations were on rural holdings, and many unemployed persons undertook intensive cultivation of small areas as a temporary means of livelihood. other hand, conditions were most prosperous in 1947, and manufacturing, transport and service industries tended to outbid rural employers in drawing labour from resources far too inadequate to meet all demands. Nevertheless the concluding columns of the table reflect the growing industralisation of the State's economy. The significantly smaller proportion of the population occupied in these rural industries in 1947 was due also in considerable measure to factors such as the much wider mechanisation of farming operations and continued scarcity, since the war years, of materials needed for permanent improvements on rural properties, together with the effect of a period of relatively unfavourable seasons which made inroads into farmers' and graziers' financial resources.

# Data from Farmers' Annual Returns.

The number and sex of persons shown in farmers' returns as being engaged permanently on farm work on rural holdings at the end of each season since 1928-29 are shown in the following statement:—

			5 5		•		
At 31st March,	Males.	Females.	Total.	At 31st March.	Males,	Females.	Total.
1929* 1930* 1931* 1932 1933 1934 1935 1936 1937 1938	117,863 116,423 114,989 116,929 121,795 124,190 126,408 127,125 128,006 126,051	10,677 9,848 9,543 8,522 8,845 7,776 7,410 7,058 5,992 6,579	128,540 126,271 124,532 125,451 130,140 131,966 133,818 134,183 133,998 132,630	1939 1940 1941 1942 1948 1944 1945 1946 1947 1948	126,341 125,556 121,364 105,123 103,143 100,820 103,386 108,129 109,324 113,052	7,059 -7;842 8,706 11,279 16,162 -15,381 13,768 11,961 -11,387 10,871	133,400 133,398 130,070 116,402 119,305 116,201 117,154 120,090 120,711 123,928

Table 239.—Persons Engaged Permanently on Rural Holdings.

The number occupied permanently was greatest in 1936 but was maintained in the vicinity of 133,000 at 31st March of each year 1935 to 1940. There was a marked increase in the employment of women and girls on farming work during the war years, but that increase, irrespective of the quality of the labour, did not go far toward offsetting the loss of male workers from farms, which by 1944 represented about one in every five of those permanently employed in 1939.

In 1944 there were 17,200 (13 per cent.) fewer persons engaged permanently on rural holdings than before the war, and the subsequent regain was tardy. In March, 1948 the permanent work force on rural holdings remained about 9,500 smaller than in 1939, with 18,300 fewer males and 3,800 more females. Many men who had served during the war years in the Forces or in factories had failed to return to their pre-war rural occupations, and it seemed also, having regard to pre-war trends and the movement since 1943, that the number of females working on farms might be expected to decline.

<sup>\*</sup> At 30th June.

A classification of the number of males engaged permanently in farm work on the holdings at the end of each season 1928-29 to 1947-48 is shown below.

Table 240.—Rural Labour—Males Working Permanently on Holdings.

At 31st March	Owners, Lessees, Share- farmers.	Employees receiving Wages.	Réla- tives not receiv- ing Wages.	Total, Per- manent Males,	At 31st March.	Owners, Lessees, Share- farmers.	Em- ployees receiv- ing Wages	Relatives not receiving Wages.	Total, Per- manent Males.
1929* 1930* 1931* 1932 1933 1934 1935 1936 1937 1938	66,134	34,234	17,495	117,863	1939	68,009	40,777	17,555	126,341
	65,300	31,387	19,736	116,423	1940	67,443	40,4°4	17,629	125,556
	66,297	27,949	20,743	114,989	1941	66,395	88,626	16,343	121,364
	67,922	26,874	22,133	116,929	1942	64,238	28,546	12,339	1105,123
	70,779	29,347	21,669	121,795	1943	64,500	26,471	12,172	103,143
	70,552	32,718	20,920	124,190	1944	64,860	23,476	12,484	100,820
	69,429	36,654	20,325	126,408	1945	68,626	22,795	11,965	103,386
	69,353	39,104	18,668	127,125	1946	72,234	26,628	9,267	108,129
	68,736	41,063	18,207	128,006	1947	74,384	25,772	9,168	109,324
	68,167	41,537	16,347	126,051	1948	73,400	30,578	9,074	113,052

<sup>\*</sup> At 30th June.

The number of males working permanently on holdings at 31st March was 13;000 fewer at 113,000 in 1948 than in 1939 before the war, but 12;000 more than in 1944 when the rural work force was most acutely depleted. Between 1938 and 1948 owners, lessees and sharefarmers increased by 5,200, employees decreased by 11,000 and relatives not receiving wages decreased by 7,300. The last-mentioned movement continued a trend in evidence since 1932 and one which gained impetus by the war-time call for men for the Services and for war and other essential industries. Doubtless, too, increasing mechanisation of farming operations has contributed to the reduction in the number of men working on rural holdings.

The measures taken toward maintaining farm man-power during the war years are traced briefly in earlier editions of the Year Book (see Volume No. 50, page 391).

Records of females stated to be working permanently on rural holdings show that between 1939 and 1948 the increase in the number at 31st March of 3,800 (to 10,900), was spread over the three categories distinguished in the following table. In each of these there was a marked decrease (aggregating 5,800) in 1948 compared with the war-time peak of 16,200 in 1943.

Table 241.—Females Recorded as Working Permanently on Rural Holdings.

At 31st March.	Owners, Lessees, Share- farmers.	Em- ployees receiv- ing Wages.	Relatives not receiving Wages.	Total Per- manent Females.	'At 81st March.	Owners, Lessees, Share- farmers.	Em- ployees receiv- ing Wages.	Relatives not receiv- ing Wages.	Total Per- manent (Females.
1938 1939 1940 1941 1942 1943	917 872 1,298 1,275 1,822 2,304	721 745 1,018 1,274 1,585 3,438	4,941 5,442 5,526 6,157 7,872 10,420	6,579 7,059 7,842 8,706 11,279 16,162	1944 1945 1946 1947 1948	2,174 1,990 1,657 1,744 1,611	2,653 2,225 2,129 1,871 1,530	10,554 9,553 8,175 7,772 7,730	15,381 113,768 11,961 11,387 10,871

## WAGES PAID TO WORKERS ON RURAL HOLDINGS.

The amount of wages paid to permanent and casual employees on rural holdings, as stated in the returns of the landholders, in each year 1928-29 to 1941-42 and in 1947-48 is shown below; the value of board and lodging supplied by the employer is included. Corresponding information is not available for intervening years except for 1945-46 when £3,085,381 was paid to casual labour; £3,018,188 to males and £67,193 to females and 1946-47 when the respective amounts were £3,377,163, £3,310,422 and £66,741.

Table 242.—Wages Paid to Rural Workers.
£ thousand

77	Males.		Fe-		Year		Males.		Fe- males,		
ended 31st March.	Per- manent	Casual	Total	males, Per- manent and Casual.	Total.	ended 31st	Per- manent	Casual,	Total	Per- manent and Casual.	Total.
1929* 1930* 1931* 1932 1933 1934 1935	6,475 5,717 4,533 4,145 4,292 4,654 5,119 5,534	3.042 2,791 2,186 2,102 2,362 2,514 2,659 3,043	9,517 8,508 6,719 6,247 6,654 7,168 7,778 8,577	83 86 71 50 52 52 53 52	9,600 8,594 6,790 6,297 6,706 7,220 7,831 8,629	1937 1938 1939 1940 1941 1942 1948†	6,048 6,427 6,302 6,406 6,309 5.093 7,333	3,393 3,670 3,608 3,610 3,686 3,724 3,827	9,441 10,097 9,910 10,016 9,995 8,817 11,160	49 60 65 88 116 180	9,490 10,157 9,975 10,104 10,111 8,997 11,455

<sup>\*</sup> Year ended June.

# Conditions of Rural Employment.

Conditions of rural employment in New South Wales generally were not subject to regulation by industrial arbitration tribunals during the decade preceding the outbreak of war in 1939, but certain workers in the pastoral, fruit-growing and sugar industries were covered by Commonwealth rural awards and agreements. The Industrial Arbitration Act of New South Wales excluded the rural industries from its provisions between December, 1929 and November, 1943, since when an award in respect of any rural industry may have effect only after gazettal of a certificate by the Industrial Commission, after public enquiry, to the effect that the industry is able, and is likely to continue to be able, to pay the award wages without becoming unprofitable.

During the war period, the Commonwealth Government subsidised or assisted producers of certain crops and dairy products needed in prosecuting the war, and wages, hours, etc., of employees engaged in the production of these commodities were regulated.

The Wheat Harvest Employment Commission, appointed under National Security Regulations, made an award in November, 1942, fixing rates of wages and hours for harvesting grain crops of wheat, oats, barley and rye, and hay crops of wheat and oats sown in 1942. The matter of conditions of employment for harvesting these crops was referred under National Security (Industrial Peace) Regulations to the Commonwealth Court of Conciliation and Arbitration, and, in circumstances described on page 393 of the Year Book No. 50, an award was made with effect from 15th November, 1943, but only for the harvesting of wheat (grain) crops, to remain in operation until rescinded or varied.

<sup>†</sup> Not available for seasons 1942-43 to 1946-47.

An award for the harvesting of rice in the Murrumbidgee Irrigation Area was made by the Commonwealth Court of Conciliation and Arbitration in terms of the National Security (Industrial Peace) Regulations, to operate from 14th May, 1942. The terms were arranged substantially by agreement between the rice growers and the employees' union, and are subject to review with changes in the price of rice or the cost of living. Hours of work were reduced from 48 to 44 per week, and the award was extended to rice harvesting in other parts of New South Wales from 22nd May, 1944.

Defence (Transitional Provisions) Acts continued this award until 31st December, 1949.

The rates prescribed for employees engaged in harvesting wheat and rice (without keep) varied as shown below:—

Table 243.—Rate	s of Wa		l Hours resting.	of Wo	ork—Wheat	and	Rice
	From	From	From				

Wheat (Grain).	From Nov., 1943.	From Dec., 1946.	From Oct., 1948.	Rice.	May, 1944.	April, 1947.	
Stacker and thatcher	per hour, s. d. 3 0	per hour. s, d. 3 2	per hour. s. d. 3 5	Platform hand	per day. s. d. 19 0	per day. s. d. 20 6	
Driver of binder, header, harvester or tractor	2 8	2 10	3 1	Driver of header Casual hand	21 0 18 6	22 6 20 0	
Other harvest hands Hours	2 4 per week.	2 6 per week. 56	2 9 per week. 56	Bag sewer	per 100 bags 14 6 per week. 44	pcr 100 bags. 14 6 per week. 44	

Wages of sugar-field workers in the three sugar-mill areas on the northern rivers of New South Wales are regulated by agreement between the Cane Growers' Association and the Australian Workers' Union. The current agreement, to remain in force for three years, commenced on 14th May, 1948. The rates of wages are subject to cost of living adjustments. The ordinary hours of work are 40 per week or 8 per day, Monday to Friday, but may be spread to 11 a.m. on Saturday. Basic rates awarded from 14th May, 1948, and those fixed from 1st June, 1945, were as follows:—

	Field Worker over 19 years. per week.	Cane Cutter (Day labour). per week.				Rate per ton on intervals).
From 1st June, 1945 From 14th May, 1948	 s. d. 96 2 121 8	s. d. 130 11 146 0	Over 15. s. d. 7 10 8 6	11 to 12. s. d. 9 3 9 11	8 to 9, s, d. 10 9 11 5	5 to 6. s. d. 16 4 17 7½

The award of the Commonwealth Court relating to fruit growing applies only to employers listed in the award in such districts as the Murrumbidgee Irrigation Area, Wentworth and Curlwaa, Young, Batlow, Kentucky, Gosford, etc., where large quantities of fruit are grown, and does not apply as a common rule in the industry. Minimum rates payable under the award

at intervals since December, 1939, were as follow; the weekly rates are 1s. Higher in the Murrumbidgee and Murray irrigation settlements:—

Table 244.—Rates of Wages, Fruit-Growing Industry (Principal Districts).

Occupation.	December,	December,	December,	December
	1939.	1945.	1947.	1948.
General Hands— In Orchard—Adult Males Females 18 years and over In Prune Dehydrators (Young) Ganger or Foreman in Orchard Pruner In Packing and Fruit (Vine) Drying Sheds— Typer Weigher in	2 12 4 per hour. 0 1 9½ per week. 4 5 0 4 8 0 4 19 0 4 8 0 per basket of 60 lb.	£ s, d. per week. 4 16 0 3 3 8 per hour. 0 2 4½ per week 5 2 0 5 5 0  5 16 0 per basket of 60 lb. 0 3 5½	£ s. d. per week. 5 7 0 3 11 0 per hour. 0 2 71 per week. 5 18 0 6 7 0 5 16 0 per basket of 60 lb. 0 3 51	£ s. d. per week. 5 18 0 3 18 4 per hour. 0 2 10½ per week. 6 4 0 6 7 0 6 18 0 6 7 0 per basket of 60 lb. 0 3 5½

The Commonwealth Court of Conciliation and Arbitration made its first award applying to the dairying industry (under National Security (Industrial Peace) Regulations) to operate from 1st July, 1943. It applies to dairy farms where ordinarily not less than ten cows are kept. Employees may be required to work on any day of the week. Ordinary hours are 56 per week, with a daily spread of 12 hours during May and June, 13 hours in March, April, July and August, and 14 hours in September to February. Overtime at ordinary rate plus 6d. per hour must be paid for work in excess of these hours. Rates of wages are subject to adjustment in May and November each year.

The rates of wages prescribed for employees under weekly engagements aged 20 years or over are shown below:—

Table 245.-Wages of Dairy Farm Workers, Weekly Rates, 7

		Males.							
Period.	Shed Farm Hand.		Milker and Carter.	Tractor Driver.	Leading Hand.	Females.			
July, 1943 to October, 1943 November, 1943 to April, 1944 May, 1944 to October, 1946 November, 1946 to January, 1947 February, 1947 to April, 1947 May, 1947 to October, 1947 November, 1947 to April, 1948 May, 1948 to October, 1948	4 17 0 4 16 0 4 18 0 5 4 0 5 6 0 5 8 0 5 12 0	£ s. d. 5 1 0 5 2 0 5 1 0 5 3 0 5 9 0 5 11 0 5 13 0 5 17 0 6 2 0	£ s. d. 5 12 6 5 13 6 5 12 6 5 14 6 6 0 6 6 2 6 6 4 6 6 8 6 6 13 6	£ s. d. 5 16 0 5 17 0 5 16 0 5 18 0 6 4 0 6 6 0 6 12 0 6 17 0	£ s. d. 6 1 0 6 2 0 6 1 0 6 3 0 6 9 0 6 11 0 6 13 0 6 17 0 7 2 0	£ s, d. 3 4 0 3 4 8 3 4 0 3 5 4 3 9 4 3 10 8 3 12 0 3 14 8 3 18 0			

If the employee is provided with board and lodging (including laundry and mending for men) the rates are reduced by £1 10s. for males and 16s. for females. The rate for adult females is two-thirds that for male shed hands, and for casual employees the rates are 25 per cent. greater than the weekly rates.

A shed hand on a dairy farm musters, milks, feeds stock, and cleans in or about sheds; a milker and carter does the work of a shed hand and sells or delivers milk from a vehicle to retail customers; a leading hand is in charge of three or more employees.

In the first award of the Commonwealth Court of Conciliation and Arbitration for pastoral workers, made in 1907, the shearing rate was 24s. per 100 sheep shorn (an increase of 4s. over the predominant rate prior to the award). Station hands have been covered by award since 1917. The pastoral award applied only to employment on the large holdings.

From 1st January, 1943, to August, 1948, the award was declared a "common rule" of the industry (in terms of National Security Regulations) and so applied to all employees where employing pastoralists or farmers were predominantly engaged in the raising and/or shearing of sheep. It did not apply to the employment of station hands on properties depasturing 2,000 or fewer sheep.

In April, 1948, the Conciliation Commissioner issued an interim award covering rates of pay only, which was followed in August, 1948, by a new comprehensive Federal award covering the pastoral industry and superseding all previous awards, with the effect of rendering the "common rule" inoperative. The award does not apply to members of the employer's family, domestic servants, or jackeroos, nor to employment of station hands on any property where 2,000 or fewer sheep are depastured.

The rates of wages as prescribed by the pastoral industry award for shearers, shed hands and station hands in New South Wales since September, 1938, are shown below:—

			Shearers per 100	Shed hand	s—per week.	Station hands—per week.		
Date of	Chang	ge.	Ordinary Flock Sheep (Machine).	Found.	Not Found.	With Keep.	Without Keep.	
September, 1938 August, 1940 March, 1941 July, 1941 August, 1942 May, 1943 June, 1945 December, 1946 March, 1947 June, 1947 June, 1947 June, 1948 July, 1948 September, 1948 November, 1948			 s. d. 35 6 36 0 36 9 38 0 39 3 40 3 41 3 45 0 46 9 47 0 51 3 51 3 56 6 60 6 60 6	£ s. d. 4 14 0 4 15 6 4 17 9 5 1 0 5 7 3 5 10 0 6 4 9 6 6 4 9 6 6 4 9 7 6 1 7 6 1 7 6 1	£ s. d. 6 0 0 0 6 2 3 6 5 9 6 11 3 0 7 1 6 0 7 10 0 7 17 9 7 19 0 7 19 0 8 10 9 9 4 1 9 11 1	& s. d. 2 5 6 2 6 9 2 8 9 2 11 9 2 17 6 3 0 3 3 4 9 3 10 2 4 0 0 4 0 0 4 8 4	£ s. d. 3 7 0 3 9 0 3 12 0 3 17 0 4 2 0 4 10 0 4 10 0 4 17 0 4 18 0 5 10 0 5 10 0 5 10 0 5 10 0	

Table 246-Rates of Wages-Shearers, Shed and Station Hands.

## Rural Workers Accommodation Act, 1926.

Employers of rural labour are required under the Rural Workers Accommodation Act, 1926, to provide employees engaged for more than 24 hours with accommodation of standards prescribed by regulations (revised in March, 1947) for sleeping, dining, etc., including hygiene facilities, sanitation and the cleanliness of premises. Unless otherwise provided by an industrial award no charge may be made for the accommodation.

<sup>\*</sup> Working at or about homestead on other than domestic duties.

The Act applies in all districts other than areas proclaimed as cities. The owner or person entitled to immediate possession must provide the premises, and in the provision of other facilities responsibility extends to the employer as well as to the person entitled to immediate possession. If the latter be a tenant he may, after notifying the landlord, erect buildings in compliance with the Act and may recover from the owner the current value of the buildings when tenancy ceases.

Inspectors appointed under the Act are empowered to enter and inspect the accommodation, and employers must notify them of the date of intended commencement of seasonal work. Notice may be given employers of accommodation requirements and action may be taken in Courts of Petty Sessions to enforce compliance with the Act. Full-time inspectors are employed and police officers in charge of country stations also act as inspectors.

## SHARE-FARMING.

The system of share-farming was introduced in New South Wales towards the end of the last century. Under the system the owner provides suitable land and sometimes seed and fertiliser, and the farmer generally provides the necessary plant and labour. The contract is usually that the land be operated for a specified purpose and a fixed time. Various arrangements are made for sharing the product. Sometimes the parties to the agreement take equal shares of the produce up to a specific yield, and any excess goes to the farmer as a bonus. In other cases the owner takes one-third and the farmer two-thirds of the total product. Since 1st July, 1943, tenancy under share-farming agreements has been subject to the Agricultural Holdings Act by which provision is made for a minimum tenancy of two years and right to compensation for improvements effected by tenants (see below).

Particulars regarding share-farming as given in Table 351 of the 50th edition of the Year Book show that in the seasons 1936-37 to 1940-41, there were on the average 6,758 holdings (equivalent to about one in every eleven of all holdings) used for share-farming by 8,659 share-farmers engaged in cultivating 1,400,163 acres and using 788,891 acres for dairying.

In 1940-41, the latest year of collection, holdings on which the shares system was used for agriculture exclusively, numbered 3,961 and for dairying only, 434. Holdings with share-farmers engaged in agriculture and dairying in combination (including dairy farms on which only fodder crops for dairy cattle were grown) numbered 2,069.

Of 1,433,364 acres cultivated in 1940-41 on the shares system, 776,279 acres were in the Western Slopes Division and 515,590 acres were in the Central Plains and Riverina. The cultivation was mainly for wheat, viz., 1,280,665 acres on 3,631 holdings. There were 792,632 acres share-farmed for dairying, of which 730,528 acres, or 92 per cent., were in the Coastal Division.

# AGRICULTURAL HOLDINGS ACT, 1941.

The majority of tenancies of agricultural land in New South Wales are tenancies at will or yearly tenancies and many areas are worked for cultivation or dairying under share-farming agreements (see above). Insecurity of tenure leads to the impairment of the productive resources of the land by discouraging good husbandry and improvement of holdings and, from time to time, remedial legislation has been enacted. For instance, the Rural Tenants Act, 1916, which was designed to give tenant farmers

the right to compensation for certain improvements but did not apply to tenancies at will, and the Agricultural Lessees Relief Act, 1931, by which tenants were enabled to obtain, under certain conditions, reduction of rent and extension of lease. These Acts were repealed by the Agricultural Holdings Act, 1941, which came into operation on 1st July, 1943. It applies to tenancies of agricultural and pastoral holdings of 2 acres or more, including tenancies at will and those under share-farming agreements. The minimum tenancy under the Act is two years, and at least twelve months' notice, to expire at the end of the year, must be given for the termination of a tenancy. The Act also defines rights to compensation for improvements (including those attributable to a better system of farming than required under the contract) and for disturbance of a tenancy, as described on page 398, of the Official Year Book No. 50.

Agricultural committees are appointed under the Act when required to determine references and matters in dispute. Each committee consists of an officer of the Department of Agriculture as chairman and two members, one selected by the landlord and the other by the tenant from respective panels of landlords and of tenants appointed by the Minister.

## PASTURE IMPROVEMENT,

## Sown Grasses.

The stock-carrying capacity of the pasture lands is being increased by cultivation of grasses and herbage, both indigenous and imported. The total area of land under sown grasses did not exceed 400,000 acres until 1901. It had risen to approximately 750,000 acres by 1908; 1,500,000 acres by 1920; 2,200,000 acres by 1930; and to 3,300,000 acres in 1940. This represented little more than 2 per cent. of the land used for grazing and thus there is scope for further extension.

Table 352 in the 50th edition of the Year Book, illustrating the increase in the area under sown grasses in each division of the State between 1901 and 1941 (when this information was last collected) showed that of a total of 3,419,417 acres under sown grasses in 1940-41 there were 2,322,025 acres in the Coastal, 346,622 acres in the Tablelands, 539,587 acres in the Western Slopes, 210,715 acres in the Plains and Riverina and 468 acres in the Western divisions.

## Fertilised Pastures.

The top-dressing of pastures with fertiliser is practised also as a means of increasing stock-carrying capacity. In 1928-29 artificial manures were applied to 87,686 acres of pastures on 689 holdings. The agricultural depression checked progress in this form of pasture improvement until 1933-34, but there was a rapid increase in the course of the next three years. The area treated in 1937-38 was 875,730 acres, or ten times the area fertilised in 1928-29. Subsequent decreases in the area were due to drought

and the scarcity of labour and fertilisers but the practice began increasing again in 1945-46, and in 1947-48 more holdings and a greater area were treated than ever before. Details are given in the appended table:—

Table 247.—Rasture Fertilising—Areas Treated and Fertilisers Used.

Season.	Holdings Using Artificial	Area Treated with	Quantity of Artificial Manures Used.			
	Manures on Pastures.	Artificial Manures.	Total.	Per Acre.		
_	No.	acres.	tons.	lb.		
1928-29	689	87,686	4,049	103		
1930 - 31	37.1	19,254	1,047	122		
1935-36	3,426	351,209	16,736	107		
.19 <b>37–3</b> 8	5,267	875,730	40,880	105		
1938 – 39	5,377	823,439	37,923	.103		
1939-40	4,850	650,134	30,465	105		
1940-41	5,022	755,416	34,553	103		
1941-42	3,933	631,949	27,942	99		
1942 - 43	3,950	399,649	16,418	:92		
1943-44	4,055	347,229	12,407	81		
1944-45	4,576	347,005	13,695	.88		
1945 - 46	5,346	462,959	19,044	.92		
1946-47	5,752	653,381	28,670	:98		
1947 - 48	6,780	879,343	41,510	106		

The Commonwealth Government assists the purchase of fertiliser and controlled supplies as shown in the chapter "Agriculture" of this volume. The following table gives the area of pastures treated and the quantity of fertilisers so used in each division in 1928-29, 1937-38 and later years:—

Table 248.—Pastures Treated and Fertilisers used in Divisions.

Season.	Coastal,	Tablelands.	Western Slopes.	Plains and Riverina.	Western Division.	New South Wales.
	AREA OF PAS	TURES TREATI	ED WITH ART	IFICIAL FERTI	LISERS.	
	acres.	acres.	acres.	acres.	acres.	acres.
1928-29	4,883	31,902	40,707	8,698	1,496	87,686
1937–38	44,969	344,111	365,484	121,131	35	875,730
1938–39	47,660	307,540	368,413	99,776	.50	823,439
1939-40	55,859	301,185	235,269	57,610	211	650,134
1940-41	59,455	324,878	291,002	79,859	222	755,416
1941-42	32,321	243,627	.289,519	66,227	255	631,949
1942 - 43	39,592	139,094	177,267	42,927	769	399,649
1943-44	45,373	93,315	151,638	56,835	ւ68	347,229
1944-45	64,245	90,976	123,077	68,530	177	347,005
1945-46	85,959	141,411	169,770	65,640	179	462,959
1946-47	94,021	235,891	234,191	87,233	2,045	653,381
1947–48	110,325	333,318	327,801	107,793	.106	879,343
	QUAN	ITY OF FERTI	LISERS USED	ON PASTURES.		
	tons.	tons.	tons.	tons.	tons.	tons.
1928-29	292	1,541	1,792	364	60	4,049
1937-38	2,829	16,440	16,626	4,979	6	40,880
1938–39	3,189	14,932	15,635	4,166	_1	37,923
1939-40	<b>'3,860</b>	13,784	10,259	2,550	11	30,464
1940-41	3,999	: 14,880	12,314	3,346	(14	34,553
1941-42	2,208	11,121	11,989	2,601	. <b>24</b>	27,943
1942 - 43	2,294	5,777	6,665	1,637	46	16,419
1943-44	2,375	3,447	4,775	1,808	.2	12,407
1944-45	3,585	3,324	4,367	2,410	. 8	13,694
1945-46	4,947	5,961	5,519	2,610	7	19,044
1946-47	5,613	10,103	9,452	3,415	:87	28,670
1947-48	6,644	15,990	13,917	4,950	. 9	41,510

## Conservation of Fodder.

Fodder is conserved to maintain herds and flocks during winter months when the growth of grass is retarded and during recurrent periods of deficient rainfall. The Department of Agriculture and farmer's organisations foster the practice of fodder conservation, and advise regarding methods of making silage and constructing silos and silage pits.

In August, 1943, the New South Wales Stock Feeds Conservation Committee was set up to conduct and co-ordinate fodder conservation schemes. The Committee, which comprises representatives of the State Treasury, the Department of Agriculture and of primary producers, allocates advances (effected through the Rural Industries Agency of the Rural Bank) under a stock feeds conservation scheme inaugurated in October, 1944. The advances are repayable over periods of three years (short term) and fifteen years (long term) and are available to rural co-operative societies as well as to individual farmers.

Short term advances are made against fodder already conserved, ranging from 17s. 6d. per ton for ensilage in dairying districts and 10s. per ton in inland areas, to 35s. per ton for baled hay and from 2s. to 3s. per bushel for grain; for sinking pit or trench silos and for pasture improvement; and to co-operative dairy and rural co-operative societies (up to £1,000) for the purchase of hay, grain and food concentrates. The works for which long term loans are granted include overhead silos, sheds, etc., and approved fodder storage facilities for co-operative societies.

Since 1935-36 farmers' annual returns have shown particulars of stocks of hay and silage on farms as well as of hay and silage produced. Information as derived from these returns for seasons since 1937-38 is given below:—

			1	Hay.		Silage,			
	Season ended		1	Stocks at 3	1st March.		Stocks at 31st March.		
31st March.			Production.	Holdings with Stocks,	Quantity.	Production.	Holdings with Stocks.	Quantit <b>y.</b>	
1988 1939 1940 1941 1942 1943 1944 1945			tons. 825,309 1,181,264 965,678 617,264 715,005 985,743 735,641 371,158 990,747*	No. 15,718 18,323 18,581 17,335 16,010 16,662 12,161 9,020 12,304	tons. 496,309 774,550 987,332 676,563 511,833 698,332 522,294 189,986 504 521	tons. 109,628 124,496 178,220 138,407 64,145 71,801 58,148 39,830 73,598	No. 1,684+ 1,450 1,858 2,111 1,365 1,473 1,091 771 931	tons, 173,636 144,493 227,810 235,962 134,230, 127,434 100,859 54,268 73,371	
1947` 1948	•••	•••	380,567* 978,236*	8,169 17,998	226,926 825,821	51,783 119,453	769 1,241	60,348 109,681	

Table 249.—Production and Stocks of Hay and Silage.

The decline in the production and stocks of hay and silage during the war years was due largely to shortage of farm labour and, particularly in 1944-45 and 1946-47, to adverse seasonal conditions.

<sup>\*</sup> Includes grass hay, not ascertained prior to 1945-46.

In 1947-48, however, a bountiful season enabled stocks of hay to be fully replenished, and those of silage to be increased substantially. There were stocks of hay on nearly as many holdings on 31st March, 1948, as before the war, but rather less than three-fourths of the number in 1938 had stocks of silage, though the number of farms on which silage was made in 1947-48 exceeded the pre-war average.

There was a strong pre-war trend toward increased silage making, which was interrupted by shortages of rural labour and several unfavourable seasons between 1940-41 and 1946-47, but in 1947-48 the quantity made (119,453 tons) was more than twice the annual average in the preceding five seasons and the greatest since 1940-41.

The following table gives particulars of silage made in divisions since 1921-22.

Period ended on	Farms	Silage	Silage made in Divisions.						
Period ended 31st March.	which Made.	Made.	Coastal.	Table- lands.	Western Slopes.	Plains and Riverina.	Western Division.		
Average—	No.	tons.	tons.	tons.	tons.	tons.	tons.		
1922–26	189	24,252	11,396	3,494	6,760	2,422	180		
1927–31	447	42,937	19,270	4,030	15,064	4,320	253		
1932–36	927	77,375	46,509	6,226	17,760	5,750	1,130		
1937–41	1,503	131,859	78,356	10,123	26,126	17,002	252		
1942–46	963	61,503	37,976	5,832	13,522	3,799	374		
Season—			}						
1937-38	1,399	109,628	86,762	7,095	12,996	2,775			
1938-39	1.476	124,496	75,682	10,328	25,848	12,638			
$1939-40 \dots$	1,743	173,220	52,815	16,329	59,433	43,553	1,090		
1940-41	1,546	138,407	96,742	9,525	13,429	18,591	120		
1941-42	820	64,145	44,416	4.760	10,264	3,137	1,568		
1942-43	1,129	71,801	41,381	7,311	18,086	4,763	260		
1943-44	947	58,143	37,101	4,031	13,844	3,150	17		
1944-45	811	39,830	29,435	2,601	5,385	2,393	16		
$1945-46 \dots$	1,110	73,598	37,548	10,456	20,030	5,554	10		
1946 - 47	788	51,783	38,684	3,768	5,271	4,060	•••		
1947-48	1,670	119,453	61,299	12,327	28,268	17,299	260		
						<u> </u>			

Table 250 .-- Silage Made.

#### Conservation of the Soil.

It was not until recent years that the grave injury to national resources from the ever-widening incidence and severity of soil erosion throughout the State came to be recognised, though early in the present century problems such as the siltation of dams, the protection of watersheds and the denudation of soil on steeply-sloping cleared land were receiving attention.

Concerted efforts to evolve and apply full-scale preventive and remedimeasures in regard to soil erosion are being made under provisions of the Soil Conservation Act, 1938-47, under which the Soil Conservation Service has been constituted. That Service, the Water Conservation and Irrigation

Commission and the Forestry Commission, comprise the Department of Conservation, controlled by the Minister for Conservation. The Service is administered by a Director and is empowered to investigate all phases of erosion, to undertake research and experimental works, conduct demonstrations and advise and assist landholders generally in their erosion problems. The Catchment Areas Protection Board, constituted under the Act, regulates the disposal of Crown lands in catchment areas where the threat of soil erosion is serious.

At Soil Conservation Research Stations at Wagga Wagga, Cowra, Wellington, Gunnedah and Inverell and that being developed at Scone, problems relating to run-off and soil loss under different types of land use, and cropping practices in relation to erosion and water disposal are being studied. Control of erosion within catchment areas, the stabilisation and re-vegetation of wind-eroded lands in the western parts of the State and the control of coastal sand drift also are being investigated. Extension activities in soil conservation are administered through district soil conservation offices at Goulburn, Wagga Wagga, Orange, Tamworth, Inverell and Scone, and technical officers are located at many country centres.

A survey completed in 1943 showed that about 70 per cent. of the Western Division was affected by wind erosion with much of the land beyond economic reclamation. Roughly one-half (or 93,700 square miles) of the Eastern and Central Divisions showed no appreciable erosion; approximately 87,650 square miles were affected in varying degree, viz., about 900 square miles very severely eroded, with extensive gullies, some 30,200 square miles moderately eroded with occasional severe gully erosion, about 36,900 square miles showing sheet erosion, nearly 1,000 square miles severely wind-eroded and 18,650 square miles affected with wind erosion in minor degree.

Owners of land in recognised catchment areas or notified areas of erosion hazard or tracts of country particularly susceptible to erosional damage may enter into agreements with the Crown and may receive instruction from experts in appropriate programmes of soil conservation. In 1947 the law provided that with Ministerial approval advances up to 100 per cent, of actual cost may be made to landholders for approved works of soil conservation or erosion mitigation, provided the landholder maintains the work and fulfils conditions imposed in relation to land use, etc. advances are made through the Rural Industries Agency of the Rural Bank, are repayable in half-yearly instalments over periods up to fifteen years, and bear interest at rates fixed by the State Treasurer. The work may be carried out by the landholder or by the Soil Conservation Service, which also may undertake works for landholders who do not seek the financial assistance of the State. Compulsory action may be taken against owners whose actions or neglect result in the depreciation of adjoining lands, or adversely affect water storages, hydro-electric or irrigation projects. العنب بيديد العقاميات During June, 1947 the Commonwealth Income Tax Assessment Act was amended to allow capital expended in preventing or remedying soil erosion as a deduction from income for taxation purposes, thereby encouraging and stimulating soil conservation activities.

The Soil Conservation Service commenced a series of soil conservation demonstrations on typical areas of severely eroding land throughout the State during 1945. Works carried out or approved up to 31st December, 1948, comprised ninety-three major and seventy minor demonstrations, with a total area of about 32,000 acres. Much erosion control work is being carried out by landholders also on the advice of the Service. During the year ended 30th June, 1948, advice on erosion control was sought by 922 landholders and 301 carried out erosion control works on 16,740 acres of land which would directly benefit other land of equal or greater area. Hire of plant had been approved in twenty-eight cases to a total expenditure of £2,138.

# BUSH FIRE PREVENTION AND CONTROL.

Local councils are authorised in terms of the Local Government Act to make provision for the prevention of bushfires and to organise bushfire brigades, as described in the chapter "Local Government" of this volume.

The number of volunteer bush fire brigades was 1,239 in December, 1948. Each brigade is under the direction of a captain appointed by the council. Town fire brigades under the control of the Board of Fire Commissioners co-operate with the bush fire brigades. Workers' compensation is provided for the benefit of volunteers injured while engaged in fighting a bush fire.

In terms of the Careless Use of Fire Act, penalties may be imposed in cases where property is endangered or damaged as a result of lighting inflammable material near crops, stacks of grain or hay, etc., or failure to extinguish fires in the open air. The sale and use of wax matches and the use of phosphorus baits for poisoning rabbits are subject to regulation.

## SETTLEMENT IN DIVISIONS.

Rainfall exerts a decisive effect on the nature of the pursuits and the extent of settlement in the various rural districts of the State, and largely explains their industrial characteristics. In a general way this is illustrated by the diagrammatic maps on pages 8 and 9 of this volume.

Particulars of rural settlement in the five statistical divisions of the State are shown in the following tables; they relate for the most part to the year 1940-41. For later years only the number and area of holdings are available. Particulars of these for the years 1941-42 to 1944-45 were

given in Table 357 of the 1941-42 and 1942-43 edition of the Year Book and those for succeeding years, compared with averages for the pre-war quinquennium are given below:—

Table 251.-Number and Area of Holdings in Divisions.

Division	ı.		Average, to '38–39.	194	5-46.	194	6-47.	194	17–48.
	-	No.	Area.	No.	Area.	No.	Area.	No.	Area.
Coastal— North Hunter-Mannin Metropolitan South	 ng . 	9,336 5,326	thous, acres. 4,732 4,974 290 2,277	11,764 9,066 6,235 4,356	thous. acres. 4,450 4,724 280 2,163	12,069 9,122 6,491 4,382	thous. acres. 4,444 4,702 283 2,110	12,449 9,010 6,352 4,863	thous. acres. 4,429 4,742 287 2,120
Total		31,219	12,273	31,421	11,617	32,064	11,539	32,174	11,578
Tablelands—			<del> </del>		1	·			
Northern Central Southern		7,472	6,516 7,693 5,740	3,538 7,070 8,091	6,555 7,738 5,455	3,535 7,056 3,095	6,546 7,711 5,413	3,491 0,981 3,089	6,441 7,638 5,418
Total		. 14,357	19,949	13,699	19,748	13,686	19,670	13,561	19,497
Western Slopes-	•						·	<del></del>	·
North Central South		4,411	8,201 6,999 10,052	4,188 4,265 7,696	8,250 6,916 9,520	4,174 4,273 '7,664	8,237 6,889 9,485	4,212 4,287 7,664	8,174 6,845 9,347
Total		. 16,744	25,342	16,140	24,686	16,111	24,611	16,163	24,366
Central Plains—				<del></del>	;				
North Central Riverina		. 2,473	7,701 13,647 16,334	1,888 2,270 6,738	7,699 13,816 16,260	1,880 2,235 6,684	7,689 13,718 16,114	1,887 2,204 6,668	7,670 13,697 16,195
Total		11,643	37,682	10,896	37,775	10,799	87,521	10,759	37,562
Western—									
East of Darling West of Darling		1,121 708	33,531 44,576	1,245 763	32,577 42,977	1,245 766	32,822 43,335	1,256 756	32,922 43,273
Total		1,829	78,107	2,008	75,554	2,011	76,157	2,012	76,195
Total, N.S.	w	75,792	173,353	74,173	169,380	74,671	169,498	74;669	169,198

# COASTAL DISTRICTS.

A table summarising the tenure and extent of occupied holdings in the four main divisions of the coastal belt as at 31st March, 1941, was published on page 405 of the 50th edition of the Year Book.

Apart from the small area in the county of Cumberland which surrounds the metropolis, the North Coast is by far the most closely-settled part of the Coastal Division. The average area of holdings in the various divisions in 1941 was:—North Coast, 404 acres; Hunter and Manning, 526 acres; and South Coast 506 acres. The proportion of the total area occupied in holdings as defined was 68 per cent, in the North Coast division, 57 per cent, in Hunter and Manning, but only 38 per cent, on the South Coast.

Much of the country is very rugged and of the 22,287,000 acres within the coastal districts, only 1,729,000 acres were considered suitable for cultivation in 1940-41, and in that year a little more than one-fifth of that area was cultivated.

In 1940-41 there were in the coastal districts 2,412 holdings, on which 3,089 share-farmers cultivated 45,406 acres and used 730,528 acres as dairy farms. Of the holdings with share-farmers, 1,937 were used for agriculture and dairying in combination, 135 for agriculture exclusively and 340 for dairying only.

When last ascertained in 1945-46 the main purposes for which the holdings in the coastal districts were used were as follows:—

Table	252.—Uses	of	Rural	Holdings	in	Coastal	Districts,	1945-46.
-------	-----------	----	-------	----------	----	---------	------------	----------

Principal Purpose for which Holdings were Used.	North Coast,	Hunter and Manning.	Metro- politan.	South Coast.	Total.
		Num	ber of Holdin	ngs.	
Agriculture Dairying Grazing Agriculture and dairying Agriculture and grazing Dairying and grazing Agriculture, dairying, and grazing Poultry	1,698 5,316 1,552 2,053 390 397 137 21 6	1,402 3,459 1,849 730 280 395 75 423 33	2,224 411 93 49 11 9 1 2,615	439 1,889 1,146 193 104 84 6 207 27	5,758 11,075 4,640 3,025 785 885 219 3,266 144
Unoccupied, or used mainly for other purposes	700	420	744	261	1,624
Total	11,764	9,066	6,235	4,356	31,421

The coastal district contained approximately 91 per cent. of the holdings used for dairying only in New South Wales, and the North Coast district contained 48 per cent. of the number in the Coastal division. Dairying separately or in conjunction with other farming pursuits, is the predominant industry, but a considerable proportion of the farms is used for grazing cattle.

## TABLELANDS.

Although extensive plateaux exist in the Tableland divisions, which comprise 25,847,000 acres, considerable areas are rugged and rock-strewn and not adaptable to agriculture. The area stated as suitable for cultivation in 1940-41 was 3,285,000 acres, and less than 19 per cent. of that area was under crops in that year. Grazing has remained the staple industry, although many farmers combine agriculture with grazing, and large areas are cultivated in suitable localities. The rainfall is ample throughout, and the headwaters of most of the principal rivers make this a well-watered region. Railway communications are good, but, except on the Central Tableland, settlement is sparse, fewer flourishing towns exist than on the coast, and small settlements are rarer because lands suitable for intense farming are more scattered. The development of dairying and agriculture has been limited, but pastoral pursuits are extensive.

The number and tenure of rural holdings in the three main divisions of the Tablelands as at 31st March, 1941, were given in Table 360 of the Official Year Book, No. 50.

Rural settlement is most dense in the central districts, which were the first to be settled. In 1940-41 the proportion of land occupied varied from approximately 82 per cent. in the northern and southern to 72 per cent. in the central tablelands. Nearly 60 per cent. of the total area of the Tableland division was alienated, and one-quarter of the area occupied was leased from the Crown. There were 630 sharefarmers on 495 holdings,

comprising 95,016 acres of cultivation and 14,857 acres of dairy farms. Of the holdings with share-farmers, 443 were used for agricultural purposes only, 12 for dairying only and 40 for agriculture and dairying together.

The main purposes for which holdings were used in each division of the tablelands when last ascertained in 1945-46 were as shown in the following table:-

Table 253.—Uses	of Kural	Holdings	on	Lablela	nds, 1945	-46.
ringing I Durnorg for which	Holdings	Northern	T.	Central	Southern	

Principal Purpose for which Holdings were used.	Northern Tableland,	Central Tableland.	Southern Tableland.	Total.
		Number o	f Holdings.	
Agriculture	261	1,088	43	1,392
Dairying	176	208	44	428
Grazing	1,862	2,889	2,467	7,218
Agriculture and Dairying	86	139	8	233
Agriculture and Grazing	851	2,159	390	3,40ა
Dairying and Grazing	105	61	48	214
Agriculture, Dairying, and Grazing	62	95	16	173
Poultry, Pigs, etc	23	124	16	163
Unoccupied or used for other purposes	112	307	59	478
Total	3,538	7,070	3,091	13,699

Grazing pursuits predominated throughout, but a considerable proportion of the holdings was used for agricultural purposes. There was a temporary increase in dairying during the depression, and the number of registered dairies in the Tableland division rose from 1,332 in 1929-30 to 1,967 in 1934-35. The number was 1,202 in 1943-44, 1,139 in 1944-45, and 1,070 in 1945-46.

## WESTERN SLOPES.

The divisions of the Western Slopes contain gently undulating lands with a westerly trend, watered by the upper courses of the inland rivers, and an adequate and regular rainfall. These fertile areas are eminently suitable for agriculture and are, with the Riverina, the most productive portions of the interior.

The area, number, and tenure of rural holdings in the various divisions of the Western Slopes as at 31st March, 1941, are shown in Table 362 of the Official Year Book No. 50.

In these divisions, which embrace 28,162,000 acres, settlement is most dense on the South-western Slopes, but the proportion of occupied land is greatest in the northern districts. In 1940-41 the proportion of land occupied in the Slopes was 90 per cent. of the total area of the whole division. The area of land suitable for cultivation is considerable and in 1940-41 constituted 40 per cent. of the total area of such land in the State. Of the land under rural occupation and considered suitable for cultivation in the Slopes division (12,430,000,000 acres) approximately 26 per cent. was under crop in 1940-41.

There were 2,886 share-farmers on 2,259 holdings on the Western Slopes in 1940-41, cultivating 776,279 acres and using 43,316 acres for dairying. Of these holdings 71 were devoted exclusively to dairying, 2,103 entirely to agriculture and 85 to dairying and agriculture in combination.

Details as to the principal purposes for which rural holdings were used in the Western Slopes division were last collected in 1945-46 when they were as follows:—

Table 254.—Uses of Rural Holdings on Western Slopes, 1945-46.

Principal Pu	Principal Purpose for which Holdings were used,			North- Western Slope:	Central- Western Slope.	South- Western Slope:	Total,	
						Number of	Holdings.	
Agriculture			• • •	•••	345	372	755	1,472
Dairying		•••	•••	• • ,•	93	48	389	530.
Grazing					1,480	734	2,147	4,361
Agriculture a	nď D	airying			77	41	I42'	260
Agriculture a	nd G	razing	•••	•••	1,871	2,855	3,304	8,030
Dairying and	Gra	zing		•••	9	3	199	211
Agriculture,	Dairy	ing, an	d Gra	zing	33	53	322	408
Poultry, Pigs	, etc.		•••		145	49.	127.	321
Unoccupied purposes	or 	used 	for	other	135	, 110	311	556
Total			•••	•••	4,188	4,265	7,696	16,149

Mixed farming—agriculture and grazing—is the principal rural activity, but grazing predominates on the North-Western Slope, and small farming is not extensive. Developments in dairying have been mainly in the South-Western Slope about Tumut. Dairying was conducted on only 7.8 per cent. of the holdings of the Western Slopes in 1927-28, on 9.8 per cent. in 1944-45 and on 8.7 per cent. in 1945-46.

## Plains and Riverina.

The Plains of the Central division, including the Riverina, cover 41,372,000 acres and constitute the eastern portion of a remarkable extent of almost level country, stretching from the last hills of the Western Slopes to the western boundary of the State. With an average width of 120 miles, the division comprises the great sheep districts of the State and about 40 per cent. of the agricultural lands. Generally speaking, they are not well watered, the average rainfall is low, and its intermittency is a source of frequent loss. They are traversed by the western rivers in their lower courses, but these do not supply water to a very extensive area, as they are few and their natural flow is irregular. Schemes of irrigation, however, are progressively increasing the productive capacity of these inland areas. Artesian water underlies a considerable area on the north, and bores supply permanent water in a number of localities. In the south sub-artesian bores are of great practical utility.

The number, tenure, and extent of holdings occupied for agricultural and pastoral purposes in the division on 31st March, 1941, were shown in Table 364 of the 50th edition of the Year Book.

The closely-settled but comparatively small area of irrigated lands in the Riverina partly accounts for the density of settlement in that division. At 31st March, 1941, there were 1,346 holdings in the Murrumbidgee Irrigation Area embracing 300,776 acres inclusive of certain attached lands outside the Irrigation Area. Eighty per cent. of the area occupied in the Central Plains and Riverina division had been alienated and Crown lands in occupation were considerable. The proportion alienated was 74 per cent. of the total area occupied in the northern districts, 77 per cent. in the Central Plains, and 86 per cent. in the Riverina, where the land is more productive.

Share-farming is not extensive in the north, but in the Riverina 801 holdings employed 1,029 share-farmers, who had 290,398 acres in cultivation and used 2,353 acres for dairying in 1940-41.

The total of 13,185,000 acres considered suitable for cultivation comprised 21 per cent. of the occupied rural laud in the Northern, 26 per cent. in the Central Plains and 44 per cent. in the Riverina. Approximately 16 per cent. of the land deemed suitable for cultivation was under crops in 1940-41.

The main purposes for which the holdings in the Central Plains and Riverina divisions were used when last ascertained in 1945-46 are shown in the following table:—

Principal Purpose for which Holdings were used.	Northern Plains.	Central Plains.	Riverina,	Tota 1
		Number of	Holdings.	
Agriculture ,	54	35	1,332	1,421
Dairying	17	12	82	111
Grazing	937	1,599	1,359	3,895
Agriculture and Dairying	2	1	51	54
Agriculture and Grazing	808	592	3,403	4,803
Dairying and Grazing		<b>2</b>	25	27
Agriculture, Dairying, and Grazing	2	$^2$	224	228
Poultry, Pigs, etc	16	1	39	56
Unoccupied or used for other purposes	52	26	223	301
Total	1,888	2,270	6,738	10,896

Table 255.—Uses of Rural Holdings on Plains and Riverina, 1945-46.

While grazing, with mixed farming and agriculture, prevails in the northern districts, agriculture, combined with grazing, predominates in the Riverina. On the irrigated lands of the Murrumbidgee many holdings are used for small farming, and in the Riverina there were 3,856 holdings on which wheat for grain was grown in 1947-48.

# WESTERN DIVISION.

The plains of the Western Division cover 80;343,000 acres and seem unlikely ever to become a populous and highly productive region. One-third of the division receives, on the average, less than 10 inches of rain

per year and practically the whole of the remainder less than 15 inches. Though the soils are uniformly fertile, the lack of rain and of permanent water and grasses, and the high rate of evaporation, ranging up to 90 inches per year, render it relatively unproductive. Except on a few small irrigated areas there is little agriculture or dairying, and by reason of the small rainfall, the sheep-carrying capacity of the land is only about one-fifth as great as that of the plains further east; but the climate is well suited to the production of high-grade merino sheep. It is a lonely region, for the most part occupied in large holdings on a long or perpetual lease tenure.

Irrigation from the Murray and the vast lake reservoirs of the South Darling, and regulation of the flow of the Darling River, combined with dry-farming methods, may make agriculture possible on limited areas and water and fodder conservation may increase sheep-carrying capacity, but a significant change in the utilisation of these western plains is not to be expected until settlement in the more attractive easterly regions has made very great advance. It was contended that in the south large areas only required railway facilities to render them profitable for agriculture, but results so far attained are not encouraging. At present, excluding the mining districts, it is a vast region comprising two-fifths of the area of the State, producing less than one-sixth of the pastoral produce, and practically nothing besides, and inhabitated by less than 20,000 persons (one person to 6 square miles) or less than one per cent. of the State's Near the western boundary, however, is situated one of population. the richest silver-lead fields of the world, and in the large mining town of Broken Hill there is a population of about 27,000 persons.

The total area returned by occupiers as alienated land in the rural holdings in the Western Division as at 31st March, 1941, was 15,731,152 acres, but many perpetual leases had not been included as alienated (as the definition required) and the alienated area was understated by probably about 30,000,000 acres (see page 273).

Of the total area occupied—nearly 78 millions acres in 1940-41 and 76,194,511 acres in 1947-48—the area under crop was only 14,745 acres and 18,685 acres, respectively, although in 1941 an aggregate area of 1,193,206 acres was considered by the occupiers to be suitable for cultivation.

## ADMINISTRATION.

The Department of Agriculture of New South Wales, created in 1890, and controlled by the Minister for Agriculture, with a permanent Under Secretary and Director, administers matters connected with all rural industries other than forestry, for which there is a separate Commission. The Water Conservation and Irrigation Commission regulates matters connected with irrigation projects and the occupation and use of land for irrigation. Finance for settlers is provided by the Rural Bank in its Banking Department and, on behalf of the State Government, in its Government Agencies department.

The Department of Agriculture administers policy and Acts of Parliament relating to rural industries, and seeks, by scientific investigation and experiment and the dissemination of information, to promote improved methods of cultivation, possible new crops, means of combating pests, the use of fertilisers, irrigation, and better marketing and transport of produce. It promotes marketing schemes and fosters a community spirit among farmers.

The seven divisions of the department have each a scientfic staff and are as follows:—

Plant Industry.—Experiment farms, field investigations, agrostology, plant breeding and tobacco growing.

Horticulture.—Fruit development and viticulture.

Animal Industry.—Animal health and livestock production services, relating to sheep and wool, herds, pigs, poultry and bees.

Dairying.—All activities relating to dairy products.

Science Services.—Agricultural biology and chemistry, botany and entomology.

Marketing and Agricultural Economics.—State Marketing Bureau and agricultural economics.

Information and Extension Services.—Publications, library and a service to assist in co-ordinating instructional activities.

Commonwealth administrations exercising functions affecting rural industries (in co-operation with State authorities) include the departments of Trade and Customs, of Commerce and Agriculture and of Health, the Council for Scientific and Industrial Research and (as regards finance) the Commonwealth Bank.

Trade agreements, trade treaties and general trade policy are the concern of the Department of Trade and Customs, which also administers Federal quarantine measures (in co-operation with the Department of Health) and export and other bounties. Functions of the Department of Commerce and Agriculture, which is organised into Administrative, Marketing, and Fisheries divisions, and the Bureau of Agricultural Economics, include matters such as Federal agricultural policy, marketing arrangements, investigation of economic and other problems of farming industries, inspection and grading of primary products for export, trade publicity and advertising in Australia and abroad, and control of the Commonwealth Trade Commissioner service. Much of the work of the Council for Scientific and Industrial Research is for the advancement of the rural industries. The Commonwealth Bank through its General, Rural Credits and Mortgage Bank departments provides funds for financing farming activities and marketing schemes.

The Australian Agricultural Council was formed in December, 1934 as a permanent organisation to promote uniformity of action between Commonwealth and States in relation to questions of marketing and agricultural problems. The Council consists of the Ministers in charge of agricultural administration in the States and the marketing and agricultural administration of the Commonwealth; other State or Federal Ministers may be co-opted. A permanent technical committee, known as the Standing Committee on Agriculture, advises the Council and guides its deliberations. Its members comprise the permanent heads of State Departments of Agriculture, members of the executive committee of the Council for Scientific and Industrial Research, the Secretary of the Department of Commerce and Agriculture, the Commonwealth Director-General of Health, and the Director-General of Agriculture.

# Commonwealth Food Control.

The measures taken to formulate and implement an Australian policy in relation to war-time production and procurement of food supplies, and the constitution in May, 1943, of the Commonwealth Food Control as a single

agency to undertake those responsibilities are described on page 412 of the Official Year Book No. 50. The Food Control organisation was disbanded soon after cessation of hostilities.

# War Agricultural Committees.

The War Agricultural Committees which functioned between July, 1942 and March, 1946 were organised to assist in meeting war-time problems of rural production. The constitution of these committees and the scope of their activities are described briefly on page 412 of the 50th edition of the Year Book,

## Commonwealth Rural Reconstruction Commission.

The Rural Industries Commission in the Ministry for Post-war Reconstruction, was appointed in February, 1943 as a Board of Inquiry to report upon the organisation of Australian rural economy for purposes of the effectual prosecution of the war and post-war reconstruction, the efficiency of methods of production, distribution and marketing of primary products and the conservation and development of natural resources,

Ten reports were submitted and published between January, 1944 and August, 1946. The Commission's conclusions and recommendations contained in the first to the fourth reports were summarised on pages 636 and 637 of the 1941-42 and 1942-43 edition of the Year Book. These reports reviewed the basis of the Australian rural economy and the factors affecting its future; the settlement and employment of returned members of the forces; the basic principles of land utilisation in Australia; and the problems of the financial and economic reconstruction of farms.

The fifth to the eighth reports, dealing with capital requirements and, rural credit; factors of farm efficiency and costs; rural amenities; and irrigation, water conservation and land drainage, were reviewed briefly on page 413 et.seq of the Official Year Book No. 50.

Rural land tenure and valuation were reviewed in the ninth report dated? 20th June, 1946; The Commission deemed attainment of the greatest efficiency in agricultural production the principal end to be sought in rural? land use, and considered settlement policies aiming at enlarging the rural population unwise if inconsistent with that objective. It held private ownership to provide the only sound and lasting basis upon which to build a, vigorous rural population and at the same time achieve productive, efficiency. Proprietorship should, however, be subject to over-riding powers; exercisable by the State in the community's interests, and undue aggregation of farm lands in single possession, or over-subdivision should not be permitted, to ensure the maximum of owner-operated farms consistent with. efficiency and the skill and capacity of each farmer. It suggested legislative action to provide for conversion of all Crown tenures (other than, over lands set aside for public purposes) and for control over the occupartion, development and use of all rural lands in the national interest.

The Commission proposed continuance of the war-time pegging of landoprices (with some elasticity) for at least five years, and recommended theoreation of a land valuation service, comprising a single authority in each State and territory, to make all land valuations for all official purposes on uniform principles which should be enunciated by a proposed National Valuation Council. Each State service should include a farm appraisement section to assess periodically the productive capacities and values of farm.

holdings. There should be a legal requirement that documents relating to the sale or mortgage of farms describe the land, and give its official classification and valuation on a productive basis, in order to ensure knowledge of the buyer of the relevant data. A tax on the increment of unimproved land value at time of transfer, and a review of existing schemes of rating and taxing land, might be considered by State and Commonwealth Governments.

Schemes of public financial assistance, some of which tend to encourage unwise borrowing and over-capitalisation, should be reviewed carefully; State assistance, the Commission considered, should be limited, as far as possible, to promoting debt relief of efficient but financially embarrassed and over-capitalised farmers. Special tenures to provide settlement assistance should be eschewed, but financial assistance should be provided through rural credit agencies to enable suitable farm employees to become farm owners.

The Commission proposed that State Land Utilisation Councils (recommended in its third report) should prepare plans to consolidate and coordinate laws relating to land use and for separate, but co-ordinated, authorities to administer them. There should be five main administrations controlling the allotment of Crown lands, the occupancy and development of private land and land valuation; research, extension services, production and marketing; water conservation, irrigation and drainage and land use within affected areas; forestry; and rural credit and financial agencies. These authorities should have local representation and decentralise their staff and authority in order to bring them into the closest possible contact with farmers and their problems.

The tenth report, dated 7th August, 1946, dealt comprehensively with the question of commercial policy in relation to agriculture. The Commission found that the constitutional position rendered necessary the close cooperation of the Commonwealth and State Governments and farming interests to ensure the success of related production and marketing schemes.

In Australia's external commercial policy the Commission favoured "the closest collaboration with other Empire countries, with a view to the adoption of a common policy directed toward elimination of the worst forms of economic nationalism throughout the world and toward the increase of international trade," but felt that modification or abolition of the system of trade preferences should be entertained with great caution, and only if arrangements for the expansion of world trade were assured. International commodity agreements not involving unduly rigid control of production would, if cousummated, assist in regularising trade in export commodities and make for more stable rural incomes. The Commission felt that there would need to be freer post- than pre-war trade to permit of any large expansion of Australian rural production.

The position of the principal farming industries in relation to external commercial policy was examined. In the opinion of the Commission future prospects for these would be enhanced if national policies of full employment, improved nutrition, and international monetary and commercial cooperation were adopted widely. It was stressed that there should be continuous consultation in relation to external commercial policy between the Government and the Australian Agricultural Council, and with producers and marketing organisations in the rural industries, and that State development programmes for rural industries should be framed to take account of international commodity obligations.

Toward the objective of reasonable and more stable farm incomes the adoption of schemes of price stabilisation was recommended, but the Commission was opposed to rigid price guarantees for farm products in view of the rigid control of production necessitated by them. Only when long-term disequilibrium between supply and demand arises and when buffer stock schemes fail should there be resort to production control. Producercontrolled marketing organisations were deemed practical media for stabilising prices of domestically consumed products. Sound organisation and productive efficiency should enable rural enterprise to function without public financial aid, and supplementary grants should be made sparingly, only after thorough investigation, and for limited periods. There should be an independent tribunal to assess the merit of claims for assistance, "reasonable prices" in international and domestic commodity arrangements, and appropriate home-consumption prices for export commodities.

Agricultural economic research should be developed to provide the advice and factual data needed by the proposed tribunal and by Governments in formulating and implementing policies in relation to rural industries.

To make good the lack of a national industry organisation, and to facilitate co-operation between the Government and farmers, and participation of the latter in determining policies affecting rural industries, the Commission (with one dissentient) strongly recommended establishment of a National Council of Farmers, with Local, Regional and State Councils and Local and State Industry Committees. There should be provision for representation on the appropriate bodies of farmers, local governing bodies, Government specialists, consumers, farm employees and the manufacturing and marketing branches of the industries. To make such an organisation effective the full co-operation of the States and the harmonising of State and national interests would be essential.

## PLANT DISEASES AND NOXIOUS PLANTS.

The Plant Diseases Act, 1924, administered by the Department of Agriculture, is designed to preclude the introduction of plant diseases from other States and countries, and to combat endemic and sporadic diseases of plants within New South Wales. All fruit and plants imported are subject to quarantine upon entry, landholders must notify the appearance of diseases or pests promptly and may be required to apply treatment as prescribed for their eradication, neglected orchards and nurseries may be destroyed, and the destruction of disease-affected produce is compulsory.

Provision is made for the notification and enforcement of destruction of noxious weeds under the Local Government Act, 1919-48.

## RURAL FINANCE.

The problem of promoting and maintaining effective rural settlement in New South Wales is associated with that of rural finance. Substantial investment is necessary for the proper development of rural holdings and temporary financial assistance must be available to rural producers, particularly in periods of drought and low prices.

Active measures have been taken by the State Government from time to time to encourage settlement on the land and to assist settlers in times of adversity. Important among such measures have been the sale of Crown lands by deposit and instalments, the institution of closer settlement and soldier settlement schemes, and the provision of advances on conditions more liberal than are obtainable from the private financial institutions.

The trading banks, pastoral finance companies and other private institutions provide extensive credit facilities for landholders. The loans made by these institutions are usually in the form of overdrafts payable on demand, though in practice many of them continue for lengthy periods. As a general rule security is lodged by the borrower, the amount of overdraft may fluctuate up to a certain limit, and interest is charged on the daily balance.

In 1936 advances within Australia to persons and institutions engaged in agricultural and pastoral industries by nine private trading banks, amounted to £125,000,000 and by twenty pastoral finance companies, mainly to wool growers, to £25,000,000. A more recent estimate is not available. Indebtedness to State Government agencies at 30th June, 1939 and 1948 is shown in Table 263.

## ADVANCES TO SETTLERS.

An Advances to Settlers Board was appointed in 1899 to make loans to farmers in necessitous circumstances or embarrassed by drought. Advances were limited to £200 for a term of ten years at 4 per cent. interest until 1902, when the Board was empowered to make advances to farmers for any approved purpose up to £500, repayable within thirty years. The functions of the Board were transferred to the Government Savings Bank in 1907, and the limit of individual advances was raised to £2,000.

In 1921 the business was organised on an extended scale in the Rural Bank Department of the Savings Bank, and in July, 1933, following the transfer of the savings bank business to the Commonwealth Savings Bank, the Rural Bank was formed.

# ADVANCES BY THE RURAL BANK OF NEW SOUTH WALES.

The Rural Bank of New South Wales (General Banking) Act, 1947, authorised the bank to conduct general banking business and merged certain of its former departments in a General Bank Department. It now functions through two departments, viz., General Bank Department (including the Rural Bank, Advances for Homes, and Personal Loans Divisions) and the Government Agency Department. Since 1935 the Agency Department of the bank has administered certain lending activities on behalf of the State Government. It collects charges and principal sums owing and makes new advances in accordance with Government policy. Six of the agencies are concerned with rural finance, viz., Rural Reconstruction, Rural Industries, Advances to Settlers, Irrigation, Closer Settlement, and Guarantee Agencies. Formerly these activities were conducted by other Government departments and bodies, and transfer to the Rural Bank was made to co-ordinate administration.

# Rural Bank Division.

To promote rural settlement and development the Rural Bank Division makes loans either in the form of amortization loans or overdrafts on current accounts. The basis of lending is generally two-thirds of the value of freehold land or certified tenures under the Crown Lands Acts, or three-fourths of the value of improvements on uncertified Crown tenures.

The following table shows the transactions in long term and fixed loans to farmers, etc., by the Rural Bank Division (or corresponding Department of the Government Savings Bank) in various years since 1910-11.

Table 256 .- Rural Bank Division-Long Term and Fixed Loans to Farmers.

	Advanç	es made durin	g Year.	Balance repayable at end of Year.				
Year (ended 30th June).	Number.	Total Amount.	Average per Advance.	Number.	Total Amount.	Average per Advance		
<del></del>	T-1-1	. £	£		£	£		
1910-11	838	331,693	395	3,754	1,074,359	286		
191213	1,386	771,272	556	5,094	2,051,132	403		
1014-15	860	387,715	451	5,860	2,514,078	429		
1920-21	1,365	813,525	596	7,242	3,423,871	473		
1930-31	78	84,675	1,086	7,986	6,520,754	817		
1934-35	100	115,115	1,151	7,226	6,520,754	827		
1935-36	134	171,130	1,277	6,924	5,974,790	835		
1936-37	.47	81,179	1,727	6,587	5,779,602	. 834		
1937-38	- 65	121,895	1,875	6,140	5,074,313	826		
1938-39	64	58,481	914	8,858	4,865,241	830		
1939-40	71	57,382	808	5,555	4,619,081	.831		
1940-41	;,55	57,668	1,049	5,315	4,431,607	834		
1941-42	36	31,569	877	5,015	4,240,890	846		
1942-43	25	21,033	841	4,675	3,920,601	838		
1943-44	11	8,600	782	4,221	3,471,754	822		
1944-45	10	8,417	842	3,700	3,028,675	819		
1945-46	6 7	10,331	1,722	3,163	2,560,779	810		
1946-47	7	3,536	505	2,655	2,048,525	772		
1947-48	4	-5,679	1,420	2,027	1,559,266	769		

Corresponding information in relation to overdraft accommodation for farmers is given in the next table, but because of the merging of departments referred to previously, figures relating to farmers' accounts are not available separately for years subsequent to 1946-47.

Table 257.—Rural Bank Department-Overdrafts to Farmers.

	Overdraft J	Limits authorised	during Year.	Advances curre	nt at end of Yea	
Year (ended 30th June).	Nu	mber.	l			
	New.	Additional.	Amount.	Number.	Amount,	
			£		£.	
1921-22	1,383		980,375	1,364	728,584	
1930-31	811	534	486,505	10,650	8,254,745	
1931 - 32	144	99	112,332	9,566	7,857,288	
1932 – 33	196	785	170,908	9,349	7,704,11.7	
1933-34	366	1,532	.437,912	9,272	7,758,946	
1934 - 35	714	807	768,648	9,535	8,093,698	
1935-36	966	753	1,388,212	9,920	8,783,166	
1936 - 37	873	655	1,201,126	10,049	9,006,533	
1937-38	984	744	1,643,516	10,281	9,993,114	
1938 – 39	545	<b>5</b> 96	847,380	10,170	10,570,803	
1939-40	550	433	980,070	10,094	10,930,753	
1940-41	447	425	712,270	9,957	11,132,898	
1941-42	398	290	.663,135	9,842	11,227,375	
1942 - 43	257	140	440,885	9,661	10,686,852	
1943–44	327	199	628,685	9,316	10,012,180	
1944-45	.536	278	953,655	9,061	10,140,510	
1945-46	760	379	1,706,705	9,017	10,651,361	
1946-47	1,190	511	3,153,840	9,295	11,995,689	

# RURAL BANK-GOVERNMENT AGENCY DEPARTMENT. Rural Reconstruction Agency.

This Agency commenced on 1st March, 1935, and functioned under the name of the Farmers Relief Agency until 22nd November, 1939. It gives effect to the decisions of the Rural Reconstruction Board, which exercises powers as described on page 316 et seq.

The main function of the Board is to assist in restoring to a sound basis farmers in financial difficulties who are deemed to have reasonable prospects of carrying on. For this purpose it may authorise advances to enable farmers to effect compositions with private creditors and to enable them to carry on while their affairs are under investigation and after they have received an advance for debt adjustment.

The total amount of capital funds received by the Agency up to 30th June, 1948 was £4,700,120, including £3,351,017 made available by the Commonwealth Government, viz., £23,017, forming part of a larger loan to the State for drought relief purposes distributed through the Rural Industries Agency, non-repayable grants of £2,253,000 for debt adjustment, and £1,075,000 for reconstruction of marginal wheat areas.

Particulars of advances in each of the years 1935-36 to 1947-48 are shown below. Advances of similar type made prior to 1935-36, mostly by the Farmers Relief Board in the period 1933 to 1935, amounted to £801,462.

Table L	30.— <u>I</u> (U)	ai Neci	oner act	on Age	ncy	Lvances	to Sen	.IC1 0+
	Advances.		-	Revenue	Repay	ments.	Debts Written	Balance of
Year (ended 30th June):	General.	Debt Adjust- ment.	Marginal Wheat Areas.	Charges, including Interest,	Principal:	Revenue Charges.	Off, and Amounts Waived.	Indebted-
	.	<del></del>						
- 00 " 00	£	£	£	£	£	£	£	£
1935-36	491,723	19,887	•••••	26,032	416,106	21,121	3,392	700,461
1936-37	462,529	327,737	• • • • • • • • • • • • • • • • • • • •	30,276	519,847	24,925	7,920	698,311
1937–38	429,906	642,912		42,013	370,224	26,273	35,502	1,651,143
1938-39	413,759	459,108	•••••	59,971	265,361	32,071	32,181	2,254,368
$1939-40 \\ 1940-41$	356,139 346,925	330,091	4050	69,707	376,666	48,733	61,636	2,523,270
1941-42	281,157	$240,387 \\ 149,355$	4,952 22,406	70,866 72,869	313,146 302,153	51,918 56,661	38,908	2,782,428
1942-43	242,583	157,504	106,753	75,386	298,789	72,790	38,164 34,127	2,911,237
1943-44	283,130	160,224	110,174	75,411	348,141	72,944	33,145	3,087,757 3,262,466
1944-45	367.713	163,936	224,493	75,247	260,877	50,162	29,622	3,753,194
1945-46	456,032	255,633	156,495	79,509	352,676	66,702	44,388	4,237,098
1946-47	419,560	339,874	233,823	77,449	510,865	71,409	40,108	4,685,422
1947-48	401,108	357,141	175,729	76,480	861,724	100,491	33,545	4,700,120

Table 258.—Rural Reconstruction Agency—Advances to Settlers.

# Rural Industries Agency:

On 1st July, 1935 the Rural Industries Agency assumed control of various lending activities initiated by the Departments of Lands and Agriculture in 1915 which had been administered by the Rural Industries Board from December, 1919, and, after its dissolution in 1923, by the Rural Industries Branch of the Department of Agriculture.

The first advances were on a limited scale to assist farmers to cultivate new areas and relieve those in necessitous circumstances. Larger sums were made available later and currently advances are made for various purposes to many classes of settlers who are unable to obtain accommodation through the usual commercial channels. These include advances to wheat growers for seasonal requirements pending receipts from the sale of products, to small graziers and dairy farmers for the purchase of improved breeding stock, and to farmers for the eradication of noxious weeds, the growing and conservation of fodder, and the purchase and

storing of hay, etc. Occasionally advances are made to farmers, orchardists, poultry farmers, market gardeners and others who have suffered loss from causes such as drought, windstorm or bush fire.

Funds amounting to £1,150,000 (of which £50,000 of £750,000 loaned by the Commonwealth in 1940-41 and 1941-42 had not been repaid by the State at 30th June, 1948), have been provided for special advances to settlers whose holdings suffer seriously by drought. These advances are repayable in periods up to seven years and are free of interest in the first year, and thereafter carry interest at the rate of 1½ per cent. per annum.

Advances are made to rural co-operative societies for the purchase and operation of farm machinery as described on page 330.

A summary of the advances to farmers by the Rural Industries Agency since 1935-36 is set out below, together with other operations on borrowers' accounts. Advances by other departments controlling loans of this type during sixteen years preceding the formation of the Agency amounted to £5,500,000 approximately, and repayments of principal to £4,400,000.

Table 259.—Rural Industries Agency—Advances to Necessitous Farmers and for Certain Other Purposes.

	<u> </u>	Revenue	Repay	ments.	Debts	Balance of
Year (ended 30th June).	Advances.	charges, including Interest.	Principal.	Revenue Charges.	Written off and amounts Waived.	Indebtedness at 30th June
	£	£	£	£	£	£
1935 - 36	51,383	34,000	45,661	9,782	126,656	1,119,388
1936 – 37	58,873	31,851	54,486	14,236	89,481	1,051,909
1937 - 38	84,321	30,497	45,533	9,915	75,001	1,036,278
1938 – 39	103,331	32,156	45,769	6,751	64,307	1,054,938
1939-40	183,164	32,722	159,122	11,389	64,157	1,036,156
1940-41	489,474	30,551	61,750	10,781	36,943	1,446,707
1941-42	235,781	33,142	121,121	6,345	37,395	1,550,769
1942 - 43	103,503	34,977	182,864	17,131	73,694	1,415,560
1943-44	125,174	30,477	207,800	16,120	120,542	1,226,749
1944-45	187,703	26,420	122,269	11,256	86,671	1,220,676
1945-46	156,783	22,417	162,825	14,763	144,491	1,077,797
1946-47	141,573	17,892	166,035	11,630	79,789	979,808
1947 - 48	89,659	14,589	295,357	16,964	114,029	657,706

This Agency also distributed drought relief grants to cereal growers. Grants were made in respect of wheat, oats and barley crops which, owing to drought, failed or yielded less than six bushels of grain per acre in 1945-46. Similar grants were made in respect of the 1946-47 crop and were made also for land prepared for 1946 sowing which could not be sown because of drought. Farmers were paid £130,184 under the 1945-46 scheme and £1,490,201 under the 1946-47 scheme.

## Advances to Settlers' Agency.

Since 1st July, 1935, this agency has administered loans first made in 1930-31 from unemployment relief funds and controlled for a period by an Advances to Settlers Co-ordination Board and a Dairy Promotion Board.

Advances are made for permanent improvements on rural holdings and for the purchase of stock and plant by dairy farmers. These advances are repayable over terms up to thirteen years with interest at 3 per cent. per annum. Initially they were made primarily to provide employment in rural areas by aiding the development of rural industries.

Particulars of the advances, etc. in each year since the Agency was established are shown in the following table. Advances in the three years 1933 to 1935, prior to the formation of the Agency, amounted to £900,997.

			_			
		Revenue	Repay	ments.	Debts	Balance of
Year (ended 30th June.)	Advances.	charges, including Interest.	Principal.	Revenue Charges.	Written off and amounts Waived.	Indebtedness
	£	£	£	£	£	£
1935 - 36	101,924	27,196	60,673	21,698	2,710	970,953
1936 - 37	37,898	27,014	84,834	26,154	4,798	920,079
1937 - 38	30,125	25,271	91,454	20,340	7,303	856,378
1938 – 39	32,768	23,744	62,846	16,006	3,887	830,151
1939-40	34,419	22,934	60,525	18,365	5,193	803,421
1940-41	25,664	21,917	58,006	16,726	6,071	770,199
1941-42	22,318	20,689	56,393	14,658	7,273	734,882
1942-43	9,827	19,285	67,319	17,908	10,045	668,721
1943-44	14,309	16,909	73,472	18,304	23,997	584,167
1944-45	19,631	14,684	72,602	13,400	20,557	511,923
1945 – 46	32,001	12,514	90,550	14,400	21,608	429,879
1946-47	28,325	10,532	79,129	12,285	12,935	364,387
1947-48	25.065	8.582	88.415	14.288	11,138	284.193

Table 260.—Advances to Settlers' Agency—Advances to Settlers.

# Irrigation Agency.

Matters relating to the conservation of water and the development and management of irrigation projects in New South Wales are controlled by the Water Conservation and Irrigation Commission, as described in a later chapter of this Year Book.

On 1st July, 1935, administration of financial transactions between settlers and the Water Conservation and Irrigation Commission was transferred to the Irrigation Agency of the Rural Bank.

The Agency makes loans to settlers in the irrigation areas and collects interest and principal sums in respect of loans and land purchase, rentals, water rates and other charges. It also collects payments to the Crown in respect of debts for shallow boring and charges for water in domestic and stock water supply and irrigation districts. Under the Farm Water Supplies Act, 1946, the agency may lend, for terms up to fifteen years, up to 90 per cent. of the actual cost of approved works for providing or improving water supplies on farms and for preparing land for irrigation. (See page 393).

Advances made by the Irrigation Agency and new capital debts incurred; by settlers in each of the last eleven years are shown in the following table. Amounts shown for new capital debts represent mainly the balance owing for the purchase of land sold by the Water Conservation and Irrigation Commission and the cost of improvements effected and shallow bores sunk by the Commission. The debts written off include debts on forfeited or surrendered holdings. The balance of indebtedness includes amounts owing but not yet due for payment.

Table 261.—Irrigation Agency—Advances to Settlers.

Year (ended		New	Revenue Charges,	Repay	ments.	Debts	Balance of Indebted-
30th June.)	Advances.	Capital Debts Incurred.	including Interest & Water Charges.	Principal.	Revenue Charges.	Written Off.	ness at 30th June.
1935-36 1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	£ 26,305 57,989 98,472 107,293 97,047 83,464 71,728 61,017 49,312 29,945 33,006 36,763 60,117	£ 229,846 134,210 94,883 91,593 67,832 53,076 52,981 38,992 51,756 78,545 86,643 89,552 100,324	£ 207,032 216,865 247,617 232,201 247,913 280,342 280,342 296,311 330,477 257,551 339,254 319,597	£ 95,487 94,182 144,001 147,497 121,736 142,413 110,161 154,351 139,676 128,833 115,023 146,154 155,938	£ 200,956 213,186 225,406 221,647 199,319 285,231 266,804 345,550 313,896 303,736 313,233 333,610 360,888	£ 26,387 9,610 7,104 9,039 31,428 55,183 56,085 53,026 33,758 18,114 13,822 16,390	£ 1,648,545 1,740,631 1,805,092 1,858,086 1,918,396 1,902,450 1,907,728 1,741,594 1,651,643 1,639,927 1,575,049 1,545,522 1,486,344
	1	I	1 1	1	1	l	II.

New capital debts incurred in 1946-47 and 1947-48 respectively, included £60,602 and £71,105 for sale of land, £12,437 and £10,948 for improvements and £16,031 and £17,910 for shallow bores; the total amounts of these in the years:1935-36 to 1947-48 were: sale of land, £776,313; improvements, £141,508, and shallow bores, £240,906.

# Closer Settlement Agency.

This agency, established on 23rd December, 1936, may make advances to persons who receive finance from the Rural Bank Division to assist them to acquire for rural production part of an estate approved for subdivision for the purpose of promoting closer settlement. Advances are made up to 13½ per cent. of the value of security to supplement advances up to 66¾ per cent. made by the Rural Bank. In this way the settler may obtain an advance up to 80 per cent. of the valuation of his property. No new advances have been made since 1941-42. There were 116 loans for £151,419 outstanding at 30th June, 1948.

Table 262.—Closer Settlement Agency-Advances to Settlers.

		Revenue	Repay	Balance of	
Year (ended 30th June.)	Advances.	Advances. Charges, including Interest.		Revenue Charges.	Indebtedness at 30th June.
	£	£	£	£	£
1937-38	5,580	134	16	68	5,630
1938-39	2,495	341	171	267	8,028
1939-40	146,140	1,244	2,108	289	153,015
1940-41	10,402	3,482	890	1,787	164,222
1941-42	2,209	4,352	430	3,581	166,772
1942-43		5,127	523	4,462	166,914
1942-45	]	5,826	574	5,222	166,944
1943-44		6,450	1,603	6,678	165,113
		6.483	2,080	7,045	162,471
1945-46		6,421	4,640	6,202	158,050
1946–47 1947–48	""	6,410	6,553	6,488	151,419

# COMMONWEALTH RE-ESTABLISHMENT LOANS AND ALLOWANCES.

Since 6th February, 1946, the Rural Bank, as lending authority in New South Wales, has administered the granting of re-establishment loans for agricultural purposes to ex-servicemen under the Commonwealth Reestablishment and Employment Act, 1945. As from 1st July, 1946, the Bank, on behalf of the Commonwealth, has also paid re-establishment allowances

by way of grant, pending the venture engaged in becoming income producing as provided under that Act. Loans are made through the Rural Bank Division up to a maximum of £1,000 and bear interest as follows; the first £50, free of interest; over £50 to £250, 2 per cent.; over £250, 3\frac{3}{4} per cent. per annum. Advances made to 30th June, 1948, numbered 3,117 for amounts totalling £2,072,307, including 161 (£83,815) in 1945-46, 1,572 (£988,645) in 1946-47 and 1,384 (£999,847) in 1947-48. Loans outstanding at 30th June, 1948, numbered 2,918, with balances totalling £1,853,331.

The amount paid as re-establishment allowances to 30th June, 1948, was £398,795, made up of £211,675 in 1946-47 and £187,121 in 1947-48. The number of ex-servicemen to whom rural re-establishment allowances were approved was 1,801 in 1946-47 and 993 in 1947-48.

Under the War Service Land Settlement Agreements Act, 1945, the Bank also paid allowances amounting to £697 during 1947-48 to 9 settlers in the Tullakool Irrigation Area. The allowances distributed by the Lands Department under the same Act are shown at foot of this page.

# CLOSER SETTLEMENT FUND-ADVANCES.

The Closer Settlement Fund relates to schemes for acquiring and subdividing large estates for closer settlement commenced in 1905, and to the settlement of returned soldiers of the 1914-18 war, the accounts of both schemes having been incorporated in the fund in 1928. A short description of the systems and of the operation is given on page 501.

Closer settlement operations have been on a restricted scale for some years and the advances shown in Table 263 relate for the most part to the balance of purchase money payable on extended terms by new holders to whom were reallotted properties which had reverted to the Crown. The balance of debt outstanding at 30th June, is the actual amount that would be due at these dates after including interest accrued thereto and deducting rental charged in advance at those dates.

# WAR SERVICE LAND SETTLEMENT AGREEMENT ADVANCES.

The agreement between the Commonwealth and State Governments regarding the settlement on the land of ex-service personnel of the 1939-45 war (reviewed on page 502) provides for initial development of the farms by the State before disposal to render them quickly productive. The farms are allotted as Closer Settlement Leases (perpetual), or Western Lands Leases in perpetuity, but settlers are required to repay the cost of improvements by instalments over a long term. They may obtain advances for working capital, to purchase or effect improvements and for stock, plant, etc., for the working of the farms. The Commonwealth provides a non-repayable living allowance during the first twelve months of occupation and during that period repayments and interest are waived except in respect of working capital.

Particulars relating to the assistance given ex-servicemen in the form of advances and of living allowances under the War Service Land Settlement Agreement are as follows:—

				7	${f Year}$ ended	l 30th June,	
War Service Land Settlement—					1947.	1948.	
Closer Settlement Lease Accounts opened	E		•••	No.	117	218	
Advances approved during year	•••		•••	No.	12	296	
Advances made during year		•••		£	14,638	382,304	
Advances Outstanding at end of year		•••		£	14.638	389,347	
Living Allowances paid during year	•••			£	10,979	55,583	

## OTHER ADVANCES TO SETTLERS.

Advances for the purchase of wire netting and other materials for the construction of rabbit-proof fencing, etc. are made by the Department of Lands as described on page 444.

Advances to assist landholders to clear their land of prickly-pear are made by the Department of Lands in terms of the Prickly-pear Act. The maximum period for repayment of such advances is twenty years.

# SUMMARY OF STATE ADVANCES TO SETTLERS.

The following summary relates to advances made to settlers in New South Wales through the State instrumentalities described above (pages 306 to 314). The amounts include substantial sums made available by the Commonwealth Government for distribution by the State. The very substantial decrease in balances outstanding in the Closer Settlement Fund between 1938-39 and recent years is due partly to payment by settlers, but as to the greater part to conversion of settlement purchases and group purchases into leases in perpetuity under the provisions of the Closer Settlement (Amendment) Conversion Act, 1943. The cumulative reduction arising from the later factor was £2,719,022, £3,433,453 and £4,090,848 on 30th June, 1946, 1947 and 1948, respectively.

Table 263.—Advances to Settlers by the State of New South Wales.

Lending Agency		during Ye 30th June.	ar ended	Ba Outstanding	lance of Del at 30th	
or Fund.	1946.	1947.	1948.	1939.	1947.	1948.
Department of Lands—	£	£	£	£000	£000.	£000.
Closer Settlement Fund Purchase of Wire Netting Prickly Pear Eradication	6,725 	19,267 	27,716 	13,523 404 15	6,356 200 3	5,208 156 2
War Service Land Settlement Agreement		14,638	382,304		15	382
Rural Bank of New South Wales— Rural Bank Department— Overdrafts* Long Term Loans	1,706,705 10,331	3,153,840 3,536	† 5,679	10,571 4,865	11,996 2,049	† 1,559
Total	1,717,036	3,157,376	†	15,436	14,045	†
Agency Department— Rural Reconstruction Rural Industries Advances to Settlers Irrigation Closer Settlement Guarantee  Total	868,160 156,783 32,001 119,649  32,425 1,209,018	993,206 141,573 28,325 126,315  25,666 1,315,085	933,978 89,659 25,065 160,441  19,267 1,228,410	2 254 1,055 830 1,858 8 11	4,685 980 364 1,546 158 10	4,700 658 284 1,486 151 9
Grand Total	2,932,779	4,506,366	†	35,394	28,362	†

<sup>\*</sup> Amount of overdraft represents limit authorised.

# COMMONWEALTH BANK-RURAL CREDIT AND MORTGAGE DEPARTMENTS.

In the Commonwealth Bank of Australia, separate departments have been established to provide credit facilities of a special nature for the benefit of rural industries. The Rural Credit Department, established in

<sup>+</sup> Mot available

October, 1925 to assist in the marketing of rural products, may make seasonal advances, upon the security of primary produce, to banks, cooperative associations, etc.

The Mortgage Bank Department was opened on 27th September, 1943 to provide long-term loans to primary producers, against securities approved by the Bank, at fixed rates of interest, with repayment on an amortisation principle. Advances may be made up to 70 per cent. of the security, but not exceeding £5,000, for terms ranging up to forty-one years. The rate of interest for loans up to twenty years is 4 per cent. per annum, and for loans from twenty-one to forty-one years, 4½ per cent. The rate of amortisation may not be less than 1 per cent. per annum. Further particulars regarding these departments of the Bank are shown in chapter "Private Finance" of this Year Book.

## LIENS ON LIVESTOCK, WOOL AND CROPS.

Particulars of the number and amount of registered loans made on the security of livestock, wool, and growing crops are published in the chapter "Private Finance." These include advances made on such security by Government agencies as well as by private institutions and individuals.

## RATES OF INTEREST CHARGED ON RURAL LOANS.

Prior to 1929 rates of interest were high but they declined during the depression period and have remained at the lower levels. Details regarding interest rates and charges during a long period are shown in the chapter "Private Finance".

The trend of rates of interest on rural loans since the beginning of 1930 is indicated below. The table shows the rates current in January of each year on rural loans through the Rural Bank and various governmental agencies and from some private sources:—

Table 264.—Rates of Interest on Rural Loans.

			M	onth of J	anuary in	Year—				
Lending Agency,		1930.	1933.	1935,	1939.	1943 and 1944.	1945 and 1946.	1947 to 1949.		
Rural Bank Division—		Per cent.								
Long Term Loans Overdraft		$\frac{6\frac{1}{3}}{6\frac{3}{4}}$	5 5	4 <del>1</del> 41	} 41	42	428	$4\frac{1}{2}$		
Governmental Agencies— Advances to Settlers Rural Industries		 6	 5 <u>1</u> .	3 4	3 4	3 4	3 4	3 4		
Irrigation— Bore Advances* Other Advances		5 <u>1</u> 6 <u>1</u>	51 6	} 4	4	4	4 {	3½ 4		
Rural Reconstruction†— Carry-on Advances Debt Adjustment Advances			 	4 	4 2½	4 2 <u>1</u>	4 2 <del>1</del>	$\begin{array}{c} 4 \\ 2\frac{1}{2} \end{array}$		
Commonwealth Mortgage Bank— Loans up to 20 years Loans 21 to 41 years	- 	***	•••		···	4 41	4 41	4 4 <del>1</del>		
Private Trading Banks— Overdrafts		6½ to 8	5 to 6	4½ to 5	4½ to 5¾	4½ to 5	41 to 41	41 to 41		
Rural First Mortgages, exclud Mortgages to Banks and Gove ment Agencies—	ing rn-									
Weighted Average Rate			•••	430	5	4½‡	4₺	4 <u>2</u> ¶		

<sup>\*</sup> And Farm Water Supplies in 1947. † Maximum rates. ‡  $4\frac{3}{8}$  per cent. in 1948. §  $4\frac{1}{8}$  per cent. com 23rd January, 1948. ¶  $4\frac{1}{8}$  per cent. in January, 1949.

The rates shown in the table for carry-on and debt adjustment advances, through the Rural Reconstruction Agency, are the maximum rates chargeable; the Board has power to fix lower rates or to waive interest under certain conditions. Certain advances of a special nature by governmental agencies bear lower rates of interest than those indicated above. For instance, drought relief advances, made for the most part by the Rural Industries Agency in two years ended June, 1942, are free of interest for one year, then the rate is 1½ per cent.; and advances by the Rural Reconstruction Agency for the purchase of additional land in marginal wheat areas are charged interest at the rate of 1 per cent. Loans for agricultural purposes made under the Commonwealth Re-establishment and Employment Act, 1945 bear interest as follows: first £50, free of interest; over £50 to £250, 2 per cent.; over £250, 3¾ per cent.

Information regarding the rate of interest payable on rural mortgages was first collected in October, 1933. The average rate on rural first mortgages at that date was 5½ per cent. It is probable that the predominant rate prior to 1930 was not less than 7 per cent.

## RURAL RECONSTRUCTION.

# Farmers' Relief and Rural Reconstruction Acts.

The Farmers' Relief Act, which came into operation on 17th February, 1933, provided means whereby farmers in case of necessity might obtain special assistance to restore their financial position. Legal action in respect of their debts might be stayed, and they might secure assistance from Government funds to carry on their activities. Protection in respect of debts was given by a Stay Order upon application by the individual farmer and approval by the Farmers' Relief Board. The term of a stay order was originally three years, but amending legislation extended it to 5th December, 1950, or six years from the date of granting, whichever be the later. The latest date for receipt of applications for Stay Orders was extended to 30th June, 1948, in order that farmers whose difficulties increased as a result of the war might obtain assistance.

The provisions of the Act and the arrangements for its administration were outlined in earlier editions of the Year Book. Assistance under it is given only in cases when investigation indicates that the farmer has reasonable prospects of success after the benefits of the Act are extended to him. The Board has power to enforce a scheme of debt adjustment in any case in which this is warranted, and the farmer's creditors have failed to enter voluntarily into such a scheme.

In 1935 the Commonwealth Government provided funds for the assistance of farmers through State agencies in the adjustment of their private debts. An amending Act authorised the Farmers' Relief Board to administer the Commonwealth assistance to any farmer when investigation indicated that thereby his farming venture might be placed on a sound basis.

Under the Rural Reconstruction Act which came into operation on 22ud November, 1939, the Farmers' Relief Board was replaced by the Rural Reconstruction Board.

The Rural Reconstruction Board consists of an independent Chairman (the Director appointed under the Farmers' Relief Act) and six other Members, comprising two creditors's representatives and four farmers'

representatives. However, only two of the latter may vote on any question before the Board, thus preserving equal representation of farmers and creditors.

The Board may grant debt adjustment benefits without the issue of a Stay Order, and may issue a protection order should a creditor threaten adverse action while an applicant's affairs are being investigated. It may make adjustments in debts to the Crown if deemed necessary for successful reconstruction of the farmer's affairs. Every case is treated on its merits, after an official survey of the practical and financial aspects of each farmer's business, including income-earning possibilities under average conditions, both of seasons and markets, to determine (a) the degree of adjustment necessary and warranted, and (b) the commitments which could be met reasonably under average conditions after providing for maintenance of the farmer and his dependants and meeting the costs of working the farm.

Where it appears desirable that Crown capital value or rent be reviewed, the Board may extend the time within which application for reappraisement may be made, and the Minister for Lands may order a fresh appraisement, although a reappraisement may have been made already under general provisions of the Crown Lands Acts. Under the Act the Commissioners of the Rural Bank may write down a debt due to the Bank as part of a scheme of reconstruction.

Briefly, the position under the Färmers' Relief Act, as amended by the Rural Reconstruction Act, is that the Board may assist a farmer to rehabilitate and carry on his industry; may provide means to obtain essential capital items such as power, plant and income-producing stock; and may advance money at a low rate of interest to discharge private debts on a composition basis. The Board may adjust a farmer's debts and commitments to the Crown in a scheme of reconstruction adapted to and warranted by his circumstances, restrain individual creditors for a limited period by issue of a protection order, protect the farmer against action by creditors by the issue of a stay order, if sought prior to 30th June, 1948, and appoint Crown or Rural Bank officers to act as supervisors or agents without charge to the farmer:

Applications received from farmers for debt adjustment up to 30th June, 1948, numbered 4,714, and at that date 567 applications had been withdrawn and 1,806 rejected, and 98 were awaiting consideration. Of the 2,243 applications which had been considered by the Board there were 373 in which the position of farmers under protection had improved sufficiently to enable them to carry on without debt composition and 1,870 for which schemes of debt adjustment had been approved by the Board. Creditors had signified assent and settlement had been effected or was in process in 1,705 of the cases approved, and 165 schemes of adjustment were in course of negotiation with creditors.

Particularst of the debt adjustment in respect of 1,705 cases finalised up to 30th June, 1948, are shown below:—

Table 265.—Farmers'	Debt-Adjustment under	Farmers'	Relief Act, at
	30th June, 1948.		

	Govern-	Other C	Watel		
Particulars.	mental Bodies.	Secured.	Unsecured.	Total.	
Debts Prior to Adjustment Debts Written Off  Proportion of Debts Written Off Debts after Adjustment (including finance		£ 6,911,080 1,393,437 per cent. 20·2	£ 973,142 556,460 per cent. 57-2	£ 10,979,210 2,411,798 per cent. 22.0	
provided by the Board to effect debts com- position and finance otherwise arranged at the instigation of the Board)		£ 2,296,962	£ 83,574	£ 8,567,412	

The item "debts written off" relates to amounts involved in compositions through the Rural Reconstruction Board. It takes no account of amounts written off settlers' debts to the Crown pursuant to Government policy, by authorities other than the Rural Reconstruction Board.

#### Reconstruction in Marginal Wheat Areas.

The Commonwealth Wheat Industry Assistance Act, 1938 (described on page 727 of the Official Year Book, 1937-38), made moneys available to the States for the purposes, *inter alia*, of vacating farmers from marginal wheat areas and enabling the lands to be devoted to other uses in accordance with plans approved by the Federal Minister on the advice of the State Minister.

A plan to operate in New South Wales was approved in 1940. Under this plan farmers in marginal wheat areas voluntarily vacating their lands may be granted up to £300, together with removal expenses in each case. To farmers who remain, advances on long terms may be made to enable them to acquire enough vacated land to increase their farms to home maintenance standard for new uses, and to purchase the stock, plant and other requisites needed in changing their farming activities.

The plan is administered by the Rural Reconstruction Board. The Board has declared approximately 4,000,000 acres, embracing about 2,000 farms in the counties of Nicholson, Sturt, Dowling, Cooper and Gipps (between the Murrumbidgee and Lachlan Rivers) as Marginal Wheat Areas.

Financial assistance approved under this scheme up to 30th June, 1948, amounted to £1,543,249, distributed as follows: £90,768 to 313 vacated farmers; £1,238,026 to 544 farmers for purchase of additional areas; and £214,455 to 221 farmers for improvements, purchase of stock, etc., in the reconstruction of farming activities.

Prior to the institution of the Commonwealth scheme, funds had been provided by the State under similar conditions for the vacation of farmers from marginal wheat areas. The total amount disbursed from these funds was £60,725 to 214 vacated farmers.

#### GOVERNMENT GUARANTEES RELATING TO RURAL LOANS.

As a measure of assistance for the rural industries, the Government of New South Wales has guaranteed the repayment of certain advances made by banks and other lenders. The guarantees have been given under the authority of the Advances to Settlers (Government Guarantee) Act, 1929-1934, and the Government Guarantees Act, 1934-1943.

The Advances to Settlers (Government Guarantee) Act constituted a Government Guarantee Board with power to guarantee repayment of advances made by banks to settlers and co-operative societies formed mainly for the promotion of rural industry or the handling, treatment, manufacture, sale or disposal of rural products. The Board was authorised to give new guarantees only during the period of two years from 23rd December, 1929, and subsequently to supplement existing guarantees to the extent of one-fourth of the contingent liability already assumed. Guarantees were limited to £3,000 in respect of an individual settler and to £25,000 in respect of a co-operative society, and the aggregate amount of guarantees to be given in any one year was limited to £2,500,000. The Guarantee Board was dissolved and its functions were transferred to the Government Guarantee Agency of the Rural Bank as from 1st July, 1935.

Under the Government Guarantees Act the State Treasurer is empowered, with the approval of the Governor, to guarantee the repayment of advances made by banks or other approved lenders to marketing boards and co-operative societies.

The amount of guarantees current at 30th June in the five years 1944 to 1948 is shown below, viz.: (a) the aggregate contingent liability under guarantee in terms of the Advances to Settlers (Government Guarantee) Act and (b) the limit of guarantees (not the actual balance owing) in respect of marketing boards and co-operative (rural) societies under the Government Guarantees Act.

	1944.	1945.	1946.	1947.	1948.
Advances to Settlers	£	£	£	£	£
(Government Guarantee) Act	233,220	$191,\!435$	187,952	155,313	113,158
Governm ent Guarantees Act	884,061	848,223	912,100	821,350	892,660

The amount guaranteed under the Government Guarantees Act included £328,000 in respect of a co-operative cannery, £196,900 in respect of three country co-operative meat companies and £150,000 in respect of the Metropolitan Meat Commission in each year.

# **AGRICULTURE**

## DEVELOPMENT OF AGRICULTURE.

Until the end of the nineteenth century pastoral pursuits were predominant in New South Wales and agricultural production barely sufficed for local needs. Wheat-growing expanded rapidly after 1897, when the export trade in wheat commenced. The completion of the Burrinjuck Dam in 1913 and other works connected with the Murrumbidgee Irrigation Area coupled with closer settlement set new agricultural activities in train. Wheat became an export commodity second only to wool; rice cultivation increased beyond Australian requirements and viticulture and fruit-growing, and in the last few years the cultivation of oats, expanded. To adjust agricultural production to war-time needs wheat-growing was curtailed and there was increased cultivation of vegetables, rice, fodder crops for dairy stock and of certain kinds of fruit, but wheat-growing remained by far the most extensive agricultural activity. Since the war ended tendencies have been toward a return to the pre-war order except that vegetable-growing remains on a larger scale.

The extension of cultivation from 1891 to 1941 is shown in the following table:—

Table 266.—Area under Cultivation.

		Area under—		Acres per Inhabitant under-		
Season.	All Crops and Sown Grasses.	Crops.	Sown Grasses.	All Crops and Sown Grasses.	Crops only.	
-	acres.	acres.	acres.			
		Average Area	per Annum.			
1891-95	1,398,199	1,048,554	349,645	1.18	0.88	
1896-00	2,252,649	1,894,857	357,792	1.73	1.46	
1901-05	2,942,506	2,436,765	505,741	2.10	1.74	
1906-10	3,575,873	2,824,253	751,620	$2 \cdot 34$	1.84	
1911-15	5,187,850	4,025,165	1,162,685	2.93	$2 \cdot 27$	
1916-20	6,011,049	4,615,913	1,395,136	3.09	$2 \cdot 37$	
1921-25	6,599,048	4,665,362	1,933,686	3.04	$2 \cdot 15$	
1926-30	7,149,119	5,014,364	2,134,755	2.98	2.09	
1931 - 35	8,424,349	6,042,593	2,381,756	3.25	2.33	
1936-40	9,340,792	6,313,190	3,027,602	3.44	2.34	
		Area in e	each Year.			
1936	8,452,774	5,730,315	2,722,459	3.18	l 2·16	
1937	8,820,129	5,951,043	2,869,086	3.29	2.20	
1938	9,509,661	6,464,624	3,045,037	3.50	2.38	
1939	10,243,664	7,044,038	3,199,626	3.73	2.57	
1940	9,677,735	6,375,931	3,301,804	3.50	2.31	
1941	9,784,852	6,365,435	3,419,417	3.52	2.29	
	, ,	' '				

<sup>\*</sup> Exclusive of double-cropping.

Fluctuations in the area under crops are due mainly to variations in the extent of wheat-growing, which under normal conditions represents more than 75 per cent. of the total. The land under sown grasses (3,419,417 acres in 1940-41) is for the greater part in the coastal districts, and is used for dairy stock. The cultivation of grasses in inland areas, however, has increased in recent years in the Tablelands, the Western Slopes and the Riverina, where the practice was adopted to improve the carrying capacity of holdings used for pastoral purposes and mixed farming.

Information regarding cultivation as shown in Table 266 is not available on a comparable basis since 1940-41. The total area of crops (including all crops grown on land double-cropped) in each season since 1936-37 is given in the next table. The area of land used for the growing of more than one crop in a season is small.

Table 267.—Area of Crops.
(Including crops on land double-cropped.)

Year ended 31st March.	Area of Crops.	Year ended 31st March.	Area of Crops.	Year ended 31st March.	Area of Crops.
1937	acres. 5,957,520	1941	acres. 6,374,354	1945	acres. 5,044,792
1938	6,470,160	1942	5,920,561	1946	6,087,566
1939	7,049,357	1943	5,297,313	1947	6,511,493
1940	6,381,531	1944	4,797,385	1948	7,168,068
			1	<u> </u>	

Particulars obtained in 1941 indicate that the aggregate area, which, in the opinion of the occupiers, was suitable for cultivation after the removal of any standing timber was 31,822,433 acres, in a total area of 173,869,144 acres of alienated and Crown lands used for agricultural and pastoral purposes. Only a very small portion of the Western Division of the State is regarded as suitable for agriculture because the rainfall is inadequate.

In addition to the area of 6,365,435 acres of land under crops in 1940-41 as shown in Table 266, 486,050 acres of new land were cleared and grubbed for ploughing, 2,234,760 acres were ploughed and worked during the year, and 4,761,437 acres of previously cropped land were not ploughed in this season. These particulars embrace both alienated and Crown lands, but the area of Crown lands under cultivation of any kind is relatively small.

The following table shows the distribution in statistical divisions of agricultural and pastoral lands during the season 1940-41. The various divisions are shown on the map forming the frontispiece of this Year Book.

Table 268.—Distribution of Agricultural and Pastoral Lands, 1940-41.

				Alie	nated and	1 Crown	Lands.			
							and Pasto and over,	ral	Suitable for Cultivation.	
21.22	Total area of Division.	Under Crop.	Under sown Grasses.	Virgin land cleared and prepar- ed for plough- ing.	Fallow Land, etc.	Pre- viously Crop- ped.	Balance of Area.	Total.	Area.	Propor- tion under Crop.
Co.ustul	thous.	thous.	thous.	thous.	thous.	thous.	thous.	thous.	thous.	per cent.
Coastal— North Coast Hunter and Manning.	6,965 8,396	133 127	1,674 448	5 7	6 5	26 25	2,888 4,166	4,732 4,778	608 492	21·9 25·8
Metropolitan South Coast	958 5,950	35 64	10 190	3 12	2 4	7 20	222 1,990	279 2,280	160 469	21·9 13·7
Total	22,269	359	2,322	27	17	78	9,266	12,069	1,729	20.8
Tableland— Northern Central Southern	8,088 10,716 7,061	130 438 48	32 212 102	14 63 11	12 162 9	29 340 38	6,391 6,542 5,659	6,608 7,757 5,867	581 2,060 644	22·4 21·3 7·5
Total	25,865	616	346	88	183	407	18,592	20,232	3,285	18.7
Western Slopes— North Central South	9,200 7,723 11,239	778 1,199 1,291	70 120 350	36 81 , 100	95 491 650	184 773 1,311	7,182 4,305 6,319	8,345 6,969 10,021	2,295 4,669 5,466	33·9 25·7 23·6
Total	28,162	3,268	540	217	1,236	2,268	17,806	25,335	12,430	26.3
Central Plains— North Central Riverina	:	382 340 1,386	27 9 174 210	27 38 87 152	38 144 612 794	136 307 1,540 1,983	7,143 13,100 12,827 33,070	7,753 13,938 16,626 38,317	2,163 3,667 7,355	17·7 9·3 18·8
Total	41,394	2,108		152	794	1,988		30,317	13,185	10.0
Western	80,321	14	1	2	5	26	77,868	77,916	1,193	1.2
All Divisions	198,011	6,365	3,419	486	2,235	4,762	156,602	173,869	31,822	20.0

<sup>\*</sup> Excluding Lord Howe Island and principal harbours.

## NUMBER OF AGRICULTURAL HOLDINGS.

The total number of holdings of one acre and upwards used for agricultural, dairying, or pastoral purposes, when last ascertained in 1945-46, was 74,173 and areas of one acre or more in extent were cultivated on 49,743 holdings.

Only 10,447 holdings were used mainly for agricultural purposes, 17,051 holdings were used for agricultural and pastoral pursuits combined, 3,578 for agriculture with dairying, 1,028 for all three pursuits combined, and a limited amount of cultivation of a non-commercial character was conducted on other holdings. On 24,430 holdings there was no cultivation or less than one acre under crop.

The total number of rural holdings, the number on which at least one acre was cultivated and the total area of crops in the last twelve seasons are shown below; where land has been double-cropped in any year the area of each crop is included in the total:—

Table 269.—Cultivated Holdings and Area of Crops.

HERE THE STORY OF THE STORY

Year ended Num 31st March. Ru	Total Number of	Cultivated Holdings.		Year ended	Total Number of	Cultivated Holdings.	
		Number.	Area of Crops.	31st March.		Number.	Area of Crops.
1937 1938 1939 1940 1941 1942	76,239 75,923 75,365 74,909 74,495 73,973	53,612 53,609 54,126 53,251 52,290 49,785	acres. 5,957,520 6,470,160 7,049,357 6,381,531 6,374,354 5,920,561	1943 1944 1945 1946 1947 1948	73,579 73,074 74,566 74,173 74,671 74,669	50,224 49,940 49,172 49,743 49,614 50,842	acres, 5,297,313 4,797,385 5,044,792 6,087,566 6,511,493 7,168,068

The number of holdings on which the various crops were grown in recent years is shown in the following statement; crops less than an acre in extent are not included:—

Table 270.—Cultivated Holdings and Principal Crops Grown.

W. 1 . G.G.	Number of Holdings upon which Crop was Grown.										
Kind of Crop.	1938–39.	1941 -42.	1942-43,	1943–44.	1944-45.	1945-46.	1946-47.	1947-48,			
Wheat	19,768	18,218	18,267	17,172	18,186	19,948	18,571	19,594			
Maize	17,215	15,950	15,924	15,247	14,435	14,098	14,373	13,509			
Barley	1,620	1,407	2,538	2,017	2,614	2,320	1,612	1,524			
Oats	23,434	21,561	25,833	24,656	23,488	24,367	21,933	23,626			
Rice	313	331	348	364	330	329	353	351			
Lucerne	9,504	8,362	10,166	9,885	9,049	8,995	8,991	9,882			
Potatoes	3,147	3,214	4,777	4.853	4,887	3,359	2,840	3,037			
Tobacco	41	52	57	<b>' 3</b> 9	26	20	22	30			
Sugar-cane	861	*	*	687	597	558	584	580			
Grapes	1,513	1,371	1,355	1,345	1,327	1,261	1,297	1,282			
Orchards	8,197	7,230	6,096	6,492	6,053	6,177	6,125	6,074			
Citrus	†3,734	†3,510	3,431	3,514	3,152	3,235	3,217	3,218			
Other	†5,865	†5,073	3,734	4,099	3,839	4,100	4,012	3,877			
Bananas	1,501	1,344	1,228	1,395	1,747	1,964	2,383	3,056			

<sup>\*</sup> Not available. † 50 or more trees.

Although holdings on which oats were grown have outnumbered wheat farms in recent years the greater proportion of them had only small areas of oats, and in total areas crops of wheat were several times greater than those of oats. As wheat was grown on many holdings under the "shares" system, described in the chapter "Rural Industries," the number of growers exceeded the number of holdings on which it was grown.

The orchards (of one acre or more) classified as citrus orchards were holdings with 50 or more citrus trees in 1938-39 and 1941-42 and those with at least an acre under citrus trees in 1942-43 and later. Other orchards have been classified on similar bases and some orchards have been included in both groups.

In respect of the last two seasons particulars are available of the number of holdings on which a significant area of the major cereals (20 or more acres) and sugar cane (25 or more acres) was grown. The numbers in each season were as follows:—

Season.	Wheat.	Oats.	Maize.	Barley.	Sugar Cane.
	20 acres.	20 acres.	20 acres.	20 aores.	25 acres.
1946-47	15,971	7,050	1,384	427	465
1947-48	16,803	7,964	991	327	447

## CROPS-AREA AND PRODUCTION.

The area and production and average yield per acre of the various crops grown in each of the seasons 1945-46 and 1947-48 are shown in the following table:—

Table 271.—All Crops, Area and Production.

		1946-47.			1947–48.	
Name of Crop.	Area.	Production.	Average Yield per acre.*	Area.	Production.	Average Yield per acre.*
	acres.	bushels.	bushels	acres.	bushels.	bushels.
Grain—Wheat		15,682,230	3.5	5,043,017	95,226,795	18.9
Maize		2,506,926	22.8	86,979	2,356,710	27.1
Barley—Malting	. 18,771	76,890	4.1	15,127	356,571	23.6
Feed	. 7,927	30,282	3.8	8,351	162,912	19.5
Oats	′	2,045,598	3.7	609,207	13,673,871	22.4
Rye		2,514	3.7	694	5,778	8.3
Rice	FT 040	2,978,130	93.1	26,208	2,676,267	102:0
Sorghum	. 51,868	629,097	12.1	24,680	467,412	18.9
Hay-Wheaten	000 557	tons.	tons. $0.55$	278,361	tons, 414,329	tous.
Doules	777	146,088 344	0.44	1.198		1.49
Onten	100 101	103,504	0.52	228,359	1,315	1.10
D		363	1.07	220,339	335,742 322	$1.47 \\ 1.21$
7	<b>■</b> 0 000	126,636	1.59	110,324	213,865	1.21
	. 19,000	£	1.00		£	1.84
Green Fodder (Fed-off)	. 462,894	927,450	•••	488,028	878,200	•••
Vegetables for Human Con		tons.	tons.		tons.	tons.
sumption—Potatoes		61,303	2.88	21,911	65,535	2.99
Other	. 79,948		•••	61,527		•••
Vegetables for Animal Fodder	7,774			5,751		
		bushels.	bushels	_	bushels.	bushels.
Broom Millet—Grain	·  ]	12,000	3⋅8		12,786	3.9
7311	3,161	cwt.	cwt.	3,294	cwt.	cwt.
Fibre	100	17,043	5.39	J	22,701	6.89
Tobacco (Dried Leaf)	. 402:	3,561	8.86 tons	414	3,016	7.29
Sugar Cane -Crushed	7,563	tons. 309,605	40.94	7,113	tons.	tons,
Not Cut	8,283			8,955	267,261	37·5 <b>7</b>
Used as Plants	341	•••	•••	360		•••
Grapes—Productive—	. 341,		•••	300		•••
Drying Varieties	5,221	± 6,336	+	5,270	1.7,613	t
Table Varieties	0.001	4,682	l i	2,659	4,835	÷
Table Varieties Wine Varieties		21,275	j j	7,001	21,573	÷
,, 110 , 41100000 111 11	. 0,011	gallons.	'	1,002	gallons.	'
Wine made		3,904,597			Barronsi	
Young Vines for Wine		0,002,001		860	l I	
Other Grapes				751	l ::: I	•••
	1 '	busbels.	bushels.		bushels.	bushels.
Orchards-Productive	. 57.204	5,981,719	104-6	57.842	7,584,791	113·£
Young Trees	74 000			12,534		•
Bananas-Productive		2,144,100	136.6	19,126	2,321,833	121.4
Young Stools	. 4,813		•••	7,255	1 1	
Pineapples—Productive		16,277	107.8	173	20,230	116.9
Young Plants	. 157			154	ļ <sub>9</sub>	
		£	£ s. d.		£	£ s. d
Nurserles		219,888	257 3 7	1,086	283,753	261 5 8
Other Crops	16,909			23,232		•••
Total Area of Crops	6,511,493			7,168,068		

<sup>\*</sup>Land under crops which failed is reckoned in the average. † Area and production cannot be related because grapes are not always used for purpose for which originally grown. ‡ Dried weight.

## VALUE OF AGRICULTURAL PRODUCTION.

The estimated value of the agricultural production of the State in 1938-39 and each of the last six seasons is shown in the following table, the values being based on prices realised on the farm or at nearest railway siding. The net value of agricultural production is shown in Table 275.

The values represent estimated gross value, as at place of production, with no deductions for seed, fertilisers, etc., used in the process of production (see page 326).

Crop.		Gross Value at Place of Production.									
стор.		1938-39,	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.			
		£	£	. £	£	£	ı £	£			
Wheat (grain)*		6,695,040	10,272,740	11,390,940	4,484,720	21,790,060	8,091,010	56,453,620			
Maize (grain)		532,590	809,240	876,870	751,510	810,890	812,140	716,880			
Barley (grain)*		27,200	45,740	87,320	44,330	145,990	36,300	167,310			
Oats (grain)		493,180	764,400	763,800	547,770	1,325,010	523,120	2.051,080			
Rice (grain)		444,430	640,990	826,820	349,790	565,600	767,330	835,290			
Hay and Straw		4,252,420	5,075,720	3,686,670	2,608,650	5,375,480†	2,498,060†	5,309,110†			
Green Food		1,156,970	1,480,000	1,670,000	1,092,160	1,234,000	927,450	878,200			
Sugar-cane		482,520	490,890	458,900	350,550	292,640	546,470	560,830			
Grapes		292,900	633,000	713,730	560,740	645,190	594,570	715,620			
Wine, Brandy, etc.		80,420	137,990	182,550	159,750	162,410	220,460	273,700			
Fruit—Citrus		823,300	1,464,610	2,023,610	1,832,920	1,671,510	1,743,590	1,690,810			
Otlier	•	1,492,320	2,947,370	4,340,340	3,415,290	4,606,810	4,340,070	4,769,610			
Potatoes		422,570	665,350	883,060	1,063,750	759,750	775,480	820,830			
Other Vegetables	7	1 .	3,351,660	4,428,590	4,224,170	4,754,130	3,588,180	3,530,840			
Other Crops	Ĵ	1,263,090	364,260	416,560	508,410	579,760	685,640	685,400			
Total	<b></b> .	18,458,950	29,143,960	32,749,760	21,994,510	44,719,230	26,149,870	79,459,080			

Table 272 .- Value of Agricultural Production.

## Value of Production per Acre.

The following table shows the annual gross value of agricultural production and the average value per acre since 1887; because of variations in average value per acre attributable to fluctuations in the area of cereal crops the statement should be read in conjunction with Table 274.

Season.	Area Cultivated.	Gross Value of Production (at Farm).	Average Value per Acre.	Year ended 31st March.	area Cultivated.	Gross Value of Production (at Farm).	Average Value per Acre.
1887-91 1892-96 1897-01 1902-06 1907-11 1012-16 1017-21 1922-26 1927-31 1932-36	acres. 858,367 1,147,733 2,114,250 2,515,268 2,933,021 4,507,748 4,349,814 4,680,110 5,467,982 5,826,754 6,440,214	erage per annu £ 4,030,611 3,812,393 5,592,620 6,302,903 8,565,164 12,867,474 16,986,250 22,328,630 16,342,398 15,656,024 19,567,460	1m. £ s. d. 4 13 11 3 6 5 2 12 11 2 10 1 2 18 5 2 17 1 3 17 8 4 15 5 3 1 7 2 13 9 3 0 9	1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1946	Acres. 5,951,043 6,464,624 7,044,038 6,375,931 6,365,435 5;914,061 5,297,313 4,797,385 5;044,792 6,087,566 6,511,493	£ 23,415,570 20,430,130 18,458,950 21,253,720 14,278,930 20,307,670 29,143,960 21,7994,510 44,719,230 26,149,870	£ s. d. 3 18 8 3 3 2 2 12 8 8 3 6 8 2 4 10 3 8 7 5 10 6 6 16 6 4 7 2 7 6 11 4 0 4

Table 273,-Agricultural Production per Acre.

<sup>\*</sup> Including Government bounty, assistance from flour tax, etc . † Including grass cut for hay.

The comparatively high value of production per acre shown in the ten years prior to 1897 was due to the fact that agriculture was on a smaller scale, and crops produced by intense cultivation formed a larger proportion of the total than in later years. The higher values shown between 1917 and 1926 and since 1941-42 were due mainly to the higher level of prices received for produce. Expansion in the growing of vegetables also contributed in recent years. A comparative statement of the average gross farm value per acre of various crops is shown in the next table.

0				Avera	ge Values pe	r Acre.			
Crop.		1938-39.	1942-43.	1943–44.	1944-45.	1945-46.	1946–47.	1947–48.	
Wheat, Grain Maize, Grain Oats, Grain Rice Hay * Potatoes Sugar-canet Vineyards† Orchards†		£ s. d. 1 8 9 4 7 2 1 4 8 18 17 8 3 19 6 ‡25 1 1 ‡46 2 9 23 15 11 29 14 5	£ s. d. 3 7 9 7 16 3 1 15 5 18 14 6 6 17 8 27 3 5 50 8 10 50 3 1 59 13 11	£ s. d. 4 4 7 8 9 10 2 0 10 20 6 5 6 17 9 29 7 5 55 13 10 58 8 0 82 1 5	£ s. d. 1 11 6 7 19 9 1 0 1 14 4 5 4 9 0 30 11 5 51 15 5 47 12 5 62 13 2	£ s. d. 5 15 6 8 15 6 2 2 11 19 18 8 7 2 0 33 4 7 49 4 10 54 1 9 76 9 4	£ s. d. 1 16 2 7 7 7 7 0 18 9 23 19 8 4 11 4 36 7 10 72 5 1 53 19 4 73 4 10	£ 8. d. 11 3 11 8 4 10 3 7 4 31 17 5 8 10 4 37 9 3 78 16 11 66 5 3 79 11 8	

<sup>\*</sup> Excluding grass cut for hay.

The average value of production per acre measures the effect from year to year of yield obtained and prices realised, *i.e.*, the combined effect of season and market on the average returns obtained by farmers from their holdings. To make the analysis complete such factors as the cost of production, the general level of prices, and acreage cropped per farm should be taken into consideration.

## Gross and Net Values of Agricultural Production.

In the absence of actual records of farm sales and purchases there is considerable difficulty in valuing net agricultural production. But the estimated values in each of the seasons 1937-38 to 1947-48 are shown below:—

Table 275.—Agricultural Production—Gross and Net Values.

Year ended March,	Gross Production valued at Principal Markets.	Difference between Principal Market and Country Prices.	Gross Production valued at Place Production,	Seed used and Fodder for Farm Stock used in Agricul- tural Work,	Net Production valued at Farm or nearest rail siding.	Value of Principal Materials used.	Net Value of Production after deducting Materials,
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
_	-		£	thousand.			
1938	25,112	4,682	20,430	3,364	17,066	806	16,260
1939	23,665	5,206	18,459	4,253	14,206	805	13,401
1940	26,926	5,672	21,254	2,456	18,798	705	18,093
1941	17,677	3,398	14,279	2,228	12,051	836	11,215
1942	24,847	4,539	20,308	3,273	17,035	992	16,043
1943	34,776	5,632	29,144	4,035	25,109	665	24,444
1944	38,553	5,803	32,750	4,167	28,583	667	27,916
1945	25,691	3,696	21,995	3,872	18,123	624	17,499
1946	51,634	6,915	44,719	4,625	40,094	749	39,345
1947	29,988	3,838	26,150	4,694	21,456	1,105	20,351
1948	90,588	11,129	79,459	7,119	72,340	1,337	71,003
	1		1				

<sup>†</sup> Productive area only,

<sup>‡</sup> Field crops only.

In estimating the net value of production as shown above, no account has been taken of depreciation of machinery and plant because of the difficulty in arriving at a reasonably reliable measurement of the amount of depreciation.

The second column provides a *relative* measure of the importance of agricultural production to the community by valuing all items on a common basis. It includes the value of transport, handling and marketing services rendered after the products leave the railway siding nearest the farm up to the point of sale in metropolitan markets. It has, however, the disadvantage of including values for such services on certain products which remain on the farms or are sold to neighbouring landholders.

The third column includes what may be called "cost of marketing" (freights, handling charges, commissions, etc.) that would have been paid if all products had been sold in the principal markets, the ratio to the total in the second column varies under the influence of changes in the volume and composition of agricultural production as well as changes in price levels, freights, commissions, etc.

The figures in the fourth column are those published in Table 272 and are inclusive of the estimated value of seed and fodder used in the course of production. The value placed on these is shown in the fifth column and the effect of deducting them is shown in the sixth column, which represents, as nearly as may be with existing data, the approximate money return to farmers for agricultural products, though it is inclusive of agricultural products used as stock feed in other rural industries, valued at £6,301,000 in 1944-45, £6,796,000 in 1945-46, £6,746,000 in 1946-47 and £7,134,000 in 1947-48.

The seventh column represents approximately the value of the principal non-rural materials used in agricultural production, and the eighth is the net value of agricultural production excluding the approximate value of the principal goods and services provided by non-rural industries. It represents approximately the aggregate incomes of farmers and their employees from agricultural production without deductions for interest, depreciation, etc., of farm properties, implements, machinery, etc.

#### PRICES OF AGRICULTURAL PRODUCTS.

The following quotations represent the average prices obtained for farm products (local and imported) in the various Sydney markets. The average for the year represents the mean of the prices ruling during each month, and does not take into account the quantity sold during the month. The prices ruling in each month, *i.e.*, the mean of the daily quotations, are shown in the "Statistical Register".

Table 276.—Wholesale Prices of Agricultural Products, Sydney.

Comn	odity		1938.	1939,	1941.	1942.	1943.
Wheat (£.a.q.)* Flour (at Mill)† Bran Pollard Oats Maize Hotatoes (local) Hay— Oaten Lucerne Chaff— Wheaten			£ s. d. bush. 0 3 5½ ton. 9 5 4 6 5 0 6 5 0 bush. 0 3 10 9 16 2 6 12 11 6 14 3	£ s. d. bush. 0 2 63 ton. 12 6 1 4 10 0 4 12 0 0 bush. 0 2 9 0 4 43 ton. 13 3 0 7 14 1 5 11 3	£ s. d. bush. 0 3 11½ ton. 12 8 0 6 0 0 6 0 0 0 4 3½ ton. 5 19 4 8 7 11 5 15 6 5 14 6	£ s. d. bush. 0 3 111 ton. 12 8 0 6 0 0 6 0 3 bush. 0 3 23 0 6 32 ton. 16 1 11 9 5 0 8 9 6	£ s, d, bush, 0 3 11½ ton. 12 8 0 6 0 0 6 0 0 0 bush, 0 3 1 0 6 11 ton. 10 1 0 0 10 12 9 8 0 7
Com	modity	у,	1944.	1945.	1946.	1947.	1948.
Wheat (f.a.q.)* Flour (at Mill)† Bran Pollard Oats Maize  Potatoes (local) Hay — Oaten Lucerne Chaff— Wheaten			 £ s. d. bush. 0 3 11½ tou. 12 8 0 6 0 0 6 0 0 bush. 0 7 5½ ton. 17 4 6 7 14 4 9 4 2 8 18 2	£ s. d. bush. 0 3 11½ ton. 12 8 0 6 0 0 bush. 0 3 4½ 0 7 3 ton. 17 17 6 9 0 0 12 3 6 10 2 8	£ s. d. bush. 0 3 114 ton. 12 8 6 6 0 8 6 0 8 bush. 0 3 7 \$ ton. \$7 17 6  11 5 8 8 17 9	£ s. d. bush. 0 3 11½ ton. 13 0 11 6 13 8½ 6 13 8½ bush. 0 4 1½ 0 7 0½ ton. ‡8 18 11¼ 9 3 0 11 8 4	£ s, d. bush. 0 6 2½ ton. 16 4 2 8 10 4 kush. 0 4 3½ ton. 12 2 1 9 12 6 9 8 6

<sup>\*</sup> See comment below table. † Includes Flour Tax. ‡ Fixed wholesale price; subsidy was paid to retailers to provide lower retail prices. § Few or no quotations.

In the above table the prices shown for wheat are shippers' and millers' buying prices for f.a.q. wheat up to October, 1939, and from then onward the price quoted is that fixed by the Australian Wheat Board for wheat for flour for local consumption, on bases as noted on page 356 of this Year Book, to which reference should be made for details regarding wheat prices. As millers paid flour tax equal to about 11\frac{3}{4}d. per bushel the equivalent of approximately 4s. 11d. per bushel was paid for wheat consumed locally as flour in the years 1940 to 1947. The tax on flour ceased late in December, 1947.

The combined price variations since 1911 of agricultural produce in Sydney markets, weighted according to the average consumption in New South Wales in the three years 1911-13, are shown below. The prices in 1911 have been adopted as base and called 1000. The index, being weighted on the basis of consumption in New South Wales, is to be viewed rather from the standpoint of prices paid by consumers than of prices paid to producers. Compilation of the index numbers has been suspended but is to be resumed later on a revised basis.

Year.	Index Number	Year.	Index Number	Year	Index Number.	Yéar.	Index Number.
1911	1000	1919	1990	1927	, 1767.	1935.	1279
1912	1339	1920	2430	1928	1456	1936	1299
1913	1069	1921	1750	1929	1707	1937	1487
1914	1135	1922	1638	1930	1428	1938	1523
1915	1648	1923	1720	1931	1061	1939	1351
1916	1163	1924	1475	1932	1137	1940	1371
1917	1127	1925	1680	1933	1122	1941	1334
1918	1377	1926	1892	1934	1114	1942	1875

Table 277.—Wholesale Price Index Number-Agricultural Produce.

From 1921 to 1929 agricultural prices were high and relatively stable, apart from seasonal fluctuations. They fell rapidly (by 45 per cent.) between July, 1929, and March, 1931, and remained depressed until improving wheat prices brought an upward trend in the middle of 1935. The rise continued and the index number reached 1759 in July, 1938, though it fell again before the end of the year. There was no sustained increase in the years 1939 to 1941. Then potatoes and fodder became dear and the index number for the year 1942 was the highest since 1926.

## AGRICULTURAL MACHINERY.

The following statement shows the area cropped, the total value of the agricultural machinery used, and the value of such machinery per acre of crop, in divisions of the State in the years 1929-30 and 1940-41. The value of machinery relates to such of the farm machines and implements as are used for agricultural purposes as distinct from pastoral and dairying activities. Similar information is not available for later years, but particulars of various types of agricultural machinery on rural holdings in the years 1943 to 1948 are given in Table 235.

Value of Agricultural Machinery and Implements Aver. value of Machinery Area under Crop. per acre of crop. Division. 1929-30. 1940-41. 1929-30. 1940-41. 1929430. 1940~41. £ Acres. Acres. s. d. d. 8. 358,838 1,536,578 285,532 1,139,488 Coastal 4 Ð 1 4 5 8 615,793 1,544,381 Tableland ... 1,165,960 2 12 2 10 443,714 Western Slopes 2,609,461 3,268,413 4,937,540 5,189,874 1 17 10 1 11 9 Central Plains and Riverina 2,107,646 3,653,248 3,320,281 2,144,606 1 14 1 11 ß Western 16,095 14,745 59,687 88,719 3 14 6 0 4 Total 5,499,408 6,365,435 10,955,923 11,679,833 1 19 10 1 16

Table 278.—Agricultural Machinery, 1929-30 and 1940-41.

In the coastal and tableland district the areas under cultivation are small, including many small holdings highly developed for fruit-growing, dairying and market gardening; on the tablelands, slopes and plains the implements in use serve large areas under wheat and oats. In the Western Division there is a small area under irrigation.

## Agricultural Machinery Pools.

Agricultural machinery pools, financed by the Commonwealth Government, were formed during the war at Cowra, Guyra, Leeton, Bathurst and Batlow to acquire and operate agricultural machinery and implements which, with operators, were hired out to producers at charges covering costs of operation and administration, as indicated on page 438 of the 50th edition of the Year Book. Since disbandment of the War Agricultural Committees these pools, except that at Cowra, have been operated by local co-operative societies formed for the purpose.

The Government of New South Wales, through the Rural Industries Agency of the Rural Bank, has made advances since May, 1943, to rural co-operative societies (mostly butter factories) for the purchase of farm machinery, spare parts and stores, and the employment of operatives. The Government provided £100,000 for these advances in 1942-43 and £50,000 in 1943-44. Particulars of the number of societies operating under the State scheme and of the amount of advances are as follows:—

1944	. 1945.	1946.	1947.	1948.
Societies registered and				
operating at 30th JuneNo. 48	5 $63$	66	52	47
Total advances approved				
to 30th June £108,06	2 164,754	204,534	211,382	221,093

At 30th December, 1945, 72 societies were operating under this scheme.

Power-driven Machinery and Tractors on Farms.

Particulars of stationary engines used on farms in New South Wales were collected in 1930 and in each year since 1943 and particulars of tractors in 1930, 1937 and following years. The statistics reveal a substantial increase in mechanisation of farming activities.

At 31st March, 1943, there were 40,148 stationary engines in serviceable condition on farms, as compared with 24,367 in 1930. The number increased to 44,192 in 1945 and to 48,662 in 1948. The distribution of stationary engines in divisions was as follows:—

Date.	Coastal.	Tablelands.	Western Slopes.	Western Plains and Riverina.	Western Division,	Total N.S.W.
At 30th June, 1930	7,890	3,633	$\begin{array}{c} 7,210 \\ 11,018 \\ 11,754 \\ 11,922 \\ 12,446 \end{array}$	4,625	1,009	24,367
At 31st March, 1943	12,675	6,666		7,277	2,512	40,148
At 31st March, 1945	14,324	7,493		7,937	2,684	44,192
At 31st March, 1947	15,874	7,840		8,026	2,539	46,201
At 31st March, 1948	16,768	8,292		8,445	2,711	48,662

Table 279.—Stationary Engines on Rural Holdings.

In June, 1930, the number of tractors on rural holdings was 6,242, viz., 6,041 wheeled and 201 crawler type; in March, 1948, there were 20,258 tractors; 18,659 wheeled and 1,599 crawler type.

The following statement shows the number of holdings on which tractors were used and the number of tractors in use in various divisions of the State; particulars regarding the number of holdings on which tractors were used in 1930 and 1943 are not available:—

Division.	1930. 1939.		1946.		1947.		1948.		
Division.	Tractors.	Holdings.	Tractors.	Holdings.	Tractors.	Holdings.	Tractors.	Holdings.	Tractors
Coastal Tablelands N.W. Slopes C.W. Slopes S.W. Slopes N.C. Plain C. Plain Riverina Western	447 617 731 1,097 1,109 212 304 1,592	1,388 1,565 1,664 1,822 1,875 555 431 2,330	1,442 1,707 1,836 2,045 2,040 628 465 2,544 219	2,379 2,409 1,925 2,126 2,402 692 524 2,940 355	2,584 2,680 2,168 2,382 2,641 793 586 3,313 383	2,809 2,682 2,076 2,330 2,618 786 570 3,153 408	3,024 2,961 2,331 2,600 2,861 909 630 3,496 437	3,094 2,800 2,085 2,424 2,763 783 591 3,321 430	3,336 3,096 2,367 2,710 3,050 914 658 3,653 474
Total, N.S.W.	6,242	11,822	12,926	15,752	17,530	17,432	19,249	18,291	20,258

Table 280.—Tractors in Use on Rural Holdings.

The number of tractors per 100 holdings used mainly for agricultural and pastoral purposes was 8.5 in 1930, 17.8 in 1939, 21.4 in 1945, and 24.6 in 1946 but cannot be calculated for later years.

#### SHARE-FARMING IN AGRICULTURE.

A brief statement as to share-farming in New South Wales and the development of this system is given in the chapter "Rural Industries" on page 290.

#### Fertilisers.

Superphosphate is the fertiliser most extensively used in New South Wales, the soils of the wheat areas, particularly in the south, being generally deficient in phosphoric acid.

Natural manures are used very little except in market gardens. The quantity used in 1941-42—the latest information available—was 119,030 loads applied to 17,860 acres of crops, including 104,621 loads for the treatment of 13,196 acres in the coastal division.

## Use of Artificial Fertilisers—Government Assistance.

The conditions under which subsidy was paid by the Commonwealth Government to primary producers in connection with the use of artificial fertilisers in the years 1932-33 and 1934-35 to 1938-39 inclusive, are indicated on page 439 of the Official Year Book, No. 50.

To meet a marked increase in costs manufacturers were given a bounty under the Superphosphate Bounty Act, 1941 of 25s. per ton on superphosphate (22 per cent. phosphoric acid) sold by them on and from 1st July, 1941 and were required to reduce the price to users by same amount.

In later seasons the selling price was stabilised at its level in 1941-42, and under the Primary Producers' Assistance (Superphosphate) Act, 1943, manufacturers were compensated by subsidy, at rates related to production costs of each, for loss sustained in selling at the fixed price. The amount of bounty and subsidy paid in New South Wales was £98,391 in 1942-43 and subsidy was £163,813 in 1943-44, £303,506 in 1944-45, £398,953 in 1945-46, £398,105 in 1946-47, and £436,865 in 1947-48.

The manufacture, distribution and consumption of superphosphate was controlled by the Superphosphate Industry Committee, appointed under National Security Regulations, until 31st December, 1947, and subsidy was paid on its recommendation. From 1st January, 1948, subsidy arrangements were administered by the Department of Commerce and Agriculture.

The Commonwealth Government also obtained nitrogenous fertilisers which it supplied at prices below cost to producers of certain crops. The cost borne by the Commonwealth in respect of New South Wales in this connection was £33,597 in 1946-47 and £24,640 in 1947-48.

'In New South Wales official control of the distribution of artificial efertilizers has ceased, but the supply of sulphate of ammonia is allocated to the States on a quota basis by the Commonwealth Government.

## Artificial Fertilisers—Area of Crops Treated.

The following table shows the area of crops treated with artificial fertilisers and the proportion of such area to total area of crops, also the quantity of superphosphate and other artificial manures used in various years since 1920-21:—

		Crops T	reated.	Artificial Manures Used.		
Season.	Total Area of Crops.	Area.	Proportion of total Area of Crops,	Super- phosphate,	Other.	
1920-21 1925-26 1929-30 1930-31 1931-32 1935-36 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1946-47	acres. 4,467,109 4,543,541 5,500,946 6,811,247 5,108,554 5,735,681 6,470,160 7,049,357 6,381,351 6,374,354 6,920,661 5,297,813 4,797,385 5,044,792 6,087,566 6,511,493 7,168,068	acres. 1,991,736 2,625,397 3,887,963 4,588,729 2,248,180 8,557,512 4,254,150 4,670,693 3,882,344 8,928,247 8,516,405 2,490,668 2,013,262 2,067,437 2,913,654 3,643,417	per cent. 44.6 57.8 70.7 66.6 44.0 62.0 65.8 66.3 60.8 61.6 59.4 47.0 42.0 41.0 47.9 56.0 56.9	tons. 42,656 74,936 113,346 119,911 59,304 92,117 120,901 131,116 109,516 107,190 94,176 62,351 47,363 45,199 66,617 88,702	tons. 7,258 10,542 12,827 11,661 9,811 14,619 16,587 17,530 16,090 15,682 12,778 16,290 22,430 22,430 20,538 20,546 24,016	

Table 281.—Crops Fertilised with Artificial Manures.

The decline in the use of fertiliser in the war years was due to scarcity of supplies and of farm labour and restriction of wheat growing.

## Artificial Fertilisers Used on Crops.

The following table shows the area of crops treated with artificial fortilisers in divisions of the State and the quantity of such fertilisers used in the last two seasons; particulars regarding the use of fertilisers on pastures are not included (see page 291).

Table 282.--Artificial Fertilisers Used on Crops.

	,	1946-4	7.		<u> </u>	1947-4	18,	·	
		Artifi	cial Manu	res.		Artificial Manures,			
Division.	Total		Quantity used.		Total		Quantity used.		
	Aren of Crops,	Area of Crops Treated.	Super- phos- phate.	Other.	Area of Crops.	Area of Crops Treated.	Super- phos- phate.	Other.	
Coastal, Tablelands Western Slopes Central Plains Riverina Western	acres. 366,468 675,580 3,416,093 610,716 1,423,903 18,733	acres. 123,101 295,145 1,932,190 199,116 1,085,266 8,599	tons, 7,752, 9;806 41,528 3,341 25,730 545	tons. 17,569 1,158 257 17 4,407 608	acres. 371,458 747,903 3,841,968. 720,334 1,467,720 18,685	acres. 119,415 389,972 2;211,401 219,252 1,177,557 7,636	tons, 7,505, 11,206 52,141, 3,987 30,999 586	tons, 17,795 1,235 250 6 3,876 61	
Total, N.S.W.	6,511,493.	3,643,417	, 88,702	24,016	7,168,068	4,075,233	106,424	23,77	

Separate details have been collected since 1943-44 regarding superphosphate, and other artificial manures used on crops of wheat, vegetables and fruit. Particulars for the last two seasons are shown below:—

Table 283.—Artificial Fertilisers Used on Various Crops in Divisions.

		1940	i–47.		1	1947	-48.	
Particulars.	Whea	t. Veget-	Fruit.	Other.	Wheat.	Veget- ables:	Fruit,	Other.
*Coastal—							] <u>-</u>	
	cres 3,16	35 19,482	21,441	79,013	2,619	18.476	21.822	76,498
		6 2,345	730	4,572	108	2,151	722	4,524
Other Ant Tout	,, .	5 6,946.	8:774.	1,845	8	6,245	9,374	2,168
Tablelands-	"	-   -,	,	_,	-	- 31	,,	j. –,= · · ·
Area Treated a	cres 192,9	60 25,497	4.788	71,910	283,787	19,825	5.024	81,336
	ons 4.61	7 1,823	297	3,068	5,964	1,471	306	3.465
Other Art. Fert	, ' '	410	627	100	10	387	689	147
Western Slopes-								
	cres 1,815,12	29 2,450	1,732	112,879	2,060,913	1,326	2,706	146,456
	ons 38,1		94	3,074	47,333	135	144	4,530
Other Art. Fert ,	,, 1	06   85	44	21	37	8	50	82
Central Plains -					II			
	cres 191,69		11	7,306	210,627	28	6	8,591
	ons 3,18		1.	149	3,790	7		189
Other Art. Fert ,	,,	2 4	1	10	2			3
Riverina—					II			
	cres 986,5		17,369	77,926	1,036,764	2,038	16,855	121,900
	ons   22,16		1,183	1,863.	26,343	315	1,146	. 3,195
Other Art. Fert ,	,,   4	1 395	3,488	483	34	281	3,026	538
Western Division -				1 001		F 0.1	0.740	
	icres 2,44		3,982	1,661	1,773	521	3,768	1,574
	ons þ	96	324	71	38	115	375	58
Other Art. Fert ,	,,	98	514	· 1	3	171	438	1
New South Wales-								
	cres[3,191,93]	39 51,460	49,323	350,695	3,546,483.	42,214	50,181	436,355
	ons 68.27		2,629	12,797	83,576	4,194	2,603	15,961
OAT ALL DIALE	,, 1		13,448	2,460	94	7,164	13,577	2,939

The average quantity of artificial fertiliser applied to crops of vegetables was 5 cwt. per acre in 1946-47 and 5.4 cwt. in 1947-48, including nearly 2 cwt. of superphosphate in each season. In fruit growing the approximate average in these seasons was 6.5 cwt. to the acre, including a little more than 1 cwt. of superphosphate.

In wheat growing superphosphate is the only fertiliser used; the average quantity per acre was 48 lb. in 1946-47 and 52\frac{3}{4} lb. in 1947-48, compared with about 56 lb. per acre before the war. Tests of manuring conducted on the farmers' experiment plots indicate that benefits derived from the application of superphosphate to wheat-lands are most marked in the southern portion of the wheat-belt, viz., the South-western Slopes and the Riverina. The beneficial results gradually diminish in the central portion of the wheat-belt and least advantage is gained in the heavier and phosphate bearing soils of the north-western districts. The results may be affected, however, by the fact that in the south fallowing is more common than elsewhere. The use of superphosphate on wheat crops in the Northern, Central and Southern sections of the wheat-growing divisions is illustrated below:—

Table 284.—Use of Superphosphate on Wheat Areas in Divisions.

		Wheat Crop Superp		Superphosphate Used.		
Tablelands, Slopes and Plains.	Area under Wheat.	Area,	Proportion to area under Wheat.	Total,	Average Per Acre Treated.	
	acres.	acres.	per cent.	tons.	lb.	
			1946-47.			
Northern	808,470	18,726	2.3	466	55.7	
Central	1,636,710	1,109,902	67.8	21,423	43.2	
Southern	2,306,060	2,057,701	89.2	46,223	50.3	
			1947-48.			
Northern	1,054,578	23,038	$1  2 \cdot 2$	553	53.8	
Central	1,861,548	1,303,510	70.0	27,189	46.7	
Southern	2,418,054	2,215,543	91.6	55,688	56.3	

Superphosphate was used as fertiliser on 66.9 per cent. of the total area under wheat in 1946-47 and 66.2 per cent. in the following season. The proportion was only 2 per cent. in the northern wheat districts and it ranged to 92 per cent. in the south.

## DATES OF PLANTING AND HARVESTING.

The usual periods of planting and harvesting the principal crops of the State in the main districts in which they are grown are as follows:—

	Most usual Months of-						
Crop.	Planting.	Harvesting.					
Wheat	April-June	November-January					
Maize	September-December	January-July.					
Oats	March-May	October-December.					
Barley	Мау	October-December.					
Rice	October	April-May.					
Potatoes—early	July-August	October-January.					
,, late	November	February-August.					
Sugar-cane	September	July-November.					
Tobacco	November-December	March-April.					
Broom Millet	September-November	January-April.					

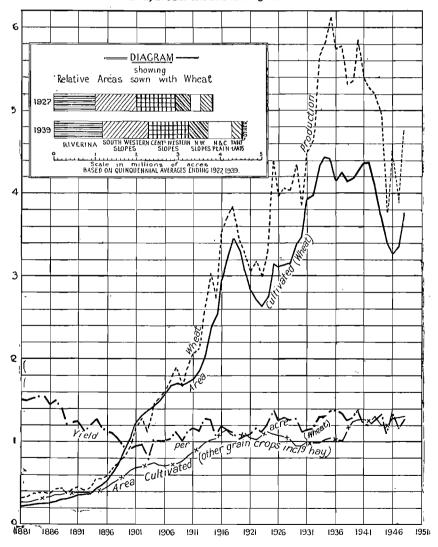
## WHEAT.

Wheat is the staple agricultural product of New South Wales. It is the principal product on a large proportion of the rural holdings of the State, and nearly three-quarters of the average area under crop is devoted to wheat.

The experience in wheatgrowing in the State over a period of almost seventy years is illustrated graphically below. An inset shows the distribution of the wheat lands in statistical divisions in 1927 and 1939.

#### WHEAT GROWING IN NEW SOUTH WALES.

## Area, Production and Average Yield.



The graph has been prepared on the basis of averages of the five seasons ended in each year as shown. The numbers at side of graph represent millions of acres; tens of millions of bushels, and for yield of wheat per acre, tens of bushels.

The mild climate of New South Wales makes it possible to work the soil on scientific lines throughout the year, and paddocks are used for pastoral purposes after the crop has been harvested. The time of sowing varies according to district and seasonal conditions, but is seldom earlier than March or later than July. Harvesting generally begins in November and may extend until February.

Relatively few farms are devoted exclusively to the cultivation of wheat. Special data indicating the extent to which wheat-growing is combined with the depasturage of sheep, with dairy farming and with the raising of pigs are given on page 271 of this volume.

## THE WHEAT BELT.

A description of the nature and extent of the wheat belt of New South-Wales was published on pages 573 and 574 of the Year Book for 1928-29 and the approximate current limits of commercial wheat-growing are defined in the diagrammatic map on page 10 of this edition.

The extension of the limits of wheat-growing in New South Wales formed the subject of special reports by the Government Statistician in 1905, 1913, and 1923. Since the year 1923 there has been little change in the eastern and western limits of wheat growing in New South Wales, but pastoral activities such as sheep farming have replaced wheat farming on appreciable areas on the western fringe of the wheat belt between the Lachlan and Murrumbidgee Rivers.

## GOVERNMENT ASSISTANCE TO WHEATGROWERS.

Details of the measures taken by the Commonwealth and State Governments to assist wheatgrowers during the pre-war agricultural depression and the grants distributed in the years 1931-32 to 1935-36 are given in earlier issues of this Year Book. The money for these grants was obtained principally from the tax on flour used for local consumption. Drought relief grants from funds provided by the Commonwealth and the State jointly were distributed to cereal growers in New South Wales in respect of crops which failed or gave very light yields in 1945-46 and 1946-47 and in the latter year, of land prepared for sowing in 1946 but not sown because of drought. Farmers (mainly wheatgrowers) were paid £130,184 for the season 1945-46 and £1,490,201 for the following season.

#### AUSTRALIAN WHEAT STABILISATION.

In 1938 prices fell sharply and a joint Commonwealth and State equalisation plan was adopted to ensure to wheatgrowers a payable price. The principles of the plan were a fixed home-consumption price (5s. 2d. a bushel) and an excise duty (flour tax) equal to the difference between the millers' price of flour and the home-consumption price. Proceeds of the tax were paid from the Wheat Stabilisation Fund to the States and distributed to the growers. This plan was superseded by war-time arrangements and its operation was suspended until six months after the war.

#### War-time Wheat Stabilisation Plan.

The war-time stabilisation plan provided under National Security regulations made in November, 1940 was applied in each of the seasons 1942-43 to 1947-48. Under it wheat farms were registered and the areas that might be sown on them in each season were fixed in licenses issued by the Wheat Industry Stabilisation Board, but though licensing continued no acreage restriction was required in this State after 1944-45. There was a fixed guaranteed price to farmers, all wheat was required to be delivered to and marketed by the Australian Wheat Board, and proceeds of the Flour tax continued to be used to assist wheatgrowers. Further particulars of the plan, including the constitution of the Wheat Industry Stabilisation Board and of the Australian Wheat Board are given on page 461 of the 50th edition of the Year Book. Information regarding the Commonwealth Flour Tax, including rate of tax, is given on page 464 of that volume.

Particulars of the number of licences issued (including those to share-farmers) and the area of wheat for grain in New South Wales permitted to be sown thereby in each season 1941-42 to 1947-48 are as follows:—

1941-42, 1942-43, 1943-44, 1944-45, 1945-46, 1946-47, 1947-48,

The Commonwealth Wheat Tax (Repeal and Refund) Act, 1948, provides for the refund to growers of amounts contributed to the Wheat Stabilisation Fund in respect of the seasons 1945-46 and 1946-47 by way of tax under the Wheat Tax Act, 1946 (thereby repealed) levied on wheat exported in conformity with the war-time stabilisation plan. Refund of the 1945-46 contributions, equal to 1s. 1½d. a bushel, was effected in December, 1948, and of those of 1946-47 (10½d. a bushel) in May, 1949.

## Post-war Wheat Stabilisation Plan.

Commonwealth and State Ministers conferred in July, 1948, and agreed upon a plan for post-war stabilisation of the wheat industry not requiring control of production other than State regulation of wheat-growing in marginal areas. A majority of the growers in each of the four main wheat producing States adopted the proposals at subsequent polls, with 8,951 (58.5 per cent.) of New South Wales and 29,912 (64.6 per cent.) of the Australian growers voting in favour of the plan.

The plan provides for a Commonwealth Government guaranteed price for wheat grown and delivered by wheatgrowers to the Australian Wheat Board, or organisations authorised by a State to act as its agents, in each season 1947-48 to 1952-53 and for the establishment of a Stabilization Fund to receive the proceeds of a tax on such wheat exported when the export exceeds the guaranteed price. The guaranteed price is to be related to costs of producing wheat in accordance with an index of production costs and was 6s. 3d. a bushel, f.o.r. ports, bulk basis in 1947-48, 6s. 8d. in 1948-49 and 7s. 1d. in 1949-50. It does not apply to exports in excess of 100 million bushels from any one season's crop. When the export exceeds

the guaranteed price the rate of tax is 50 per cent. of the difference between the two prices with a maximum of 2s. 2d. a bushel. If the export falls below the guaranteed price the difference will be met from the Stabilization Fund or, if the fund is exhausted, from Commonwealth Consolidated Revenue. Whenever the financial prospects of the fund are favourable and so justify, refunds of tax in respect of the oldest contributing pool will be considered by the Commonwealth.

The Wheat Industry Stabilisation Act and the Wheat Export Charge Act, passed by the Commonwealth Parliament to give effect to these provisions, came into operation on 25th November, 1948.

On the same date the respective State Wheat Industry Stabilisation Acts came into operation. These authorise the Australian Wheat Board to act as provided in the Commonwealth Act in acquiring and disposing of wheat and wheat products and in all related matters, provide for the licensing of any person, firm, company or State authority to receive wheat on behalf of the Board, and for the fixation of the home-consumption price of wheat at the same price as that guaranteed growers by the Commonwealth. Under the New South Wales Act a State Wheat Committee of seven members (four elected by wheat-growers in the State and three nominated by the Minister) is established to advise the Minister on wheat matters, and to nominate from its members the growers' representatives on the Australian Wheat Board, and the Minister is empowered to control wheat-growing on specified marginal areas in the State.

#### Australian Wheat Board.

The Australian Wheat Board, as re-constituted under the Wheat Industry Stabilisation Act, 1948, functioned as from 18th December, 1948. It consists of a chairman, a person engaged in commerce with experience in the wheat trade, a representative of flour mill owners and a representative of employees (all appointed by the Minister) and seven representatives of wheat-growers (two from each New South Wales and Victoria and one from each Queensland, South Australia and Western Australia) nominated by and from amongst the members of the respective State Wheat Board, if any, or otherwise, after election by the wheat-growers in the State. Subject to ministerial direction the Board may appoint any number of its members to be an executive committee and empower it to discharge any of its powers or functions. It may appoint licensed receivers (and must appoint as such those licensed under the State Acts) and oversea agents.

The powers of the Board extend to the acquisition of wheat, wheat products, corn sacks, jute and jute products, the sale of these, arrangements for the gristing of wheat and disposal and sale of resulting products, the control and management of all matters connected with the handling, storage, protection, treatment, transfer or shipment of wheat and other things in which it deals, and the marketing of wheat interstate and in the Territories of the Commonwealth and in connection with or incidental to any international agreement to which Australia may become a party.

#### INTERNATIONAL WHEAT AGREEMENT.

At a special session of the International Wheat Conference in Washington on 6th March, 1948, an international wheat agreement to regulate world trade in wheat was drawn up to which 36 wheat importing countries and three of the four major wheat exporting countries (the United States, Canada and Australia) subscribed. Argentina was not a party. This agreement was subject to ratification by the respective Governments, but the United States failed to ratify it before 31st July, 1948, and in consequence, the agreement lapsed.

In March, 1949 another attempt to evolve an acceptable world wheat agreement was being made in a further session of the International Wheat Conference held in Washington at which both Argentina and the U.S.S.R. were represented.

## DEVELOPMENT OF WHEAT GROWING.

Wheat growing as an industry in New South Wales expanded steadily between 1890 and 1930. The area sown first exceeded 1,000,000 acres in 1897-98 and 2,000,000 acres in 1904-05 and was doubled during the next ten years. It is estimated that an area of between 20,000,000 acres and 25,000,000 acres in the principal wheat districts is suitable for cultivation, and the maximum area actually sown with wheat was 5,674,000 acres, of which 5,135,000 acres were harvested for grain, in 1930-31.

Of the 51 harvests recorded in the following table, average yields have been as follow: 4 under 5 bushels per acre, 11 between five and ten bushels per acre, 26 between ten and fifteen bushels per acre, and 10 over fifteen bushels per acre. From 1928-29 to 1930-31 and in 1937-38 and later years areas with a fed-off value of less than 15s. per acre were classified as failed, and included with the areas sown for hay or grain. The value adopted was 7s. 6d. per acre in 1931-32 and 10s. per acre in the years 1932-33 to 1936-37.

The area under wheat for grain decreased from 4,650,872 acres in 1938-39 (then next to 1930-31 and 1932-33 the largest ever sown) to 2,693,302 acres in 1943-44 (33 per cent. below the average for 1934-35 to 1938-39), due at first to lower prices, and later, to seasonal difficulties, scarcity of fertiliser and farm labour and to war-time control. Thereafter sowings increased again and in 1947-48 recovered to 5,043,017 acres to exceed that in all previous seasons other than 1930-31.

In some of the war years the smaller area sown was offset in part by high yields per acre. The season 1944-45 was extremely poor and that of 1946-47 even more adverse, and the average yields per acre were very light, that in 1946-47 being the lowest since 1919-20. Conditions were exceptionally favourable in 1947-48 when the yield per acre (18.9 bushels) and the harvest (95,227,000 bushels) each easily established a new record. In that season the yield per acre averaged 18.5, 18.2, and 19.6 bushels in the northern, central and southern sections of the wheat belt respectively.

The following statement shows the area under wheat for grain and for hay, together with the total production, average yield per acre, and quantity exported since 1897-98, the first season in which there was a surplus of wheat for export:—

Table 285.—Wheat—Area, Production, and	Exports.
--	----------

Season'.	:	Area uud	er Wheat.		Yi	eld.		yield per re.,	Wheat and Flour exported Oversea in cal- endar pear following Harrest,
	For Grain,	For Hay.	Fed-off.*	Total.	Grain.	Hay.	Grain,	Hay.	Wheat Flour ex Oversion i endar a
		ľ		I	thous.	thous.	[ ]	l . I	thous.
1897-98	aores. 993;350	1 213,720	aores.,	acres,	bushels.	tons.	bushels.	tons.	bushels.‡.
1898-99	1,319,503	312,451	1	1,207,070 1,631,954	10,560 9,276	182 177	10·6· 7·0	-85	582
1899-00	1,426,166	414,813	' +	1,840,979	13,604	341	9.5	; ·57 ·82	437
1900-01	1,530,609	332,143		1,862,752	16,174	348	10.6	1.05	865 4,788
1901-02	1,392,070	312,858	†	1,704,928	14,809	287	10.6	92	2,914
1902-03	1,279,760	320,588	†	1,600,348	1.585	76	1.2	\	154
1903-04	1,561,111	286,702	Ť	1,847,813	27,334	452	17.5	1.58	9,772
1904-05	1,775,955	284,367	†	i 2,060,322	16,464	207	9.3	.73	5,661
1905-06	1,939,447	313,582		2,253,029	20,737	305	10.7	97	5,338
1906-07 1907-08	1,866;253 1,390;171	316,945	16,744	2,199,942	21,818	408	11.7	1.27	6,246
1908-09	1,394,056	365,925 490,828	129,813 104,202	1,885,909 1,989,086	9;156 15,483	198	6.6	.54	962
1909-10	1,990,180	380,784	5,825	2,376,789	28,532	427 566	11·1, 14·3	·87 1·49	4,866
1910-11	2,128,826	422,972	61,458	2,613,256	27,914	468	13.1	1.11	$12{,}111 \\ 14{,}423$
1911-12	2,380,710	440,243	80,731	2,901,684	25,088	423	10.5	96	10,172
1912-13	2,231,514	704,221	31,557	2,967,292	32,487	780	14-6	1·ĭĭ	17,116
1913-14	3,205,397	534,226	23,393	3,763,016	38,020	588	11.9	<u>1</u> .10	20,038
1914-15	2,758,024	569,431	815,561	4,143,016	12,831	355	4.7	.62	785
1915-16	4,188,865	879,678	53,702	5,122,245	66,765	1,212	15.9	1.38	23,514
1916-17	: 3,806,604	633,605	58,101	4,498,310	36,598.	814	9.6	1.28	21,262
1917–18 1918–19	$\begin{bmatrix} 3,329,371 \\ 2,409,669 \end{bmatrix}$	435,180	63,885	3,828,436	37,712	485	11.3	1.11	12,650
1919-20	1,474,174	613,544 716,770	$204,161 \\ 877,596$	3,227,374 3,068,540	18,325	517	7\6 3\0	•84	19,694
1920-21	3,127,377	520,555	15,420	3,663,352	$4,388 \\ 55,625$	355 822	17.8	.49 1.58	$427 \\ 41,746$
1921-22	3,194,949	467.368	24,735	3,687,047	42,767	575	13.4	1.23	21,798
1922-23	2,942,857	598,184	350,968	3,892,009	28,668,	649	9.7	1.09	8,904
<b>1923</b> ⊢24	2,945,335	695,622	283,305	13(924,262	33,176	703	11.3	1.01	11,976
1924-25.	3,550,078,	388,479	21,647	3,960,204	59,767	537	16.8	1.38	38,741
1923-26	2,925,012	449,803	286,552	3,661,367	33,806	444	11.6	.99	16,951
1926-27 1927-28	3,352,736	311,213	36,160	3,700,109	47,541	395	14.2	1.27	18,697
1927-28 1928-29	3,029,950 4,090,083	369,960 375,270	622,385	4,022,295	27,042	343	8.9	93	15,516
1929-30	3,974,064	381,071	19,605 48,914	4,484,958 $4,404,049$	$49,257 \ 34,407$	390 311	$12.0 \\ 8.7$	•04	21,063
1930-31	5,134,960	520,993	17,992	5,673,945	65,877	678	12.8	·82 1·30	$14,621 \\ 44,122$
1981-32	3,682,945	292,234	20,008	3,995,187	54,966	376	14.9	1.29	38,769
1932-33	4,803,943	290,556	24,535	5,119,034	78,870	396	16.4	1.36	40,779
1933-34	4,584,092	324,129	30,561	4,938,782	57,057	385	12.4	1.19	21,503
1934-35	3,892,768	271,272	26,017	4,190,057	48,678	342	12.5	1.26	30,471
1935-36	3,851,373	224,632	49,651	4,125,656	48,822	267	12.7	1.19	25,546
1936-37	3,982,864	293,854	28,417	4,305,135	55,668	352	14.0	1.20	28,450
1937–38 1938–39	4,464,664	348,339	28,491	4,841,494	55,104	350	12.3	1.00	26,360
1989-40	4,650,872	559,437 264,289	35,993 35,852	5,246,302	59,898 76,552	612 373	12·9 17·5	1.09	28,955
1940-41	4,453,963	354,833	57,181	4,680,686 4,865,977	23,933	271	5.4	1·41 0·76	36,604
1941-42	3,968,758	. 346,261	26,621	4,341,640	48,500	315	1212	0.70	12,586 8,868
1942-43	3,032,946	287,470	66,061	3,386,477	51,693	373	17.0	1.30	6,903
1943-44	2,603,302	198,066	83,700	, 2,975,068	47,500	250	17.6	1.28	14.238
1944-45	2,844,804	279,120	50,334	3,174,258	17,134	183	6.0	0.65	3,395
1945-46	3,773,901	389,918	49,612	4,213,431	62,520	499	16.6	1.28	21,467
1946-47 1947-48	4,474,894	263,557	34,527	4,772,978	15,682	145	3.5	0.55	7,703
£341-40	5,043,017	278,361	33,791	5,355,169	95,227	414,	18.9	1 1 49	53,688

<sup>\*</sup> Includes area sown for green food. In 1927-28 and previous years all areas fed-off were included in this column. In 1928-29 and subsequent year, areas with an estimated fed-off value of less than that indicated on page 339 were treated as having failed entirely, and the acreage, was allocated to grain or hay according to the purpose for which sown.

#### WHEAT DISTRICTS.

The principal wheat-producing divisions of the State are the Riverina, the south and central-western slopes with the north-western slopes division next in order. Large areas are sown also on the central plains and northern tablelands. The statistical divisions of New South Wales are shown on

<sup>†</sup> Information not available.

<sup>‡</sup> Flour has been expressed at its equivalent in wheat.

the map as the frontispiece of the Year Book. The relative areas sown with wheat in five-year periods ended in 1927 and 1939 in divisions are illustrated by inset to the graph on page 335. The average area sown for grain and the average yield in divisions for the period of ten years 1937-38 to 1946-47 are shown in the following summary:—

Table 286 .- Wheat Area and Production -- Average, 1937-38 to 1946-47.

District,	t. Northern.		Ce	ntral.	Sou	ithern.	Total.		
Coastal Tableland Slopes Plains Western Division Total	261.820	bus, 174,153 6,722,599 3,057,232  9,953,984	211,077 877,167 241,099	bus. 3,191;808 10,990,907 1,473,340  15,656,055	3,019 876,908 877,872	9,464,122	acres. 4,196 227;564 2,255,508 1,380,791 5,811 3,873,870	bus, 54,80 4 8,414,599 28,366,531 13,994,094 20,992 45,851,620	

Although the proportions vary seasonally, approximately 45 per cent. of the area sown for grain was in the southern districts, 35 per cent. in the central districts, and 20 per cent. in the northern districts. Thus the wheat belt is divided into three portions. The northern normally receives the greater part of its rainfall in the summer, and the southern in the winter; the rainfall of the central districts is non-seasonal in character. Differences of soil, geographical features, cultural methods, and other factors play a considerable part in determining the yields of the various divisions.

Of the total acreage of wheat for grain in 1947-48, 99.8 per cent. was within the main wheat belt, with 19.8 per cent. in the northern, 34.7 per cent. in the central and 45.3 per cent. in the southern section thereof.

Wheat production in New South Wales attained a record in 1947-48 although the area of wheat for grain in that season was not quite as large as in 1930-31. The distribution of holdings growing wheat for grain in districts and the area under wheat for grain classified according to the quantity of wheat produced on each holding in 1947-48 was as follows:—

Table 287.—Holdings with Wheat for Grain; Holdings and Area in Production Series, 1947-48.

- 1		Quantity of Wheat Harvested on Holding (in bushels).									
	Under 1,500.	1,500 to 2,999.	3,000 to 5,999.	6,000 to 8,999.	9,000 or more.	Total.					
			NUMBER C	F HOLDINGS.		·					
	96 1951 11225 11366 24 3,662	13 616 809 1,201 5	8 1,518 2,711 2 6,098	3 !504 !1,075 !1,551 1	620 1/140 1,383 1	120 3,550 5,767 8,212 33 17,682					
1.		AREA FROM	WHICH WHE	AT WAS PROD	UCED (ACRES	).					
	3,036 68,749 77,158 85,102 3,403	1,405 105,674 :138,009 :181,715 1,230	1,330 226,450 408,723 .648,133 550	1,110 /189,657 /414,236 /541,986 /600	405,813 710,837 832,611 1,000	6,881 996,343 1,748,463 2,284,547 6,783 5,043(017					
		1951 1;225   1;366 24   3;662   3,036   68;749   77;158   85;102   3,403	1951   616     1,225   809     1,366   1,201     24   5     3,662   2,644     3,036   1,405     68,749   105,674     77,158   138,009     85,102   181,715     3,403   1,230	96 13 88 1,951 616 1859 1,225 809 1,518 1,366 1,201 2,711 24 5 2,644 5,098  AREA FROM WHICH WHE 3,086 1,405 1,330 68,749 105,674 2,226,450 77,158 138,009 408,723 85,102 181,715 946,133 3,403 1,230 550	1951   616   1859   1504   1,125   809   1,518   1,075   1366   1,201   2,711   1;551   1,551   24   5   2   1   1;551   1,075   1,000	96					

<sup>\*</sup> Tablelands, Slopes and Central Plains.

The average area of wheat for grain per holding in this year was 57 acres in the Coastal division, 204 acres in the Western division and 281, 303, and 278 acres in the northern, central and southern sections, respectively, of the main wheat belt.

The statistical divisions with wheat-growing holdings in the greater numbers in 1947-48 were, in order, the South-western Slopes, the Riverina, the Central-western Slopes and the North-western Slopes. Arranging the divisions in the recognised wheat districts, holdings with wheat for grain were most numerous in the southern section, where there were 8,212 holdings (46.4 per cent. of those in the State) of which 6,458 had areas of from 50 to 499 acres of wheat, followed by the central section where of 5,767 holdings, 4,039 were in that acreage range. In the northern section the respective numbers were 3,550 and 2,541.

The following statement shows the average yield per acre in divisions in recent seasons:—

		Area Sown for Grain.		Yield of Grain.		Yield of Grain per Acre.						
Division,	Average 1937-38 to 1946-47.	1947-48.	Average 1937–38 to 1946–47.	1947–48.	Average 1937–38 to 1946–47.	-42.					1946 -47.	
	1	ſ	thous.	thous.						l	1	1
	acres,	acres.	bus.	bus.	bus.		bus.			bus.	bus.	bus.
Constal	4,196	6,881	55	103	13.1	11.5	18.2	18∙6		17.9		15.0
*Northern	776,721	996,343	9,954	18,386	12.8		14.7			18.9	1.5	18.5
*Central	1,329,343	1,748,463	15,656	31,871	11.8	12.0	17.4			19.9	1.7	18.2
*Southern	1,757,799	2,284,547	20,166	44,816	11.5	11.3	18.1	19.6	2.5	13.1	5.5	19.6
Western	5,811	6,783	21	51	3.7	0.9	8.1	1.6		2.0	2.6	7.5
Total	3,873,870	5,043,017	45,852	95,227	11.8	12.2	17.0	17.6	6.0	16.6	3.5	18.9

Table 288.-Wheat Areas and Yields per Acre.

Generally speaking, the use of fertilisers and the practice of fallowing are most extensive in the southern districts, where the average yield is usually higher than the general average for all districts. This is due in a large part to the more dependable nature of the winter rains. In several recent years however, severe drought prevailed in these districts, causing the ten-years average to fall below that of other districts.

#### SIZE OF WHEAT AREAS.

The following table illustrates the development of wheat-growing since 1920-21 in respect of number of holdings and average size of areas sown per holding:—

Table 289.—Number and	Average Area	of `	Wheat	Farms.
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***	Whe	at sown for and Green		Holdings on which wheat was sown	W.	heat for Gra	ln.
Year.	Holdings. Total Area Average Area productions with Wheat. Average Area production with Wheat.		Holding devoted	only for hay or for green food.†	Holdings.	Area Sown for Grain.	Average area per Holding.
	No.	acres.	acres.	No.	No.	acres.	acres.
1920-21	17,790	3,663,352	206	2,132	15,658	3,127,377	200
1925-26	17,074	3,661,367	214	2,797	14,277	2,925,012	205
1930-31	18,171	5,673,945	312	1,247	16,924	5,134,960	303
1935–36	17,220	4,125,656	240	1,297	15,923	3,851,373	242
1938-39	19,768	5,246,302	265	2,118	17,650	4,650,872	264
1939-40	19,023	4,680,686	246	1,911	17,112	4,380,595	256
1940-41	18,400	4.865.977	264	1,780	16,620	4,453,962	268
1941-42	18,218	4.341.640	238	*	<b> </b> '*	3,968,758	•
1942-43	18,267	3,386,477	185	2,821	15,446	3,032,946	196
1943-44	17,172	2,975,068	173	2,351	14.821	2.693,302	182
1944-45	18,186	3,174,258	175	3.395	14,791	2,844,804	192
1945-46	19,948	4,213,431	211	3,606	16,342	3,773,901	231
1946-47	18,571	4,772,978	257	1,907	16,664	4,474,894	269
1947-48	19,594	5,355,169	273	1,912	17,682	5,043,017	285

<sup>\*</sup> Not available.

<sup>\*</sup> Tablelands, Slopes and Central Plains.

In 1938-39 more farmers grew wheat than in any season of the preceding two decades and the average wheat area per holding was also high. Then war-time restriction of wheat growing reduced the number of growers and the average area, but re-expansion began in 1944-45 and in 1947-48 wheat for grain was grown on a record number of holdings and the total area sown with wheat, that sown for grain, and the average area per holding in each case was second only to that of 1930-31.

Particulars of wheat holdings in area series and wheat crops in production series up to 1940-41 were published in earlier issues of the Year Book. Corresponding information was not ascertained in respect of later years until 1947-48 and the particulars for that year and those of ten years earlier are given in the appended table:—

Acreage of1937-38.				1947–48.					
Wheat for Grain (Area Series) Holdings Whe		Area of Wheat for Grain.	Wheat Produced.	Average Yield per acre.	Holdings	Area of Wheat for Grain.	Wheat Produced.	Average Yield per acre.	
acres, 1-49 50-299 300-499 506-999 1,000-1,999 2,000 or more	No. 2,214 9,309 3,788 1,717 214 30	acres. 48,446 1,563,376 1,399,747 1,100,126 265,471 87,498	bushels. 649,881 21,916,692 16,241,097 11,963,838 3,054,468 1,278,024	bushels. 13·4 14·0 11·6 10·9 11·5 14·6	No. 1,952 8,560 4,547 2,333 264 26	acres. 42,184 1,455,463 1,673,768 1,470,454 324,510 76,638	bushels. 700,746 28,203,726 31,776,552 27,307,827 5,979,423 1,258,521	bushels. 16.6 19.4 19.0 18.6 18.4 16.4	
Total	17,272	4,464,664	55,104,000	12.3	17,682	5,043,017	95,226,795	18.9	

Table 290.—Holdings with Wheat for Grain in Area Series.

In the table, farms growing wheat for grain are divided somewhat arbitrarily into six classes graded according to the size of the area under On holdings with less than 50 acres, wheat growing may be deemed to be merely a subsidiary farm activity. In 1947-48 these numbered 1,952 or 11 per cent. of the total compared with 2,214 or 12.8 per cent. in 1937-38. On holdings having 50 to 299 acres under wheat for grain the farmers probably depend substantially, in some cases wholly, upon wheat growing for their livelihood, and in 1947-48 there were 8,560 holdings, or 48.4 per cent. in this group compared with 9,309 or 53.9 per cent. in 1937-38. On holdings where 300 or more acres were used for wheat for grain it would be usual for hired labour to be employed throughout the season, or for more than one grower to be concerned. Holdings. in this category grew in number from 5,749 in 1937-38 to 7,170 in 1947-48, representing 33.3 per cent. and 40.6 per cent. respectively of all holdings in those seasons. Of the total area for grain in 1937-38 and 1947-48, 56 per cent. and 62.3 per cent., respectively, was on holdings using from 300 to 999 acres for that purpose.

In 1947-48 holdings having areas of less than 30 acres of wheat for grain numbered 1,269. There were 3,406 with areas of less than 100 acres, 3,459 with from 100 to 199 acres, 3,647 with from 200 to 299 acres, 2,786 with from 300 to 399 acres and 1,761 with from 400 to 499 acres. In succeeding 100 acres intervals the numbers were 1,004, 640, 363, 193 and 133.

Approximately 35.6 per cent. of the wheat area for grain in 1947-48 was on holdings of from 500 to 1,999 acres, 1.5 per cent. on holdings of or exceeding 2,000 acres, 33.2 per cent. on those ranging from 300 to 499 acres, and 29.7 per cent. on those of less than 300 acres. Relating the production

of wheat to the size of the holdings on which it was grown, the distribution in 1947-48 was 35 per cent. on holdings of from 500 to 1,999 acres, 1.3 per cent. on those of 2,000 or more acres, 33.4 per cent. on holdings of between 300 and 499 acres and 30.3 per cent. on those of lesser area.

Holdings with wheat areas in area series in 1947-48 were distributed throughout the State as follows:—

Table 291.—Holdings with Wheat for Grain Area Series, in Divisions, 1947-48.

	Number of Holdings with acreages of Wheat for Grain of-									
Division,	1–49.	50-299.	300–499.	500–999.	1,000- 1,999.	2,000 or more.	All Areas,			
Coastal Divisions	74	44	1	1			120			
Northern Tableland	85	90	12	5	1		19			
Central Tableland	456	900	236	115	13		1,72			
Southern Tableland	124	31			•••		15			
North-western Slopes	340	1,249	567	255	43	3	2,45			
Central-western Slopes	189	1,313	1,133	666	72	5	3,37			
South-western Slopes	463	1,999	1,132	548	51	8	4,20			
North-western Plain	37	372	251	209	29	2	90			
Central-western Plain	33	257	200	159	18	2	66			
Riverina	144	2,286	1,010	374	36	6	3,85			
Western Division	7	19	5	1	1		8			
Total, New South Wales	1,952	8,560	4,547	2,333	264	26	17,68			

#### AVERAGE YIELD PER ACRE OF WHEAT.

Viewed over a long period of years, the average yield of wheat in New South Wales has been subject to marked fluctuations by reasons of the widely divergent nature of the seasons, but reference to Table 285 will show that these fluctuations have been much less marked since 1920-21 than formerly. The highest yields have usually been recorded in seasons following the worst droughts, and, besides giving proof of the advantages of fallowing, have gone far to make immediate compensation for the losses sustained. In the eighteen seasons ended 1947-48, the average annual yield fell below 12 bushels per acre in only three seasons, viz., in 1940-41 when winter rains failed and the average was 5.4 bushels, in 1944-45 when severe drought prevailed in southern wheat areas and the average yield was 6 bushels and in 1946-47 when, as a result of extreme drought in all sections, only 3.5 bushels per acre were harvested. The highest averages in the eighteen years were 18.9 bushels per acre in 1947-48, 17.6 bushels in 1943-44, 17.5 bushels in 1939-40 and 17 bushels in 1942-43.

The average annual yield in decennial periods since 1882 is shown below. The comparatively high average in the early years is due probably to the fact that the smaller area under cultivation in these early years embraced a larger proportion of land specially suitable for wheat-growing in districts of highly reliable rainfall.

Table 292.-Wheat Yields, Decennial Averages.

Period,	Average Yield per acre.	Period.	Average Yield per acre.
1882–1891 1892–1901 1902–1911	bushels. 13·30 10·02 11·04	1912–1921 1922–1931 1932–1941	bushels. 11.62 12.02 13.10

In calculating these averages the area which was sown for grain, but failed, is included, while the area fed off profitably or used for green fodder is excluded.

Although the yield is influenced largely by the nature of the seasons, it is apparent that, as scientific methods of cultivation are being more widely adopted and land is properly fallowed, tilled and manured, and types of wheat are improved by plant breeding, the average is increasing; notwithstanding the inclusion of two extremely poor seasons, the average yield in the five seasons ended 1947-48 was 12.64 bushels per acre.

Holdings growing wheat for grain in 1947-48 were classified according to the average yield of wheat per acre. For the State the average yield in that season was the highest ever obtained. The tabulated results are not a reflection of average conditions, but they serve to show that even in a season of generally very favourable conditions, there is a wide variation in average yield from farm to farm and as between districts. Thus, there were 909 holdings with an average yield per acre of less than 6 bushels, 2,271 on which it was between 6 and 12 bushels, 9,987 between 12 and 24 bushels, 3,045 between 24 and 30 bushels, and 1,470 on which the yield exceeded 30 bushels per acre.

In a restricted yield grouping the distribution of holdings by number and proportion in the districts of the wheat belt and elsewhere in the State was as follows:-

District		er of Holding d per Acre		Total	Proportion of Holdings with Yield per Acre of—			
Division,	Under 12 bushels,	12 and under 24 bushels.	Over 24 bushels,	Holdings.	Under 12 bushels.	12 aud under 24 bushels.	Over 24 bushels;	
Coastal Northern* Central* Southern* Western	52 864 1,138 1,100 26	43 1,859 3,260 4,818 7	25 827 1,369 2,294	120 3,550 5,767 8,212 33	per cent. 43·3 24·3 19·7 13·4 78·8	per cent. 35.9 52.4 56.6 58.7 21.2	per cent. 20·8 23·3 23·7 27·9	

Table 293.—Holdings with Wheat for Grain, 1947-48-Yield of Wheat per Acre.

17,682

18.0

56.5

25.5

3,180

9,987

## FALLOWING AND THE WHEAT YIELD.

Between 1923-24 and 1941-42 statistics were collected of the yield of grain from the areas of new land, fallowed land, and unfallowed land sown with wheat. It was intended that land should not be classed as fallow unless it had been cultivated by ploughing during the year preceding the sowing, but it is doubtful whether farmers' returns were made on this basis in all cases. Summer fallow is practised to some extent.

<sup>4,515</sup> \* Tablelands, Slopes and Central Plains.

The following table provides a comparison of the yields obtained from the various classes of land in 1941-42 in each of the divisions described on page 341:—

Table 294.-Wheat Yield from Fallowed and Unfallowed Land, 1941-42.

The future	Area.†				Average Yield per Acre.				
Division.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land,	Stubble Land.
Coastal Northern* Central* Southern* Western	acres.  89 14,123 17,869 13,762 370 46,213	1,863	acres. 1,862 738,755 824,144 846,211 1,826	bushels. 589 170,742 236,766 177,753 46	bushels. 35,960 1,930,260 6,626,777 10,463,486 2,205	bushels. 7,615 10,540,078 9,157,420 9,149,021 1,282 28,855,416	bush. 6·6 12·1 13·2 12·9 0·1	bushels. 19·0 16·9 13·4 11·6 1·2 12·6	bushels 4·1 14·2 11·1 10·8 0·7 12·0

<sup>\*</sup> Tablelands, Slopes, and Central Plains. † Including areas which failed.

The average yields on new and fallowed land were far in excess of those from other land throughout the wheat belt. The climatic conditions prevailing in the various wheat districts and the methods adopted by farmers differ in a marked degree, consequently the results shown above do not represent fully the benefits which accrue from fallowing. Still, it is apparent that fallowing raises the wheat yield appreciably.

The average yields per acre from fallowed and unfallowed lands respectively in the northern, central, and southern districts of the State in each year for which records have been obtained were as follow:—

Table 295.—Wheat Yields on Fallowed and Stubble Land.

Season.	Northern 1	Districts.*	Central D	istricts.*	Southern 1	Districts.*	Whole State.	
beason,	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.	Fallowed.	Stubble.
	bushels.	bushels.	bushels.	bushels,	bushels.	bushels.	bushels.	bushels.
1923-24	8.3	6.8	10.4	8.5	15.3	$12 \cdot 2$	14.1	9.6
1924–25	19.4	16.1	19-1	14.7	19.9	13.9	19.7	14.8
1925-26	9.3	7.5	15.3	10.7	13.2	10.1	13.5	10.0
1926–27	16.1	14.3	16.4	12.7	15.2	12.3	16.0	13.0
1927-28	5.8	3.6	9.0	5.7	11.7	7.5	11.2	5.7
1928-29	16.7	14.3	14.5	9.7	13.7	9.2	13.9	10.6
1929 – 30	19.2	15.0	7.9	4.2	11.7	6.5	10.8	7.3
1930-31	16.3	14.7	15.8	12.8	15.2	9.9	15.4	11.8
1931-32	20.1	16.4	18.6	13.5	16.7	11.6	[ 17-1	13.4
1932–33	16.6	12.8	19.3	13.7	20.6	15.1	20.2	14.1
1933 – 34	21.4	17.0	14.0	10.3	14.0	7.8	14.3	10.7
1934 – 35	18.0	13.3	13.1	10.2	13.8	9.3	13.8	10.7
1935 – 36	13.2	9.3	13.1	7.2	17.0	9.9	15.8	8.5
1936 – 37	16.8	12.8	15.0	11.4	16.0	11.8	15.8	11.9
1937 – 38	14.8	11.4	14.2	8.6	15.3	9.4	15.0	9.6
1938–39	23.1	20.6	13.0	9.5	12.3	8.3	13.0	12.6
1939-40	16.1	13.9	21.9	17.8	18.3	14.8	19.3	15.6
1940-41	5.2	4.0	7.7	6.4	6.1	4.4	6.5	5.0
1941 - 42	16.9	14.2	13.4	11.1	11.6	10.8	12.6	12.0

<sup>\*</sup> Includes Tablelands, Slopes, and Central Plains.

The following statement shows the approximate areas of new land, fallowed land, and stubble land sown with wheat for grain, including that sown for grain which failed entirely, in New South Wales during each of the ten seasons ended 1941-42.

Table 296 .- Areas of Wheat for Grain on Fallowed and Unfallowed Land.

Season.		T7.111	Description	Area Sown,		
	New Land,	Fallowed Land.	Remainder, Stubble Land.	Total.*	Proportion of Fallowed Land	
	aores.	acres.	aores.	acres.	per cent.	
1932-33	175,232	1,852,243	2,776,468	4,803,943	38.6	
1933-34	180,088	$2,\!152,\!276$	2,251,728	4,584,092	46.9	
1934–35	133,018	2,242,764	1,516,986	3,892,768	57.6	
935-36	127,249	2,199,006	1,525,118	3,851,373	57.1	
1936–37	180,729	2,144,932	1,657,203	3,982,864	53.9	
1937-38	263,409	2,241,214	1,960,041	4,464,664	50.2	
1938-39	281,892	2,179,740	2,189,240	4,650,872	46.9	
1939–40	199,258	2,201,024	1,980,313	4,380,595	50.2	
1940–41	103,643	2,019,754	2,165,380	4,288,777	47.0	
1941–42	46,213	1,509,747	2,412,798	3,968,758	38.0	

<sup>\*</sup> Approximate.

#### VARIETIES OF WHEAT GROWN.

Progress in plant-breeding has been continuous since the time of Farrer (1886-1905), though retarded during the war periods. New varieties of wheat have been introduced and subsequently replaced by types more serviceable from the standpoint of climate and soil, disease resistance, quality and productivity. In this work wheat growers have co-operated with the Department of Agriculture in cultivating experimental plots on farms throughout the State.

In recent years wheats of good milling and baking quality have been developed to replace weak, soft flour wheats of low gulten content, especially in the north-western slopes division, where wheats of greater flour strength are produced. Fewer varieties have been recommended for cultivation, and this has resulted in greater uniformity in the f.a.q. sample with consequent advantages in marketing. In 1946-47 nearly 68 per cent. of the area sown was of the five leading varieties as compared with 56 per cent. in 1929-30.

Particulars of the principal varieties grown in New South Wales in 1938-39, 1945-46 and 1946-47 are shown below. The figures, being compiled from preliminary returns, total somewhat less than the area under wheat as shown in Table 285.

Table 297 .- Varieties of Wheat Grown.

Variety. 1938-39		1945–46.	1946–47.	Variety.	1938-39.	1945–46.	1946-47.	
Bencubbin Ford Eureka Eureka 2 Dundee Bordan Gular Ranee Waratah Bobin Nabawa Rapier Koala	994,100 * 816,233 12,098 95,269 206,020 286,089 146,285 747,749	acres. 1,543,504 437,916 283,850 111,089 215,935 134,938 115,166 112,777 105,123 77,403 75,461 63,154 59,892	aores. 2,180,290 515,520 195,644 101,944 223,312 159,984 127,281 152,469 127,893 63,807 100,553	Ghurka Pusa 4 Pusa 111 Baldmin Geeralying Bungulla Charter Cailloux Baringa Other, Unspecifie etc.	193,358 17,557 16,637 101,480 * 266,499	acres 55,402 50,738 44,570 17,504 19,014 18,809 16,554 16,329 15,296 199,537	acres. 57,304 50,922 51,280 16,522 46,326 66,213 535,705 4,772,978	

<sup>\*</sup> Information not compiled.

In 1948 the Department of Agriculture recommended twenty-two principal varieties for sowing in specified zones of the New South Wales wheat belt; nineteen varieties for grain, and three for hay or green fodder only. The order of sowing relates to the normal range of sowing dates for each district. Many of the varieties so classified have been proved under field conditions, to resist stem rust of the races known to be present in the State; all are capable of producing medium to heavy yields under reasonable conditions of growth. Resistance to leaf rust is rare amongst the commercial varieties. The varieties recommended and their characteristics are shown below:—

Table 298.—Varieties of Wheat Recommended for New South Wales, 1948.

			Characteristics.						
Variety.	Districts for which Recommended.	Flour	gt		ease tance.	Other and			
		Content.	Straw.	Flag Smut	Stem Rust.	General.			
	For H	ay or Green	Fodder only	<i>i</i> .					
Baroota Wonder	C.W. Slopes, C.W. Plains, N.E. Riverina,		Tall, slender.	M.R.	s.	High quality.			
Florence	Coastal		do	M.R.	M.R.	Early maturing, resists bunt.			
Zealand	N.E. Riverina		do	M.R.	S.	Late maturing.			
	For	Grain—Ear	ly Sowing.						
Bordan	General (good 'rain- fall)—late districts.	-strong.			S.	M.R. Septoria.			
Celebration	NWestern	do	Tall	R.	R.	Tree stripping.			
Fedweb 1	NWestern	do	Short, strong.	s.	R.	Takes leaf rust, and Septoria.			
Ford	General	do	Tall	M.R.	M.R.	M.R. Septoria. Makes good hay.			
Ghurka	W. Riverina	Weak	Short, strong.	R.	M.R.	Grain only,			
	For Gr	ain—Mid-se	eason sowing	g <b>.</b>					
Bencubbin	General (drier areas) except Northern.	Weak	Weak	R.	s.	Withstands dry			
Dundee	General, except Northern,	Medlum -strong.	Strong	M.R.	v.s.	Damaged by frost.			
Kendee	NWestern	do	Medium-	R.	R.	Large, deeply creased grain.			
Koala	Pts. C.W. Slopes and C.W. Plains.	Weak	Strong,	M.R.	s.	Good heavy grain			
Ranee	S. Central and W. Riverina.	. do	Short, fine,	<b>≀s.</b>	8	Disease limble.			
Waratah	C. Tlands, Pt. C.W. Slopes, M.I.A.	do	strong. Tall, slender.	S.	s.	Tends to shed grain.			
Yalta	NWestern	Strong	Fairly strong.	B.	R.	Small grain of premium qual- ity.			
I	_	1	N	ļ	1				
		Grain—Ldi			_				
Bungulla	N.W. Plains, Pts. C.W. Slopes and Plains.		Weak	R.	s.	Withstands dry- ness.			
Charter	NWestern	Strong.	Tall, slender,	æ.	R.	Premium wheat in N.W.			
Gabo	NWestern	do	Short	M.S.	R.	For heavy soils.			
Gular	General	do	Slender	8.	s.	Premium wheat.			
Pusa 4 Pusa 111	NWestern	Strong	do	M.R.	s.	High quality, but light yielding.			

R., Resistant; M.R., Moderately resistant; S., Susceptible: V.S., Very susceptible.

## RAINFALL INDEX IN WHEAT DISTRICTS.

The following summary provides a monthly index of rainfall in the wheat districts of the State since 1934. The index is derived from the ratios of the average rainfall of eleven districts to the normal rainfall in the same districts weighted in accordance with the average area sown with wheat in each district. The normal rainfall for each month (based on records of a period of years) is represented by 100, and the index shows, therefore, the percentage of actual to normal rainfall in each month:—

Table 299.—Rainfall Index in Wheat Districts.

Month.		Rainfall Index—New South Wales Wheat Districts. (Percentage of Normal).													
	1934.	1935.	1936.	1937.	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.	1948.
January	169	117	184	154	74	38	24	336	31	138	28	127	158	18	101
February	310	104	207	:37	81	221	18	87	:158	55	32	.92	269	207	222:
March	35	24	131	105	9	287	21	148	70	17	49	30	95	136	48
April	117	199	67	41	75	280	227	11	37	148	80	63	57	85	126
Мау	4	28	48	56	68	48	36	61	237	118	135	90	43	56	109
June	72	33	107	63	83	115	17	87	128	53	14	167	50	53	134
July	163	115	203	31	94	60	33	67	113	83	53	73	84	152	36
August	137	68	96	113	141	216	.36	41	105	103	:90	152	41	97	56
September	71	114	53	83	30	48	116	47	78	122	26	27	39	131	84
October	255	116	52	109	139	140	11	75	97	83	73	104	47	127	84
November	218	27	15	<b>′7</b> 3	54	201	52	65	164	171	45	67	155	163	88
December	·66	:68	215	73	٠9	:26	129	88 ·	93	32	42	47	94	302	110
			Avera	ge Vié	ld of V	Vheat.	per ac	re, Sea	son en	ded M	arch o	f follo	wing 3	ear.	
Bushels	12.5	12.7	14:0	12:3	12.9	17.5	5.4	12.2	17.0	17:6	6.0	16.6	3.5	18:9	16:0

The significant months as regards the effect of rainfall on wheat yields are from April to October—especially April, May, and September. The wheat districts extend over practically the whole length of the hinterland, and seasonal conditions vary widely as between districts. The incidence of fallowing and fertilising, temperatures and winds also play a large part in modifying the effect of rainfall on yield.

In the following table the rainfall index for the northern, central, and southern sections of the wheat belt is shown in comparison with the average yield per acre in the seasons 1946-47 and 1947-48.

Table 300 .- Rainfall Index and Average Yield in Various Wheat Districts.

			Rainfall Index, 1946—Wheat Districts.  Normal for each Month = 100.				Rainfall Index, 1947—Wheat Districts. Normal for each Month = 100.			
Month	•		North- ern.	Central.	South- ern.	Total.	North- ern.	Central.	South- ern.	Total.
January			130	110	184	158	51	27	8	18
February			49	153	363	269	263	257	175	207
March			48	76	113	95	100	83	165	136
April			60	78	48	57	58	76	95	85
May	•		37	35	49	43	61	83	43	56
June			33	38	59	50	38	32	63	53
July			20	42	114	84	80	142	171	152
August			ì	14	60	41	129	82	96	97
September			160	47	10	39	140	139	126	131
October			24	61	46	47	170	135	115	127
November			71	100	196	155	128	196	156	163
December		•••	$7\overline{2}$	88	102	94	173	325	319	302
				1946-	-47.	_		1947-4	18.	
Average yi wheat per	eld acre	of 	1.5	1.7	5∙5	3.5	18.5	18.2	19-6	18.9

#### MARKETING OF WHEAT.

The development of the wheat industry in New South Wales is dependent largely on world demand, on efficiency of production, facilities for gaining access to overseas markets, and on the maintenance of such internal conditions that it will pay local farmers to grow wheat. In ordinary circumstances the price of wheat for export is determined by world's parity, which fluctuates with the world supply and demand; the market for the exportable surplus of local wheat is found chiefly in Europe, but quantities of flour are sent to the countries and islands in the Pacific and Indian Oceans. For some years after 1930 large quantities of wheat were shipped to China and Japan.

In Europe Australian wheat is affected by the competition of great wheat-producing countries nearer the market—the United States, Canada, the Argentine and Russia—which derive advantages from shorter distances and lower ocean freight. These advantages are counteracted to some extent by the greater land haulage necessary from the interior to the coast of some of these countries. All wheat grown in Australia since the outbreak of war has been handled in, and marketed through, compulsory pools controlled by the Australian Wheat Board. Latterly the bulk of the exportable wheat has been disposed of under contracts entered into with oversea Governments, chiefly of the United Kingdom, India (and Pakistan) and New Zealand.

The movement of wheat and flour oversea from New South Wales in the years 1933 to 1948 is shown in the next table. The particulars for the respective years relate to the twelve months ending 30th November, and represent the movement following each harvest. Flour is expressed at its equivalent in wheat, viz., 48 bushels of grain to 2,000 lb. of flour. Complete information as to interstate movement since 1939 is not available.

There is normally a considerable movement of wheat interstate from New South Wales but in 1944-45 and 1946-47 imports were made necessary by smallness of the local harvests. Figures compiled by the Australian Wheat Board show that in 1944-45 there were net imports totalling 5,927,000 bushels of wheat and 1,392,000 bushels (wheat equivalent) of flour from other States and 468,810 bushels of wheat from the United States, and in 1946-47, of 13,337,000 bushels of wheat and no flour from other States.

Table 301.—Oversea Exports of Wheat and Flour and Stocks: New South Wales.

Year ended	Export Oversea from N.S.W.		Recorded Stocks at 30th Nov.	Year ended	Export ( from N	Recorded Stocks at 30th Nov.	
30th Nov.	Wheat.	Flour.	Wheat and Flour,	30th Nov.	Wheat,	Flour.	Wheat and Flour.
		Expresse	d in thousar	nd bushels of	f wheat.		
1933	34,669	11,256	6,110	1941	1,969	12,526	6,232
1934	10,430	11,513	13,302	1942	3,761	4,475	16,055
1935	16,324	12,666	5,980	1943	2,208	5,650	25,859
1936	16,442	8,828	2,719	1944	305	12,862	19,090
1937	19,513	9,187	3,272	1945*	33	4.384	2,082
1938	16,807	10,836	4,134	1946	6,181	14,841	11,854
1939	13,993	15,808	6,733	1947*	17	7,136	3,023
1940	19,966	15.266	20,803	1948	37,031	16,082	14,086

<sup>\*</sup> See paragraph preceding table.

#### GRADING OF WHEAT.

Wheat for export is marketed almost entirely on the basis of a single standard known as f.a.q. or fair average quality. In New South Wales the standard is determined by a committee under supervision of the Grain Trade Section of the Chamber of Commerce, representatives of the Farmers and Settlers' Association and the Department of Agriculture. Samples obtained from each of the wheat districts are weighed in proportions based on production, and an average is struck, to be used as a standard in wheat export transactions. The Schopper weighing machine is used.

The following comparison shows the standard adopted in New South Wales for each of the past ten seasons, and the date on which it was fixed in each year:—

Table 302.-Wheat, F.A.Q., Standard, (N.S.W.).

Season.	Date Fixed,	Date Fixed. Weight of Bushel of Wheat. f.a.q.		Date Fixed.	Weight of Bushel of Wheat. f.a.q.
1939-40 1940-41 1941-42 1942-43 1943-44	26th Jan., 1940 24th Jan., 1941 21st Jan., 1942 5th Feb., 1943 4th Feb., 1944	1b. 631 623 64 63 644	1944-45 1945-46 1946-47 1947-48 1948-49	2nd Feb., 1945 15th Feb., 1946 28th Jan., 1947 20th Feb., 1948 11th Feb., 1949	1b, 63 63 62 60 5 60 5 63 6 63 6 63 6 63 6 63 6 63 6

The weights shown above are those used for guidance in determining whether particular lots of wheat are at or above fair average quality, but not as a measure of quantity. Normally wheat is sold in New South Wales by weight (bushel of 60 lb.), and not by volume.

In certain seasons, when a substantial quantity of the grain was pinched or damaged by adverse seasonal conditions, a "second" grade was determined. Separate Australian pools were formed to handle "under quality" wheat grown in 1939-40, 1941-42 and 1947-48, and comprised pools Nos. 3, 5A and 11A, particulars of which are given in Table 306.

## BULK HANDLING.

The circumstances leading to the erection of bulk handling facilities were described at page 584 of the Year Book for 1928-29.

The grain elevator system consists of a concrete and steel shipping elevator at Sydney, with a storage capacity of 7,500,000 bushels at one filling, a terminal elevator at Newcastle, with a capacity of 800,000 bushels at one filling, and 180 elevators situated at the more important wheat receiving stations throughout the State. These country elevators, which have direct access to rail, have a storage capacity at one filling of 24,478,000 bushels.

The terminal elevators at Sydney and Newcastle have been built and equipped for receiving, handling and shipping classified wheats, and facilities for cleaning and conditioning are provided. Electric power is used. The terminal elevator at Sydney is connected with the railway system of the State by four lines of rail, and has a receiving capacity of 6,000 tons (approximately 224,000 bushels) per day, and a shipping capacity of 12,000 tons (approximately 448,000 bushels) per day of eight hours. At Newcastle the rates are 2,000 tons and 8,000 tons per day respectively.

The country elevators, with few exceptions, are equipped for receiving wheat in bulk from farmers' waggons and loading into bulk trucks. The more modern are fitted with weighbridges for inward weighing, and the majority are equipped with outward scales. The storage capacity of the individual country elevators varies from 30,000 bushels to 350,000 bushels. They are built of reinforced concrete and steel with corrugated galvanised iron coverings, and practically all of them are capable of receiving classified or graded wheat in bulk.

Wheat is generally transported from the farms to the silos in bags fastened by clips or sewn, the bags being emptied and returned to the farmer for subsequent use, but some farmers utilise bulk waggons. For conveyance from the country stations to the terminal, special railway trucks are provided.

Upon the introduction of war-time control by the Australian Wheat Board and the inauguration of Pools for the 1939-40 and following harvests, negotiable wheat warrants formerly issued by the Government Grain Elevators were replaced by a "Wheat Warrant and Claim for Compensation." This is a certificate that the grower named therein has delivered the quantity set out, and is handed direct by the Government Grain Elevators to a licensed receiver nominated by the grower. Advances are made to the growers against the wheat by the licensed receivers as they are approved by the Board.

The bulk handling system was first put into operation in 1920-21 and its development is shown in the following table:—

	Number of Ele- vators		Storage		heat Received.	·	Proportion of Wheat Received in Elevators.	
Season.	in Cor Distr	intry icts.	Capacity of Elevators Available in Country Districts.*	In Country Elevators.	In Terminal Elevators from Non-Silo Stations.	Total	To Total	To Total Quantity Received at Rail.
	and i							
7,000 04	0.0		bushels.	bushels.	bushels.	bushels.	per cent.	per cent.
1920-21	28	28	5,450,000	1,941,694	041.105	1,941,694	3.5	4.2
1925-26	62	62	13,500,000	8,295,148	841,185	9,136,333	$\frac{27.0}{35.9}$	34.9
1930-31 $1931-32$	99	$\frac{99}{105}$	16,373,000	22,948,116	724,972	23,673,088	47.3	41.3
1931-32	105	111	16,613,000	23,877,542	2,123,344	26,000,886	43.7	53.1
1932-33	111 119	119	17,183,000	33,954,534	500,877	34,455,411	38.2	52·2 41·9
1934-35	149	149	17,693,000	21,229,928	566,575	21,796,503	44.2	51·6
1934-35	158	156	21,083,000	21,509,227 24,811,726	295,897	21,509,227	51.4	62.8
1936-36	175	175	21,773,000		142,981	25,107,623 29,230,560	52.5	64.3
1937-38	175	175	23,123,000 23,223,000	29,087,579 32,533,477	146,566	32,680,043	59.3	72.5
1938-39	175	173	23,323,000	27,590,667	307,776	27,898,443	46.6	59.9
1939-40	175	175	23,523,000	38,912,339	295,699	39,208,038	51.2	62.3
1940-41	175	159	23,548,000	11,453,207	7,140	11,460,347	47.9	74.5
1941-42	180	180	24,478,000	25,161,215	385,138	25,546,353	52.7	68.0
1942-43	180	180	24,478,000	26,089,372	1	26,089,372	50.5	60.7
1943-44	180	180	24,478,000	19,276,772		19,276,772	40.6	50.3
1944-45	180	51	24,478,000	5,467,138		5,467,138	31.9	53.1
1945-46	180	178	24,478,000	25,825,915		25,825,915	41.3	50.3
1946-47	180	90	24,478,000	5,835,923‡		5,835,9231	37.2	77.6
1947-48	181†	181†	24,578,000†	43,018,879	272,203	43,291,082	45.5	50·9

<sup>\*</sup> At one filling. † Includes one leased silo not part of system. † N.S.W. wheat only. In addition, 5,377,386 bushels of Victorian wheat were handled through the country system.

The storage in elevators of wheat from earlier harvests limited receivals in 1942-43 and 1943-44.

The following table shows the financial operations in connection with the grain elevators in the last ten years. The capital cost to 30th June, 1948, consisted of £5,300,000 expended from the General Loan Account and £30,836 from the Unemployment Relief Fund. Earnings are paid into and expenses defrayed from the Consolidated Revenue Fund. The charge for interest and exchange on interest remitted overseas, as shown in the table, represents the amount calculated at the average rate paid on the public debt of the State.

Table 304.—Grain Elevators—Finances.

Year	Capital cost		Rece	ipts.		Payments	Charge for	
ended 30th June.	(to 30th June).	Handling Fees,	Storage Fees.	Other.	Total,	(Working and Sundry Expenses).	Interest and Exchange.	
	£	£	£	£	£	£	£	
1939	5,214,509	218,136	162,169	9,645	389,950	108,132	189,436	
1940	5,231,931	298,836	129,424	30,376	458,636	191,375	190,991	
1941	5,325,514	141,054	186,373	4,863	332,290	107,529	193,223	
1942	5,330,776	220,475	125,893	15,936	362,304	106,413	193,155	
1943	5,330,806	158,463	74,038	3,948	236,449	116,962	191,575	
1944	5,330,836	279,972	23,921	4,725	308,618	99,364	192,451	
1945	5,330,836	376,691		3,538	380,229	73,355	192,064	
1946	5,330,836	334,495		4,621	339,116	115,448	187,088	
1947	5,330,836	378,853		2,693	381,546	82,373	183,455	
1948	5,330,836	349,189		5,445	354,634	212,533	179,457	

After meeting expenses (including interest and exchange) the operations of the Government Grain Elevators resulted in surpluses of £16,803 in 1943-44, £114,810 in 1944-45, £36,580 in 1945-46 and £115,718 in 1946-47 and a deficit of £37,356 in 1947-48.

Under the system of pooling wheat, described below, fees for the handling of wheat by the elevators are paid by the Australian Wheat Board. Since November, 1942, the basis of payment has been actual working costs plus an allowance for capital charges on bulk handling equipment.

# WHEAT ARRIVALS AT RAILWAY DEPOTS.

As a rule small quantities of new season's wheat become available towards the end of November, the actual time varying under seasonal influences. Usually all but a small proportion of the crop intended for sale is sent from farm to railway for transport before the end of February. These particulars of wheat delivered to rail by growers exclude New South Wales wheat consigned to the Wheat Board in Victoria.

			cur Attorni			
Season.	Bulk.	Bagged.	Total.	Proportion	Proportion	Received.
Season.	.buik.	Dagged.	10vai,	of Harvest.	In Bulk.	In Bags.
1942-43 1943-44 1944-45 1945-46 1946-47	bush. 26,089,372 19,276,772 5,467,138 25,825,916 5,834,784	bush. 16,305,801 18,997,473 4,821,021 25,015,191 1,730,435	bush. 42,395,173 38,274,245 10,288,159 50,841,107 7,565,219	per cent. 82·0 80·6 60·0 81·3 48·2	per cent. 61·5 50·4 53·1 50·8 77·1	per cent. 38.5 49.6 46.9 49.2 22.9
1947-48	43.029.765	38,003,255	81,033,020	85.1	53-1	46.9

Table 305.-Wheat Received at Railhead.

#### WHEAT POOLS MANAGED BY THE AUSTRALIAN WHEAT BOARD.

Wheat of each harvest acquired and marketed by the Australian Wheat Board is treated in a separate pool. No. 1 pool comprised the residue of the 1938-39 crop, most of which was held by traders when requisitioned. In 1939-40, 1941-42 and 1947-48 relatively small quantities of inferior grade wheat were marketed in Pools No. 3, No. 5a, and No. 11a, respectively, but no New South Wales wheat entered Pool No. 5a. Growers received approximately 3d. and 7½d. per bushel less for No. 3 Pool and No. 11a Pool wheat than for wheat in Pools No. 2 and No. 11. Wheat delivered to and advances made by the Board were as follows:—

		Wheat Ac	quired in—		I	Advances to Farmers.				
Pool No.	Harvest.		{	Total A	Amount.	Average per bush	el (Al	l Stat	es).	
New	New South Wales.			All States.	Basis.	Вад	ged.	Bu	ılk.	
		thous.	thous.	£000.	£000.	Terminal Ports-	в.	d.	в.	d.
1	1938-39	bus. 6,226	bus. 17,840	*	2,427	F.O.B	. 2	9.9	2	7.9
2 3	1939-40	65,350	194,106	} 10,299	31,353	Ex Trucks	. 3	8	3	6
3	1939-40	1,338	1,338	J .	1 ' L	,,		5	3	3
4	1940-41	16,919	63,659	2,880	11,240	,,	1 4	0·4 0·6	3	9·5 9·1
4 5 5∧	1941-42 $1941-42$	41,236	153,944 }	7,007	> 27,120 ₹	,,	l 6	9.6	3	6.1
υA	1041-42	.,	, (	•••	, (	Country Sidingst-	'l "	00	ľ	0.
6	1942-43	44,709	141,990	9,169	29,884	Quota 1	. 4	8.5	4	5.5
			•	•		Non-quota	-  *	0.0	<b>*</b>	0.0
7	1943-44	40,879	94,756	10,117	23,796	Quota	- 5	6.2	5	3.7
_		10.100	00.000	0.710	0.045	Non-quota	1		-	-
8	1944-45	12,168	38,826	2,719	8,845	Quota Non-quota	- 5	0⋅8	4	9.8
9	1945-46	54,889	123,825	19,433	44,264	All wheat	. 7	8.4	7	4.8
10	1946-47	8,635	98,520	3,732	38,942	All wheat	. 9	6	9	0
11	1947-48		197,889	} 54,450	120,225 {	All wheat	. 13	2.2	12	.7.
11 A	1947-48	5,561	6,704	J	1 1	All wheat	. 12	7	11	11:5

Table 306 .- Australian Wheat Pools.

<sup>\*</sup> Not available. † Freight (average per bushel in New South Wales 5.55d. to 1945-46, 5.75d. in 1946-47 and 7.81d. in 1947-48) to be deducted from amounts stated.

# WHEAT: OCEAN FREIGHTS.

In ordinary circumstances, in the conditions governing the marketing of wheat abroad, the shipping space offering and its cost are very important factors. Under condition of war most of the shipping was under Government control, the space available for wheat was limited, and costs of ocean transport increased considerably. Shipping difficulties continued in the early post-war years and United Kingdom shipping remained subject to direction.

Information regarding rates of ocean freight from Sydney to London are shown in the chapter "Shipping" of this Year Book. The rate of freight per ton (in English currency) on bulk wheat, Sydney to London, was 102s. 6d. at 30th June, 1948, compared with 115s. at 30th June, 1946 and 1947, 135s. 6d. from 1941 to 1944 and 31s. 3d. in 1939.

# CONSUMPTION OF WHEAT IN NEW SOUTH WALES.

Data obtained since the year 1927 have enabled estimates to be made of the consumption of wheat in New South Wales based upon total recorded production, less net exports, with due adjustment for recorded stocks, exclusive of seed wheat and of wheat retained for use in the locality in which it is grown. The average quantity used for seed is approximately one bushel per acre.

For the purpose of the estimates, the wheat year is considered to extend from 1st December to 30th November, and at the latter date returns of stocks are obtained. As, however, in some years considerable quantities of new season's wheat arrive on the market in the latter half of November and as records of wheat in transit are difficult to obtain, it is not possible to estimate closely the consumption of individual years.

Prior to the war the average annual consumption of wheat in New South Wales was estimated to be about 22,700,000 bushels, viz., 13,750,000 bushels used as flour, 4,700,000 bushels as seed and 4,250,000 bushels for other purposes, mainly poultry feed.

During later years there was an increase in consumption due to expansion in pig and poultry farming, use of wheat for feeding stock in place of other fodder in short supply, increased usage for breakfast foods, and (till 1945) distillation of power alcohol from wheat to eke out war-time supplies of liquid fuel.

Full data regarding the interstate movement of wheat and flour were not available during the war years. Because of drought wheat production in the State was so small that it was necessary to import nearly 8,000,000 bushels in 1944-45 and over 13,000,000 bushels in 1946-47 of wheat and flour (wheat equivalent) from other States. Indications are that the quantity of wheat consumed in New South Wales may have been between 37,000,000 and 38,000,000 bushels in 1944-45 and approximately 28,000,000 bushels in 1945-46, 1946-47 and 1947-48. In each of the last three years, rather more than 14,000,000 bushels were consumed as flour, and about 1,000,000 bushels for breakfast foods, etc.; stock feed absorbed from 7,000,000 to 8,000,000 bushels and approximately 4,800,000 to 5,400,000 bushels were used for seed wheat in the respective years.

# Wheat Sold for Stock Feed.

The quantity of wheat sold for stock feed, etc., in New South Wales by the Australian Wheat Board in each wheat year ended 30th November since 1940-41 was as follows:—

Season.	Thous. bus.	Season.	Thous. bus.	Season.	$\mathbf{T}$	hous, bus,
1940-41	. 4,964	1943-44	13,280	1946-47		7,956
1941-42	. 7,414	1944-45 .	17,618	1947 - 48		6.934
1942-43	. 7,452	1945-46 .	7,913			.,

The use of wheat for stock feeding began to increase in 1940-41. Wheat was used very extensively in 1943-44 and 1944-45 when natural pastures were scanty owing to drought. It was deemed necessary to ration wheat sales for stock early in 1945 in order to safeguard supplies for human consumption and a committee which included the Commonwealth Director of Agriculture as chairman and a representative of the Australian Wheat Board undertook the control of the distribution of wheat. The quotas allocated to New South Wales for stock feeding were 14,000,000 bushels for the eleven months ended November, 1945, 7,100,000 bushels in 1945-46 and 10,200,000 bushels in 1946-47, 1947-48 and 1948-49.

Changes in the Australian Wheat Board's selling prices for wheat for stock feeding, per bushel, truck lots, f.o.r. port, bulk basis from January, 1940, were as follows:—

	per bus.		per bus.		per bus.
From—	s. d.	$\mathbf{From}$ —	s. d.	From—	s. d.
1940-to Apr. 11	$3 \ 10\frac{1}{2}$	1942-Apr. 16	$3  3\frac{3}{4}$	1947-Dec. 22	5 0
Apr. 12	4  1	*	-	*	
July 29	4 01	1945-Nov. 28	4 3	1948–Jan. 19	6 3 <del>3</del>
* *	•	*		Dec. 1	$6 8^{\frac{3}{4}}$
1941-Nov. 13	$3 9\frac{3}{4}$	1946-Dec. 13	4 11		- 4

For the reduction of 6d. per bushel from 16th April, 1942, the Board was reimbursed by Commonwealth subsidy. Subsidy ceased from 13th December, 1946.

# PRICES OF WHEAT.

Information regarding the prices of wheat in Sydney in each year since 1911 is shown in the following table. The figures for the years 1865 and onward were published in the Year Book for 1919.

The prices quoted in the table for the years 1911 to 1936 inclusive are per imperial bushel (60 lb.) of f.a.q. wheat in three-bushel bags; the bag was sold with the wheat and was included in the weight paid for as wheat. From 1937 the prices are per bushel of f.a.q. bulk wheat. The monthly averages represent the mean of daily prices, and the annual average is the mean of the monthly averages. The prices quoted for the years 1915 to 1921 are those officially fixed for wheat for home consumption (imported wheat in 1920); the quotations 1922 to 1939 (October) are shippers' and millers' buying prices. Since October, 1939, prices of wheat have been fixed by the Australian Wheat Board, and the Sydney price per bushel for bulk wheat for flour for local consumption was 3s. 11½d. from August, 1940 until December, 1947, when it was raised to 4s. 11¼d. It became 6s. 3d. in January and 6s. 8d. in December, 1948 and to March, 1949 was unchanged at that price.

Prices charged for wheat for stock feed are shown above on this page.

Table 307.—Prices of Wheat, Sydney.

	Price (	of Wheat, Sy	dney.	<u> </u> .	Price, c	of Wheat, Sydney.		
Year.	February.	March.	Average for Year.	Year.	February.	March.	Average for Year,	
H9TT 19L2. 1913 1914 1916 1916: 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926	Pen bushel.  s. d.  3 5 3 9 4 3 6 5 1 4 9 5 0 8 5 9 0 5 2 5 8 4 7 6 9 5 1 6 5 1 6 5 1 6 6 7 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	Per bushel. s. dl. 3 3 8 3 3 7 3 9 4 5 6 5 5 0 4 4 9 5 0 8 10 9 0 5 11 5 7 4 7 6 3 3 5 5 8 2	Ren busheli. s. dl 3 6 4 1 3 74 4 1½ 5 5 5 4 10 4 9 4 9 5 1½ 8 8 5 8 5 8 5 5 6 22 6 2	1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941–46 1947 1948	Per bushelt s: d. 5 1½ 4 8½ 4 8½ 2 1½ 3 2 2 5½ 3 11½ 5 5½ 3 11¼ 6 3	Rer bushel.  5. d. \$\frac{3}{2} \displays \frac{1}{2} \displays \displays \frac{1}{2} \displays \frac{1}{2} \displays \frac{1}{2} \displays \frac{1}{2} \displays \displays \frac{1}{2} \displays \dinfty \displays \displays \displays \displays \displays \dinfty \displays \din	Per bushell   St. dt.   St. 5   St. 4   10   2   2   10   2   2   2   3   6   2   7   3   11   3   3   11   3   6   2   3   3   6   2   3   3   3   3   3   3   3   3   3	

In the above table the prices of wheat for the year 1940 onward are not comparable with those shown for earlier years. As explained on page 328, prices in the more recent years need to be considered in conjunction with flour tax until its cessation on 22nd December, 1947 in arriving at the purchase price to consumers of wheat consumed locally as flour. The average prices received by wheat growers were indicated fairly reasonably by average shippers' and millers' buying prices (with adjustment for freight) until the fixation of prices by the Wheat Board commenced in October, 1939. From that time the average return to farmers has been governed by payments from the wheat pools in disbursement of moneys accrued from local and overseas sales and from proceeds of the flour tax, etc., and is indicated in succeeding paragraphs.

Under the present stabilisation scheme, to operate until the close of the 1952-53 season, the price of wheat in each major producing State is to be maintained at the home-consumption price, which, in turn, is to be related to the cost of producing wheat and is to be varied year by year in accordance with an index of production costs. The trend in export prices of Australian wheat since 1938 has been related to the state of world wheat supplies. These contracted during the war and were extremely short in the later war and early post-war years. Export prices rose appreciably up to 1944 and sharply during 1945 to early 1948, holding at the record level of 20s. 10d. per bushel from February to May, 1948. Thereafter, with current and prospective world supplies more nearly approaching demand, a downward trend developed and in February, 1949 the basic

export price was 15s. 6½d. per bushel. Trends are illustrated by the following table:—

Table 308.-Export Prices of Wheat, Australia.\*

Average during—	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.	1948.
				Pence p							
March June September December	47.96 41.85 32.72 28.96	27·19 28·68 29·93 35·50	47.00 48.00 (47.25) (47.75)	(50·00) (50·00) (50·00) (50·00)	50.00 50.00 (50.00) 50.00	51.00 (51.00) 51.00 57.00	57·00 60·00 69·00 75·00	(77·00) † 116.00	122.00 122.00 134.00 164.00	187.00 196.00 204.00 238.00	250·00 237·00 208·25 190·25
Year	40.72	29.37	47.50	50.00	50.00	51.75	64.00	†	130.90	200.08	223.98

Figures in brackets are nominal. bagged and bulk lots to October, 1939. From November, 1939, the quotations are approximate (being the basic export selling price of Australian Wheat Board) but are comparable (approximately) with prices shown for earlier years.

#### ESTIMATED RETURN TO WHEAT-GROWERS FOR WHEAT.

It was very difficult to determine satisfactorily the estimated net return to wheat-growers prior to 1927 because adequate data were not available. Latterly additional information has been obtained and the averages as estimated for 1927 and subsequent years to 1939 are close approximations. The estimated net return for each of these years represents the weighted average price of wheat delivered at country railway sidings less the net cost of bags.

The net return to wheat-growers in 1939-40 and later seasons has been estimated on the basis of advances by the Australian Wheat Board and were as follows:—

Table 309.—Estimated Return to Wheat Growers (as at country sidings).

Season.	Estimated Net Return to Grower per bushel.	Season.	Estimated Net Return to Grower per bushel.	Season.	Estimated Net Return to Grower per bushel.	Season.	Estimated Net Return to Grower per bushel
1910-11 1911-12 1912-13 1913-14 1914-15 1915-16 1916-17 1917-18 1918-19 1919-20	s. d. 3 1 3 3 3 3 2 5 1 4 0 2 10 4 1 4 5 7 6	1920-21 1921-22 1922-23 1923-24 1924-25 1925-26 1926-27 1927-28 1928-29 1929-30	s. d. 7 0 4 8 4 7 5 7 5 1 4 7 4 0 3 2	1930-31 1931-32 1932-33 1933-34 1934-35 1935-36 1936-37 1937-38 1938-39	s. d. 1 7 2 11·5 2 6 2 5·5 2 11·2 3 4 4 8 3 4·5 2 2·8	1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	s. d. 2 11·9 3 7 3 3·6 3 11·7 4 9·6 5 2·8 6 11·0 10 3·8 11 10·3

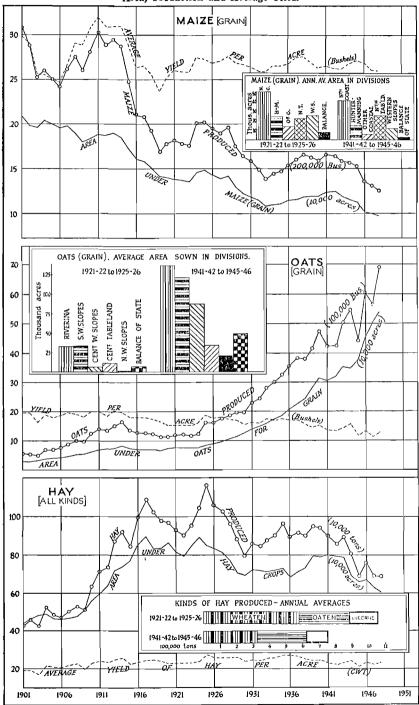
<sup>\*</sup> On advances to date; may be increased by further payments from pool.

Payments to wheat-growers in the nature of bounty, drought relief, and payments from flour tax are included in the table; these were as follows:—

		,	
d. per bushel.	d. per bushel.	d. per bushel.	d. per bushel.
1931-32 4.3	1935–36 2.8	$1941-42 \dots 1.5$	1945-46 1.7
1932-33 3.1	1938-39 5·3	$1942-43 \dots 1.6$	1946–47 23·1
1933-34 3.8	1939-40 1.0	$1943-44 \dots 4\cdot 1$	1947-48 0.3
1934-35 5.5	1940-41 5.8	$1944-45 \dots 19\cdot 1$	

In calculating the averages (per bushel) shown above, drought relief paid in some seasons on acreages which failed to produce a minimum yield of wheat was taken into account.

# MAIZE, OATS AND HAY GROWING IN NEW SOUTH WALES. Area, Production and Average Yield.



The Graphs have been prepared on the basis of averages of the five seasons ended in each year as shown,

#### VALUE OF PRODUCTION FROM WHEAT CROPS.

Wheat growing has been outstandingly the major source of income of agriculturists in New South Wales. The value of production from wheat crops fluctuates considerably from year to year in consequence of the nature of seasons and variations in the area sown and the price of wheat. These factors may be interacting in effect and tend to produce sharp short-term fluctuations within longer-term movements resulting from persistent trends in wheat prices and the relative profitability of wheat growing. Improvement in the productivity and quality of the varieties of wheat grown and in farming practice have contributed to an increase in the volume and value of wheat production.

Most of the value accruing from wheat growing is derived from grain, but that arising from wheat hay crops is also considerable. In the following table, the gross value at place of production arising from wheat growing is shown for 1947-48 and certain earlier seasons. The value of wheat grown for green fodder is not ascertained separately and is therefore not included.

Table 310.—Gross Farm Value of Production of Wheat Crops.
£ thousand.

Season.	Grain.	Hay.	Total.	Season.	Grain.	Hay.	Total.
1911-12	4,077	1,561	5,638	1936-37	12,989	1,057	14,040
1913-14	6,020	1,845	7,865	1937-38	9,,299	1,240	10,719
1920-21	19,469	3,441	22,910	1938-39	6,695	1,950	10,719
1925-26	8,590	2,299	10,889	1939-30	11,451	667	12,118
1928-29	9,851	1,688	11,539	1940-41	4,286	846	5,132
1929-30	5,448	1,214	6,662	1941-42	8,011	1,351	9,362
1930-31	5,215	1,186	6,401	1942-43	10,273	1,653	11,926
1931-32	8,130	601	8,731	1943-44	11,391	1,131	12,522
1932-33	9,859	694	10,553	1944-45	4,485	1,274	5,759
1933-34	7,013	771	7,784	1945-46	21,790	2,695	24,485
1934-35	7,150	748	7,898	1946-47	8,091	896	8,987
1935-36	8,137	627	8,764	1947-48	56,454	2,139	58,598

Very high values for wheat production in the post-war period following each World War were due in part to some exceptional harvests, but in greater degree to the very high level which wheat prices attained because of the acute world wheat supply situation marking those periods. With both the harvest and wheat prices at record levels in 1947-48, the value of wheat production in that season was by far the greatest ever recorded.

#### MAIZE.

Production of maize in New South Wales attained its maximum (7,594,000 bushels) in 1910-11. Thereafter, due in part to the sowing of pastures with lucerne and grasses of vigorous growth and high nutritive value, the production of maize declined steadily, and has averaged less than 3,000,000 bushels in recent years. In 1947-48 the area under maize for grain was the smallest since 1863 and less maize was produced than in any year since 1919. Trends in maize growing are illustrated in the graph on page 359. The following comparison relates to maize-growing since 1906-07:—

Table 311.-Maize, Area and Production.

	Ar	ea under Mai	ze.	Producti	on of Maize.	Gross Farm Value of Maize Grain.		
Season.	For Grain.	For Green Fodder.	Total.	Total.	Average yield per Acre.	Total.	Per Acre.	
Av'ge 5 yrs ended 1910-11 1920-21 1925-26 1930-31 1935-36 1940-41 1945-46	acres. 188,384 189,266 143,870 119,479 114,406 124,308 102,123	acres. 25,329 17,137 23,485 21,280 38,014 43,579 37,406	acres. 213,713 156,403 167,355 140,759 152,420 167,887 139,529	bushels. 6,030,855 3,630,680 3,874,670 3,167,620 3,060,320 3,297,500 2,744,710	bushels. 32-0 25-9 26-9 26-5 26-8 26-5 26-9	£ 884,050 981,000 813,910 682,460 489,330 641,260 751,810	£ s. d. 4 8 7 6 13 8 5 13 2 5 10 10 4 5 10 5 3 2 7 7 8	
Year—1937—38 1938—39 1938—40 1940—41, 1941—42 1942—43 1948—44 1944—45 1945—46 1946—47 1947—48	125;049 122;201 115;856 142;147 117;262 103;591 103;237 94;107 92;416 110;038 86;979	38,785 44,472 50,249 41,842 46,868 88,792 35,362 34,437 31,573 33,739 28,715	163;834 466;673 766;105 183;989 164;130 142;383 188;599 128;544 123;989 143,777 115,694	3,403,140 2,905,020 2,832,810 4,043,985 3,141,720 2,814,765 2,769,057 2,437,317 2,560,695 2,506,926 2,356,710	27·2 23·8 24·5 28·4 26·8 27·2 26·8 25·9 27·7 22·8 27·1	716,080 582,590 507,550 741,390 510,530 809,240 876,870 751,510 810,890 812,140 716,830	5 14 6. 4 7 2. 4 7 7 7. 5 4 4. 4 7 1 8 3 8 9 10 7 19 9 8 15 6. 7 7 7 8 4 10	

Most of the maize used as green fodder is grown for stock in the dairying districts.

Maize is cultwiated chiefly in the valleys of the coastal rivers and on the Northern Tablelands where both soil and climate are peculiarly adapted to its growth. The following statement shows the area of maize sown for grain, production, and average yield in each division of New South Wales in the last two seasons compared with the averages in the five preceding years:—

Table 312.-Maize (Grain) in Divisions.

	Average 5 years ended 1945–46.				1946–47.			1947-48.		
Division.		Yield—	Bush.		Yield—	Bush.		Yield—	Bush.	
	Area.	Total.	Per acre.	Area.	Total.	Per acre.	Area.	Total.	Per acre.	
Coastal— North Hunter and	acres. 41,038	1,289,428	31.4	acres. 40;021	1,117,029	.27-9	acres. 34,790	1,125,099	32.3	
Manning Metropolitan South	14,096 602 5,244	394,764 13,558 175,940	28·0 22·5 33·6	10,886 711 5,849	337,302 25,488 228,876	31·0 35·8 39.1	11,135 614 6,050	357,861 21,231 223,047	32·1 34·6 36·9	
Total	60,980	1,873,690	30 7	57,467	1,708,695	29.7	52,589	1,727,238	32.8	
Tableland— Northern Central Southern	25,583 2,191 123	569,431 39,176 1,829	22·3 17·9 14.9	'34,983 2,246 80	652,248 31,413 1,716	18·6 14·0 21·4	26,178 1,918 198	456,684 49,704 2,517	17.4 25.9 13.0	
Total	27,897	610,436	2/1.9	37,909	685,377	18.4	28,289	508,905	18.0	
Western Slopes Central Plains and Riverina, and		255,759	19.9	14,519	111,021	7:6	5,917	118,143	20.0	
Western Division	392	4,826	12 3	743	1,883	2.5	184	2,424	13-2	
All Divisions	102,123	2,744,711	26.9	110,038	2,506,926	22.8	86,979	2,356,710	27.1	

1947-48

#### OATS.

Experience in the growing of oats for grain is illustrated graphically on page 359. The following table gives statistics of the cultivation of oats for grain since 1906-07:—

18	able 313,	Jats, Grain-	—Area and F	roduction.	
g	Area under	Produ	iction.	Gross Farm Va Gr	lue of Oats for
Season.	Oats for Grain.	Total.	Average yield per Acre.	Total.	Per Acre.
Annual Average	acres.	bushels.	bushels.	£	£ s. d.
1907–11	70,303	1,409,040	20.0	151,040	2 3 0
1912-16	72,350	1,304,863	18.0	179,156	2 9 6
1917-21	78,000	1,208,660	15.5	214,220	2 14 11
1922-26	91,022	1,623,610	17.8	275,870	3 0 8
1927-31	140,972	2,301,560	16.3	283,440	2 0 3
1932–36	207,226	3,562,220	17.2	280,700	171
1937-41	306,516	4,218,626	13.8	408,690	1 6 8
1942–46	454,160	6,052,040	13.3	765,990	1 13 9
Year—					
1937-38	255,144	3,395,130	13.3	480,980	1 17 8
1938-39	399,449	4,831,110	$12 \cdot 1$	493,180	1 4 8
1939-40	405,262	6,903,990	17.0	431,500	1 1 4
1940-41	236,910	1,995,340	8.4	224,480	18 11
1941-42	303,860	4,118,090	13.6	428,970	1 8 3
1942-43	431,299	7,338,213	17.0	764,400	1 15 5
1943-44	374,205	7,050,438	18.8	763,800	2 0 10
1944-45	544,364	1,756,674	3.2	547,770	1 0 1
1945-46	617,070	9,996,765	16.2	1,325,010	2 2 11
1946-47	557,987	2,045,598	3.7	523,120	18 9

Table 313.—Oats, Grain—Area and Production,

Particulars of oaten hay are shown in Table 320.

13,673,871

609,207

The total area of 1,042,940 acres under oats for all purposes in 1947-48 was exceeded previously only in 1942-43 and 1945-46, and that of 609,207 acres for grain only in 1945-46. As a result of the lush season there was an exceptionally high yield per acre and the harvest of 13,673,871 bushels far surpassed the previous record of nearly 10 million bushels in 1945-46, exceeding it by 36.8 per cent.

22.4

2,051,080

3

The particulars of oats grown for grain, hay or green crops since 1936-37 are shown below:—

Table 314.—Area and Purpose of Oats Crops. acres.

		_		_					
Year,	For Grain,	For Hay,	For Green Feed.	Total,	Year.	For Grain.	For Hay.	For Green Feed.	Total.
1937-38 1938-39 1939-40 1940-41 1941-42 1942-43	255,144 399,449 405,262 236,910 303,860 431,299	312,337 413,002 349,266 248,493 289,943 351,985	203,592 184,221 161,446 231,125 237,760 343,392	771,073 996,672 915,974 716,528 831,563 1,126,676	1943-44 1944-45 1945-46 1946-47 1947-48	374,205 544,364 617,070 557,987 609,207	252,300 237,834 289,720 198,134 228,359	341,469 280,286 218,679 177,160 205,374	967,974 1,062,484 1,125,469 933,281 1,042,940

Subsidies provided by the Commonwealth for artificial manures and increasing attention given to the raising of fat lambs have been factors in the expansion of the cultivation of oats. Considerable areas of oats are grown as fodder for sheep, and with an improvement in quality as an outcome of plant breeding, grain is sold to local mills to be treated for human consumption.

The elevated districts of Monaro, Goulburn, Bathurst, and New England contain large areas of land on which oats may be cultivated with excellent results, as oats thrive best in regions which experience a winter of some severity. Particulars of the area cultivated and production in each of six divisions in which approximately 93 per cent. of the oats crops were grown in the last three seasons are given in the following table:—

	1945-46.				1946–47.			1947-48.		
Division.	Area	Production.		Area	Production.		Area	Production.		
	for Grain,	Total.	Av'ge per acre.	for Grain,	Total.	Av'ge per acre.	for Grain.	Total.	Av'ge per acre,	
Riverina S.W. Slopes C.W. Slopes Central Tablelands N.W. Slopes Central Plain	acres. 169,554 167,921 121,400 47,747 32,960 33,237	bush. 2,076,462 2,783,670 2,450,895 972,201 656,571 273,636	bush. 12·2 16·6 20·2 20·4 19.9 8·2	acres. 143,533 153,895 104,467 51,890 37,258 29,632	bush. 959,556 570,942 51,177 51,389 24,624 7,446	bush. 6·7 3·7 0·5 3·7 0·7 0·3	acres. 169,569 163,525 116,624 58,610 29,628 29,442	bush. 4,495,761 4,063,206 2,488,095 979,272 474,975 512,064	bush. 26·5 24·8 21·3 16·7 16·0 17·4	

Table 315.—Oats Production in Divisions.

#### BARLEY.

Barley is produced only on a moderate scale in New South Wales, and supplies for local consumption are imported from other States. Although there are several districts where the necessary conditions as to soil and drainage are suitable for the crop, particularly the malting varieties, barley is grown mainly in the Western Slopes Division and in the Riverina. The areas under the crop in other districts are small.

Only a small proportion of the barley required for malting is produced in New South Wales, but in co-operation with the brewers a system of seed barley production was inaugurated in 1935-36 and the production of malting barley increased.

The following table shows the area under barley for grain, together with the production at intervals since 1900-01.

	Area	Produc	tion.		Area	Produc	tion.
Season.	under Barley for Grain.	Total. Average per acre.		Season.	under Barley for Grain.	Total.	Average per acre.
1900-01 1910-11 1915-16 1920-21 1925-26	acres. 9,435 7,082 6,369 5,969 6,614	bushels, 114,228 82,005 114,846 123,290 105,150	bushels. 12·1 11·6 18·0 20·7 15·9	1939-40 1940-41 1941-42 1942-43 1943-44	acres. 24,273 20,087 20,581 14,297 20,075	bushels, 465,810 175,674 303,594 223,236 379,656	bushels, 19·2 8·7 14·8 15·6 18·9
1930–31 1935–36 1937–38 1938–39	11,526 11,583 11,542 14,194	188,610 214,860 166,860 217,680	16·4 18·5 14·4 15·3	1944-45 1945-46 1946-47 1947-48	28,119 28,893 26,698 23,478	121,716 495,936 107,172 519,483	4·3 17·2 4·0 22·1

Table 316.—Barley (Grain)—Area and Production.

Barley growing for grain expanded considerably during the war years, the average area sown increasing from 11,761 acres in the five seasons ended 1938-39 to 22,393 acres in the seasons 1941-42 to 1945-46. In 1947-48 when

the season was very favourable, the harvest of barley (519,483 bushels) was the largest on record although the area for grain was 5,415 acres below the record area of 28,898 acres in 1945-46.

Particulars of areas sown with barley which yielded grain, hay and green fodder and of production in 1938-39 and each of the seasons since 1942-43 are shown below:—

~		Агеа,					. Production.		
Season,	Malting Barley.	Other Barley.	Hay.	Green Food.	Total Area.	Maltiug Barley.	Other Barley.	Нау.	
	acres.	acres.	acres.	acres.	acres.	bushels.	bushels.	tons.	
1938-39	6,961	7,233	2,225	7,737	24,156	111,780	105,900.	2,238	
1942 - 43	5,501	8,796	4,800	18,863	37,960	79,667	143,559	5,776	
1943-44:	10,154	9,921	1,340	11,876	33,291	205,449	174,207	1,376	
1944-45	17,567	10,552	1,474	13.529	43.122	79,161	42,555	889	
1945-46	18,624	10,269	1,088	11,787	41,768	339,264	156,672	1,342	
1946-47	18,771	7.927	7.74	6,567	34,039.	76,890	30,282	344	
194748	15,127	8,351	1,198	6,228	30,904	356,571	162,912	1,315	

Table 317.—Barley: Grain, Hay and Green Fodder.

#### RICE.

The cultivation of rice in New South Wales expanded very rapidly after 1922 when encouraging results were obtained from trials on the Murrumbidgee Irrigation Area. As production increased beyond the demand for consumption in Australia a maximum area which might be supplied with water for irrigation of rice was fixed for each grower. To meet war-time demand the area per grower was increased and rice growing was extended beyond the Murrumbidgee Irrigation Area to the Tabbita and Benerembah Irrigation Districts supplied with water from the Murrumbidgee River and in 1943-44 to the Wakool Irrigation Area, supplied from the Murray River. These irrigation areas are the only localities in Australia where rice has been grown extensively. A rice research station is maintained by the Department of Agriculture at Yanco, where plant breeding, seed selection and general experimental work are undertaken.

The progress of rice growing since 1925-26 is illustrated below:

~	Number of Holdings	Area	Yield	Gross Farm	Average	e per acre.
Season.	where Rice was Grown,	Sown,	(Paddy Rice).	Value of Yield.	Yield (Paddy),	Gross Farm Value,
		acres.	bus.*	£	bus.	£
1925-26	30	1,556	61,100	12,030	39.21	7.7
1930-31	270	19,825	1,427,413	259,610	72.00	13.1
1935–36	304	21,705	2,163,520	354,620	99.68	1,6;3
1937-38	319	23,737	2,268,907	380,220	95.59	16,0
1938 - 39	313	23,533	2,774,987	444,430	117.96	18.9
1939-40	314	24.120	1,857,650	333,360	77.00	13:8
1940-41	329	24,547	2,240,267	391,690	91.26	15.9
1941-42	331	23,633	2,192,052	425,220	92.75	1810
1942 - 43	348	34,232	3,084,480	640,990	90-11	1/8/7
1943-44	364	40,690	4,014,933	826,820	98.67	20.3
1944-45	330	24,596	1,692,747	349,790	68.82	14.2
1945-46	329	28,372	2,735,040	565,600	96.40	20.0
1946-47	353	31,995	2,978,130	767,330	93.08	24.0
1947 - 48	351	26,208	2,676,267	835,290	$102 \cdot 12$	31.9

Table 318.—Rice-Growing.

The area sown and the production of rice attained a record in 1943-44. The area comprised 36;400 acres in the Murrumbidgee districts and 4,200 acres at Wakool and production reached 4,014,933 bushels. In 1947-48, rice was grown only in Murrumbidgee districts where 26,208 acres were sown and each grower was allocated a maximum rice area of 60 acres. The season was very favourable and with the high yield of 102.1 bushels per acre the harvest approached that of the preceding season, although the area under rice was about 18 per cent, smaller. No rice has been planted at Wakool since 1945-46.

Rice is marketed by a Rice Marketing Board constituted under the Marketing of Primary Products Act, and normally the greater part of the crop is sold for consumption in Australia. The price per ton, f.o.r. Leeton, was £11 in 1941-42, £11 17s. in 1942-43 to 1945-46 inclusive, £14 16s. 0d. in 1946-47 and £18 in 1947-48.

The distribution of rice for consumption by civilians in Australia was suspended in August, 1942, since when available supplies have been used mainly for Australian and Allied Services, for Asiatics in Australia and the population of Pacific Islands.

The quantity of rice (paddy) produced, and the amount and value of local rice shipped oversea from Australia in each year since 1937-38 are shown in the following statement:—

Table 319.—Rice Produced and Rice Exported Oversea.

	Rice	Local	Rice Exported.O	versea from Au	stralia.	
Year ended 30th June.	Produced in 'N.S.W.		Quantity.		Total	
	(Paddy).	Cleaned.	Uncleaned.	Meal and Flour.	Value,	
		tons (2,	240 lb.).		£	
1938	42,542	12,217	126	412	215,353	
1939	52,031	11,832	151	835	185,260	
.1940	34,831	14,060	114	.403	.268,033	
<b>1941</b>	42,005	<b>9,24</b> 6	::232	274	198,820	
1942	41,101	11,038	244	1,095	224,674	
.1943	57,834	9,348	1,656	352	265,69	
1944	75,280	23,712	11,573	<sup>2</sup> 358	591,32	
1945	31,739	8,429	11,716	482	509,49	
1946	51,282	9,932	15,855	148	590,89	
1947	55,840	~23,548	1,269	250	759,62	
1948	50,180	27,772	213	82	1,044,99	

#### HAY.

The production of wheaten and oaten hay varies in accordance with the massonal factors controlling yield, the prospects for grain crops and the market demand for hay. In favourable years considerable stocks are stacked for use in dry seasons. The production of lucerne hay, though subject to considerable fluctuation, is less variable than that of wheaten and oaten hay. The following table shows the area, production and average yield per acre of hay of each principal kind since 1935-36:—

		1 411	ne 020.	IIay	AICE EI	ia i roda	CHOIL.		
			Annual	average.					
Kind of Hay.			1935–36 to 1940–41.	1940–41 to 1944–45.	1943-44.	1944–45.	1945-46.	1946-47.	1947-48.
Wheaten-									
Area		acres	338,100	293,150	198,066	279,120	389,918	263,557	278,361
Production		tons	390,732	278,491	249,905	182,760	499,432	145,088	414,329
Yield p.a	•••	tons	1.16	0.95	1.26	0.65	1.28	0.55	1.49
Oaten—									
Area		acres	349,161	276,111	252,300	237,834	289,720	198,134	228,359
Production		tons	399,040	265,431	329,905	87,836	352,976	103,504	335,742
_ Yield p.a		tons	1.14	0.96	1.31	0.37	1.22	0.52	1 47
Lucerne						1		ļ	
Area	•••	acres	98,762	85,138	82,179	66,820	69,745	79,666	110,324
Production	• • • •	$_{ m tons}$	153,017	138,286	153,574	99,173	126,016	126,636	213,865
Yield p.a	•••	tons	1.55	1.62	1.87	1.48	1.81	1.59	1.94
Barley and Rye-	•								
Area	•••	acres	2,342	2,846	1,925	2,055	1,331	1,113	1,465
Production	•••	tons	2,638	2,753	2,257	1,384	1,588	707	1,637
Yield p.a	•••	tons	1.13	0.97	1.17	0.67	1.19	0.64	1.12
otal Hay									
Агеа		acres	788,365	657,245	534,470	585,829	750,714	542,470	618,509
Production		tons	945,427	684,961	735,641	371,153	980,012	375,935	965,573
Yield p.a		tons	1.20	1.04	1.38	0.42	1.31	0.69	1.56
					100	"-	101		

Table 320.—Hay—Area and Production.

The production of hay was expectionally poor in 1944-45 and in 1946-47, but in 1945-46 it was approximately 20 per cent. greater than the annual average of the preceding ten years.

The quantity of grass cut for hay was ascertained for the first time in 1945-46. Farmers' returns indicated the quantity cut as 10,735 tons from 7,686 acres in 1945-46, 4,632 tons from 3,961 acres in 1946-47, and 12,663 tons from 9,145 acres in 1947-48, the average yield per acre being 1.4, 1.17 and 1.38 tons in the respective seasons. Grass hay is not included in the figures in the above table.

Information regarding the storage of hay on the rural holdings is shown on page 293 in the chapter "Rural Industries."

#### SUGAR-CANE.

The great bulk of the Australian sugar-cane is grown in Queensland, but its cultivation is an important enterprise on the far north coast of New South Wales. The cane-fields are confined to the hills and flats of the Tweed and the flats of the Clarence and Richmond Rivers, where the conditions are favourable, e.g., cheap transport (important because of the bulky nature of the crop), suitable soil, good drainage, adequate rainfall and reasonable freedom from frost. There are few holdings devoted exclusively to cane-growing; usually it is undertaken in association with other agricultural activities and dairying.

The planting of sugar-cane takes place usually from August to early November according to location, soil and climatic conditions. Usually plantings are renewed every fourth or fifth year. Harvesting is a standardised process carried out on a contract basis. The cut cane is crushed

in three mills at convenient centres and the raw sugar is purchased by the Queensland Sugar Board in terms of an agreement with the Commonwealth Government. Certain particulars regarding the operations of these sugar mills and the sugar refinery at Pyrmont (Sydney) are published in the chapter "Factories".

The average yield of cane per acre varies considerably from year to year; it depends partly upon seasonal conditions, cultural methods, and variety of cane and specially upon the maturity of the cane—sometimes considerable areas are stood over for harvesting in the following year. The highest yield on record was  $42\frac{1}{3}$  tons per acre in 1941-42.

For several years before the war the area under sugar-cane exceeded 20,000 acres, but by 1944-45 it had decreased to 13,473 acres (the smallest since 1922) but then recovered gradually and in 1947-48 it was 16,068 acres. In that season cane was cut for crushing from 7,113 acres and 8,955 acres remained uncut. The quantity of cane cut in 1945-46 was less than in any season since 1932-33, but the yields per acre were high in 1946-47 and 1947-48 and production approached the average of the five seasons preceding the war.

The fluctuations of cane-growing in New South Wales are shown in the following table:—

	Area	under Sugar-	cane.		ction of r-cane.	Gross value of Sugar-cane produced.†		
Season.	Cut for Crushing.	Not Cut.	Total.*	Quantity.	Average Per Acre.	Total,	Per Acre.	
	acres.	acres.	acres.	tons.	tons.	£	£ s. d.	
1905-06	10,313	11,492	21,805	201,988	19.59	161,240	15 12 8	
1915–16	6,030	5,228	11,258	157,748	26.16	205,070	34 0 2	
1925–26	8,688	10,675	19,363	297,335	34.22	397,690	45 15 6	
1930-31	7,617	8,007	15,624	160,209	21.03	279,700	36 14 5	
1935-36	10,416	9,794	20,210	280,472	26.93	384,820	36 18 11	
1937–38	10,716	10.137	20,853	361,724	33.76	489,240	45 13 1	
1938-39	10,458	10,772	21,230	336,701	32.20	482,520	46 2 9	
1939-40	10,488	10,229	20,717	274,548	26.18	447,830	42 14 0	
1940-41	10,192	10,386	20,578	342,548	33.61	507,260	49 15 5	
1941-42	8,491	9,896	18.387	359,433	42.33	514,910	60 12 10.	
1942-43	9,732	8,958	18,690	338,013	34.73	490,890	50 8 10	
1943-44	8,240	7,092	15,332	290,364	35.24	458,900	55 13 10	
1944-45	6,771	6,702	13,473	200,050	29.54	350,550	51 15 5	
1945-46	5,943	8,860	14,803	166,069	27.94	292,640	49 4 10	
1946-47	7,563	8,283	15,846	309,605	40.94	546,470	72 5 1	
1947-48	7,113	8,955	16,068	267,261	37.57	560,830	78 16 11	

Table 321.—Sugar-cane—Area and Production.

#### Sugar Agreement.

Since June, 1920, the sugar industry in Australia has been subject to agreements between the Commonwealth and Queensland Governments administered by the Queensland Sugar Board, which arranges for the refining and marketing of sugar produced in Queensland and New South Wales. There is an embargo on the importation of foreign sugar and the prices of refined sugar of various grades are fixed on a uniform basis throughout Australia. Under the current agreement (operative to 31st August, 1951) the wholesale price of refined sugar of 1a grade is £37 6s. 3d. (£33 4s. to December, 1947) per ton. The sugar is sold retail on the basis of 4½d. per lb. in capital cities.

<sup>\*</sup> Exclusive of areas cut for green food or plants since 1910. † At place of production.

Provision is made for rebates on sugar used in the manufacture of canned fruits, jams, etc., and on the sugar contents of other manufactures exported to reduce the cost of the sugar used to a parity with world prices of sugar. These rebates are made at rates and on conditions determined by the Fruit Industry Sugar Concession Committee (see pages 375 to 377) and the Export Sugar Committee set up under the agreement.

Rationing of sugar for household consumption by means of coupons ceased on 2nd July, 1947.

#### TOBACCO.

Encouragement has been given for many years by the Commonwealth and State Governments to tobacco growing, but in New South Wales the industry, though potentially important, has not developed. In 1947-48 therewere only 30 holdings on which tobacco was grown and even at the peak: in the years 1931-32 to 1935-36 the average number of holdings was only 180; the area planted averaged 1,931 acres, and the annual production of dried leaf was 12,041 cwt. The area planted recovered slightly from 370° acres in 1945-46 to 414 acres in 1947-48 but the production of 3,016 cwt. of dried leaf was less than that of any season since 1934-35. There is a State Tobacco Expert to advise farmers and to conduct field experiments: assistance has been given by scientific investigations financed from Commonwealth and State funds; the industry has a highly protective tariff, and on occasion (as in 1943-44 and 1944-45) it has been aided by subsidy. Researches of the Council for Scientific and Industrial Research produced effective means to combat blue mould, which earlier had jeopardised the progress of the industry.

From May, 1941 until 24th September, 1948, all leaf grown in Australia was appraised, acquired and marketed by the Australian Tobacco-Board under National Security Regulations.

Tobacco leaf, is grown mainly in the North-western Slopes division on light, sandy land with facilities for irrigation. The experience in the cultivation of tobacco in New South Wales since 1916-17 is illustrated by the following table:—

lable	322.—Toba	cco-growing	g—Holdings,	Area	and Pro	duction,
	1	1	1 1.		Gross	l Ave

Season.	Holdings Cultivating Tobacco.	Area Planted,	Production (Dried Leaf).	Production per acre Cultivated.	Gross Value of Production (At Farm).	Average Value per acre Cultivated
	No.	acres.	cwt.	ewt.	£	£ s.
Average 1917-21	105**	1,009	10,293	10.20	79,632	78-18!
,, 1922–26	T35	1,493	12,234	8.19	95,890	64 6
,, 1927⊬31	- 87	688	4,310	6.26	38,128	55 8
,, 1932–36	180	1,931	12,041	6.24	149,414	77 5
,, 1937–41	<b>5</b> 2	759	5,175	6.82	49,508	65 <b>5</b>
1937–38 1938–39	58	610	3,649:	5.98	37,860	62 1 60 15
1939-40	41 37	$\frac{629}{717}$	3,550 4,674	$\frac{5.64}{6.52}$	38,220 40,050	55 17
1940-41	49	988	8,589	8.69	77,590	78 11:
1941 - 42	52	953	7,461	7.83	72,530	76 2
1942 + 43	57	823	6,892	8:36	71,790	87 5
1943-44	39.	657	4,599	7.00	61,530	93 .134.
1944-45	26	410	3,107	7.58	41,210	100 10
1945-46	20	370	3,263	8.82	47,200	1'27' 11'
1946-47	22	402	3,561	8.86	53,330	13 <b>2</b> 21 <b>3</b> 0
1947-48	30	414	3,016	<b>7·29</b> .	45,400	109≒1 <b>3</b> ∂3

<sup>\*</sup> Average for four years—particulars for 1919-20 not available.

#### GRAPES.

The most important viticultural district is in the Riverina Division. where 5,081 acres under vines in 1947-48 were for wine-making, 702 acres; for table use, 1,374 acres for drying, with 776 acres of young vines. The greater part of these vineyards is in the Murrumbidgee Irrigation Area growing of grapes for drying is most extensive in the irrigation areas at Wentworth, where 3,175 acres of vines were devoted to this purpose and 9 acres to other purposes in 1947-48. In the Hunter and Manning Division the area cultivated for grapes in 1947-48 was 1,256 acres for winemaking, 262 acres for table use, and 259 acres of young vines.

In the period spanned by the following table there was steady expansion. in the area under grapes until 1938-39 when the record area of 16,979 acres was reached; it then decreased to 15,891 acres in 1944-45 and recovered to 16,541 acres in 1947-48.

A comparative statement of the area planted with table, drying and wine grapes is shown below:--

Varieties of Grapes. 1920-21.\* |1930-31\* |1940-41† |1943-44† |1944-45† |1945-46† |1946-47† |1947-48† acres. acres. acres. acres. acres. acres. acres acres. 3,014 5,368 7,371 Table 2,087 2,637 3,937 2,917 5,376 2,906 5,377 2,735 5,3202,904 5.221 2,659 5,270 Drying Wine 699 4,589 6,771 7,054 6,847 6,8761 6,977 7,001 Tôtal, bearing
∫Wine 7,375 15,753 292 13.345 15,347 15,130 14,931 15,102 14:930

433

16,478

Table 323.—Grapes—Area Grown for Various Purposes.

}3,408 }

Not bearing \ \ \text{Wine} \ Other

Grand Total

.

495

620

15,983

 $\frac{520}{716}$ 

16,338

860

751

16,541

1947-48.

 $\frac{175}{479}$ 

16.001

The production of the vineyards according to the purposes for which it was used is shown in the following comparison. The produce of some varieties of vines cultivated usually for a particular purpose may be used ultimately in a different way. The quantities stated below, therefore, do not relate in every case to the acreages as classified in the preceding table.

Particulars regarding the varieties of dried grapes—currants, sultanas and lexias—are shown in Table 336.

1937-38. 1942-43. 1943-44. 1944-45. 1945-46. 1946-47. Production. Table granes tonsl 5.076 5.186 5.325 4,363 4.817 4.682

1,269 749

15,363

Table 324.—Grapes—Production.

Table grapes Dried grapes Grapes used for wine Wine made	tons 7,293 18,976 gal. 2,690,315	8,888 17,681	5,325 9,207 20,627 3,530,012	4,363 6,116 15,778 2,578,732	4,817 7,781 18,473 2,967,648	7,613 21,573
Seasonal cond periods are during						 critical ber, and

October) and in February and March, when ripening and picking are in progress and drying is commenced.

The quantity of wine made in 1947-48 was the largest on record and the annual output in the five seasons ended 1945-46 was 21 percent greater than in the five years ended 1938-39.

Particulars of the production from vineyards in irrigation areas are shown on page 389.

<sup>10,783</sup> \* Year ended 30th June.

<sup>15,891</sup> † Year ended 31st March.

A Wine Grapes Marketing Board, constituted under the Marketing of Primary Products Act of New South Wales, functions mainly as a negotiating body between the growers of the Murrumbidgee Irrigation Area and the winemakers.

The export trade in wine was assisted by Commonwealth bounty payable under the Wine Export Bounty Act, 1939-44 under conditions as outlined on page 476 of the 50th edition of the Year Book. The rate of bounty from 1st March, 1939, to 28th February, 1947, was 1s. per gallon; the amount of bounty paid in New South Wales was £2,427 in 1943-44, £1,597 in 1944-45 and £1,573 in 1945-46. No bounty payments were made in this State in 1946-47 or 1947-48. Under the Wine Export Bounty Act, 1947 the sum of £500,000 was transferred from the Wine Export Encouragement Account (established in 1939 and from which bounty payments were met) to the Wine Industry Assistance Account established under that Act, to be used during the ten years from 28th February, 1947 for the assistance of the wine making industry. Assistance was made subject to enquiry and report by the Tariff Board, and determination by the Minister as to whether assistance is necessary or desirable, and of the amount, the purpose and the manner of use, of sums to be expended at any time from the Account. At the expiration of the ten years the unexpended balance of the Account is to be paid to Consolidated Revenue.

Under the Wine Overseas Marketing Act, 1929-45 the Australian Wine Board (consisting of representatives of the Commonwealth Government, grape growers, co-operative wineries and distilleries and privately-owned distilleries) supervises the export trade, maintains a representative in London, has all wine inspected before export, and arranges advertising and cenological research. To meet its expenses a levy is imposed on grapes used in Australia for making wine or spirit used for fortifying wine. The levy has been maintained at the original rate of 2s. per ton of fresh grapes and 6d. per ton of dried grapes.

# FRUIT GROWING.

There was a record area of fruit crops of all kinds (including grapes) on holdings of one acre or more in 1947-48 of 115,442 acres, viz., productive 93,076 acres and not yet bearing 22,366 acres and the gross farm value of the fruit produced in that year, £7,434,540 was also greater than ever before. Particulars of area and value of the crops in last seven seasons are shown below:-

Congon		Orchards,		Win same all a	D	Other						
Season.	Citrus.	Citrus. Non-Citrus. Total.		Vineyards.	Bananas.	Fruit,*	Total.					
AREA OF CROPS (acres).												
1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	27,583 30,043 29,086 28,411 28,502 29,917 31,565	40,945 35,732 38,326 37,549 37,270 38,340 38,811	68,528 65,775 67,412 65,060 65,772 68,266 70,376	16,445 16,302 16,001 15,891 15,983 16,338 16,541	13,862 12,457 12,868 15,250 16,938 20,509 26,381	1,037 $1,131$ $1,003$ $1,020$ $1,352$ $1,824$ $2,144$	99,872 95,665 97,284 98,121 100,045 106,937 115,442					
		GRO	SS FARM VAL	UE OF CROPS	(£).	•	•					
1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	1,157,120 1,464,610 2,023,610 1,832,920 1,671.510 1,743,590 1,690,810	1,120,830 1,728,510 2,556,130 1,607,730 2,530,880 2,446,030 2,912,470	2,277,950 3,193,120 4,579,740 3,440,650 4,202,390 4,189,620 4,603,280	656,090 770,990 896,280 720,490 807,600 815,030 974,120	730,370 1,162,070 1,712,160 1,758,790 2,006,330 1,831,420 1,771,250	40,090 56,790 72,050 48,770 69,600 62,620 85,890	3,704,500 5,182,970 7,260,230 5,968,700 7,085,920 6,898,690 7,434,540					

<sup>\*</sup> Includes passion fruit, pineapples, berry fruits, etc.

Opportunities of profitable marketing rather than considerations of suitability of soil or climate govern the devlopment of the fruit-growing industry. With the climate ranging from comparative cold on the highlands to semitropical heat on the North Coast, a large variety of fruits can be cultivated. In the vicinity of Sydney, citrus fruits, peaches, plums, apples, and passion-fruit are most generally planted. On the tablelands, apples, pears, apricots and all the fruits from cool and temperate climates thrive; in the west and in the south-west, citrus, pome and stone fruits, figs, almonds and grapes are cultivated; and in the north coastal districts, bananas, pineapples and other tropical fruits are grown.

The usual periods of harvesting are in the summer and early autumn. Bananas and citrus fruits are harvested throughout the year. Apples and pears ripen from December to May, peaches and plums from November to March, apricots from November to February and table grapes from January to April.

Information regarding the marketing of fruit in New South Wales is given at the conclusion of this chapter.

Particulars as to the number of fruit trees on rural holdings of one acre or over in 1930-31, 1938-39 and 1947-48 and the yield in 1947-48 are shown below. Bananas, passion fruit, pineapples, grapes and berry fruits are not included.

Table 326.—Fruit Trees: Number and Production.

	1930	)-31.	193	8-39.		1947-48.	
Fruit.		Number	of Trees.		Number of Trees	Trees of B	Bearing Age.
	Not yet Bearing.	Bearing.	Not yet Bearing.	Bearing.	not yet Bearing.	Number.	Yield.
Oranges— Navel Valencia All other	158,380 234,560 39,081	551,616 719,441 425,123	114,546 154,055 20,971	643,736 802,254 185,747	139,809 330,024 16,619	721,425 983,690 118,099	bushels. 1,255,074 1,552,678 154,902
Total Oranges	432,021	1,696,180	289,572	1,631,737	486,452	1,823,214	2,962,654
Lemons  Mandarins Other Citrus  Total Citrus	53,350 100,184 14,919 600,474	210,833 589,839 27,942 2,524,794	65,352 20,274 19,012 394,210	207,464 331,955 39,628 2,210,784	75,959 18,461 23,390 604,262	287,641 224,284 67,583 2,402,722	435,631 253,218 142,635 3,794,138
Apples	323,802 45,614 54,166 55,685 7,746 37,559 21,616 6,002 78,331 16,156 9,929 9,931 2,269	967,164 301,612 302,688 171,127 32,142 207,631 272,553 8,629 241,724 147,789 15,969 35,899 15,738	471,810 61,645 87,471 114,077 16,734 25,488 14,111 3,331 42,854 21,743 7,384 25,402 13,072	1,104,309 200,942 311,507 185,053 41,804 201,000 248,567 20,106 268,643 146,969 38,158 53,688 21,274	191,228 40,717 126,919 60,259 19,478 27,222 47,815 4,112 29,468 32,595 8,561 6,359 4,547	1,133,290 202,319 372,757 273,628 63,651 154,414 212,932 21,169 199,64 149,147 44,486 54,251 13,498	1,329,955 429,916 390,964 573,214 59,609 152,560 303,615 20,884 95,275 390,869 62,484 6,523 11,839
Total Non-Citrus	667,906	2,720,664	905,122	2,932,200	599,280	2,985,348	3,790,653

Before the war (1939-45), citrus fruit growing tended to decrease and emon-citrus fruit growing to extend moderately. Part of an increase in citrus trees between 1938-39 and 1942-43 was lost in following war years, but this was followed by a marked increase and in 1947-48 these numbered 402,000 (or 15.4 per cent.) more than in 1938-39. Non-citrus in bearing decreased between 1938-39 and 1945-46 and then tended to increase again and in 1947-48 numbered 53,000 more than before the war, but the increase in trees not yet bearing was small; these were 306,000 or 33,8 per cent, fewer athan in 1938-39.

# CITRUS FRUITS.

Particulars of citrus or chards are shown in the following statement:

	Area und	er Cultivation Fruits.)	on (Citrus	Produ	ictiou.	Gross Farm Value of Production.		
Season.	Productive.	'Not bearing.	Total.	Total.	Average per Pro- ductive Acre.	Total.	Average per Pro- ductive Acre.	
	acres.	acres.	. acres.	bushels.	bushels.	£	€ s. d.	
1910-11	17,465	2,643	20;108	1,478,306	85	199,300	11 8 3	
1920+21	21,990	6,445	28,435	2,009,756	91	477,580	21 14 4	
1922-26 (Av.)	21,854	8,119	29,973	2,155,313	99	595,900	27 5 4	
1927-81/(Av.)	26,140	7,019	.33,159	2,677,548	102	450,450	31 12 4	
1932-36 (Av.)	26,223	4,806	31,029	2,947 468	112	557,850	21 5 6	
1937-41 (Av.)	23,569	4,164	27,733	2,731,579	116	728,460	30 18 2	
1937-38	23,875	3,742	27,617	2,653,599	111	659,950	27 12 6	
1938-39	23,416	4,072	27,488	3,108,859	133	823,300	35 3 2	
1939-40	23,077	4,313	27,390	2,405,785	104	886,770	38 8 6	
1940-41	22,909	4,708	27,617	2,705,547	118	619,080	27 0 6	
1941-42	22,502	5,081	27,583	2,833,745	126	1,157,120	51 8 6	
1942-43	24,402	5,641	30,043	2,085,065	85	1,464,610	60 0 5	
1943-44	23,726	5,360	29,086	2,891,648	122	2,023,610	85 5 10	
<b>194445</b>	23 384	5,027	28,411	2,996,468	128	1,832,920	78 7 8	
··1945-46	23,484	5,018	28,502	2,605,804	111	1,671,510	71 3 6	
1946-47	24.543	5,374	29,917	3,013,452	123	1,743,590	71 0 10	
1947~48	25,263	6,302	31,565	3,794,138	150	1,690,810	66 18 7	

Table 327.—Citrus Fruits—Area and Production.

Most of the citrus orchards are concentrated about Gosford, Windsor, Kurrajong, Baulkham Hills and Hornsby within about fifty miles of the metropolis (in the Hunter and Manning, Central Tablelands and Metropolitan divisions) and in the Murrumbidgee Irrigation Area in the Riverina division. Of 31,565 acres under citrus fruits in 1947-48, approximately "20,800 acres were in the divisions first named and about 6,400 acres were in the Murrumbidgee Irrigation Area.

Oranges predominate, with Valencias comprising more than one-half and navels over three-eighths of the orange trees; the number of productive age increased by 155,000 in 1946-47 and 1947-48 after minor fluctuations over the preceding ten years. Lemon trees (bearing) increased by over 77,000 (37 per cent.) between 1937-38 and 1947-48 while owing to marketing difficulties mandarin trees (bearing) decreased by about 146,000 (39 per scenty) sin sthat period.

Seasonal conditions cause rather marked fluctuations in production and those prevailing in 1947-48 were very favourable. In that season the total citrus crop of 3,794,000 bushels eclipsed the former record of 1938-39 (by 22 per cent;) although the production of mandarins and oranges other than navel or Valencia was much below the pre-war level.

Barticulars of the production of the various kinds of citrus fruits in each year 1937-38 to 1947-48 are shown in the following table. Information vas to the number of trees in 1942-43 is not available.

Table 328 .- Citrus Fruits-Trees and Production

				1 . 4	7 7 0 0 0 min	- 110440					
Year ended		Orang	ges.		Lemons.	Mandarins.	Other	Total.			
March,	Navel.	Valencia.	Other.	Total Oranges.	Lemons,	manuarms.	Citrus.	Tour.			
TREES OF PRODUCTIVE AGEthousands.											
1938 I	633-5	812·0	203.3	1,648.8	210.1	ı 370⋅3 I	37.0	2,266.2			
1939	643.7	802-3	185.7	1,631.7	207.5	332.0	39.6	2,210 8			
1940	654.0	793-9	180.0	1,627.9	208.8	307.9	37:6	2.182.2			
1941	$643 \cdot 3$	790.8	173.9	1,608.0	215.1	294-3	39.2	2,156.6			
1942	648.0	798-9	129.9	1,576.8	232,9	270.3	57.7	2,137.7			
1944	651.6	831.0	139.2	1,621.8	240.0	241.9	56.9	2,160.6			
1945	657.3	857.3	125.6	1,640.2	252.5	230.5	63.9	2,187.1			
1946	$662 \cdot 1$	887.2	118.7	1,668 0	258.5	217.0	65.5	2,209 0			
1947	689-5	933.0	122.5	1,745.0	284.5	216.1	71.8	2,317.4			
1948	721 4	983.7	118'1	1,823.2	287.6	224.3	67.6	2,402.7			
			PRODUCT	ION—thousa	and bushels.						
1938	879.9	922.7	219.2	2,021.8	1 253.0	314.4	64:4	2,653.6			
1939	1,078.3	1,172.6	$227 \cdot 2$	2,478.1	256.5	305.8	68.5	3,108.9			
1940	895.4	874.9	174.8	1,945.1	211.6	186.6	62.5	2,405.8			
1941	1,014.9	1,067.5	157.5	2,239.9	235.5	153.8	76.4	2,705.6			
1942	985.3	1,066.9	169.8	2,222.0	287.3	236 1	88.4	2,833.8			
1943	788∙8	752.8	103.8	1,645.4	222.7	127.6	89.3	2,085 0			
1944	997.5	1,093.0	160.8	2,251.3	298.0	231.1	111.2	2,891.6			
1945	995 4	1,190.5	160.4	2,346.3	334:0	193.4	122.8	2,996.5			
1946	872.4	982-2	114.1	1,968.7	332.5	179.2	$125 \cdot 4$	2,605.8			
1947	871.6	1,184.9	155.3	2,211.8	422.2	256-6	122.9	3,013.5			
1948	1,255.1	1,552.7	154.9	2,962.7	435.6	253,2	142.6	3,794.1			

#### FRUITS OTHER THAN CITRUS.

The non-citrus orchards are distributed widely throughout the State. From the record of 45,412 acres in 1936-37 the area of non-citrus orchards and fruit gardens, including passion fruit but exclusive of bananas, pineapples and berry fruits decreased steadily to 36,598 acres in 1942-43 and then made gradual recovery to 40,387 acres in 1947-48, but new plantings remained much below the pre-war level. The area under these fruits and the total value of each season's yield; at intervals since 1910-11 were as follows:—

Table 329.—Non-Citrus Fruits—Area and Value.

	Area under Cult	tivation (Fruits ot	her than Citrus).	Gross Farm Value of Production			
Season.	Productive.	Not Bearing.	Total.	Total.	Average per Productive Acre.		
	acres.	acres.	acres.	£.	£ s. d.		
1910–11	20,498	6,748	27,246	271,930	13 5 4		
1920-21	27,302	14,309	41,611	577,480	21, 3 0		
1932-36 (Av.)	32,834	7,713	40,547	719,846	21 18 6		
1937-41*(Av.)	33,927	9,957	43,884	932,843	27 9 11		
1942-46 (Av.)	31,860	6,889	38,749	1,954,864	61. 7 2:		
1937-38	34,462	10,254	44,716	935,474	27. 2.11.		
1938-39	34,037	9,955	43,992	899,120	26 8 4		
1939-40	33,003	10,012	43,015	869,140	26 6 8		
1940-41	32,923	9,364	42,287	930,210	28 5 1		
1941-42	33,281	8,476	41,757	1,154,900	34 14 0		
1942-43	29,732	6,866	36,598	1,771,900	59 11 11		
1943-44	32,540	6,470	39,010	2,609,390	80 3:10		
19 <del>44 -4</del> 5	31,826	6,300	38,126	1,645,350	51 14 0		
1945-46	31,924	6,332	38,256	2,592,780	81 4 4		
1946-47	33,272	6,355	39,627	2,499,110	75 2 3		
1947 - 48	33,445	6,942	40,387	2,985,260	89. 5. 2		

<sup>\*</sup> An increase in 1936-37 of 2,377 acres bearing and 2,488 acres not bearing, was due to the inclusion of a number of small orchards not previously recorded.

More than one-quarter of the area under fruits other than citrus is situated in the Central Tablelands, where the area occupied in this way in 1947-48 was 10,221 acres; 7,321 acres were situated in the South-Western Slopes and 8,684 acres in the Riverina. The last-mentioned acreage includes the orchards of the Murrumbidgee Irrigation Area, which are described on page 390.

Apples easily take first place amongst non-citrus fruits and, with pears, are grown extensively around Bathurst and Orange (Central Tablelands), Batlow and Tumbarumba (South-Western Slopes), Uralla (Northern Tablelands), between Camden and Mittagong (South Coast) and in the Murrumbidgee Irrigation Area (Riverina division).

Increases in trees of productive age were shown in 1947-48 for apples, peaches and apricots, but pear, plum, prune and cherry trees decreased in number. Over the last ten years small fluctuations brought little change in the number of productive apple, pear and apricot trees; peach trees increased nearly 30 per cent., while plum and cherry trees each decreased by 27 per cent., and prune trees by 10 per cent.

The number of non-citrus fruit trees (in bearing) of each of the principal varieties and production in each year since 1937-38 are shown in the following table. (Particulars as to the number of trees were not collected in 1942-43.)

Table	330N	on-Citrus	Fruits-	-Trees	and	Production.
-------	------	-----------	---------	--------	-----	-------------

Season.	Apples.	Pears.	Peaches.	Apricots.	Plums.	Prunes.	Cherries.					
NUMBER OF TREES OF PRODUCTIVE AGE.												
1937–38	1,133,609	293,666	498,393	152,843	211,180	236,961	272,410					
1938-39	1,104,399	290,942	496,560	146,969	201,000	248,567	268,643					
1939-40	1,074,570	281,019	481,414	142,288	190,388	219,572	266,061					
1940-41	1,078,595	275,116	491,438	136,779	184,214	209,650	259,194					
1941-42	1,071,775	272,999	545,168	147,541	189,734	210,863	249 325					
1943-44	1 110,447	254,806	567,320	139,757	185,183	207,812	219,197					
1944-45	1,088,162	281,173	566,291	140,251	167,032	207,056	212,779					
1945-46	1,096,997	279,536	575,426	137,716	158,891	208,938	214,815					
1946-47	1,108,146	305,452	623,407	148,130	163,012	232,195	220,999					
1947 - 48	1,133,290	292,319	646,385	149,147	154,414	212,937	199,806					
		]	PRODUCTION-	-bushels.			_					
1937-38	1,234,802	455,610	509,532	197,846	145,917	307,632	140,493					
1938-39	936,766	338,467	583,833	153,685	114,140	146,409	127,459					
1939-40	615,932	276,257	508,409	194,994	100,960	206,157	69,225					
1940-41	989,679	364,829	583,064	164,856	117,545	164,339	115,668					
1941-42	812,843	257,433	584,831	197,184	93,118	176,826	132,872					
1942 - 43	628,418	353,863	631,239	234,441	173,831	210,280	137,116					
1943-44	1,233,758	319,976	752,357	246,008	243,166	243,688	213,229					
1944 - 45	501,378	270,609	501,059	99,968	121,982	119,389	146,460					
1945 – 46	1,180,442	323,981	701,367	233,107	149,433	220,803	160,286					
1946-47	1,065,709	350,957	794,970	255,041	121,927	160,083	115,319					
1947 - 48	1,329,955	429,916	973,178	339,809	152,566	308,615	95,275					

Vagaries of season, pests and disease affect the yield of non-citrus fruits greatly. Thus production in 1944-45 was 1,837,917 bushels followed by 3,111,979 bushels in 1945-46, 2,968,267 bushels in 1946-47 and 3,790,653 bushels in 1947-48.

# BANANAS.

Practically all banana growing is in the North Coast division where it is extensive in the Tweed River district, and of some importance around Coff's Harbour, where it developed during the depression years. More

prosperous conditions and a recurrence of bunchy-top caused a decrease in holdings with an acre or more of bananas from 2,295 with 17,438 acres in 1933-34 to 1,228 with 12,457 acres in 1942-43. Then the industry expanded again and in 1947-48 both the number of holdings (3,056) and the area under bananas (26,381 acres) were far greater than ever before. Holdings with bananas increased by 419 in 1946-47 and by 673 in 1947-48, the acreages in bearing and not yet bearing increasing by 2,551 and 1,020 acres and 3,430 and 2,442 acres in the respective years.

More than 1,500,000 bushels of bananas were produced in every season since 1934-35 and production in 1947-48, 2,321,833 bushels, was a record.

Bananas consigned to southern markets are handled by the Banana Growers' Federation, a growers' co-operative organisation. Since late in 1946, bananas have been marketed in cases of a capacity of approximately 1.36 bushels in lieu of tropical cases containing about 1.6 bushels.

The following table shows the area cultivated for and the production of bananas in certain years since 1922:—

Table	331.—Banana	growing-	-Holdings,	Area	and	Production.
-------	-------------	----------	------------	------	-----	-------------

Year ended	77.122		Area.	Production,		
31st March.	Holdings.	Bearing.	Not bearing.	Total.	Bushels.	Farm Value
i	<u> </u>	acres.	acres.	acres.	No.	£
1922*	†	4,570	898	5,468	650,299	260,120
1925*	+	1,002	502	1,504	91,144	47,090
1930*	523	1,806	1,534	3,340	175,680	107,840
1935	2,117	12,179	3,893	16,072	1,589,064	306,220
1938	1,697	11,965	2,749	14,714	1,845,394	740,080
1939	1,501	11,677	2,194	13,871	1,582,706	585,270
1940	1,509	11,838	2,618	14,456	1,700,648	611,170
1941	1,565	12,706	2,558	15,264	1,905,310	575,560
1942	1,344	12,930	932	13,862	l í f	730,370
1943	1,228	11,700	757	12,457	<b>†</b>	1,162,070
1944	1,395	11,651	1,217	12,868	1,580.462	1,712,160
1945	1,747	11,967	3,283	15,250	1,600,422	1,758,790
1946	1,964	13,145	3,793	16,938	1,960,381	2,006,330
1947	2,383	15,696	4,813	20,509	2,144,100	1,831,420
1948	3,056	19,126	7,255	26,381	2,321,833	1,771,250

<sup>\*</sup> Year ended 30th June.

# FRUIT AND VEGETABLE CANNING.

Under the Sugar Agreement between the Commonwealth and Queensland Governments (see page 367), the Queensland Sugar Board for the Queensland Government provides from proceeds of the sale of cane sugar the amount of £216,000 annually for disbursement by the Fruit Industry Sugar Concession Committee (constituted under the Agreement) in the form of rebates on sugar used in the manufacture of fruit products. The Committee-comprises representatives of the Commonwealth Government, the Queensland Sugar Board and of growers and processors of fruit.

A domestic sugar rebate of £2 4s. per ton is paid to manufacturers on sugar used in manufacturing fruit products, provided the fruit processed is bought at not less than prices determined by the Committee. When the Australian exceeded the world parity price of sugar, an export sugar rebate was made on the sugar contents of fruit products exported, and the Committee also provided special export assistance from time to time. Because of the high world prices, payments of export sugar rebate have been negligible since 1944-45 and ceased altogether from 1st May, 1947. Any

<sup>†</sup> Not available.

funds remaining after payment of rebates may be applied to promote the use of Australian fruit products in Australia or abroad, or for research for the purpose of increasing the yield per acre of fruits required by manufacturers.

The domestic sugar rebates granted in respect of New South Wales fruit products in successive years from 1943-44 to 1947-48 amounted to £41,738, £34,942, £36,858, £44,007 and £49,737.

The following statement shows the minimum prices declared by the Fruit Industry Sugar Concession Committee as reasonable prices to be paid by manufacturers for certain fresh fruits of the seasons 1939 and 1942 to 1948. Canning prices are at grower's railway station or country cannery. Non-canning prices are for fruit delivered at metropolitan factory; if delivered at country factory the minimum prices are £1 per ton lower than those stated:—

Table 552.—Willin	ium I.	rices o	1 1 105	II I-19 (AII)	. 101 1	Tällala	cture,		
Kind of Fruit.	1939.	1942.	1943.	1944,	1945.	1946.	1947.	1948.	
Tride of Fiding	Prices per long ton (2,240 lb.).								
	£	£	£	£	£	£	£	£	
Apricots—Canning	12	14	$15\frac{1}{4}$	161	17	17	17	19	
Non-canning	10	. 12	$13\frac{7}{4}$	$14\frac{7}{2}$	15	15	15	17	
(Peaches, Canning—			*	_ ~					
Clingstone, clear centres	$9\frac{1}{2}$	13	$14\frac{1}{4}$	$15\frac{1}{3}$	16	16	16	18	
Clingstone, Other	8 1	12	$13\frac{7}{4}$	14 រ៉ឺ	15	15	15	17	
Freestone	7	$9\frac{1}{2}$	$10\frac{3}{4}$	12	$12\frac{1}{2}$	121	$12\frac{1}{2}$	$14\frac{1}{2}$	
Peaches, Non-canning	6	9	$10\frac{7}{4}$	$11\frac{1}{2}$	12	12	12	$14^{-}$	
Pears—Bartlett	10	12	$13\frac{1}{4}$	$14\frac{7}{2}$	15	15	15	16	
Plums	6	$8\frac{1}{2}$	9*	10	10	10	1:0	12	
Quinces—Canning	6	$8\frac{1}{2}$	9	10	10	10	10	12	
Non conning	_	71	Q	Q	ā	اما	l a l	11	

Table 332.—Minimum Prices of Fresh Fruit for Manufacture.

# Fruit Canning.

The Australian Canned Fruits Board supervises the export of canned fruit under the Canned Fruits Export Control Act, 1926-38. Before the war exporters were assisted by an export bounty (additionally to domestic and export sugar rebates paid by the Fruit Industry Sugar Concession Committee.) The rates of bounty in 1938-39 per dozen 30 oz. cans were 1½d. for apricots and pears and 3d. for peaches. About 50 per cent. of the pre-war pack went to the United Kingdom and quantities were marketed in Canada, New Zealand and Eastern countries.

War-time packs were disposed of largely under purchase agreements with the United Kingdom Ministry of Food and by allocations for the Services and other requirements made under National Security powers. Shipments to the United Kingdom began again in 1944-45 and the United Kingdom Ministry of Food purchased 977,300 cases or about one-half the 1946 pack and 1,500,000 cases of the 1947 pack and agreed to accept up to 1,750,000 cases from the 1948 pack. New Zealand was allocated 100,000 cases in each of the last two seasons and an allocation of 100,000 cases for Canada in 1948 was the first made since the war.

After the cessation of hostilities service demands fell away rapidly. Control over the marketing of the 1947 and 1948 packs was exercised under Distribution of Food Orders. The domestic market quota was increased in 1948, but supplies for consumption in Australia were still short of normal demands.

The production of canned fruit in New South Wales was heavy up to 1940-41, after which scarcity of factory and field labour and of tin-plate, the pulping of large quantities of fruit, and some adverse seasons caused marked reduction. In 1944-45 the output was 51.8 per cent. below the annual average in 1936-37 to 1938-39. There was rapid subsequent recovery and in 1947-48 the quantity canned was a record and 9.5 per cent. above the average in the three years ended 1938-39.

The quantity and value of fruit preserved in liquid in factories in New South Wales in each year since 1936-37 were as shown below:—

Year ended	Fruit Preserved in Liquid.		Year ended	Fruit Preserved in Liquid.		Year ended	Fruit Preserved in Liquid.		
30th June.	Quantity.	Value at Cannery.	30th June.	Quantity.	Value at Cannery.	30th June,	Quantity.	Value at Cannery.	
1937 1938 1939 1940	1b. 28,394,451 26,947,628 28,387,122 24,182,682	£ 438,172 465,968 507,032 517,299	1941 1942 1943 1944	lb. 29,581,313 23,309,653 17,351,194 19,181,992	£ 617,370 587,772 460,588 498,400	1945 1946 1947 1948	lb. 13,456,695 21,762,420 27,408,125 30,556,132	581,618 764,077	

Table 333.-Fruit Preserved in Liquid.

Jam.

Jam-making absorbs a considerable proportion of the fruit produced, and appecial export assistance, supplementary to domestic and export sugar rebates, has been given jam manufacturers by the Fruit Industry Sugar Concession Committee. Between January, 1932 and December, 1941, all jam exported, other than to New Zealand, and after 1936, excepting certain varieties to the United Kingdom, was eligible for this assistance which was at the rate of £5 per ton up to 1939 and at £2 10s. per ton during 1940 and 1941. From 1942 onward demands of British and Allied services and Australian civilian requirements absorbed the entire output of jam. The export trade began to revive late in 1945, and to assist exports to the United Kingdom in that year, the Committee set aside £20,000, but claims in Australia against this totalled only £3,020. No export assistance was given in 1947 or 1948.

Jam production in New South Wales rose from an annual average of about 21,000,000 lb. in 1936-37 to 1938-39 to 54,667,000 lb. in 1943-44. It was affected by an adverse season in 1944-45 but increased again thereafter and in 1947-48 was nearly 59,000,000 lb., and about 180 per cent. above the pre-war average. Details follow of the quantity and value of jam produced in each of the ten years ended 30th June, 1948:—

		10	1016 00-	. bank 17	anarayta	cu.		
Year ended	Jam Manufactured.		Year	Jam Man	ufactured.	Year ended	Jam Manufactured.	
30th June.	Quantity.	Value at Factory	ended 30th June.	Quantity.	Value at Factory.	30th June.	Quantity.	Value at Factory.
	16.	£		lb.	£		lb.	£
1937 1938 1939 1940	21,407,212 20,996,010 20,634,787 29,549,423	463,193 528,049	$1941 \\ 1942 \\ 1943 \\ 1944$	32,872,895 37,193,363 52,029,673 54,666,802	782,570 1,022,259 1,335,795 1,432,627	1945 1946 1947 1948	43,136,051* 45,725,769* 51,936,149 58,977,654	1,358,600* 1,388,182* 1,593,312 2,079,808

Table 334.—Jam Manufactured.

Revised.

War-time demands of the armed services, especially Allied, caused a marked expansion in production of fruit juices and initiated (in 1943-44) the extraction of tomato juice. Tomato juice extraction has increased again after decreasing heavily in 1945-46, but the production of fruit juices tends to return to the low pre-war level. Production of fruit juices was 191,683 gallons in 1941-42. The quantities produced in later years were:—

	1942–43. gal.	1943-44, gal.	1944–45. gal.	1945-46. gal.	1946-47. gal.	1947-48. gal.
Fruit Juices	0 -	1,396,521	8	362,228	89,312	116,702
Tomato Juice	•••	291,677	714,918	234,750	332,291	382,503

#### DRIED FRUITS.

The cultivation and drying of vine fruits is important in the Murrumbidgee, Coomealla, Curlwaa, Goodnight and Pomona Irrigation Areas. Prunes are grown in the Murrumbidgee Irrigation Area and in the Young district, and dried apricots, pears and nectarines are produced in the Murrumbidgee and Curlwaa irrigation districts. Small quantities of dried fruits are produced in the Junee, Albury and Euston districts.

All dried fruits must be handled in registered packing houses and graded and packed hygienically in properly branded boxes. The New South Wales Dried Fruits Board regulates the marketing of dried fruits in New South Wales and the Commonwealth Dried Fruits Control Board has controlled exports since 1924. The system of marketing gives to each producer an equal share of local sales (which normally represent about one-fifth of the dried fruits produced) and the less profitable overseas marketings. Quotas, uniform in all States, are declared by the State Boards each season, fixing the proportion of each kind of dried fruit which may be sold within the State. Toward the cost of administration packers contribute at the rate of 4s. 3d. per ton of dried fruits. All dried tree fruits from 1941 to 1945 were requisitioned for the services and no quotas for these were determined in those years, nor in 1946 when appreciable quantities again became available to civilians, but the entire packs of 1947 and 1948 were available for local markets. The quotas for dried vine fruits produced in the years. 1938 to 1948 are given below:

Kind of Dried Fruit.		Quota for Intra-State TradePer cent. of Production.									
	1938.	1939.	1940.	1941.	1942.	1943.	1944.	1945.	1946.	1947.	*1948
Currants	15	14	15	23	301	271	30	30	33	49	24
Sultanas	13	19	14	17	201	261	32	32	$22\frac{1}{2}$	20}	30
Lexias	45	50	45	39	50 <u>1</u>	46 <del>1</del>	421	50	58	80	77≹

Table 335 .- Dried Vine Fruits-Marketing Quotas.

Fluctuations from year to year in production of dried fruits are occasioned mainly by seasonal factors, and the higher level of the years 1937 to 1946 was due at first to the greater area, and later the greater maturity of vines. Decreases in peach and apricot drying after 1942 were caused by diversion of fruit to other uses. The output of both vine and tree dried fruits was affected seriously by adverse climatic conditions in 1945 and 1947 and by excessive rain during the ripening and drying stages in 1946, but was relatively high in 1948 when conditions were more favourable than

<sup>\*</sup> Interim declaration.

for several seasons. Although there were fewer trees, prune production exceeded the pre-war average in the seasons 1942 to 1944; it was halved by drought in 1945, hampered by adverse ripening and drying conditions in 1946, again affected by drought in 1947, but in 1948 was a record and 43 per cent. above the annual average production in the five years preceding the war.

The following statement gives particulars of the production of dried fruits in New South Wales in each of the last eleven years as recorded by the State Dried Fruits Board.

Table 336 .- Dried Fruits, Production.

·- <u> </u>				tons.							
Calendar Year.	Dried Fruits,										
	Currants.	Sultanas.	Lexias.	Prunes.	Peaches.	Apricots.	Nectar- ines.	Pears.	Total.		
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	1,070 1,282 1,509 1,016 1,381 1,291 1,527 990 889 731 1,079	5,805 4,114 7,411 6,256 7,489 7,279 7,431 4,342 6,571 4,453 6,367	384 395 501 524 532 600 662 600 568 447 577	2,131 1,049 1,604 1,343 2,155 2,219 2,279 1,098 2,052 1,359 2,649	139 120 87 107 86 66 47 23 29 33 66	326 187 188 162 341 104 105 14 55 53 84	4 2 2 3 4  2 3 1 	7 2 3 6 6 1 5 1  6	9,866 7,151 11,305 9,417 11,994 11,560 12,058 7,071 10,165 7,080 10,857		

During the war years (1939 to 1945) the United Kingdom Government purchased the residue of each season's dried fruits crop after local requirements and allocations to Canada and New Zealand had been met. Increased proportions of the small 1945 crop were allocated to these countries, and in compensation for the reduced quantity sold in the more remunerative local market, growers were paid subsidy by the Commonwealth on that season's output at rates per ton of £3 10s. on currants, £3 on sultanas and 3s. 4d. on lexias.

The United Kingdom Government contracted to buy all dried vine fruit of the 1946, 1947 and 1948 seasons in excess of Australian, Canadian and New Zealand requirements at prices (Australian currency) on f.o.b., Australian port basis, per ton, of £50 for currants and £65 for sultanas, both from one crown upwards, and £64 7s. 6d. for lexias, four, five and six crown. Under a new contract arranged in 1948 quantities to the value of £stg. 2.5 million are to be taken annually in each year 1949 to 1953. The fixed prices for 1949 and 1950 (equivalent in Australian currency) per ton are £60 for currants, £70 for sultanas and £64 7s. 6d. for lexias.

#### VEGETABLES.

Statistics of vegetable growing in New South Wales from 1942-43 embrace practically all varieties of vegetables grown for human consumption except on holdings less than an acre in extent or in home gardens. Formerly, information as to varieties produced was obtained only from holdings with an acre or more of any one kind of vegetable; market garden statistics were confined to the total acreage and value of all crops produced. Information regarding the marketing of vegetables in New South Wales is given at a later page.

To cope with heavy demands from our own and Allied Services for fresh and processed vegetables, the Commonwealth promoted increased vegetable growing during the war years by publicity, contracts with growers, and the establishment and operation of pools of specialised machinery. In New South Wales the area of crops of vegetables for human consumption rose from 81,051 acres in 1942-43 (then already much in excess of the pre-war area) to 133,422 acres in 1944-45. Government contracts to growers were reduced in 1945-46 and ceased (except in regard to potatoes) after that year. The area decreased to 103,040 acres in 1945-46 and to 101,257 acres in 1946-47, and in 1947-48 there were 2,999 fewer holdings with vegetable crops and the acreage of vegetables was 37½ per cent. smaller than in 1944-45.

The following statement shows the number of holdings on which vegetables were grown for human consumption and the area of the crops in various divisions in each year since 1944-45:—

Table 337 .- Vegetables-Holdings and Area of Crops in Divisions.

Division				H	oldings.		A	rea of Ve	getable Cr	ops.
Division	l. <b>.</b>		1944-45.	1945–46.	1946-47.	1947–48.	1944-45.	1945–46.	1946-47.	1947-48,
Coastal— North Coast Hunter and Ma Metropolitan South Coast	nning		No.  3,598 2,207 1,902 1,273	No. 2,859 1,840 1,808 1,076	No. 2,761 1,974 1,864 1,142	No. 2,775 1,819 1,766 1,125	acres. 15,992 11,068 10,106 9,665	acres. 11,238 9,174 8,358 7,554	9,877 9,099 8,815 7,848	9,550 7,759 7,838 8,280
Total			8,980	7,581	7,741	7,485	46,831	36,324	35,639	33,427
Tablelands— Northern Central Southern		:::	1,311 2,151 476	1,125 1,851 361	1,198 1,811 335	960 1,730 312	30,188 38,670 3,094	21,835 32,239 1,848	18,808 34,010 1,862	13,216 26,734 1,542
Total	•••	•••	3,938	3,337	3,344	3,002	71,952	55,922	54,680	41,492
Western Slopes— North Central South			310 225 465	227 160 415	219 170 398	215 149 389	1,880 2,408 3,308	1,260 1,430 2,445	912: 1,421 2,969	878 925 2,470
Total	•••	•••	1,006	802	787	753	7,596	5,135	5,302	4,273
Central Plains— North Central Riverina			70 41 662	65 37 503	60 39 542	51 34 395	498 167 5,742	274 165 4,502	324 177 4,388	231 108 3,218
Total	•••		773	605	641	480	6,407	4,941	4,889	3,557
Western Division			143	133	137	121	636	718	747	689
Total, New Son	ath Wa	les	14,840	12,458	12,650	11,841	133,422	103,040	101,257	83,438

Note, -Particulars of vegetables grown for animal fodder are not included—see page 384.

Almost half the area of vegetable crops is in the Central and Northern Tablelands divisions, where the area far exceeds the pre-war acreages. In 1947-48 the area in the Central Tablelands, 26,734 acres, included 15,139 acres of green peas and 7,075 acres of potatoes. In the Northern

Tablelands the area was 13,216 acres and the principal varieties were potatoes, 4,926 acres, navy beans, 2,441 acres and green peas, 4,413 acres.

In the Coastal divisions there were 33,427 acres or 40 per cent. of the vegetable crops, including potatoes, 7,186 acres; green peas, 7,902 acres; French beans, 5,638 acres; pumpkins, 3,127 acres; tomatoes, 2,334 acres and cabbages, 1,276 acres; as well as Swede turnips, carrots, cauliflowers, etc.

In the Western Slopes division potatoes and green peas are the most extensive crops and in the irrigation districts of the Riverina, green peas, tomatoes, pumpkins and carrots are the principal varieties.

During the war years large areas of navy beans were grown (mainly in the Northern Tablelands division) under contract to the Commonwealth Government. Contracts ceased in 1946-47 and the Navy Bean Marketing Board was set up to market navy beans in New South Wales.

1945-46. 1946-47. 1947-48. Production. Production. Production. Vegetable. Атеа. Area. Area. Gross Gross Quan-tity. Quan-tity. Quan-Farm tity. Value. Value. Value. tons. 61,768 6,874 13,437 2,939 2,319 1,712 5,494 14,841 acres. tons. acres. acres. tons. 22,865 2,505 2,394 747 21,309 2,409 2,018 65,535 7,337 7,529 Potato -759,750 61,303 775,480 820,830 Turnip (Swede) Carrot 776,480 43,360 158,890 30,770 55,860 50,110 116,960 38,270 206,480 42,100 46,720 27,350 95,140 108,770 †2,169 1,466 46,160 97,500 5,656 10,126 1,710 2,670Onion 408 542 568 460  $2,158 \\ 2,232$ 32 450 438 28,140 Parsnip ‡<sub>644</sub> 2,337 3,496 17,857 649 793 Sweet Potato 502 ‡ 3.291 ‡ 81,290 Beetroot. 1.148 Pumpkin 6,596 5,235 15,017 83,410 ... Melon 1,805 7,610 72,850 1,667 6,341 72,520 (Water & Rock) Marrow, Squash  $1,711 \\ 698$ 19,010 27,020 428 1,634 28,590 422 ‡ **\***765 Asparagus 496 688 25,970 bush. 662,591 24,487 bush. bush. 7,381 607,804 55,214 7,483 441,620 435,590 331,300 746,395 10,973 French 6,943 Navy 4,136 62,580 26.830 2,441 8,550 29,508 1,549,480 1,149,200 35,025 1,245,643 1,131,460 39,252 1,418,218 957,300 Green Blue Boiler doz. doz. 772,281 doz. 636,357 556,480 Cabbage 2.610 437,090 2,175 172,350 1,560 521,296 202,000 Cabbage ... Cauliflower ... 2,268 664,575 588,420 2,182 324,620 2,017 505,642 284,420 doź: doż. doż. bunches. 97,687 43,545 218) ‡ bunches bunches Silver Beet, Spinach 230.866  $\frac{217}{73}$ 393 20,010 89,542 29,680 20,350 Rhubarb 102 69,781 11,340 Í cases. 392,267 ½-cases cases. 366,955 1,122 1,094 117,220 960 Lettuce 406.638 175,080 111,140 <del>1</del>-caśes. 1-cases. 1,668,653 111,780 1,029,000 35,860 4,845 513 5,256  $\substack{924,070 \\ 22,610}$ 4,523 1,813,706 823,720 Tomato 132.472622 110,754 Cucumber ... 105,390 Other 1,214 64,330 1,189 49,430 2,815 4,351,670 Tòtal 103;040 5,513,520 101,257 4,362,860 83,438

Table 338.—Vegetables—Varieties Grown.

Generally the potato is the vegetable most extensively grown in New South Wales, but in the years 1943-44 to 1947-48 the area of this crop was exceeded by the area under peas. For the major vegetables the decreases in acreage between 1944-45 and 1947-48 were:—green peas, 29.6 per cent.; potatoes, 37 per cent.; pumpkins, 30.3 per cent.; French beans, 15.0 per cent.; tomatoes, 19.9 per cent.; navy beans, 72.5 per cent., and cabbage, 53.2 per cent.

<sup>\*</sup> Includes 162 acres not yet bearing,

<sup>†</sup> Turnip (Swede and White).

<sup>‡</sup> Not available.

Nearly two-thirds of the area under vegetables in 1947-48 comprised green peas (35.4 per cent.) and potatoes (26.3 per cent.). Freuch beans (8.3 per cent.), pumpkins (6.3 per cent.) and tomatoes (5.4 per cent.) accounted for another one-fifth of the total area, and navy beans (2.9 per cent.), turnips (2.6 per cent.) and cauliflowers (2.4 per cent.) were the only other crops exceeding 2,000 acres in area.

# Vegetable Canning and Dehydration.

A slow pre-war development of the vegetable canning industry was accelerated by war-time demands. Consequent upon reduction and then cessation of large Services contracts, vegetable canning was curtailed after 1943-44 and the quantity in 1947-48 was 46.5 per cent. less than in 1943-44, but even so, was about five times greater in quantity and seven times greater in value than in 1938-39.

The dehydration of vegetables for re-hydration was peculiarly a war-time measure, reached a maximum of 6,025,100 lb. in 1944-45, and ceased after 1945-46.

A statement follows of the quantity and value of vegetables preserved in liquid in factories in New South Wales in each of the last twelve years:—

		Lai	ne 55.	J Vegeti	able Calli	ung.		
Year ended	Vegetables Preserved in Liquid.		Year ended	Vegetables Preserved in Liquid.		Year ended	Vegetables Preserved in Liquid.	
30th June.	Quantity.	Value at Cannery.	30th June.	Quantity.	Value at Cannery.	30th June.	Quantity.	Value at Cannery.
1937 1938 1939 1940	1b. 4,091,623 3,636,230 4,902,288 5,572,406	£ 128,033 127,978 170,092 191,047	1941 1942 1943 1944	1b, 14,854,400 26,437,066 34,105,259 47,605,410	£ 386,311 783,783 1,035,957 1,500,001	1945 1946 1947 1948	lb. 43,407,345 36,926,172 25,937,541 25,480,192	£ 1,472,918 1,278,471 1,069,966 1,282,431

Table 339 .- Vegetable Canning.

# POTATOES.

All persons growing an acre or more of potatoes must be licensed under the Potato Growers' Licensing Act, 1940, at a fee of 10s. per annum. The amount of fees collected is expended for the benefit of the industry. From April, 1942 to 30th November, 1948 the production and distribution of potatoes was controlled by the Australian Potato Committee under National Security Regulations which were continued in force under the Defence (Transitional Provisions) Acts 1946 and 1947. In 1942-43 growers were paid the difference between a guaranteed and the market price of potatoes. Contracts were entered into with growers in each of the seasons ended October, 1948. From July, 1943 until 31st October, 1948 a fixed retail price to civilian consumers was maintained by subsidies paid under the Commonwealth price stabilisation plan covering the difference between that price and the cost of potatoes to distributors.

A Potato Marketing Board comprising five potato growers' representatives and two Government nominees was constituted on 2nd April, 1947 following a poll of growers taken under the State Marketing of Primary Produce Act, 1927-40. It has controlled potato marketing in New South Wales since 1st November, 1948.

Local potatoes meet only part of the State's requirements and large quantities are imported from other States, principally Tasmania and Victoria. From two-thirds to three-quarters of the area of potato crops has

been in the Northern and Central Tablelands and North Coast divisions in recent years, as the following particulars indicate:—

Period.	North Coast Div.		Other Coastal Divisions.		Northern Tableland Div.		Central Tableland Div.		New South Wales.	
renod.	Area.	Pro- duction.	Area.	Pro- duction.	Area.	Pro- duction.	Area.	Pro- duction.	Area.	Pro- duction.
Annual Average — 1934-36-38-9* 1939-40* 1938-39* 1939-40* 1940-41* 1941-42* 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	acres. 2,057 4,134 2,107 2,209 3,288 3,140 2,635 5,632 5,975 6,471 4,032 3,250 4,163	tons.  5,504 11,875 5,508 6,941 11,575 7,761 7,192 17,964 14,181 11,547 9,717 10,720 15,108	acres. 2,668 2,886 2,793 2,067 2,091 1,666 2,520 3,929 4,226 5,195 2,849 2,334 3,023	tons.  7,059 7,456 7,996 5,561 4,606 5,023 5,228 11,769 11,104 10,407 7,852 8,324 11,671	aeres.  5,516 5,479 5,112 3,991 4,677 5,211 4,363 5,691 7,452 10,993 6,690 5,794 4,926	tons.  11,716 13,815 10,920 6,733 11,741 14,877 8,711 13,638 20,108 32,348 15,237 10,780 8,241	acres.  7,824 6,768 8,042 6,065 6,826 5,663 6,167 6,821 8,361 7,691 6,967 7,075	tons.  19,823 13,221 17,350 13,977 8,700 16,173 12,728 15,318 15,318 16,585 19,263 21,120 20,759	acres. 21,110 21,862 21,372 16,866 19,232 17,836 17,685 24,488 30,067 34,796 22,865 21,309 21,911	tons. 53,078 51,987 50,833 39,385 40,531 50,388 33,634 64,728 65,655 90.587 61,768 61,303 65,535

Table 340.-Potatoes-Area and Production.

Potato production was a record of 121,033 tons in 1910-11, then fell away irregularly to 23,339 tons in 1930-31, and in the pre-war decade fluctuated between that tonnage and 66,255 tons in 1936-37. The war-time peak of 34,796 acres and 80,587 tons was recorded in 1944-45 and in 1947-48 the area (21,911 acres) was slightly above and the production (65,535 tons) was 23.4 per cent. above the average of the five pre-war seasons (not including market gardens). Holdings with an acre or more of potatoes numbered 3,037 in 1947-48 (197 more than in 1946-47 and 1,450 fewer than in 1944-45) compared with an annual average (excluding market gardens) of 3,647 in the years 1934-35 to 1938-39.

Potato production fluctuates widely in reflection of seasonal conditions, the incidence of disease and the area sown. Prices tend to react strongly in relation to the supply situation, with modifying effect on the average value of production per acre, and also upon sowings of the subsequent season. The following table shows the average yield of potatoes per acre and the average gross value per acre at place of production of the potatoes produced at intervals since 1910-11:-

Tab	ole 341.–	—Potatoes	s—Yield	and Average	Value p	er Acre.		
Ave	erage Yield	per Acre.		Average G	ross Value p Product		lace of	
Season.	Yield.	Season.	Yield.	Season.	Value.	Season.	Value.	
Average 5 Yrs. ended— 1910—11 1920—21 1925—26 1930—31 1935—36 1940—41 1945—46	tons.  2.65 2.10 2.12 2.12 2.12 2.27 2.47 2.40	1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	tons. 2·38 2·34 2·11 2·83 2·18 2·64 2·18 2·32 2·70 2·88 2·99	Average 5 Yrs. ended— 1910-11 1920-21 1925-26 1930-31 1935-36 1940-41 1945-46	£ s. d.  11 18 7 14 11 3 14 6 4 13 12 7 11 3 3 19 0 1 27 15 5	1997-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47	£ s. d. 9 18 5 25 1 1 28 5 4 18 1 2 13 6 8 27 3 5 29 7 5 30 11 5 33 4 7 36 7 10 37 9 3	

<sup>\*</sup> Field crops only; market gardens excluded (to 1941-42).

# Vegetables for Animal Fodder.

The area of vegetables grown for animal fodder (not included in the foregoing statistics) has been recorded only since 1942-43. Most of the vegetables for livestock are grown in the Northern Tableland, the Hunter-Manning and the North Coast divisions, and comprise principally turnips and pumpkins. These represented 74.5 and 26.1 per cent. respectively of the total area in 1946-47 when varieties were last recorded. Particulars of the area sown with vegetables of all kinds for animal fodder and the gross value at place of production of these crops are as follows:—

Tabi	Table 342.—Vegetables for Animal Fodder.										
Season.	Area.	Gross Value at Place of Production.	Season.	Area.	Gross Value at Place of Production.						
1942–43 1943–44 1944–45	acres 6,673 - 7,403 - 9,290	£ 141,450 146,930 222,190	1945-46 1946-47 1947-48	acres. 8,105 7,774 5,751	£ 177,950 138,030 44,924						

Table 342 .- Vegetables for Animal Fodder.

#### MARKETING OF FRUIT AND VEGETABLES IN NEW SOUTH WALES.

For the marketing of fresh fruit and vegetables in New South Wales the principal centre is the Sydney Municipal Markets. Large quantities of hard vegetables are bought wholesale in Sydney at the Alexandria railway goods station and at Sussex Street merchants' stores. There are markets of less importance at Newcastle, West Maitland and other cities and towns. Special boards deal with the marketing of potatoes and navy beans as indicated in preceding pages. Further particulars of the Sydney Municipal Markets are given on pages 489 to 491 of the Official Year Book No. 50.

Fruit and vegetables reach Sydney by rail, road and sea, and are carried by express freight trains from adjoining States, the North Coast, the Murrumbidgee Irrigation Area and the Batlow district. Freight rate concessions are made on consignments in truck lots. Growers usually consign their produce to agents and co-operative societies for sale by private treaty on a commission basis, to wholesale merchants (mainly hard vegetables), or sell direct to buyers in a section of the Municipal Markets known as the Producers' Market. The buyers comprise mainly retailers, manufacturers, shipping, hotel and restaurant suppliers, interstate traders and suppliers of country orders.

Most fruit is sold in one-half or bushel cases. Pineapples, paw paws, etc. are packed in tropical cases (1½ bushels) as were bananas until late in 1946 since when 1¾-bushel cases have been used. Cherries and figs are packed in ½-bushel cases. Cases of 1¾-bushels are used for citrus fruits for export. The principal varieties of fresh fruit marketed and the approximate weight per bushel of each are shown below.

Table 343.—Fruit—Principal Varieties Marketed and Weight per Bushel.

Kind of Fruit.	Weight per bushel.	Kind of Fruit.	Weight per bushel.	Kind of Fruit.	Weight per bushel,	Kind of Fruit.	Weight per bushel.
Apples Apricots ananas herries igs	55 50 48	Grapes Lemons Mandarins Oranges	1b. 50 47 46 48	Nectarines Passion Fruit Peaches Pears	lb. 48 34 44 50	Pineapples Prunes Quinces Tomatoes	1b, 40 60 42 48

Vegetables are marketed in crates, cases, bags, bunches and loose (as particularised on page 490 of the 50th edition of the Year Book), and mostly are sold as received in the agents' markets or loose off the floor in the producers' market.

Officers of the Department of Agriculture attend the market to ensure that vegetables and fruit have been graded and packed, and that disease-affected produce is destroyed, as required under the Plant Diseases Act, 1924; to inspect agents' records in connection with complaints by growers and others, and to collect wholesale prices data for record purposes and for publication.

# Farm Produce Agents Act.

Persons who, as agents, sell fruit, vegetables, potatoes and other edible roots and tubers, eggs, poultry, honey, etc. must be licensed under the Farm Produce Agents Act, 1926-32, except that auctioneers registered under the Auctioneers, Stock and Station and Real Estate Agents Act need not hold a license to auction farm produce beyond a radius of ten miles from the General Post Office, Sydney.

Agents must provide a bond from an approved insurance company, may not, without written consent of the vendor, buy produce consigned to them for sale, must keep books in the form prescribed and must conform to the approved practices of their calling. The gross proceeds from the sale of produce, less commission and other charges, must be accounted for to growers. Commission may not exceed 7½ per cent., subject to minimum rates of 6d. per bushel case, 4d. per one-half bushel case and 2d. per quarter-bushel case for fruit and tomatoes, and to the exception that for produce auctioned and vegetables, potatoes and other edible roots and tubers sold at auction or otherwise outside a radius of ten miles from the General Post Office, Sydney, a maximum commission rate of 10 per cent. may be charged.

In December, 1948, the number of agents registered was 300 of whom 273 were in the metropolitan area, 20 in Newcastle and 7 in other country centres.

# WATER CONSERVATION AND IRRIGATION

In a large portion of New South Wales where the rainfall is low and irregular, and the rate of evaporation is high, the conservation of water for agricultural and pastoral purposes is necessary for the full utilisation of natural resources.

Public and private projects in New South Wales provide for the supply of water for rural purposes to approximately 19,000,000 acres, including nearly 3,350,000 acres for purposes of intensive or extensive irrigation and about 15,650,000 acres for domestic and stock purposes only. A brief summary of the recommendations of the Commonwealth Rural Industries Commission in regard to water conservation and irrigation in Australia is given on page 414 of the 50th edition of the Year Book.

The control of water conservation (other than town and domestic supplies) is vested in the Water Conservation and Irrigation Commission, which consists of the Minister for Conservation, as Chairman ex officio, and two other members appointed by the Governor. The Commission controls the works for water conservation and conducts investigations relating to water storages throughout New South Wales; it administers the irrigation areas established by the State; exercises statutory control of private irrigation and issues licenses under the Water Act to landholders; establishes water trusts and districts for the supply of water for domestic purposes and stock and irrigation, and constructs works for such trusts and districts. The Commission also controls the use of artesian and sub-artesian waters, and assists landholders to establish or improve farm water supplies.

Works for the improvement of rivers and foreshores in New South Wales are controlled, in terms of the Rivers and Foreshores Improvement Act, 1948, by the Minister for Public Works (Constructing Authority for Tidal Waters) and the Water Conservation and Irrigation Commission (Constructing Authority for the non-tidal portions of rivers). The Act also provides for the constitution of a Rivers and Foreshores Improvement Board.

Control of the waters of the River Murray for the benefit of the States concerned—New South Wales, Victoria and South Australia—is exercised by the River Murray Commission in terms of the Murray Waters Agreement between these States and the Commonwealth. Ministers of the affected Governments agreed in conference on 18th October, 1948, to amend the agreement in certain particulars and the amending Agreement was ratified by the Parliament of the Commonwealth by an Act assented to on 21st December, 1948. The Commission consists of representatives of the Governments; a Commissioner of the Water Conservation and Irrigation Commission represents New South Wales. The agreement provided for the construction of locks and weirs in the Murray and Murrumbidgee Rivers and Lake Victoria storage (551,700 acre feet), of barrages at the

mouth of the river in South Australia and of the Hume Reservoir for the purpose of regulating the flow of the Murray River. The agreement also ensures an equitable allocation of its flow between the States. The storage capacity of the Hume Dam is 1,250,000 acre-feet but arrangements have been made to increase the capacity to 2,000,000 acre-feet. The allocations per annum were as follow:—New South Wales, 1,957,000 acre-feet, Victoria, 2,219,000 acre-feet and South Australia, 1,254,000 acre-feet. Any surplus over these quantities may be allocated and, under the amended agreement, allocations may be varied or restricted by the River Murray Commission from time to time. In New South Wales the Water Conservation and Irrigation Commission administers the State's share of the stored waters and carries out schemes for its use.

The waters of the Severn, Dumaresq, Macintyre and Barwou Rivers are controlled by the Dumaresq-Barwou Border Rivers Commission, established under, and in terms of an agreement concluded in 1947 between the Governments of New South Wales and Queensland. The Commission comprises an independent chairman and a representative of each State. Within New South Wales the scheme is administered by the Water Conservation and Irrigation Commission.

The agreement provides for construction of a storage dam in the Dumaresq River, 12 weirs in the border rivers and 4 regulators in effluent streams and for equal sharing by the States of costs of construction, maintenance, operation and control of existing and proposed works, and of water discharged from the storage dam.

A scheme for the diversion of the waters of the Snowy River for use in conjunction with the waters of the upper Murrumbidgee, Tumut and upper Murray Rivers and tributaries was adopted by Commonwealth, New South Wales and Victorian Ministers in February, 1949. The scheme envisages the diversion of water from the Eucumbene, upper Murrumbidgee and Tooma Rivers to the Tumut valley for generation of electricity and thence to the Murrumbidgee River for irrigation purposes; the diversion of at least an equal quantity of water from the Snowy to the Murray River for generation of electricity; the balance of the Snowy River waters to be diverted either to the Murrumbidgee or the Murray River. Details of these schemes have yet to be finalised.

The Water Conservation and Irrigation Commission summarises the irrigation and water supply projects which it controls as follows:—

1 able 344	,—Ext	ent or	irrigatio	n in ive	ew Sout	n wales	1947-	48.
P	rojects.			Land	for Irrigat	Water Supplied.		
Nature of Supp	oly.	No.	Area.	Irrigable Area (approx.).	Holdings with Irrigable Land,	Area Actually Irrigated.	For Irrigation.	For Stock and Doniestic Purposes.
Irrigation areas (inten Irrigation districts (ex Flood control district	tensive)	·-	acres. 462,053 2,057,816	acres. 205,500 511,400	No. 2,454* 1,217	186,316	acre-ft. 281,890* 182,420	acre-ft. 3,551* 8,024
sive) Irrigation trusts Licensed irrigators		. 7	647,800 15,853 165,130‡	95,670† 5,656 165,130‡	93 225 3,768	95,670† 4,187 44,100	185,680† 6,414 123,571	53,982 <b>§</b>
Total			3,348,652	983,356	7,757	510,168	779,975	65,557

Table 344.-Extent of Irrigation in New South Wales, 1947-48.

<sup>\*</sup> Includes 58 holdings supplied under agreement; area irrigated, 10,607 acres; water for irrigation and domestic and stock purposes, 14,560 acrc-ft. † Lowbidgee district only. ‡ Irrigable area only. § Supplied to 908 holdings for domestic and stock purposes only.

#### IRRIGATION AREAS ESTABLISHED BY THE STATE.

The Irrigation Areas established by the State of New South Wales are the Murrumbidgee, Curlwaa, Coomealla, Tullakool and Hay Irrigation Areas. The system of land administration applying to these areas and the tenures under which the lands are occupied are described in the chapter "Land Legislation and Settlement."

#### MURRUMBIDGEE IRRIGATION AREAS.

The source of water supply for the Murrumbidgee Irrigation Areas is the Murrumbidgee River. A large concrete dam has been constructed at Burrinjuck at the head of the river. Its capacity is nearly 33,613 million cubic feet (771,640 acre-feet), the maximum depth of water is 200 feet, and the area of water surface is 12,780 acres. Water stored in the dam is conveyed along the river channel for a distance of about 240 miles to Berembed Weir where it is diverted into the main canal which, at the offtake, has a capacity of 1,600 cubic feet per second. The main canal has been constructed for a distance of 96½ miles to supply the Murrumbidgee Irrigation Areas by means of a system of reticulation channels. The total length of the canals, channels and pipe lines (including drainage channels) is 1,650 miles. In addition there are approximately 380 miles of channels supplying districts and water trusts adjacent to the Irrigation Areas. At Burrinjuck Dam, hydro-electric power works have been installed which form an important part of the electric power system of New South Wales.

Particulars of the Murrumbidgee Irrigation Areas are shown below:-

Year ended 30th June.	Water Distributed,	Value of Rural Production.	Revenue derived.			
			Water Rates and Charges.	Land Lease Rentals.	Interest on Advances.	Other Revenue.
	acre-feet	£	£	£	£	£
1926	81,949	800,000	38,707	73,287	120,086	650
1931	173,696	868,000	56,239	83,914	81,248	1,527
1936	267,890	1,184,000	80,056	53,928	42,770	7,283
1938	368,660-	1,539,000	107,339	47,386	50,252	4,164
1939	243,183	1,790,700	71,517	46,443	54,027	2,456
1940	261,100	1,831,900	80,618	48,686	55,274	802
1941	332,643	1,942,000	107,289	45,478	55,006	2,237
1942	349,877	2,067,000	112,270	45,347	52,986	2,156
1943	304,429	2,518,100	100,394	46,287	52,038	2,349
1944	347,423	3,336,500	114,607	46,356	49,147	2,417
1945	238,332	2,590,800	85,462	45,770	47,818	2,728
1946	232,731	2,693,500	81,187	45,447	46,887	3,362
1947	373,241	3,169,100	121,950	44,423	46,771	4,40
1948	264,530	4,336,000	112,026	41,384	45,416	3,03

Table 345.—Murrumbidgee Irrigation Areas.

During the years of depression the Government granted to settlers many concessions in respect of water charges and rentals. Informationarespecting these concessions is published in the chapter "Land Legislation and Settlement" of the 1937-38 issue of the Year Book.

The capital expenditure of the Murrumbidgee Irrigation Areas and Burrinjuck Dam was £10,947,131 as at 30th June, 1948, of which £10,745,790 was expended from Loan Account. This sum was reduced by £2,150,443 written off for various reasons, mainly on account of Soldier Settlements.

<sup>\*</sup> Excluding value added in factories.

# CURLWAA, COOMEALLA, TULLAKOOL AND HAY IRRIGATION AREAS.

The Irrigation Areas of Gurlwaa, 10,550 acres, and Coomealla, 35,450 acres, are situated on the Murray River near its junction with the Darling. Water for irrigation is pumped from the Murray River. The Tullakool Irrigation Area, 16,593 acres, formerly part of the Wakool Irrigation District, was constituted on 27th June, 1947. Farms in the area are being made available to ex-servicemen for mixed farming, including rice growing. The Hay Irrigation Area, 6,806 acres, is on the Murrumbidgee River and derives its supplies by pumping from the river. The main industry is dairying.

#### PRODUCTION OF IRRIGATION AREAS.

Comparative statistics of the production of the irrigation areas (excluding Tullakool) established by the Government of New South Wales are shown in the following statement. Farming operations on the Murrumbidgee area commenced in the season 1912-13, and the first section of the Coomealla project became available in 1925.

The total area under occupation (including non-irrigable lands) in these areas at 30th June, 1948 was Murrumbidgee, 341,195 acres; Coomealla 34,132 acres (including 30,194 acres of undeveloped land leased for grazing); Curlwaa 8,819 acres; and Hay, 6,230 acres:—

Table 346.—State Irrigation Areas: Production.

Particulars.	1930–31.	1938–39.	1944–45.	1945–46.	1946-47.	1947-48.
Cultivated HoldingsNo.	1,598	1,579	1,553	1,537	1,542	1,546
Area under—						
All Crops Acres	114,441	128,466	90,947	113,546	129,732	124,072
Rice ,,	19,825	22,456	17,199	19,985	26,702	21,500
Other Grain ,,	55,444	56,484	26,142	50,648	61,563	64,955
Hay & Green Food ,,	16,032	23,459	19,349	15,801	14,072	10,598
.Grape Vines—						
Bearing ,,	6,301	8,737	8,173	8,032	8,030	8,038
Not yet Bearing "	1,452	759	123	204	362	528
Orchards— Bearing	10,507	12,021	11,798	12,066	12,686	:12,919
3T-1 T T t	4,079	3,692	3,179	3,030	2,723	3,008
Live Stock—	4,010	3,002	3,110	0,000	2,720	0,000
Horses No.	6,131	6,842	5,917	5,387	5,307	.4.883
Cattle-	-,	-,	-,	-,	-,00.	(11,000
*Dairy ,,	2,416	1,580	1,464	1,735	1,619	1,731
Other ,,	3,163	4,221	6,253	6,035	6,736	7,134
Sheep ,,	76,609	147,071	145,762	124,984	133,068	156,602
Pigs ,,	1,889	1,065	3,437	2,469	2,496	2,727
Production-						
Wine gal.	904,402	2.245.183	2.370.425	2,630,090	.3,461,857	3,868,452
Sultanas cwt.	33,250	68,668	60,835	88,998	75,670	85,888
Raisins and Lexias ,,	2.139	4,913	5,817	5,630	5,482	.5;208
Currants ,,	5,862	21,651	16,951	15,204	13,458	17,078
Oranges— bush.		·	·		,	
Wash'ton Navel ,,	355,629	510,332	407,754	351,256	187,362	391,247
Valencia ,,	199,990	430,390	406,699	388,435	281,085	538,448
_ All Other ,,	24,340	18,360	14,866	19,002	12,725	16,371
Lemons ,,	. 54,208	50,341	48,020	28,456	28,796	.35,440
Peaches—	45.005	77 00F	04.000	00.001	0,504.0	40.044
Dessert & Drying ,,	45,995	.57,325 $372,276$	24,036	38,301	.35,013	40,344 $573.214$
Canning ,, Nectarines	$204,848 \\ 4.944$	7,646	$281,693 \\ 4,777$	402,319 $14.104$	409,838 8,537	15.782
Amminoto	-86,079	127,397	-80,797	195,217	218.432	290,603
Ti	86,698	60,591	103,457	99,974	97,529	102,628
A1	17,278	47,976	50,844	109,513	107,928	147,027
Butter lb.	374,121	198,084	164,863	149,095	198,716	201,81
Grain—				,	200,.10	
Wheat bush.	503,664	710,295	175,728	630,000	442,515	1,019,538
Rice ,,	1,427,413	2,657,760	1,269,387	2,005,760	2,432,853	2,163,840
Oats	68,247	152,847	79,272	274,950	134,715	312,756
Other ,,	4,386	1,059	1,674	5,805	50,316	23,631

<sup>\*</sup> Cows in registered dairies only.

The area under crop was greatest (129,732 acres) in 1946-47. During the war years it fluctuated between 100,000 and 110,000 acres except in 1939-40 and 1944-45 when it was 92,304 and 90,947 acres respectively. It increased to 113,546 acres in 1945-46 and was above 120,000 acres in 1946-47 and 1947-48. Changes in rice, wheat and hay and green food acreages were the principal elements in the fluctuations. Particulars of rice-growing are given on page 364.

Dairying tended to be replaced by rice growing and fat lamb raising for some years after 1934-35 and in recent years "other" cattle have increased while sheep and (since 1940-41) dairy cattle have decreased in number. In 1947-48 compared with 1938-39 there were about 6.5 per cent. more sheep, about 10 per cent. more dairy cattle and about 69 per cent. more "other" cattle,

Oranges, peaches, apricots, apples, and prunes are the principal kinds of fruit produced. Grapefruit growing has expanded on irrigation areas where there were 23,768 bearing and 6,721 non-bearing trees in 1947-48, and the production was 56,744 bushels. There is a considerable area under grapes for wine, table and drying purposes.

The following statement shows the number of fruit trees of the principal varieties on the irrigation settlements, distinguishing the productive from those not yet bearing:—

	193	0-31.	193	8-39.	194	5–46,	194	6–47.	194	7–48.
Fruit Trees.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.
Orange— Seville	1,071	812	1,111	2,258	2,515	1,627	2,141	398	2,659	1,029
Washington Navel Valencia All other Lemon Mandarin	121,478 14,429 27,856	65,529 105,874 4,476 14,066 7,092	237,773 201,048 9,372 28,654 11,738	17,465 51,054 1,290 8,501 1,078	185,462 236,182 6,922 25,299 7,523	14,601 85,620 190 4,940 338	181,999 254,784 6,545 24,750 8,644	21,365 72,630 2,220 4,773 119	187,543 264,214 5,484 25,151 8,393	20,509 101,725 2,034 3,522 104
Peach— Dessert and Drying Canning Nectarine Apricot Prune Plum	32,194 160,621 4,566	2,691 54,153 1,079 6,201 4,974 823	27,996 181,883 4,004 89,338 78,683 5,929	15,349 113,002 1,224 11,013 6,690 1,378	19,561 238,112 7,930 89,659 66,912 4,551	8,359 75,984 3,596 19,985 16,561 1,131	20,717 264,586 8,838 96,587 64,783 5,790	7,759 63,986 3,123 17,808 18,695 2,607	18,523 273,628 8,991 98,080 67,838 5,372	4,145 60,259 1,783 17,744 24,550 3,457
Pear— Williams Other Apple Fig Almond	6,925 51,577 6,359	2,075 918 69,603 4,833 6,214	13,499 5,295 97,229 7,750 33,984	18,734 3,678 52,097 1,652 20,171	20,189 10,751 58,999 0,497 34,571	13,353 5,022 3,534 1,803 3,547	26,496 12,109 62,110 8,857 34,891	9,759 3,818 1,667 1,426 2,067	28,533 13,727 62,441 9,841 3 <b>3,</b> 254	9,141 1,523 1,526 2,760 641

Table 347.—State Irrigation Areas: Number of Fruit Trees.

In addition to irrigated crops, extensive areas of pastures and land under fallow are irrigated. It has been estimated by the Water Conservation and Irrigation Commission that the total area irrigated for crops, pastures and fallow in New South Wales (including private projects) was 510,168 acres in 1947-48.

# LACHLAN RIVER WATER CONSERVATION SCHEME.

A dam with a capacity of 303,900 acre-feet has been constructed at Wyangala, on the Lachlan River, and the project includes balance storages in Lake Cargelligo (29,400 acre-feet), already constructed, and in Lake Ballyrogan, above Hillston (108,000 acre-feet), under construction, and a head storage on the Belubula River, to assure water supplies for domestic purposes and stock along the full length of the river and effluent streams, and water which will be diverted for irrigation under licenses. The Jemalong and Wyldes Plains Irrigation Districts constituted under the Water Act are supplied with water under this scheme. The discharge of water from Wyangala Dam in 1946-47 and 1947-48 was 195,096 and 415,850 acre-feet respectively.

### NAMOI RIVER WATER CONSERVATION SCHEME.

In December, 1937, the Government authorised the construction of a storage dam at Keepit on the Namoi River as a national work at an estimated cost of £1,340,000. The site of Keepit dam is about 26 miles east of Gunnedah upstream of the confluence with the Peel River. The scheme includes a diversion weir at Boggabri and extensive channel systems on either side of the Namoi River. The storage capacity of the dam will be about 345,000 acre-feet; it will be about 1,800 feet long and about 125 feet high above the river bed. The total expenditure to 30th June, 1948, was £803,740. Construction was suspended early in 1942, owing to war conditions, and was resumed in November, 1945.

# DARLING, MACQUARIE AND HUNTER RIVER SCHEMES.

Authority to undertake schemes of water conservation on the Darling, Macquarie and Hunter Rivers is given by the Darling River Waters Act, 1945, the Burrendong Dam Act, 1946, and the Glenbawn Dam Act, 1946, respectively. Work has been commenced on the Darling River scheme which provides for from thirty to forty weirs to enable the supply of water for stock and domestic use, to augment the Broken Hill supply, and for irrigation of limited areas. From the Burrendong Dam, to store 520,000 acre-feet, about 6,700,000 acres may be supplied with stock and domestic water but only a very small area with water for irrigation. The Glenbawn Dam, to be located on the Hunter River about 8 miles above its confluence with Page's River and to hold about 120,000 acre-feet, is the first of five storage dams proposed in the Hunter River system. Regulation of the river flow and the provision of piped water for irrigation of about 31,000 acres of river flats between Aberdeen, Muswellbrook and Denman are the purposes of the scheme.

The estimated cost of the Darling River weirs scheme is £450,000, of the Burrendong Dam, £2,000,000 and of the Glenbawn Dam, £1,500,000.

#### WORKS UNDER THE WATER ACT, 1912-46.

IRRIGATION DISTRICTS.

The Water Act, 1912-46 makes provision for the constitution of districts for water supply. These differ from the Water Trusts, described later, in that the charges payable by landholders for water are intended to cover maintenance and operation by the Commission and contribution towards interest on capital cost. Landholders, however, are not required to repay the cost of the works constructed by the State.

The following districts had been constituted up to 30th June, 1948:—

District.	Supplied from	Area Served.	Water Rights Attached.	Date o Constitut		
Berriquin (Provisional) Deniboota (Provisional) Jernargo (Provisional) Wakool Denimein (Provisional) Barramein* (Provisional)	. do . do . do . do		acres. 607,801 303,064† 130,850 415,513 140,850† 88,651†	33,520 11,240†	9 Mar., 16 Dec., 18 April, 4 July, 11 Jan., 5 April,	1934 1938 1941 1941 1946 1946
Tabbita	do do	River	5;631 121,555 557,512 324	670 12,862 3,755	16 Aug., 23 Oct., 11 Jan., 15 Aug.,	1935 1936 1946 1947
Jemalong Wyldes Plains	do		158,406 52,329	7,455 1,295	25 June, 20 July,	1943 1945
Total Area			2,582,486	152,546		

Table 348.—Irrigation Districts.

Water is supplied to landholders for fodder crops or sown pastures but not for commercial orchards, vineyards, or for rice (except in the circumstances indicated at page 364).

During the year ended 30th June, 1948, water was supplied to holdings within the Tabbita, Benerembah, Wah Wah, Wakool, Berriquin, Jemalong and Wyldes Plains districts.

The works for the Wakool, Berriquin, Deniboota, Denimein, Barramein and Jernargo districts are projects for the utilisation of the New South Wales share of the Murray waters conserved in the Hume Dam.

The works for the Berriquin district include the Mulwala Canal, which branches from the Murray at Yarrawonga Weir. It supplements the supply of water from the Edward River to the Wakool district and will serve the Deniboota district by a pipe syphon passing under the Edward River. When completed, it will be about 100 miles in length. Its capacity at the offtake is 5,000 acre-feet per day. The Mulwala Canal was completed as far as the Edward River, 75½ miles, in 1942. The Berrigan Channel, 22 miles, was completed in 1944. The approximate length of canal, channels and escape channels at 30th June, 1948 was 752 miles.

The cost of the Wakool district works was about £519,200; of the Benerembah works, £43,273; the Tabbita works, £4,658; and the Wyldes Plains and Jemalong projects, £188,800. Up to 30th June, 1948, approximately £1,487,188 had been expended upon construction of the Mulwala Canal and the Berriquin district works, and £472,000 on the Deniboota scheme.

#### FLOOD CONTROL AND FLOOD IRRIGATION DISTRICTS.

In December, 1940, the Water Act was amended to empower the Commission to constitute flood control districts and flood control and irrigation districts, where works may be constructed for controlling or partly controlling floods and supplying water for irrigation by flooding. Before.

<sup>\*</sup> Domestic and stock water supply only.

<sup>†</sup> At date of constitution.

constituting them particulars of the proposed districts, purpose, rates, and works must be published by the Commission and objections must be considered by the Land Board. Pending completion of the works the areas are notified as provisional districts. Landholders within the districts deemed to be benefited by the works are to pay rates as levied by the Commission. Municipal or shire councils may be compensated for damage to any public road resulting from flooding caused by the operation of the works, and in certain circumstances landholders on whose land such works are constructed may claim compensation for the land used or in respect of severance resulting from the works.

The works (in progress) for the Lowbidgee Provisional Flood Control and Irrigation District of approximately 367,000 acres, constituted on 9th February, 1945, are to flood irrigate about 140,000 acres of pasture lands by diversion of water from the Maude and Redbank Weirs on the lower Murrumbidgee River. The cost to 30th June, 1948 was £62,578. Works for the Medgun Flood Control and Irrigation District were completed in September, 1947 and cost £22,709. The District, constituted on 16th March, 1945, embraces about 272,800 acres on either side of Medgun Creek about 40 miles north-west of Moree.

#### WATER TRUSTS:

The Water Act, 1912-46 vests in the Water Conservation and Irrigation Commission for the benefit of the Crown the right to use and control the water in rivers and lakes in New South Wales. Trust districts may be constituted to supply water for domestic purposes and stock and for irrigation. The Commission may construct or acquire the necessary works. Upon completion the works in each district are transferred to the administration of trustees consisting of persons elected by the occupiers of the land and a representative of the Commission. The trustees levy rates to meet the expenses of maintenance and administration and to repay the cost of the works by instalments.

At 30th June, 1948, there were thirteen trusts for the provision of water for domestic use and stock purposes, one for a town supply and one for flood prevention; the total area: was 2,945,068 acres located as shown; below:—

		Murray River.	Murrum- bidgee River.	Lachlan River:	Darling River, Anabranch.	Other: Locations.	Total,
Trusts	No.	5	1,001,210	5	1	3	15
Area benefited	Acres	339,015		552,915 2	. 995,200	56,728	2,945,068

There were, in addition to the foregoing, seven irrigation trusts, covering an area of 15,854 acres.

# FARM WATER SUPPLIES ACT, 1946.

The Farm Water Supplies Act, 1946, which came into operation on 9th August, 1946, provides that advances up to 90 per cent. of the cost of approved works may be made to owners of farm lands to provide or improve.

water supplies for domestic, stock or irrigation purposes, and to prepare land for irrigation. The advances, made through the Irrigation Agency of the Rural Bank, are secured by deeds of charge over the land and are repayable by half-yearly instalments over periods up to fifteen years.

The works may be carried out by the farmer, by a contractor or by the Commission, and the latter may make surveys and investigations and prepare designs and estimates for proposed works and undertake works financed by farmers themselves.

Where required by the Water Act a license or authority must be obtained before the work is begun. Works constructed with government assistance must be maintained to the Commission's satisfaction.

#### LICENSES AND PERMITS FOR WATER WORKS.

The Water Conservation and Irrigation Commission may issue licenses to authorise landholders to divert water from rivers or lakes for the irrigation of their holdings or for joint water supply schemes.

Under the Water Act as amended in 1946 licenses may be refused where proposed works or their purposes are deemed unsatisfactory, cancelled if not exercised for three years, suspended for non-observance of conditions thereof, and treated as lapsed if the works authorised are not constructed within the time prescribed. Under a license the maximum area and quantity of river water which may be taken for irrigation may be fixed. The same amendment empowers the Commission to determine priority of right (based on past beneficial use) to the taking of water in times of shortage, gives non-riparian landholders the right to apply for licenses, and provides for the granting of authorities for construction and use of joint water supply schemes.

During 1947-48 applications for 686 new licenses and 502 for renewal of existing licenses for pumps, dams and other works were received, and 636 new licenses and 420 renewals were issued. On 30th June, 1948, there were 4,748 licenses in force, the usual term being five years. Of these 3,768 were for irrigation to serve an aggregate area of 165,130 acres.

Permits which are intended for works for mining and other purposes of a temporary nature, and for irrigation of areas not exceeding 10 acres, have a term up to twelve months, and may be renewed for a further year. Permits in force at 30th June, 1948, were 49.

One authority for a joint water supply scheme to serve land subdivided with right to a supply of water for irrigation purposes covering an area of 1,500 acres was in force at 30th June, 1948.

#### ARTESIAN BORES.

The portion of the great Australian artesian basin which extends into New South Wales covers approximately 80,000 square miles and is situated in the northern and north-western hinterland of the State. The watering of the north-western country by means of bore-water has increased the carrying capacity of the land, and has made practicable some pastoral settlement on small holdings previously utilised by companies holding extensive areas.

Large supplies of water are obtained from the artesian basin, and eighty Bore Water Trusts and twelve Artesian Wells Districts, covering nearly

5,000,000 acres, are in operation under the Water Act. The Bore Trusts are administered by trustees in the same way as the Water Trusts previously described. In the Artesian Wells Districts the settlers maintain the drains and pay to the State charges assessed by the Local Land Board.

The Water Conservation and Irrigation Commission exercises general control over the use of artesian water with the object of preserving the efficiency of the bores and preventing waste. The Commission may sink artesian bores, improve the supply from existing wells, and construct drains, etc. for the benefit of landholders, and may issue licenses under the Water Act for the construction of bores by private owners.

At 30th June, 1948, 948 artesian bores had been sunk; 558 were flowing, giving an approximate aggregate discharge of 62,376,998 gallons per day; 336 bores were yielding a pumping supply; the balance (54) were abandoned. The total depth bored was 1,338,393 feet.

The following statement shows the particulars of the Government and private bores in operation at 30th June, 1948:—

Bores,	Flowing.	Pumping.	Total.	Total Depth.
For Public Watering-places, Trust Bores, etc. For Country Towns Water Supply For Improvement Leases	No. 147 3 15	No. 56 1 10	No. 203 4 25	feet. 430,110 6,533 35,870
Total, Government Bores	165	67	232	472,513
Total, Private Bores	393	269	662	803,329

Table 349,-Artesian Bores, 30th June, 1948.

The average depth of successful Government bores at 30th June, 1948, was 2,041 feet, and of successful private bores 1,297 feet; the depth ranges from 89 feet to 4,570 feet.

The deepest bores in New South Wales are in the Moree district. One at Boronga has the greatest depth (4,570 feet) and outflow (1,115,360 gallons per day); another at Kiga has a depth of 4,268 feet. The Yerranbah bore, in the same district, has a depth of 3,828 feet.

Bore water shows considerable variation in temperature, ranging from 72 degrees Fah. at Tunderbrine No. 1 Bore to 142 degrees Fah. at Wonga No. 1 Bore.

The flow from 92 bores is used for supplying water for stock on holdings served in connection with bore-water trusts and artesian wells districts. The total flow from these bores amounts to 25,239,514 gallons per day, watering districts of an area of 4,913,639 acres by means of 4,285 miles of distributing channels. The average rating of the bore trusts is 1.59d. per acre, including the cost of maintenance and administration.

The majority of the other bores is used by pastoralists for stockwatering only, but in a few instances the supply is utilised in connection with country towns.

The flow of artesian water is decreasing and it has been determined that the multiplicity of bores is a major cause of the decrease and that the limitation of the discharge of water from a bore will prolong its Service Services

existence. Provision of control head gear has saved approximately 4,000,000 agallons per day.

# SHALLOW BORING.

Arrangements were made by the Government in 1912 to assist settlers by sinking shallow bores. The scheme is administered by the Water Conservation and Irrigation Commission. The Commission constructs bores at pre-arranged charges which are repaid by settlers over a term of years.

Up to the 30th June, 1948, the number of bores sunk by the Commission was 4,040, of which 655 were abandoned and 160 were only partially successful. The total depth of shallow bores was 1,188,875 feet, the average depth being 294 feet. The aggregate cost of sinking these bores was £1,210,375 approximately.

Licenses under the Water Act must be obtained by private contractors for the sinking of bores to a depth of 100 feet or more in that part of the State west of direct lines drawn from Albury to Tanworth, Tamworth to Bingara, Bingara to Inverell, and Inverell to Bonshaw.

The number of licenses issued up to the 30th June, 1948, was 2,395.

#### GROWTH OF ARTESIAN AND SHALLOW BORING.

The recorded number of successful bores of all kinds (including those sunk by private contract of which the Water Conservation and Irrigation Commission has a record) increased from 458 in 1911 to 5,619 at 30th June, 1948.

# PASTORAL INDUSTRY

The climate, terrain and vegetation of New South Wales are pre-eminently suited for pastoral pursuits and early economic progress of the State was closely identified with the development of the pastoral industry. Extensive agricultural and dairying industries also have arisen, but the pastoral industries remain the greatest of the primary industries, having contributed more than 40 per cent. of the total value of primary production during the last ten years.

Some indication of the geographical distribution of the pastoral lands of New South Wales is given in succeeding pages and in the chapter "Rural Industries". The area of holdings used for grazing is approximately 156,000,000 acres, representing about 90 per cent. of the area used for the principal forms of rural activity within the State. Sheep grazing is the outstanding pastoral pursuit and is the principal rural enterprise on the slopes and plains west of the mountains; but cattle raising also is important, both for dairying and slaughtering in the coastal belt and for slaughtering in the tablelands and slopes and central plains. The extent to which sheep grazing is associated with wheat growing is displayed in Table 227 of this volume. The distribution of sheep, dairy cattle and "other" cattle throughout the State is indicated in the diagrammatic map published on page 10 of this Year Book.

# LIVE STOCK.

New South Wales does not possess any indigenous animals which would give rise to a large industry, and of those introduced, sheep only have developed into a prolific source of wealth in the hinterland. Indeed, the development of the sheep industries has been so remarkable that it has, in a sense, restrained expansion of other pastoral activities. Horses have been bred principally for their utility in various industries and for racing purposes, but horsebreeding has declined in recent years. For many years cattle were produced only to supply local requirements of meat and dairy produce, but later an export trade was established and the number of cattle depastured increased. Pigs are bred principally in conjunction with dairying and wheat growing, but not in sufficient numbers to meet local requirements.

#### Importation of Stud Stock.

The pre-war scheme of subsidisation of the import of pedigree stock, which was suspended early in 1940, was revived and extended on 1st May, 1946.

It covers stud beef and dairy cattle from the United Kingdom, Canada and the United States of America, Zebu cattle from the United States, sheep, draught horses and milch goats from the United Kingdom, pigs from the United Kingdom and Canada, and, from 24th March, 1947, poultry from the British Isles. Subsidy is paid on animals only after safe landing and release from quarantine in Australia. Stock breeders may not sell

imported subsidised stock within two years of arrival without the consent of the Minister of Agriculture in the State of import. Others importing stock must agree to offer them at auction without reserve within one month of release from quarantine and, where applicable, to reduce the purchase price by the difference between the ordinary and the concession freight rate; this done, the purchaser may claim the subsidy. The rates of subsidy per head are £100 for cattle and draught horses, £50 for pigs, £40 for sheep and milch goats and 30s. (per bird or setting of 16 eggs) for poultry. Between May, 1946 and November, 1948, subsidy totalling £6,180 was paid in New South Wales on 53 cattle, 19 sheep and 3 goats.

#### Number of Livestock.

The following table shows the number of horses, cattle, sheep and pigs in New South Wales at decennial intervals from 1861 to 1921, and at the end of each season since 1921. Particulars of other live stock are given later.

							-11 11 410		
Year.*	Horses.	Cattle.	Sheep.	Pigs.	Year.*	Horses.	Cattle.	Sheep.	Pigs.
1861	233,220	2,271,923	5,615,000	146,091	1932	524,751	2,993,586	52,986,000	385,846
1871	304,100	2,014,888	16,279,000	213,193	1933	528,943	3,141,174	53,698,000	388,273
1881	398,577	2,597,348	36,592,000	213,916	1934	532,028	3,361,771	52,104,000	367,116
1891	469,647		61,831,000	253,189	1935	534,853	3,482,831	53,327,000	397,535
1901	486,716	2,047,454	41,857,000	265,730	1936	542,862	3,388,538	51,936,000	436,944
1911†	689,004	3,194,236	48,830,000	371,093	1937	545,829	3,288,169	53,166,000	390,870
1921†	663,178	3,375,267	37,750,000	306,253	1938	528,625	3,019,581	51,563,000	356,765
1922†	669,800		41,070,000	383,669	1939	531,355	2,811,884	48,877,000	377,344
1923†	660,031	3,251,180	38,760,000	340,853	1940	534,837	2,762,653	54,372,000	451,064
1924†	658,372		41,440,000	323,196	1941	531,776	2,769,061	55,568,000	507,738
1925†	647,503	2,876,254	47,100,000	339,669	1942	525,697	2,878,450	56,738,000	454,102
1926†	651,035		53,860,000	382,674	1943	483,277	3,030,546	56,044,000	486,960
1927†	623,392		55,930,000	332,921	1944	465,672	3,143,378	56,837,000	561,294
1928	598,377	2,848,654	50,510,000	301,819	1945	436,443	3,144,701	46,662,000	523,917
1929	567,371	2,784,615	50,185,000	311,605	1946	403,645	3,116,834	44,076,000	432,612
1930	534,945	2,686,132	48,720,000	323,499	1947	379,774	2,983,093	43,105,000	358,417
1931	524,512	2,840,473	53,366,000	334,331	1948	376,043	3,129,740	46,065,000	365,171

Table 350.—Live Stock in New South Wales.

A comparison of the number of horses, cattle, sheep, and pigs in New South Wales and in the other States is shown below:—

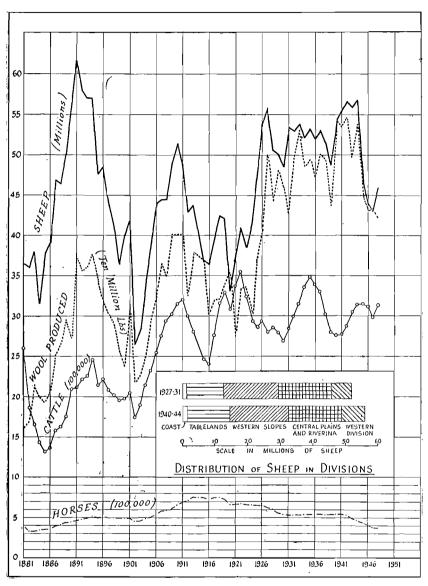
State.	Horses.	Cattle.	Sheep,	Pigs.
New South Wales	376,043	3,129,740	46,065,000	365,171
Victoria	221,454	2,174,203	17,931,173	271,499
Queensland	335,581	5,975,460	16,742,629	378,102
South Australia	100,619	445,287	9,055,237	100,343
Western Australia	74,537	815,610	10,443,798	93,18
Tasmania	23,125	224,107	2,086,528	45,149
Northern Territory	32,318	991,429	19,058	686
Anstralian Capital Territory	973	8,748	215,227	56
Total, Australia	1,164,650	13,764,584	102,558,650	1,254,68
Proportion per cent. in N.S.W.	32.3	22.7	44.9	29

Table 351.-Live Stock in Australia, 31st March, 1948.

Trends in livestock numbers and in the production of wool in New South Wales since 1881 are illustrated graphically on page 399. The geographical distribution of sheep, dairy cattle and other cattle is indicated in the diagrammatic map inserted on page 10 of this volume, and changes in the distribution of sheep in major divisions between the periods 1927-31 and 1940-44 are shown graphically in the inset to the following graph.

<sup>\*</sup> As at 31st December 1861 to 1911; 30th June, 1921 to 1931; and 31st March in 1932 and after years. † Includes Australian Capital Territory.

#### LIVESTOCK AND WOOL PRODUCTION IN NEW SOUTH WALE;



The numbers at side of graph represent 1,000,000 sheep, and 100,000 horses and cattle at end of season, and 10,000,000 lb. of wool produced.

An indication of the fluctuations in the number of livestock depastured in the State since 1861 is given in the next table. For this purpose, the arbitrary equivalent of ten sheep to each head of large stock is used to express sheep, horses, and cattle in common terms—pigs are disregarded. The resulting sheep equivalent is shown for years spanning movements between 1861 and 1935 and annually since 1938.

	<u> </u>				
Year.*	Equivalent in Sheep of Live Stock grazed.	Year.*	Equivalent in Sheep of Live Stock grazed.	Year.*	Equivalent in Sheep of Live Stock grazed
1861	30,666	1905	67,955	1938	87,045
1870	41,636	1910	89,489	1939	82,309
1875	60,272	1916	67,743	1940	87,347
1877	52,267	1918	81,560	1941	88,576
1881	66,551	1920	70,616	1942	90,779,1
1884	49,283	1921	78,134	1943	91,182
1891	87,816	1923	77,872	1944	92,928
1895	74,118	1927	90,350	1945	82,473
1899	60,706	1930	80,931	1946	79,281
1901	67,199	1933	90,399	1947	76,734
1902	48,563	1935	93,504	1948	81,123

Table 352.—Stock: Sheep Equivalent Thousands.

Between 1861 and 1891, the sheep equivalent increased by 186 per cent. The trend was interrupted only by drought in 1877 and 1884. In this period idle and partly used lands were being developed, mainly for sheep grazing. It has been held that in 1891 the State was overstocked in view of the scanty pastoral improvements then in the hinterland.

The upward trend was reversed by a series of poor seasons in the 'nineties' and in 1902, after severe drought, the sheep equivalent (48,563,000) The 1891 level was exceeded in 1910, but in this year was its lowest. the number of sleep was 10,251,000 less than in 1891. Seasonal conditions were unfavourable in 1912 and 1914, and after severe drought between 1918 and 1920 the sheep equivalent fell to 70,616,000 compared with 48,563,000 in 1902, though the number of cattle grazed had increased from 1,741,000 to 3,084,000. The sheep equivalent increased in each year (except 1923) from 1921 to 1927, when for the first time it exceeded 90,000,000. Then unfavourable seasons caused losses until 1930, which were recouped in the relatively good seasons which followed. The number of sheep exceeded 53,000,000 and the sheep equivalent reached a peak of 93,504,000 in March, 1935 but then trended downwards and drought losses in 1938-39 caused a sharp decline to 82,309,000. Sheep flocks were restored in the following year and increased gradually to nearly 57,000,000 in 1944; the number of cattle also increased after 1941 and the sheep equivalent in March, 1944 was nearly as high as in 1935. Severe drought caused heavy losses in sheep flocks between 1944-45 and 1946-47. The decline in the number of horses accelerated in this period and the steady increase in cattle between 1940 and 1945 was checked after 1945-46. equivalent in March, 1945, was little higher than in 1939 and in March, 1947 it reached its lowest point since 1920. Pastoral conditions improved. in the summer of 1947 and were very favourable in the second half of 1947-48, leading to some regain in sheep numbers, but the sheep equivalent in March, 1948, was 11,805,000 lower than in March, 1944...

<sup>\*</sup> As at 31st December, 1861 to 1910; 30th June, 1916 to 1930; and 31st March in 1933 and later years.

# Geographical Distribution of Live Stocks

The following table indicates the distribution of live stock in each division in New South Wales at intervals since 1891.

Table 353.-Live Stock in Divisions.

Division.		Number of Live Stock. (thousands.)								Proportion of Total, per, cent,			
		1891.*	1911.*	1921.†	1931.†	1941.‡	1947.‡	1948.‡	1891!*	1921.†	1941:1	19484	
						SHEEP,						-	
Coastal Tablelands Western-Slo		1,483 7,882 10,869	1,559 9,735 12,167	1,048 7,524 9,743	1,159 11,304 17,270	$\begin{array}{c c} 1,277 \\ 12,879 \\ 17,579 \end{array}$	1,134± 11,077 13,691	1,047 ' 11,164 14,207	2.4 12.8	19.9 19.9 25.8	$\begin{array}{c c} 2.3 \\ 23.2 \\ 31.6 \end{array}$	2·3 24·2 30·8	
C'l. Plains a Riverina	ind	25,194:		14,370	16,910	16,328:	12,258	13,760	40.7	ľ.,	1294	29:9/	
Western Di	ivi-	16,403	7,936	5,065	6,723	7,505	4,945	5,887	26 5	134	,13.5	,12.8	
Total .		61,831	48,830	37,750	53,366	55,568	43,105	46,065	100.0	100∙0	100.0	100.0	
					DAIR	Y CAPTE	0.						
Coastal		197′	653	674	901	941	874 `		57.4	79 9	89.2	90.3	
Tablelands Western Slo C'l. Plains, a		67 37	107 78	73 59	44 51	39 · 61.	34 48	34 48	$^{19\cdot5}_{10\cdot8}$	8·6 7·0	3.7. 5.8	3.5 h 5.0 H	
Riverina Western Di		35	48	36	9	13"	11	11	10.2	4.3	1.2	1.1	
sion L	•••	7.	9	2	1.	1.	1,	, 1	2.1	0.2	0.1	0.1	
Total	]	343§	895	844	1,006¶	1,055¶	968¶	965¶	100.0	100.0	100.0	100 0	
					OTHE	R CATTL	E.						
Coastal		640	915	1,009	736	682	783	798	35.9	39.9	39.8	36.9	
Tablelands Western Slo		$\frac{465}{247}$	550 422	580 441	40 <del>4</del> 397	393 370	$\frac{470}{468}$	493 516	26·0 13·8	22·9	22·9 21:6	22·8 23·8	
C'l. Plains a		241	422.	321	001								
Riverina Western Di	vi-	339	302∵	369~	234	208	242	286	1940	14.6	12.1	13.2	
sion		94	110	132	63	61	52	72	5.3	5.2	3.6	3.3	
Total		1,785	2,299	2,531	1,834	1,714	2,015	2,165	1000	100.0	100.0	100.0	
					В	ORSES.							
Coastal		163;	207	203	144.	151	130	134	34:7	30.6	28:4	35.6	
Tablelands		92.	127	112	86	91 150	70° 95	68 91	$19.6 \\ 16.2$	16·9 25·4	$\begin{array}{c} 17.1 \\ 28.2 \end{array}$	18·1 24·2	
Western Slop C'l. Plains a		76	180	168	159	190	ยอ	91 (	10.7	120,4	140:2	A4.14	
Riverina Western Di		95	140	152	112	113	69	66	20.2	22.9	21.2	17.6	
sion		44	35	28	23	27	16 -	17	943	4.2	5.1	4.5	
Total		470	689	663	524	532	380	376	100.0	100.0	100· <b>0</b>	100.0	

<sup>\*</sup> At 31st December. † At 30th June. † At 31st March. \$ Cows in milk only; dry cows and springing heifers are included in "Other Cattle." ¶'Cows in registered dairies only.

Sheep are depastured principally in the hinterland of the State, and are usually most numerous in the Western Slopes division. Cattle are most numerous in the coastal areas, and horses in the Coastal and Western Slopes divisions.

Since 1922 statistics of livestock have been compiled in local government, areas, and not in counties as formerly. The change in geographical basis, involved considerable alteration; in the areas comprising divisions of the Western Slopes and the Central Plains, where large numbers of stock area depastured. Therefore the divisional figures in the foregoing table for 1931, and later years are not strictly comparable with those for 1891, 1911, and 1921.

Improvement of Pastures and Fodder Conservation.

Information regarding the improvement of pastures by fertilising the land and cultivating suitable grasses and herbage is shown on page 291 of this volume.

#### SHEEP.

The following table shows the number of sheep at the end of each quinquennial period from 1861 to 1936 and at the end of later seasons, and the average rate of increase or decrease in each period.

Year,*	Sheep.	Average Annual Rate of Increase or Decrease.	Year.*	Sheep. Average Annual Rate of Increase or Decrease.		Year.*	Sheep.	Average Annual Rate of Increase or Decrease
	thous.	per cent.		thous.	per cent.		thous.	per cent.
1861	5,615	·	1906	44,132	1.1	1940	54,372	11.2
1866	11,562	15.5	1911	48,830	2.0	1941	55,568	2.2
1871	16,278	7.1	1916	36,490	5.6	1942	56,738	2.1
1 <b>8</b> 76	25,269	9.2	1921	37,750	0.7	1943	56,044	— 1·2
1881	36,591	7.7	1926	53,860	7.4	1944	56,837	1.4
1886	39,169	1.4	1931	53,366	0.2	1945	46,662	— 17·9
1891	61,831	9.6	1936	51,936	<b>—</b> 0·5	1946	44,076	— 5·5
1896	48,318	4·8	1938	51,563	3.0	1947	43,105	- 2.2
1901	41,857	2.8	1939	48,877	- 5.2	1948	46,065	6.9

Table 354.-Increase or Decrease in Number of Sheep.

The number of sheep was greatest in 1891, and thereafter lowest at the end of 1902 by reason of drought. The reduction in the number of sheep between 1891 and 1921 seems to have been due mainly to a remarkable deterioration of seasons. The weighted average annual rainfall of the State was about 3½ inches less in the twenty years which followed 1894 than in the preceding quarter of a century, and this decline was proportionally heaviest in the plain districts of low average rainfall, which is 1891 carried two-thirds of the sheep depastured in the State. The rabbit pest, too, aggravated the effects of dry weather through destruction of natural herbage, and the expansion of the agricultural industry caused land to be diverted from the purpose of sheep-breeding.

During later years the grazing capacity of the pastoral lands was improved by increased conservation of water, control of the rabbit pest, fertilising of pastures and cultivation of grasses, and better facilities for transfer of stock from localities where seasonal conditions become unfavourable. Between 1923 and 1926 the number of sheep rose by 15 millions and remained above 50 millions (except in 1930 and 1939) until March, 1944, when the number, 56,837,000, was the highest since 1894. The weighted average annual rainfall in sheep districts was below normal in every season except 1938-39, from 1936-37 to 1945-46, normal in 1946-47, and much above normal in 1947-48. In the preceding years since 1920-21 the longest succession of years of below normal rainfall was three from 1921-22 to 1923-24. Severe losses were experienced in 1944-45 and flocks continued to decline until in March, 1947, the number (43,105,000) was the lowest since 1924. Though good seasonal conditions throughout 1947 and 1948 enabled some of the drought losses to be made good, the number at 31st March, 1948 (46,065,000), was 10,772,000 below the high level of 1943-44.

<sup>\*</sup> At 31st December, 1861 to 1911; 30th June, 1916 to 1931; and at 31st March later years.

The following table shows as nearly as may be the extent of each of the principal factors in the increase and decrease in the number of sheep since March, 1937. Figures for the years since 1915-16 were published in earlier issues of the Official Year Book.

Table	355.—Sheep.	Lambing,	Slaughter,	Exports,	Deaths.
		Thousa	nds		

Season,	Lambs Marked.	Sheep and Lambs Slaughtered.	Excess of Imports (+) or Exports ()	Estimated number of Deaths* (Balance).	Net Increase (+) or Decrease ()	Sheep at 31st March.
$\begin{array}{c} 1937-38 \\ 1938-39 \\ 1939-40 \\ 1940-41 \\ 1941-42 \\ 1942-43 \\ 1943-44 \\ 1944-45 \\ 1945-46 \\ 1946-47 \\ 1947-48 \\ \end{array}$	13,045	6,860	(—) 2,332	5,456	(—) 1,603	51,563
	9,286	6,311	(+) 230	5,891	(—) 2,686	48,877
	15,674	6,887	(—) 44	3,248	(+) 5,495	54,372
	14,015	8,168	(—) 664	3,987	(+) 1,196	55,568
	14,616	8,128	(—) 1,432	3,886	(+) 1,170	56,738
	13,627	9,299	(—) 772	4,251	(—) 694	56,044
	15,068	9,476	(—) 798	4,000	(+) 793	56,837
	11,069	8,865	(—) 1,009	11,370	(—)10,175	46,662
	9,894	7,601	(+) 393	5,272	(—) 2,586	44,076
	11,240	7,137	(—) 628	4,446	(—) 971	43,105
	12,861	6,189	(—) 302	3,410	(+) 2,960	46,065

<sup>\*</sup> The figures in this column represent a balance and are rough approximations.

The effect of adverse seasons on the sheep flocks is apparent in four directions, viz., losses by death attributable mainly to lack of fodder and water, increase in the slaughtering of fat stock, decrease in lambing, and increased export to other States.

Adverse seasons in 1937-38 and 1938-39 caused losses which were more than regained in 1939-40 when mortality was low and lambing was a record. With mortality low and lambing heavy, there was a gradual increase despite much heavier slaughtering, and from 1941-42 to 1943-44 the number of sheep exceeded 56,000,000. Severe drought supervened and in the three seasons ended March, 1947, deaths of sheep on holdings were about 9,500,000 above, and lambs marked about 3,866,000 short of the average in the preceding quinquennium, and slaughterings, though fewer, were at a high level. Lambing was at its lowest level in 1945-46 when there was a net import of sheep for the first time since 1938-39. During the three seasons 1944-45 to 1946-47, the number of sheep decreased by 13,732,000 or by 24.2 per cent. Subsequently pastures were good, lambing satisfactory, mortality low, and slaughtering lighter, but despite the season's increase of 2,960,000, the number of sheep at 31st March, 1948 was 19 per cent. less than in 1944.

#### NUMBER AND SIZE OF SHEEP FLOCKS.

The 46,058,746 sheep depastured on holdings of one acre and upwards in the State at 31st March, 1948 were distributed over 31,894 flocks ranging in size from under 50 to over 50,000 sheep. Sheep and flocks were most numerous in the Western Slopes division where 30.8 per cent. of the State's sheep were depastured in 37.7 per cent. of the flocks. The proportions in the other divisions were: Central Plains and Riverina, sheep 29.9 per cent., flocks 25.1 per cent; Tableland, sheep 24.2 per cent., flocks 28.8 per cent.;

Western, sheep 12.8 per cent., flocks 4.3 per cent; and Coastal, sheep 2.3 per cent, flocks 4.1 per cent. The number of flocks in each division, classified in order of size, risegiven in the following table:—

Table 356.—Sheep Flocks on Holdings of One Acre or More, 31st March, 11948.

	 	Numb	er of Sheep F	locks in Divisio	n,	
Number of Sheep in Flock,	Coastal,	Tablelands.	⊮Western Slopes.	Central Plains and Riverina	Western Division.	Whole State.
Under 50	337	576	697	238	24	1,872
50-99	107	458	440	175	.11	1,191
100+249	152	1,147	1,545	822	34	3,700
250-499	- 203	1,654	2,605	1,534	33	6,029
500-999	252	2,343	3,050	1,901	186	$^{.7,632}$
1,000-1,999	165	1,833	2,135	1,661	248	6,042
2,000-4,999	74	921	1,239	1,276 274	682	4,192
(5,000±9,999	`17 3	198 59	-227	92	169  56	હે885 279
10,000-19,999 20,000-49,999	.:2	4	8	29	24	67
20,000-49,999 50,000 and over	_	1	_		'44	5
oo,ooo and over			***	4	1	
.Total	1,312	9,193	.12,015	8,006	1,368	31,894

Nearly a quarter of the flocks in the State were of from 500 to 999, and 19,703 flocks, or 62 per cent. of the total, each contained between 250 and 1,999 sheep. Twenty-one per cent. of the flocks consisted of less than 250 sheep; 13 per cent. comprised flocks of 2,000 to 4,999 and 4 per cent. contained 5,000 or more sheep. Four flocks in the Central Plains division and one in the Western division each contained 50,000 or more sheep.

The divisional distribution of sheep in flocks of varying size was as follows:—

Table 357.—Sheep according to Sizes of Flocks, 31st March, 1948.

	Number of Sheep in Flocks in Division.									
Number of Sheep in Flocks,	Coastal.	Tablelands.	Western Slopes,	Central Plains and Riverina.	Western Division.	Whole State.				
Under 50	6;686	13/698	16,625	5,850	590	43,449				
50-99	. 8,250	37,155	35,134	13,887	795	95,221				
100-240	27,879	217,082	293,636	163,683	6,240	708,520				
250-499	82,397	671,394	1,075,273	632,955	13,388	2,475,407				
500-999	202,850	1,881,566	2,414,478	1,532,738	71,578	6,103,210				
1,000-1,999	249,116	, 2,849,828	3,317,044	2,636,339	428,864	9,481,191				
2,000-4,999	241,255	2,994,566	4,092,987	4,231,830	2,404,228	13,964,866				
5,000-9,999	127,052	1,508,204	1,693,624	2,059,782	1,242,694	6,631,356				
10,000-19,999	39,342	883,255	1,017,581	1,347,062	851,275	4,168,515				
20,000-49,999	60,917	105,061	220,453	855,237	806,744	2,048,412				
50,000 and over		•••		279,851	58,748	338,599				
Total	1,045,744	11,161,809	14,206,835	13,759,214	5,885,144	46,058,746				

<sup>\* 6,254</sup> sheep on holdings of less than one acre in extent, are not included in this table.

Flocks of from 2,000 to 4,999 sheep contained 13,964,866 or 30.3 per cent, of all sheep in the State. Those with 1,000 to 1,999 sheep were next in order, followed by flocks thaving 5,000 to 9,999, 500 to 999, and 10,000 to 19,999 sheep containing 20.6 per cent., 14.4 per cent., 13.3 per cent., and 9.1 per cent. of the sheep respectively, and thus 87.7 per cent. of all sheep were in flocks of from 500 to 19,999 sheep. Those of less than 500 sheep (40 per cent. of all flocks) together contained only 3,322,597 or 7.2 per cent. of the sheep and 2,3874011 or 5.1 per cent. were in flocks of 20,000 or more sheep.

#### INTERSTATE MOVEMENT OF SHEEP.

Apart from the seasonal movement of stock to and from agistment in other States, there is a regular export of slieep from New South Wales to Victoria. During the five years ending June, 1948, 6,531,000 sheep were moved from New South Wales to Victoria, and 1,623,000 from Victoria to New South Wales, leaving an excess of exports to Victoria of 4,908,000. In the same period, 3,930,000 sheep were imported from Queensland to New South Wales and 1,174,000 were exported from New South Wales to Queensland, leaving an excess of imports of 2,756,000 from Queensland to New South Wales. The excess of exports to other destinations during the same period was 188,000, chiefly to South Australia, and the total excess of exports of live sheep from New South Wales during the five years was 2,340,000, consisting mainly of sheep sent to market in Victoria from the southern districts of New South Wales.

The following table shows the movement of sheep from and to New South Wales, as recorded, in 1937-38 and later seasons:—

Table 358.—Sheep: Interstate Exports and Imports.
Thousands.

~~	Shee	p from Ne	w South W	ales.	She	ep to New	South W	iles,	
Year ended 30th June.	To Victoria.	To Queens- land.	To South Australia and by Sea.	Total.	From Victoria.	From Queens- land.	From South Australia and by Sea;	Total:	Excess of Exports.
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	2,207 1,054 1,837 1,624 1,718 1,527 1,447 1,449 888 1,640 1,106	745 446 384 343 370 169 286 291 190 211	350 34: 106 111 221 351 161 63 14 7 23	3,302 1,534 2,327 2,078 2,309 2,047 1,894 1,803 1,092 1,859 1,325	469 919 460 599 368 264 326 243 297 346 <sup>1</sup>	541 1,339 1,631 621 320 1,203 671 558 1,192 741 768	16 66' 21' 31 33 12 20 21 37 1	1,026 2,324 2,112 1,251 721 1,479 1,017 822 1,526 1,088	2,276 (-)700 215 827 1,588 568 877 981 (-)434 771 145

<sup>(-)</sup> Denotes excess of Imports.

### SHEEP—SEXESWAND LAMBS.

Returns supplied by landholders show the following approximate distribution of the flocks according to sex, also the number of lambs:—

Table 359.—Sheep: Sexes and Lambs.

		mber (thou	ısand).		Proportion per cent; of Total:					
At <sup>*</sup> 31st March.	Rams.	Ewes.	Wethers.	Lambs (under 1 year)(:	Total.	Rams.	,Ewes,	Wethers.	Lambs (under 1 year):	Total.
1938 1939 1940 1941 1942 1948 1944 1945 1946 1947 1948	676 662 676 721 721 792 774 659 596 622	26,051 25,940 27,269 29,373 30,129 30,382 25,733 24,871 24,190 24,959	14,672' 13,542 14,296' 13,994 '13,770 12,891 11,452' 10,545	10,078- 7,603- 12,885 11,178 11,894 11,192- 12,790 8;818- 8,064 8;799 10,803	51,568 48,877 54,372 55,568 56,738 56,044 56,837 46,662 44,076 48,105 46,065	1.4 1.3 1.3 1.4 1.4 1.4 1.4	50.5 53.0 50.2 52.9 53.1 53.4 55.2 56.4 56.1 54.2	28·6 30·0 24·0 25·7 24·7 24·6 22·7, 24·5 23·0 21·0	19·6 15·6 23·7 20·1 20·9 20·0 22·5 18·9 18·3 20·4 23·4	100 0 100 0 100 0 100 0 100 0 100 0 100 0 100 0 100 0 100 0

As few ewes were lost in 1938-39, the losses of that season were regained quickly. In the three seasons 1944-45 to 1946-47, losses were spread over the entire flock, and the decrease of 6,192,000 ewes (over 20 per cent.) during that period rendered speedy recovery of sheep numbers impossible. An appreciable increase in both ewes and lambs during 1947-48, however, disclosed progress toward the rebuilding of flocks.

The number of breeding ewes and of other ewes and wethers under, and of or over, four years, available only as at 31st March, 1944 and 1945, is shown on page 511 of the 50th edition of the Year Book.

#### LAMBING.

The greater part of the lambing of the State takes place during the autumn and winter months, although a considerable proportion of ewes, varying according to the nature of the season, is reserved for spring and early summer lambing. It is possible to breed from ewes twice per year, but it is not considered good policy and is rarely practised, except, perhaps, after severe losses. Seasonal changes play a large part in determining the proportion of ewes mated and of resultant lambs, and cause wide variations in the natural increase.

The lambing season extends almost continuously from March to November and comparatively few lambs are dropped in the months of December, January and February.

Lambing results in recent years were as follows:-

Year ended 31st March.	Ewes Mated,	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated.	Year ended 31st March,	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes Mated
Average, 5 Yrs. ended 1936 1941 1946 Year 1932 1933 1934 1935 1936 1937 1938	19,877,280	12,724,900 13,269,920 12,854,580 14,332,000 14,221,200 10,737,500 12,996,300 14,330,700 13,044,600	per cent. 64·0 64·1 63·3 69·6 67·6 59·8 62·9 59·3 67·4 63·7	$1941 \\ 1942$	17,670,700 22,231,500 21,877,600 22,263,800 21,577,500 22,188,200 18,564,600 16,942,700 18,695,400 18,124,200	9,285,700 15,674,200 14,014,400 14,616,300 13,626,700 15,067,600 11,068,600 9,893,700 11,240,400 12,861,000	per cent. 52-6 70-5 64-0 65-9 63-1 67-9 59-6 58-4 60-1 71-0

Table 360.-Lambing.

During the ten years ended 1947-48, the ratio of lambs marked to ewes mated ranged from 52.6 per cent. in 1938-39 to 70.5 per cent. in 1939-40, and the average was 63.6 per cent. In each season from 1939-40 to 1943-44 the number of lambs marked was above the average. The number then declined progressively and in 1945-46 it was, with one exception (1938-39), the lowest since 1929-30. More lambs were marked in the following seasons and in 1947-48 the ratio to ewes mated was the highest in the last quarter of a century.

Table 361.-Lambing in Districts.

ļ		1946-47.			1947-48.	
District,	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes. Mated.	Ewes Mated.	Lambs Marked.	Proportion of Lambs Marked to Ewes, Mated.
Coast	thous.	thous. 216	per cent. 75·4	thous. 269	thous. 188	per cent.
Tablelands— North Central South	571 1,881 1,150	262 1,211 785	45·9 64·4 68·3	558 1,675 1,101	384 1,136 757	68·8 67·8 68·8
Total	3,602	2,258	62.7	3,334	2,277	68.3
Western Slopes— North Central South	1,759 2,051 2,476	749 1,277 1,797	42·6 62·3 72·5	1,581 1,786 2,323	1,077 1,170 1,672	68·1 65·5 72·0
Total	6,286	3,823	60.8	5,690	3,919	68.9
Plains— North Central Riverina	1,691 2,210 2,492	632 1,152 1,905	37·4 52·1 76·5	1,613 2,251 2,551	1,191 1,541 1,963	73·8 68·5 77·0
Total	6,393	3,689	57.7	6,415	4,695	73.2
Western Division	2,128	1,254	58.9	2,416	1,782	73-8
Total	18,695	11,240	60.1	18,124	12,861	71 0

# Breeds of Sheep.

The Merino is the most important breed of sheep in New South Wales. It is noted for its hardiness and produces its best wool when depastured in areas of relatively low rainfall. Sheep of other pure breeds are not numerous. British breeds of sheep, in numerical importance in 1947, were the Border Leicester, Romney Marsh, Dorset Horn, Southdown, and a small number of Suffolk, English Leicester, Lincoln, Ryeland, and Shropshire. Crosses of long-woolled breeds with merino constitute a relatively small proportion of the sheep in the State. The Corriedale is an inbred cross between the Lincoln and the Merino, and is valuable as a dual purpose (wool and mutton) sheep, well suited to all but the hotter and drier areas of the State. Polwarth is a breed evolved in Victoria about 1885 and may be termed a fixed comeback, merino rams being mated to Lincoln by merino ewes and the progeny inbred. The Polwarth is considered an ideal farmers' sheep, having a better carcase than the merino and producing saleable wool of comeback type.

The number of crossbred sheep tends to increase with the greater interest in fat lamb raising for export. The increased demand for broad quality wools for military purposes also encouraged production of crossbreds, but after hostilities ceased demand shifted to fine quality wool, retarding this war-time trend.

The numbers of the principal breeds in New South Wales in recent years is shown in the following table:—

	ı.	Number of Sheep	at 31st March.	
Brebd.	1939.	: 1940.	1942.	1947.
Merino	40,861,601	44,134,857	44,762,319	31,067,510
Corriedale	471,134	511,859	687,267	1,437,107
Polwarth	25,089	40,909	49,827	74,389
Border Beicester	124,774	161,297	. 178,045	412,839
Romney (Marsh	45,277	60,083	~80,519	118,864
Dorset Horn	20,610	24,517	35,459	56,651
Southdown	19,033	23,718	22,250	32,534
Other British Breeds	12,701	14,339	14,312	7,509
Total Pure Non-merino	718,618	836,722	1,067,679	2,139,893
Ierino Comeback	2,483,916	2,766,300	2,994,108	2,059,812
Crossbred	4,812,528	6,634,593	7,913,409	7,837,785
Total all Breeds	48,876,663	54,372,472	56,737,515	43,105,000

-Table 362. Breeds of Sheep.

Merinos represented nearly 85 per cent. of the sheep in New South Wales during the years 1932 to 1939 but by March, 1942 the proportion had declined to 79 per cent., and when next ascertained, in March, 1947, to 72 per cent. The latter low proportion was after drought which affected areas in which merinos are normally depastured more severely than other districts; consequently it may not be significant of a long-term change in the composition of the flocks.

In March, 1942 and 1947, respectively, the proportions of crossbred sheep were 13.9 and 18.2 per cent., of other pure breeds, 1.9 and 5.0 per cent., and of merino comeback sheep, 5.3 and 4.8 per cent.

#### STUD SHEEP.

Stud flocks of merino and other breeds are maintained throughout the State and a register is compiled annually. Most of the flocks maintained for breeding purposes are registered. At 31st December, 1946, there were 902,972 stud sheep in the 368 registered merino flocks, viz., 110,585 rams, 521,298 rewes and 271,089 lambs. In that year 137,448 stud rams and 150,927 stud ewes were bred.

#### WOOL.

#### PRODUCTION.

Wool is produced in New South Wales principally by shearing the live sheep and to a considerable extent by fellmongering. A small quantity is picked from the carcases of dead sheep on the holding. In normal times many sheep skins are exported oversea and interstate, and the quantity of wool on these is estimated and included in the total production.

The output of wool is stated as in the grease, as data as to its clean scoured yield are not available. A small proportion of the shorn wool is scoured before being marketed, and the whole of the fellmongered wool is in a scoured condition. Greasy wool when scoured yields, on the average, approximately one-half its greasy weight, but the clean scoured yield varies appreciably from season to season. Very little wool is washed on holdings.

The following table shows, in quinquennial periods from 1876, and annually since 1934-35, the total quantity of wool produced (as in the grease) in New South Wales, together with the aggregate value at Sydney, and the value to growers:—

-	Wool Pr	roduced.			Wool Produced	,
Average /per Season,	Quantity as in the Grease.	Value at Sydney.	Season	Quantity as in the Grease.	Value at Sydney.	Value at Place of Production.
	thous, lb.	£ thons.		thons, lb.	£ thous.	£ thous.
1876-1880	* 143,679	6,260	1934-35	494;981	19,827	18,045
î1881⊬1885	* 188,763	8,113	1935-36	472,585	27,321	25,408
<b>1886–1890</b>	* 258,956	8,055	1936–37	503,616	34,106	32,091
1891-1895	* 362,726	9,805	1937–38	495,027	25,961	24,060
1896-1900	* 281,648	8,597	1938–39	437,141	18,761	17,076
. 1901–1905	* 260,517	9,344	1939–40	546,273	⊭30,58 <b>6</b>	28,283
:71906-1910	* 869,321	14,958	1940-41	536,908	29,401	27,127
-c <b>1911–1915</b>	357,256	15,468	1941-42	547;000	29,823	27,458
1916-1920	328,065	18,507	1942–43	497,538	<sup>7</sup> 31,318	29,154
1921-1925	323,635	24,272	1943-44	537,410	34,179	31,703
1926-1930	457,712	30,648	1944-45	: 448,683	28,183	26,112
19311935	488,064	20,679	1945-46	431,549	27,157	25,234
1936-1940	490,929	27,347	1946-47	432,621	42,541	40,277
19411945	513,508	28,311	1947-48	422,260	-66,682	63,713

Table 363.-Wool Production.

Since 1926 pastoral holdings have been improved and wool production, though subject to seasonal fluctuations, has been maintained at a far higher level than formerly. The quantity produced in the five seasons ended 1943-44 was greater than in any earlier quinquennium and 10.9 per cent. greater than in the five years ended 1938-39. In later seasons production decreased owing to drought and in 1947-48 it was the lowest since 1925-26.

Marked changes in the value of the output have been caused by fluctuations in price rather than variations in the quantity produced. The average annual value (as at place of production) of over £31,650,000 in the five seasons ended 1928-29 was not reached again for any subsequent quinquennium up to the war. The value, as stated for the years 1939-40 to 1945-46, is based on the average price under the agreement with the United Kingdom Government for the purchase of the Australian clip. Wool prices rose sharply on the resumption of the auction sales in September, 1946 and continued to advance throughout 1946-47 and 1947-48. In the latter season, despite the smallness of the clip, the value (£63,713,000) was easily a record. The course of wool prices since 1876 is shown in Table 379.

<sup>\*</sup> Exclusive of wool exported on skins.

Year

1935-36

1937-38

1938-39

1939-40

1940-41

1941-42

1942-43

1943-44

1944-45

1945-46

1946 - 47

1947-48

55,805

54,673

51,530

54,637

57,704

58,537

57,654

57,318

52,268

45,402

43,119

43,691

Particulars of the number of sheep shorn, the average weight of wool per sheep, and the amount of shorn and other wool produced since 1920-21, are as follows:-

	sneep snorn	Average					
Season.	during year (including lambs).	clip (greasy). †	Shorn and crutched.	Dead.	Fell- mongered.	Exported on skins.	Total Productions
Average 5 Years ended—	Thousands.	lb.		ני	Chousand 11	) <b>.</b>	
1924 - 25	38,378	7.5	286,786	925	23,599	12,325	323,635
1929 - 30	50,944	8.2	418,405	985	18,548	19,774	457,712
1934-35	53,691	8.2	438,594	1,035	34,109	14,326	488,064
1939-40	54,426	8.2	445,206	1,815	26,172	17,736	490,929
1944-45 'ear	56,696	8.2	463,871	1,155	41,712	6,770	513,508
1930-31	48,840	7.9	385,105	585	22,740	18,790	427,220
1933-34	56,878	7.5	427,959	2,428	42,909	11,094	484,390
	1				ı		ı

2,358

1,771

2,427

1,095

1,326

1,125

1,278

1.164

1,204

1,246

516

883

429,701

447,695

391,627

497,356

484,012

497,447

448,968

490,331

398,598

386,724

383,692

382,142

7.7

8.2

7.6

9.1

8.4

8.5

7.8

8.6

7.6

8.5

8.9

8.8

Table 364.—Sheep Shorn and Wool Produced.

Weight of Wool Produced (as in the grease).

24,176

23,951

25,678

32,751

46,019

41.964

42,500

39,816

38.261

31,647

27,076

19,947

16,350

21,610

17,409

15,071

5,551

6,464

4,792

6,380

10,660

11,974

20,607

19,655

472,585

495,027

437,141

546,273

536,908

547,000

497,538

537,410

448,683

431,549

432,621

422,260

# QUALITY OF NEW SOUTH WALES WOOL.

Particulars of all greasy wool (other than from Joint Organisation stocks) appraised or sold at auction in Australia from 1940-41 to 1947-48; were recorded by the Central Wool Committee and the Australian Wool Realisation Commission and have been analysed for each State by the Commission in respect of qualities, combing or carding classifications, and degrees of vegetable fault. Similar analyses were issued by the Central Wool Committee for the years 1917-18 to 1919-20 but no detailed records of the quality of the wool clip are available for the inter-war period. The summary which follows covers the Australian Wool Realisation Commission's analyses relating to greasy wool appraised or sold at auction at Sydney, Newcastle, and Goulburn; appraisals and sales at Albury are not included.

<sup>†</sup> Including crutchings. Lambs shorn and lambs' wool are included in the average,

The number of bales of greasy wool appraised or sold at auction in New South Wales from 1940-41 to 1947-48, classified by predominating quality counts, is shown in the following table:—

Table 365.—Greasy Wool: Predominating Quality Groups. Sydney, Newcastle and Goulburn Appraisements and Sales.

Quality		Greasy	y Wool Ap	praised—B	ales.		Greasy W at Auctio	ool Sold n—Bales.
Predominating.	1940-41.	1941-42.	1942–43.	1943-44.	1944–45.	1945-46.	1946-47.	1947–48.
90's	6	40	48	29	28	11	34	64
80's	1,484	1,018	1,059	966	977	343	868	1,246
70/80's	11,358	12,668	12,131	11,105	11,007	6,224	9,194	8,655
70's	99,487	81,370	82,726	53,434	55,181	34,944	50,069	41,699
64/70's	372,126	371,755	323,721	278,298	254,846	157,886	193,345	174,927
64's	414,793	375,334	288,732	318,307	268,865	226,108	207,861	202,765
64/60's	66,674	80,403	85,238	124,978	86,971	127,241	84,771	98,723
60/64's	91,742	110,202	105,492	147,335	101,162	154,829	119,474	145,873
60's	84,853	106,917	125,889	124,510	108,419	141,928	108,115	99,076
60/58's	4,867	8,307	10,747	11,433	8,739	20,325	13,762	15,516
58's	68,937	85,921	74,099	84,153	84,291	80,380	64,320	63,672
56's	32,306	39,437	44,908	67,538	59,211	74,687	73,394	72,442
50's	6,957	8,092	11,143	16,717	15,771	27,251	29,958	30,937
46's and 44's	2,943	3,372	4,428	5,556	5,082	7,373	6,864	8,240
40's	59	65	78	119	59	85	115	226
36/46's	28 34	23	112	43	17	61	126	282
32/40's	34	25	25	21	15	17	164	14
Oddments	0.440	4 505	7 404	0.400	- 45.	11 000	7.017	4 700
Merino†	2,448	4,535	5,686	8,488	7,454	11,689	7,917	4,709
Crossbred	608	1,213	1,328	1,382	2,014	1,755	1,394	1,370
Total	1,261,710	1,290,697	1,177,590	1,254,412	1,070,109	1,073,137	971,745	970.436

<sup>\*</sup> Greasy wools to which Joint Organisation's reserve prices were not applicable are not included.
† Includes fleece wools classified as overgrown, double, doggy, cotted or black and brands.

In the next table the proportional distribution of the foregoing wool is given in a restricted grouping of predominating qualities the better to reveal the changes in the composition of the wool clip over the period reviewed:—

Table 366.—Greasy Wool: Proportion in Qualities. Sydney, Newcastle, and Goulburn Appraisements and Sales.

Quality		Greasy Wool Sold at Auction.						
Predominating.	1940–41.	1941–42.	1942–43.	1943–44.	1944-45.	1945–46.	1946–47.	1947-48
70's and over	per cent.	per cent.	per cent. 8·2	per cent.	per cent.	per cent.	per cent.	per cent
<b>€</b> 4/70's	29.5	28.8	27.5	22.2	23.8	14.7	19-9	18.0
64's	32.9	29.1	24.5	25.4	25.1	21.1	21.4	20.9
64/60's and 60/64's	12-6	14.8	16.2	21.7	17.6	26.3	21.0	25.2
<b>6</b> 0's	7.1	8.9	11.6	10.8	10.9	15.1	12.5	11.8
58's	5.5	6.7	6.3	6.7	7.9	7.5	6.7	6.6
56's	2.6	3.0	3.8	5.4	5.5	7.0	7.6	7.5
50's	0.5	0.6	0.9	1.3	1.5	2.5	3.1	3.2
Below 50's	0.2	0.3	0.4	0.5	0.5	0.7	0.7	0.9
Oddments	0.2	0.4	0.6	0.8	0.9	1.2	0.9	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The war-time trend towards the production of strong quality wools and the effect of severe drought in 1944-45 and later seasons are displayed in the table. Production of 64's and finer wools, which represented 71.3 per cent. of the total in 1940-41, declined to 55.2 per cent. in 1944-45 and then to 39.7 per cent. in the following season, after drought had reduced sheep numbers by over ten million. This downward trend was arrested in 1946-47. A further small decline in the production of 64's or better in 1947-48; may have been due to seasonal conditions which tended to broaden the clip.

An analysis by combing or carding groups for the years 1940-41 to 1947-48 is given in the next table:—

Table	367.—Greasy Wool:	Combing and	Carding, Groups.	Sydney,	New-
	castle and Go	ulburn Āpprais	ements and Sales.	•	

	Quantity—bales.,					Proportion—per cent.					
Season.	Noble Combing,	French. Combing:	Carding.	Totali*	Noble Combing:	French Combing.	Carding.	Total:			
1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	851,078 834,108 754,143 828,910 655,561 713,723 587,139 661,052	190,764 245,354 213,084 198,367 218,054 150,996 167,980 123,352	216,812 205,487 203,349 217,265 187,026 194,974 207,315 179,953	1,258,654 1,284,949 1,170,576 1,244,542 1,060,641 1,059,693 962,4341 964,357	67·6 64·9 64·4 66·0 61·8 67·4 61·0 68·6	15·2 19·1 18·2 15·9 20·6 14·2 17·5 12·8	17·2 16·0 17·4 17·5 17·6 18·4 21·5	100 (0) \\ 100 (0) \\			

<sup>\*</sup> Excluding oddments:

Noble combing wools predominate in the New South Wales clip and in the period covered by the table the proportion of wools in this classification ranged from 68.6 per cent. down to 61 per cent. of the total. Wools, usually of shorter length, classified as French combing, ranged from 19.1 per cent. of the total in 1941-42 to 12.8 per cent. in 1947-48, and carding wool ranged from 21.5 per cent. in 1946-47 to 16 per cent. in 1941-42. The Noble combing wools consist largely of wools carrying light vegetable fault or free or nearly free of vegetable fault whereas, in the French combing wools, those free of vegetable fault are only a small proportion. It is generally accepted that seasonal conditions during the growing period resulted in a typical New South Wales clip in 1942-43. Comparison of the 1947-48 clip with that of 1942-43 should provide a fairly reliable indicator of changes in quality, while comparison of the clips in these years with the clips of the drought affected years, 1944-45 to 1946-47, provides a general indication of the effect of drought on wool quality.

The incidence of vegetable fault in the New South Wales clip in recent years is shown in the next table. Free or nearly free wools include combing and carding wools which are free or nearly free of vegetable fault. Combing wools classified as "light burr and/or seed" contain up to 3 per cent. of vegetable fault if merine fleece and up to 4 per cent. if merine broken, pieces or bellies. Similar wools contain up to 6 per cent. and 8 per cent. of vegetable fault, respectively, if classified as "medium burr and/or seed" and up to 12 per cent. if classified as "heavy burr and/or seed". Carding wools are classified as "light burr and/or seed" if they contain odd burr and/or up to 3 per cent. seed, and as carbonising if the fault content is greater. For crossbred combing wools the permissible fault content of each classification is slightly higher.

Table 368.—Greasy Wool: Incidence of Vegetable Fault: Sydney, Newcastle and Goulburn Appraisements and Sales.

Season.	Frée <sup>2</sup> or: Near Free.	Light Burr and/or Seed.	Medium Burrand/or Seed (Combing).	Heavy Burrand/or Seed (Combing).	Carbonising.	Total.*
		<u>'</u>	NUMBER OF BA	LES,		
1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	423,326 376,990 358,337 265,200 242,379 262,667 236,379 268,166	374,429 488,116 423,711 472,503 393,181 353,663 277,113 317,954	183,920 178,250 149,325 208,857 171,100 175,720 168,271 145,793	86,289 56,117 60,753 101,319 86,983 94,254 87,847 73,350	190,690 185,476 178,450 196,663 166,998 173,389 192,824 159,094	1,258,654 1,284,949 1,170,576 1,244,542 1,060,641 1,059,693 962,434 964,357
	<u> </u>	Propor	FION OF TOTAL	per cent.		·
1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	33·6 29·3 30·6 21·3 22·9 24·8 24·0 27·8	29·7 38·0 36·2. 38·0 37·1 33·4 28·8 33·0	14·6 13·9 12·8 16·8 16·1 16·6 17·5 15·1	6.9 4.4 5.2 8.1 8.2 8.9 9.1 7.6	15·2 14·4 15·2 15·8 16·7 16·3 20·0 16·5	100·0 100·0 100·0 100·0 100·0 100·0 100·0

<sup>\*</sup> Exclusive of Oddments.

In a normal season approximately 65 per cent. of the clip is free of or contains light vegetable fault, 20 per cent. contains medium or heavy burr and/or seed and 15 per cent. is carbonising wool. The proportion of carbonising wool is fairly constant from season to season but that falling within the other classifications varies considerably under the influence of seasonal conditions. During drought periods the relative importance of free or nearly free wools increases. On the other hand in good seasons, when more seed is present in the pastures, there is a decline in the proportion of free wools.

#### AVERAGE WEIGHT OF FLEECE.

The average weight of the fleece fluctuates considerably from year to year with variations in seasonal conditions, and it is affected also by changes in the proportion of lambs in the number. The average over the last tenyears was 8.4 lb. per head (sheep and lambs). During that period the average weight of clip was 9.0 lb. per sheep, and 3.0 lb. per lamb. The annual averages for sheep (exclusive of lambs and not including crutchings) in respective districts were as follows:—

Table 369.—Average Clip per Sheep in Divisions.

Season.	Tablelands.	Western Slopes.	Plains.	Western Division.	Total N.S.W.
	lb.	lb.	lb.	lb.	1b.
1937–38	8.5	8:4:	9!2:	10.2	8.9
1938-39	7.6	7.4	7.8	9.5	7.8
1939±40 ·	9:3	9.7	10.4	10.4	9.9
1940-41	8.8	8.8	9.3:	1071	9.1
1941-42	8:8	8.8	9.3	10:2	9.1
1942-43	840	8:0:-	8.4	9.2	8.3
1943-44	8.7	9.1	9.8	10:6	9.4
1944-45	7.6	7.6	8.6	9.6	8.1
1945-46	8.8	8.5	9.3	9.9	8.9
1946-47	8.9	9.3.	10.3	11-1	9.6
1947–48	8.9	9.1	9.9	11.1	9.5
erage 10 years			, <u></u>		
ended 1947-48	8.5	8:6	9.3	10.1	9.0

The average weight of fleece shorn from sheep and lambs in statistical divisions of New South Wales in the four years ended March, 1944 to 1948, is shown below. Crutchings, which generally represent 2 or 3 per cent. of total wool production, are not included.

	1948	3-44.	1944	4-45.	194	5–46.	1946	3-47.	1947	-48.
Division,	Sheep.	Lamb.	Sheep.	Lamb.	Sheep.	Lamb.	Sheep.	Lamb.	Sheep.	Lamb.
Tablelands—	lb.	lb.	lb.	lb.	lb.	lb.	lb.	Ib.	lb.	lb.
Northern Central Southern	7·76 9·09 8·87	2·93 2·48 1·65	7·10 7·66 7·88	2·79 2·20 1·27	8·29 8·95 9·00	2.63 $2.28$ $1.52$	7·94 8·87 9·55	2·98 2·49 1·72	8·28 8·83 9·49	2·68 2·38 1·81
Total	8.69	2.27	7.59	1.99	8.81	2.08	8.86	2.26	8.91	2.21
Western Slopes— Northern Central Southern Total	8·66 9·69 9·12 9·12	3·42 2·94 2·81	7·57 8·14 7·26 7·58	3·15 2·65 2·21 2·57	8·77 9·39 7·55	3.27 2.84 2.30	8·31 9·45 9·87	3·13 2·85 2·65	8·82 9·25 9·18	3·06 2·98 2·79
Central Plains— Northern Central Riverina	9·52 10·43 9·35	3·76 2·91 2·68	8·31 9·13 8·29	3·90 3·38 2·53	9·47 10·23 8·04	3·49 3·66 2·61	9·41 10·49 10·87	3·70 3·60 3·10	9·47 9·88 10·29	3·59 3·61 3·18
Total	9.75	2.98	8.57	3.15	9.31	3.35	10.32	3.38	9.94	3.40
Western Division	10.58	3.82	9.58	3.93	9.95	3.64	11.17	3.84	11.06	3.81
New Sonth Wales (including Coastal Divisions)		2.99	8.09	2.79	8.94	2.89	9.64	3.03	9.52	3.10

Table 370.-Average Clip per Sheep and Lamb.

As the figures quoted in the preceding tables relate to greasy wool, comparisons between divisions necessitate allowance for the presence in the fleece of foreign matter such as dust, burr and seed. Generally the greasy wool from the tablelands produces the highest yield of scoured wool. The yield is lower in the Western Slopes, the Plains and Riverina, and Western Division.

#### INDEX OF RAINFALL IN SHEEP DISTRICTS.

The climatic and rainfall characteristics of the various statistical divisions are shown in the chapter "Climate" of this volume, and the diagrammatic maps on pages 9 and 10, showing, inter alia, the principal rainfall regions, isohyets, and the principal sheep regions, afford a general view of the average conditions under which the industry is conducted.

The following table shows a monthly index of rainfall in the sheep districts of New South Wales as a whole. The index represents the weighted average ratio of actual to normal rainfall in each month, the normal in each month being the average over a long period of years and represented by 100:—

Table 371.-Index of Rainfall in Sheep Districts.

1933 -34.	1934 -35.	1935 -36.	1936 -37.	1937   -38,	1938 -39.	1939 -40,	1940 -41.	1941 -42.	1942 -43.	1943 -44	1944 -45.	1945 -46.	1946 -47.	1947 -48
161	88	142	61	73	37	41	109	56	72	116	31	30	99	147
131	271	128	46	96	148	121	18	75	127	90	52	85	46	136
208	168	31	14	97	77	148	52	78	165	170	41	61	116	165
						l								
142		92	200	65	9		123	34	129		37	49	90	24?
136	115	173	122		69	30	319		141		114	151	31	99
274	87	161	70	72	149	34	78	147	52	58	123	195	261	180
		146	124		251	46	152			41	31	79		81
		55			214	204	16					65		107
15	28	69	42	119	53	33	58	196	124	127	105	42	61	133
		1						!				1		
		84			104			118	51		181	49	44	171
														43
136	59	98	113	151	200	36	37	72	105	142	144	25	117	58
								i —						
131	99	115	77	85	115	64	92	88	98	82	87	74	100	131
			1	1		1					1		'-	
	161 131 208 142 136 274 22 100 15 74 165 136	-34.   -35.	-34.   -36.   -36.   -36.	-34.	-3436363738.    161	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Season | 7.5 | 8.1 | 7.7 | 8.3 | 8.2 | 7.6 | 9.1 | 8.4 | 8.5 | 7.8 | 8.6 | 7.6 | 8.5 | 8.9 | 8.8

Comparison of rainfall with the average clip per sheep shorn in the succeeding season, as shown at the foot of the foregoing table, clearly indicates a close relationship between rainfall and the weight of the fleece, years of poor rainfall almost invariably resulting in a decline in the quantity of wool shorn per sheep. Whilst satisfactory seasonal conditions throughcut the year are needed for good results, summer and autumn rains exercise a considerable influence upon wool production. This influence is illustrated by reference to 1936-37, 1940-41 and 1944-45. rainfall over the whole season in each of those years was below normal, good rains fell in summer and autumn and the average weight of fleece shorn in the next succeeding years was relatively high. Rainfall was above normal in several months of 1939, and the average clip in 1939-40 was a record. The relationship between rainfall and the average clip per sheep in later seasons is obscured by the marked variations in the proportion of crossbreds and other strong woolled sheep in the flocks, particularly between 1944-45 and 1946-47 when drought losses in merino districts were severe (see page 408). Fleeces were light in 1944-45 and relatively heavy in the three succeeding seasons. The average in 1946-47 (8.9 lb) was the heaviest since 1939-40.

Below average rainfall for the sheep districts as a whole may result either from deficiences in all parts or from acute dryness in particular districts. In the latter case the movement of sheep to the more favoured districts tends to limit losses, but when, as in and about 1945-46, drought is general, flocks dwindle by deaths and the wool clip tends to be hungerfine, to lack density, and to be light in condition. Index numbers of rainfall are calculated to show the rainfall experience of each major part of the sheep belt, and the separate monthly data are published in the Monthly Summary of Business Statistics. Data for each month for the seasons 1945-46 to 1947-48 follow.

<sup>\*</sup> Sheep and lambs, crutchings included.

Table 372.—Index of Rainfall: Parts of Sheep Belt. (Normal Rainfall for Each Month = 100.)

1	Sheep Districts,					Year and	Sheep Districts.					
Yean and Month			North- ern.	Central	South- ern.	West- ern.	Total					
1945⊢46—	<u> </u>					1946–47—	ļ					
September	. 46	16	34	18	30	March	142	82	151	178	132	
October	+42	68	125	116	85	April	81	59	96	45	76	
November	· 66	50	78	28	61	May	62	88	41	51	61	
December	.54	43	46	61	49	Jnne	32	38	61	41	44	
	'					July	- 64	135	155	137	122	
January	153	100	166	236	151	August	136	94	100	178	117	
February	+ 95	129	327	228	195				l	1		
March	166	76	·105	43	79	1947-48						
≟April	66	90	61	14	65	September	148	168	119	175	147	
May	139	40	53	24	42	October	148	161	106	136	136	
June	23	38	75	64	49	November	144	192	156	176	165	
$\mathbf{July}$	17	38	109	34	55	December	168	285	306	174	.247	
$\mathbf{August}$	2	13	~60	8	25	_						
						January	99	107	110	49	99	
1946-47-	000	0.0	1 7 -	150	00	February	82	211	252	138	180	
September	203	68	15 51	156	99 46	March	144	-90	21	72	.107	
October	34	63 77	191	17		April	80 145	102	145	75		
November	84 78	83	98	73 116	116	May	202	138	120	129	133 171	
December	/8	83	98	110	90	June July	79	204 23	102 33	214 28	43	
January	77	21	8	7	31	August	53	68	50	70	58	
February	271	271	176	462	261	August	00	00	30	l ′°	1 20	

#### WOOL MARKETING.

For many years the whole of the wool grown in New South Wales was shipped for sale in London. As the number of continental buyers increased, however, there developed a tendency to seek supplies of the raw material at their source, and after the year 1885 local wool sales began to assume importance. The proportion of the clip shipped oversea before sale rarely reaches 1 per cent. The quantities so shipped from New South Wales ports in each season from 1927-28 (except in 1939-40 to 1945-46, when the war-time appraisement scheme operated), as recorded by the Sydney Wool Selling Brokers' Association, were as follow:—

Table 373.—Wool Shipped Oversea from N.S.W. Ports before Sale.

Season.	Bales,	Season.	Bales.	Season.	Bales.	Season.	Bales.
1927–28 1928–29 1929–30 1930–31	8,984 9,302 8,839 12,487	1931-32 1932-33 1933-34 1934-35	9,153 10,061 10,107 9,436	1935-36 1936-37 1937-38 1938-39	10,346 7,770 6,775 3,982	1946–47 1947–48	9,504 14,133

#### SYDNEY WOOL SALES.

Sydney is the largest primary wool market in the world and the auction sales are attended by representatives of firms from practically every country in which woollen goods are manufactured extensively. Sales are held regularly in Sydney, Newcastle, and Goulburn, and usually extend from September to June each season. They are held alternatively at Sydney, Newcastle, and Brisbane and concurrently at Newcastle and Goulburn. At least one series is held in Sydney each month, the frequency in other centres depending on the quantity of wool to be offered at each in any season. Sales are made by private treaty in July and August, but the quantity of wool sold in this way is negligible. Some New South Wales wool is sold also at Albury (regarded as a Victorian selling centre) and in other States. Sales by auction were suspended during the war years (1939-1945). The Australian wool clips of 1939-40 to 1945-46 were sold

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under the appraisement system of the United Kingdom war-time purchase agreements.

Wool auctions were resumed in Sydney on 2nd September, 1946. Apart from a small quantity of good quality, free wool selected for sale from November each year, each lot is offered for sale strictly in order of arrival at brokers' stores. The quantity of wool and the proportion of various types and qualities sold each mouth varies considerably. Generally wool of relatively low quality is offered in September and June, and fine wool in November, December, and January. The quality of wool received at "brokers' stores each month is governed largely by the order of shearing throughout the State; most wool from early shearing districts is coarser and usually carries more vegetable matter than that from late shearing districts.

The following statement compiled and published by Dalgety and Co. Atd. shows particulars of New South Wales wool sales since 1921-22. The information for the years 1939-40 to 1945-46 relates to wool appraised at New South Wales centres and the appraised value thereof (excluding additional payments for adjustment to United Kingdom contract value; see page 419). In 1947-48, 882,000 bales (greasy and scoured) were sold in Sydney, 149,000 in Newcastle, and 48,000 in Goulburn. The quantities in 1946-47 were 890,000, 154,000 and 46,000 bales respectively.

Average weight} per Bale of Wool Sold in Wool Sold:\* Proportion of Bales of each Description Sold. 'Year ended Breed. Growth, Condition. Sydney. 30thJune. Greasy. Scoured Value. Other Fleece, Lambs. Greasy. Scoured Greasy. Scoured Merino. Merino thous. thous per bales 85 £000 ceut. cent. cent cent įb. 240 cent 1921-22 15,201 19,159 21,711 22,827 836 750 73 79 27 - 98  $\frac{330}{321}$ **1**922–23  $\frac{21}{21}$ 94 234 69 1923-24 645 93 318 228 1924-25 622 32 86 95 232 95 327 1925*∸*26 1,028 23,744 6 5 4 4 4 6 6 227 5 6 6 1926-27 1:071 67 67 26,349 27,066 -88 12 95  $\frac{94}{94}$ 322 208 1927÷28 1,000 īō 306 226 90 1,108 1,063 1,011 1928-29 1929-30 96 47 96 313 236 15,081 12,03290 231 10 96 305 1930-31 1,138 1,22771 105  $\frac{10}{10}$ 94 94 94 308 311 1931-32 13,001 90 6 8 230 1932-33 90 236 14,983 8 6 7 92 94  $\frac{237}{230}$ 1933-34 1,046 91 23,040 ٠ŌŎ 195 5755435544 1,186 1,116 1,20477 84 1934 - 3515,939 90 10 93 307 1935 - 3690 93 230 1936-37 67 26,347 95 55577677777 300 235 1,076 1937-38 18,143 91 96 95 298 228 1,119 1,35797 95 95 ∷93 1938-39 15,521 91 302 233 $\frac{233}{233}$ 1939-40 96 124.397189 11 312 1940-41 ,265 21,319  $\tilde{12}$ ,291 88 14 14 96 96  $\frac{310}{320}$ 1941-42 21,919 86 ·94 223 93 1942-43 123.95986 1,194 1,266 1,079 1,078 1,018 996  $\frac{227}{226}$ 1943-44 90 25,254  $\hat{1}\hat{5}$ 6 93 314 80 77 72 120,294 1944-45 83 17 95 5 93 305 120,960 86 96 93 317 217 1946-47 33.073 81 5 93 220

Table 374.-Wool Sales: New South Wales.

53,094

 $8\overline{3}$ 

<sup>20</sup> \* 1921–22, to 1928–29, Sydney only. 1929–30 to 1938–39, Sydney 1947–48; Sydney Newcastle and Goulburn. † Including skin wool. additional payments for adjustment to United Kingdom contract value. 1929-30 to 1938-39, Sydney and Newcastle. 1940-41 ‡ Appraised value, excludes

The figures as to quantity and value in table 374 are not comparable with records of production. They are for the year ending 30th June, and include wool carried forward from the preceding season, small quantities of wool from other States (mainly Queensland) forwarded to Sydney for sale, and wool carried forward to the next season, but exclude wool grown in New South Wales and marketed interstate or oversea.

Figures compiled by the Sydney Wool Selling Brokers Association show that it is exceptional for a significant proportion of the wool received by brokers not to be sold during the year in which it reaches the stores. The following table shows the carry-over in the Sydney centre for each of the last twenty years. In this period the proportion ranged from 0.5 per cent. in 1940-41 to 11 per cent. in 1937-38, and was about 2.9 per cent. over the ten years ended 1936-37. Frequently much of the wool carried over consists of autumn shearings and crutchings which have not reached the selling centre in time for offering at the final sale of the season.

Carried over Carried over Carried over Carried over Season. at end of Season. Season. at end of Season. at end of Season. at end of Season. Season. Season. bales. bales. bales bales. 64,805 43,256 32,847 28,878 1928-29  $\substack{1933-34\\1934-35\\1935-36}$ 1938-39 53,234 7,583 6,024 1943-44 1944-45 1945-46 44,421 14,432 11,660 15,370 17,883 1929-30 1939-40 1930-31 23,276 1940-41 1931 - 3261,161 1936-37 1941-42 35,833 1946-47 34,514 13,493 1932-33 21,902 1937-38 133,534 1942-43 27,641

Table 375.—Wool (Greasy and Scoured) Carried-over at Sydney.

United Kingdom Government's Purchases of Australian Wool.

During the First World War (1914-18) the Australian wool clips were purchased by the United Kingdom Government; the war-time and post-war arrangements of this period are described in the Year Books for 1919 (page 527) and 1921 (page 781).

Similar arrangements, described on pages 519 and 520 of the Official Year Book No. 50, were made for the disposal of the Australian clips of 1939-40 to 1945-46 inclusive.

The average prices paid for the Australian wool clips of 1939-40 to 1945-46 were:—

		Seasons 1939-40 to 1941-42.	Seasons 1942-43 to 1945-4€.
English Currency, per lb. greasy		10·75d.	12·3625d.
Australian equivalent, per lb. greasy	•••	13·4375d.	15·4531d.

In addition, the agreement provided for equal sharing between the United Kingdom and Commonwealth Governments of profits arising from the resale of wool for use outside the United Kingdom.

The Central Wool Committee, with the assistance of a Wool Committee in each State, administered the scheme in Australia. The wool in each season was submitted for appraisement in accordance with a table of limits and payments to growers were made through the usual trade channels.

Particulars of appraisements of the Australian wool clip in each of the seasons 1939-40 to 1945-46 are shown below. Appraisements of skin wools and wool purchased by Australian manufacturers are included.

	0-10-144	of Mari	Payments to Suppliers.						
Season.	Quantity	of Wool,	Apprais	ed Value.	Additional Pay- ment (to adjust				
	Greasy.	Scoured.	Total.	A verage per lb. (greasy).*	appraised to flat rate value).	Total.			
1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46	thous. lb. 1,066,237 990,833 1,034,617 1,048,049 1,044,228 883,767 823,335	thous. 1b. 45,829 53,206 55,853 51,369 54,021 47,315 43,612	£000 59,842 55,251 58,472 66,677 66,856 56,075 51,480	d. 12·40 12·08 12·24 13·01 13·93 13·76 13·57	£000 4,881 5,709 5,168 6,877 7,022 6,527 6,710	£000 64,723 60,960 63,640 73,554 73,878 62,602 58,190			

Table 376.—Appraisement of Australian Wool, 1939-40 to 1945-46.

As the average appraised price per lb. (greasy) for each clip was less than the agreed price payable by the United Kingdom Government, equalisation payments were made to suppliers of participating wool at the end of each season. Expressed as a percentage of appraised value, these were as follows:—8½ per cent. in 1940, 11 per cent. in 1941, 9½ per cent. in 1942, 11 per cent. in 1943, 11¼ per cent. in 1944, 12½ per cent. in 1944-45 and 13.9 per cent. in 1945-46. Suppliers of wool derived from skins did not participate in these equalisation payments.

Details of appraisements in each State in 1944-45 and 1945-46 are shown on page 520 of the Official Year Book No. 50; the particulars for 1939-40 and 1940-41 were published on page 804 of the 1940-41 edition and for 1941-42 to 1943-44 on page 736 of the 1941-42 and 1942-43 edition of the Year Book.

In this period Australian manufacturers purchased wool ex-appraisement and from stocks held in Australia on United Kingdom account. They paid appraised prices in 1939-40 but the wools selected were generally of superior quality to the remainder of the clip, and in later seasons a percentage was added to the appraised prices to adjust them to the prices paid for similar wools by the United Kingdom Government. The additional charge proved insufficient for this purpose and by 31st October, 1945 a loss of £670,759 had been incurred, which was set against trading surpluses earned by the Central Wool Committee and the Australian Wool Realisation Commission.

From 17th February, 1941 to 30th October, 1945 a deferred charge, made as a percentage of the appraised price, was imposed on the wool content of manufactured goods exported oversea. Details of this charge and of prices paid by Australian manufacturers for wool for domestic consumption are given on page 521 of the Official Year Book No. 50.

A Commonwealth Government subsidy was paid on wool purchased by Australian manufacturers between 1st November, 1945 and 30th June, 1948. From 1st November, 1945 to 30th June, 1946, it was equal to the difference between the official selling prices of the Joint Organisation (see page 421) and appraised prices plus 5 and 10 per cent. for skin and shorn wools, respectively, and from September, 1946 to 30th June, 1948, was the difference between a basic price, determined by the Commonwealth Prices Commissioner for each type of wool, and the average market price realised for that type at each auction series held in Australia. Subsidy paid on wool or the raw wool content of manufactured goods exported overseas was recovered before export was permitted. Net subsidy paid from 1st November, 1945 to 30th June, 1947 amounted to £3,226,075.

<sup>4</sup> In this table 1 lb. scoured wool is taken as equal to 2 lb. greasy.

The following statement shows particulars of sales of wool to Australian manufacturers during the years ended June, 1940 to 1946. The amount of deferred charges on the wool contents of manufactured goods exported is not included; the total of such charges to 30th June, 1946 was £1,996,836.

	Qua	ntity.	Apprais	ed Value.	Additional	
Year ended 30th June:	Greasy.	Scoured.	Total,	Average per lb. (greasy).	Charges. (other than deferred charges.)	Total Payments.
	thous. lb.	thous. lb.	£000	d;	£000	£000·
1940 1941	101,130	2,466 3,994	5,677 6,630	12:85 12:84	108 497	5,785
1941	115,917 137,812	7,890	7,983	12:54	1,148	$7,127 \\ 9,131$
1943	131,546	7,240	8,726	14.44	839	9,565
1944	128,275	7,353	8,643	14.45	816	9,459
1945	110,503	6,595	7,409	14.34	706	8,115
1946	120.693	1 5.602: 1	7.714	14.04	713	8.427

Table 377.—Sales of Wool for Manufacture in Australia.

Sheepskins available for export were purchased by the United Kingdom. Government in terms of an agreement which operated from early in 1940, until 30th June, 1946. The sheepskins were purchased at appraised values, according to a sheepskin table of limits. Sheepskins carrying not more than ½-inch of wool were excluded from ordinary appraisements but the export of such skins was controlled by the Central Wool Committee. Particulars of appraisements in New South Wales and Australia from 1939-40 to 1945-46 are given on page 522 of the 50th edition of the Year Book.

# Post-War Marketing of Wool. Joint Organisation.

Under war-time arrangements with the United Kingdom Governments regarding the purchase of the wool clips of Australia, New Zealand and South Africa: a large quantity of wool was accumulated in the ownership. of the United Kingdom and the stocks as at 30th June, 1945 were estimated. at 3,315 million lb., including Australian wool 2,060 million lb., New Zealand 540 million lb., and South African 645 million lb. In view of the marketing problems created by the existence of this surplus—equal to two years' consumption—a wool conference of representatives of the United Kingdom and the three Dominions was held in London in 1945. As an outcome of the conference, a plan was adopted for the establishment by the four Governments of a Joint Organisation to take charge of the marketing of the wool in stock and to support the marketing of new clips during the period The basic elements of the plan are the determination of minimum reserve prices below which wool from stocks or current clips will not be sold and the joint responsibility of the several Governments for administration and finance.

Under the agreement, which was ratified by the Commonwealth Parliament, Dominion grown wool owned by the United Kingdom as at 31st July, 1945, was transferred to the joint ownership of the United Kingdom and the Dominion Government concerned; wool subsequently acquired will also be in joint ownership.

The Joint Organisation: established under the agreement was incorporated in England as a private limited company—U.Kt-Dominion Woole Disposals Limited—on 21st May, 1946. It is to seek to reduce accumulated stocks progressively whilst maintaining stability of wool prices, and to

estrive to stimulate the demand for wool. From time to time it will buy, hold and sell wool on behalf of the four Governments concerned. It will determine the quantities of wool to be offered from time to time for sale concurrently in the Dominious and elsewhere, to be made up of all new clip wool and an appropriate proportion of wool from stocks, prepare schedules of reserve prices at which it may acquire wool, and lift from the market such quantities of new wool as cannot be sold at the reserve prices.

Shares in U.K. Dominion Wool Disposals Limited are held by nominees of the Governments, viz., United Kingdom, 4; Australia, 2; New Zealand and South Africa, 1 each. An active subsidiary in each Dominion conducts operations on behalf of the principal company; that for Australia is the Australian Wool Realisation Commission.

The directors of the principal company consist of an independent chairman appointed by the four Governments in agreement—four directors representing the United Kingdom, two Australia, and one each New Zealand and South Africa. In addition, chairmen of the subsidiaries are, ex officio, directors without additional voting power.

Under the financial clauses of the agreement the Government of each Dominion has taken up half the original capital represented by the opening stock of its country's wool transferred to the Joint Organisation and will share equally the cost of further purchases of its wool by the Organisation and in profits or losses on realisation. The opening stock was taken in by the Joint Organisation at its original cost (including f.o.b. payments) less amounts accumulated in the divisible profits accounts, which is estimated to cover depreciation fully. The balances in the divisible profits accounts will be retained by the United Kingdom.

Half the operating expenses of the Joint Organisation will be borne by the wool industry, primarily from proceeds of a contributory charge on sales of new clips, and half by the organisation by means of a deduction from proceeds of sales. The net proceeds of sales will be used for repayment of capital equally between the United Kingdom and the Dominion Government concerned.

During the wool year 1945-46, the United Kingdom was responsible for the purchase of the whole clip, management and sale being entrusted to the Joint Organisation. The United Kingdom was reimbursed by each Dominion for half the cost of that part of the Dominion's clip which was unsold at the end of the wool year. The net proceeds of the sales of old wool during this interim year, with profit or loss on sales of new clip wool, after meeting the operating costs of the Joint Organisation and incidental costs incurred by the United Kingdom in connection with the new clip, were allocated to capital repayment. All sales were made on the basis of selling prices determined by the Joint Organisation.

Official selling prices for wool in Australia were fixed on an "ex store" basis from 1st November, 1945 to 30th June, 1946; in addition, buyers were required to pay a delivery charge of &d. (Aust.) per lb. The sale of wool at fixed prices by or on behalf of the Joint Organisation ceased on 30th June, 1946, and orders against which allocations had not been made on or before that date were cancelled.

# Dominion Wool held by Joint Organisation.

Stocks of Dominion wool taken over by the Joint Organisation at 31st July, 1945 totalled 10,407,000 bales. Disposals in the following three years greatly exceeded expectations. By 31st December, 1948 stocks,

including new clip wool bought in, had been reduced by 75.7 per cent. to 2,528,000 bales. Stocks at various dates since 31st July, 1945 were:—

Table 378.—Stocks of Dominion	Wool	Held	Ьy	Joint	Organisa	tion.
Thousan	nd Bales	3.				

Date.	Australian. Wool.	New Zealand. Wool.	South African. Wool.	Total Stocks
31st July, 1945	6,796	1,777	1,834	10,407
30th June, 1946	3,789	1,425	572	5,786
30th June, 1947	3,076	1,092	347	4,515
81st Dec., 1947	2,719	948	249	3,916
30th June, 1948	2,271	801	146	3,218
31st Dec., 1948	1,828	612	88	2,528

Very favourable marketing conditions have rendered large-scale support of the sale of new clips unnecessary. The quantities of new clip wool bought in by Joint Organisation in 1946-47, 1947-48, and from July to December, 1948-49 were as follows:—

Season.		Australian.	New Zealand.	South African.	Total.
1946–47 1947–48 1948–49–July–Dec.	 	bales. 63,855 22,298 1,493	bales, 107,892 2,006 52	bales. 22,129 6,584 749	bales. 193,876 30,888 2,294

# Australian Wool Realisation Commission.

The Australian Wool Realisation Commission appointed under the Wool Realisation Act, 1945 is the Australian subsidiary of the Joint Organisation. It consists of a chairman, an executive member, and four members representing producers' organisations, a representative of the Storemen and Packers' Union, and two persons with experience in valuation or marketing of wool. An Advisory Committee of Wool Selling Brokers has been appointed to advise the Commission in relation to the valuation and disposal of wool. There are eight members; two from each New South Wales and Victoria, and one from each of the other States. Wool Buyers' and Woollen and Worsted Manufacturers' Advisory Committees have been constituted also.

The functions of the Australian Wool Realisation Commission are to hold wool in Australia as agent for the principal company, to sell wool from stocks in Australia and arrange for the regulation of sales of current clips by auction, to assess appropriate reserve prices for individual lots of wool from stock and current clips on the basis laid down by the principal company, to take up wool offered at Australian auctions for which reserve price or better is not offered by a commercial buyer, to conduct the financial operations of the principal company in Australia, and to furnish to the principal company annual reports of its activities.

The stock of Australian wool held by the United Kingdom at 31st July, 1945, was costed at £100,000,000, and taking into account a credit balance of £20,000,000 in the divisible profits account in respect of quantities already sold, Australia's half-share of original capital is £40,000,000. Payment is to be made in four annual instalments out of Australia's share of the proceeds of sales made by the Organisation and the net profit earned in the interim year 1945-46. A minimum payment of one-quarter of the original capital must be paid each year, but if in any year that minimum plus any new capital required is exceeded by proceeds of sales and net profit of the interim year, the excess is to be paid to the United Kingdom in that year, reducing the amount of the fourth year's repayment correspondingly.

The Commission succeeded the Central Wool Committee on 16th November, 1945, and administered the system of acquisition and appraisement for the remainder of the 1945-46 wool year. Since the resumption of auctions it has acted to effectuate in Australia the general level of reserve prices determined by Joint Organisation but did not auction wool from stocks until January, 1947. Sales made by the Commission in Australia in 1946-47, 1947-48, and from July to December, 1948-49 were:—

Season.		Greasy.	Scoured.	Sale Value.	
		lb.	lb.	£	
1946-47		61,862,545	10,185,042	5,401,336	
1947 - 48		118,913,691	7,069,534	13,986,558	
1948-49:	July–Dec.	62,597,932	6,293,913	8,227,751	

Wool Sales under Post-war Marketing Scheme.

When sales by auction were resumed in September, 1946, a general level of reserve prices for Dominion wool sold in the Dominions was fixed by Joint Organisation. For Australia, it was the official selling price, ex store, ruling at 30th June, 1946. The initial reserve price level was maintained throughout the 1946-47 wool year and increased by approximately 9 per cent. in 1947-48. From 30th August, 1948, the 1947-48 level was increased by approximately 20 per cent. Tentatively it is to remain at that level during the 1948-49 wool year.

All growers' wool from current clips together with quantities from stock as determined by the Organisation is offered at auction. If no buyer is forthcoming at reserve price or higher, the lot offered is taken over by the Joint Organisation at auction reserve price, subject to the growers' right of withdrawal. If the price offered by a commercial bidder exceeds the reserve, the benefit accrues to the grower. The organisation may offer at auction wool from stocks in such quantities as will prevent prices from rising above the desired level. Moreover, in some circumstances, it may make standing offers to sell wool from stocks outside the auctions at a fixed percentage above the auction reserve, and in this way impose a ceiling on prices actually obtainable at auction.

Regulations prohibiting the export of wool except with the permission of the Minister for Trade and Customs were continued in force after auctions were resumed in order to make the general reserve price effective. With the exception of wool consigned to brokers in the United Kingdom for sale by auction, permission for export is given only in respect of wool purchased in Australia after being submitted at auction.

A contributory charge is levied on wool produced in Australia under the Wool (Contributory Charge) and the Wool (Contributory Charge) Assessment Acts of 1945. These Acts operated as from 1st July, 1946, superseding the Wool Tax Act, 1936-45. Proceeds of the charge are paid into the Wool Contributory Charge Trust Account and are used to meet the wool industry's share of the operating expenses of the Joint Organisation and interest on Commonwealth funds expended for the purchase of wool under the disposals plan and also to make payments to the Wool Use Promotion Fund (see page 426). Any moneys remaining in the Account may be used for the benefit of the wool growing industry. The contributory charge was at the rate of 5 per cent. of the sale value of wool during 1946-47; it was reduced to 0.75 per cent. in July, 1947 and to 0.5 per cent. in July, 1948. Wool sold by the Australian Wool Realisation Commission is not subject to the charge. The charge yielded £4,497,124 in 1946-47 and £1,143,874 in 1947-48. In these years the amounts collected in New South Wales (excluding collections on sales made at Albury) were £1,555,059 and £502,219, respectively.

The Wool Realization (Distribution of Profits) Act, 1948 provides for the Commonwealth's share of the profit from the war-time sheepskins, disposal agreement (see page 420) and any profit arising from the operations of the Joint Organisation to be distributed to wool-growers. An final distribution will be made when the Wool Disposals Plan is wound, up, but progress distributions may be made as the financial position admits. The distribution will be made, through the wool selling brokers as agents for the Australian Wool Realization Commission, to each supplier of participating wool in the years 1939-40 to 1945-46 inclusive in the same proportion as the appraised value of his wool bears to the appraised values of all participating wool.

#### PRICES OF WOOL,

Ther following, statement shows the average prices of greasy, wool, in New South Wales since 1876. Average prices obtained at Sydney auctions have been recorded by the Sydney Wool Selling Brokers' Association since, 1899. Between 1876 and 1899; the table shows the average value of greasy, wool as declared in export returns obtained by the New South Wales Customs Department. The average prices stated for the seasons ended June, 1940 to 1946 are the averages for greasy, wool under the United Kingdom, purchase plan. All prices are stated in Australian currency:—

Table 379 .- Prices of Wool, Sydney.

Average Export Value of Greasy Wool f.o.b. Sydney.			Average Price realised for Greasy Wool at Sydney Auctions.						
Year ended 31st Dec.	Average Price Per lb.	Year ended 31st Dec.	Average Price Per lb.	Season euded 30th June.	Average Price Per lb.	Season ended 30thJune	Average Price Per lb.	Season ended 30th June	Average Price Per lb.
1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886	d. 11 10 10 10 10 10 10 10 10 10 8 2 8 8	1888 1889 1890 1891 1892 1893 1894 1895 1896 1897	d. 8888776665848484	1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912	d. 71556-8 1 1755 6 8 8 8 9 9 9 7 9 8 8 8 9 9 9 9 9 9 9 9 9	1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1926 1926 1927 1928 1929 1930 1931	d. 8 8 10 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	d. 8.3. 8.5 15.8 9.7. 14.0 10.3 13.4† 13.1† 15.1† 15.1† 15.1† 15.1† 23.6‡ 37.9‡

<sup>\*</sup> Price as appraised under Imperial Wool Purchase Scheme. The average amount to be added to the value of greasy wool in respect of profits is 7-13d, per lb. of which 3-69d, accrued to Australian growers... † Based upon the agreed price for sale of the clip to the United Kingdom Government. † New South Wales auctions, excluding Albury.

The figures for the years since 1899 (apart from the war periods) represent the average price of wool sold during the year and furnish an accurate guide to the average value per pound (greasy) of the clip produced in individual years, except that allowance for carry-over of unsold wool (see, Table 375) is necessary in some seasons, viz.—the average price realised for wool-produced in 1920-21 was 12\frac{3}{6}d.; in 1924-25, 23\frac{3}{6}d.; in 1925-26, 16\frac{7}{6}d.; in 1933-34, approximately 15\frac{7}{3}d. and in 1937-38 approximately 12\frac{7}{2}d. The prices shown above are affected over long terms by changes in the proportion of merinos, merino comebacks, other pure breeds and crossbreds in the sheep flocks (see page 408 for details of changes in recent years) and by variations in the quality of the sheep within these broad classifications. Shorter comparisons are affected by the impact of seasonals conditions on

the quality of the clip, e.g. onedensity, length, firmness and soundness, and the proportion of natural grease and vegetable and other foreign matter in the clip. These variables, in any season, within limits set by the composition of the flocks, determine the proportionate quantities of wool of various qualities in the clip. The wool sold locally as escoured is of limited range and quantity, and the prices are not sufficiently representative to be of value for comparative purposes.

# Average Monthly Prices of Greasy Wool.

The foregoing observations in respect of average annual prices for a complete season's clip apply also to any attempt to compile average monthly prices comparable with the annual averages. There are marked differences between the types and qualities of wool sold at auctions in successive months throughout the season and the average price per lbi greasy actually realised in any month has dimited comparative significance singulation to prices realised in other months.

In Table 380 below, endeavour has been made to calculate monthly average greasy prices for average quality wool comparable with the annual average for a complete clip on a greasy basis. These prices are derived from clean scoured prices of representative types of wool, the resultant average being converted to greasy basis by applying a factor deemed to be appropriate. This procedure has at times (and particularly in 1947-48) been invalidated to some extent by marked variations in such factors as clean scoured yield, type composition, etc. of entire clips. Extensive data are now regularly compiled by the Australian Wool Realisation Commission on price, type, and quality of wool and the Commission now compiles an Australian wool price index on a clean scoured basis. From some important standpoints this index has more merits than an index on a greasy price basis and consultations are proceeding concerning the whole matter.

The following table gives the greasy equivalent for each month and the weighted annual average of the series for certain years from 1924-25 to 1938-39 and for each season since auction selling of wool was resumed in September, 1946; prices shown in brackets are nominal, being estimates made on various data for periods when there were no auction sales. For comparative purposes the average price per lb. greasy realised at Sydney auctions in these years is given at foot of the table.

Table 380.—Average Monthly Prices (Greasyn Equivalents) 4 of 1 Wool at Sydney Auctions.

	Pence per lb. greasy.												
Mo	onth.		1924- 25.	1928→ 29.	1929- 30.	1931- 32.	1933- 34;	1934- 35,	1936– 37:	1038→ 39	1946⊢ 47.	1947– 48	1948÷ 49.′
July August September October November December January February March April May June Weighted Season		    for	00.0	(17·8) 17·8 17·8 16·9 17·3 16·9 17·3 16·9 11·0 15·6 14·7 12·9	(12·9) (12·4) 12·0 10·7 12·2 11·7 10·7 9·2 9·8 10·3 9·9	(8·3) (7·5) 7·5 9·7 8·5 8·9 8·7 7·5 7·4 7·3	(11·4). (11·6) 13·1 12·8 14·5 14·9 17·7 16·7 15·9 (15·4) 13·5 (12·1)	(11·0)· (10·5) 9·4 9·4· 9·1 9·4· 8·7 8·6 9·5 10·6 11·1	(13·3): (13·5) 13·1 14·0 16·2: 16·6 18·0 17·2 17·8 18·6, (18·3) 17·2	(11 0) 10 4 10 6 10 7 10 5 10 6 10 3 10 0 9 9 10 5	21:0 22:0 23:5 23:0 24:5 25:5 26:0 26:0 26:0	(26·0) (32·0) 33·0 34·5 36·5 (36·5) 41·5 43·5 (40·0) 41·5 44·0 48·0	(46·5) (46·5) 47·0 43·5 48·5 53·0 54·5 (54·5) 44·5 45·0
		11	eighted	Averag	gc Price	per lb.	Greasy	at Syd	пеу Ацс	ctions.			
Season		•••	25.5	16.5	10.5	8.3.	15.8	9.7	16:4	-10-3	23.6*	37.9*	46.8₺

<sup>\*</sup> New South Wales auctions, excluding Albury,

In the pre-war period covered by this series, monthly fluctuations were greatest in 1928-29, when the advent of financial depression caused prices to fall rapidly, and in 1933-34, when a rapid rise was followed by a sharp decline. The range was considerable in 1936-37; early in the season, following a Japanese embargo against Australian wool, prices declined until general economic revival, devaluation of the French franc, and return of Japanese buyers to the market caused a marked upturn. The trend was downward in 1937-38 (from 15.4d. in September to 10.8d. in June) and in 1938-39 prices varied little from the low level ruling at the close of the previous season.

When sales by auction were resumed in September, 1946, the greasy equivalent moved 36 per cent. above the average price paid under contract for the Australian war-time clips from 1942-43 to 1945-46. Since then prices have risen steeply and consistently except for temporary declines in March and October, 1948 and April, 1949. In August, 1947 the greasy equivalent exceeded the previous record level of 29.3d. in November, 1924. The price in February, 1949 (54.5d.) was the highest ever recorded in New South Wales. It was 160 per cent. higher than in September, 1946 and 86 per cent. higher than in November, 1924.

#### WOOL PUBLICITY AND RESEARCH.

Particulars of the Wool Publicity and Research Act, 1936 and of the Wool Use Promotion Fund which was administered by the Australian Wool Board in promoting the use of wool for the benefit of the Australian wool industry, and in meeting its administrative expenses are given on page 526 of the 50th edition of the Year Book.

South Africa, New Zealand, and the Australian Wool Board and representatives of the wool industry of the three countries co-operated in the establishment of an International Wool Publicity and Research Fund (which came into being on 1st July, 1937). Contributions are based on the average quantity of wool exported over a period of five years; Australia's quota is 62.16 per cent. of the total. The authority in each country undertakes local research and publicity.

The Wool Use Promotion Act repealed the Wool Publicity and Research Act of 1936 in June, 1945, was provided for the reconstitution of the Australian Wool Board and the appointment of a Wool Consultative Council comprising the Commonwealth Wool Adviser, two producer members of the Wool Board, and six other members to represent the Council for Scientific and Industrial Research, wool manufacturers, textile distributors, technical education authorities and appropriate trades unions. It is the function of the Wool Board to promote by publicity and other means the use of wool in Australia and other countries.

The Act also created a Wool Research Trust Account which receives annually a Commonwealth grant equal to the amount of wool tax collected or the amount which would have been collected as wool tax were it not for operation of the Wool (Contributory Charges) Act. The funds in this account may be used for purposes of scientific, economic and cost research in connection with wool and woollen goods and in co-ordinating and applying the results of such research. The trust account was credited with £100,000 in 1945-46 and £186,614 in 1946-47. Expenditure in these years was £18,778 and £84,469 respectively, and the balance in the account at 30th June, 1947 was £183,367.

The total income and expenditure of the Wool Board, Australia's contribution to the International Wool Publicity and Research Fund, allocations by the Wool Board for scientific pastoral research, and the balance transferred to accumulated funds of the Board in each year from 1936-37 to 1947-48 are shown in the following table:—

Table 381.—Australian	Wool	Board:	Income	and	Expenditure.
-----------------------	------	--------	--------	-----	--------------

	Inco	ome,		Balance			
Year.	Proceeds of Wool Levy.*	Total Income of Board.	Inter- natioual Secretariat.†	Pastoral Research,	Total Expenditure.	Transferred to Accumulated Fuuds.	
193637	£ 72,805	£ 73,343	£	£ 22,844	£ 25,691	£ 47,652	
1937-38 1938-39	77,523	79,479 $76,973$	31,045 30,925	$10,103 \\ 12,028$	55,323	24,156	
1939-40	74,356 84,399	86,576	31,100	11,621	58,197 65,777	18,776 $20,799$	
1940-41	84,255	87,134	31,080	17,460	71,705	15,429	
1941-42	85,948	90,153	31,080	14,446	67,237	22,916	
1942-43	81,782	87,464	31,080	11,967	57,185	30,279	
1943-44	84,629	91,853	31,080	15,450	60,948	30,905	
1944-45	72,104	80,823	31,080	15,744	72,605	8,218	
1945–46 1946–47	269,925† 300,260	$278,993 \\ 310,483$	65,876 123,328	$14,273 \\ 2,503$	114,599 256,047	164,394 54,436	
1947-48	292,036	302,396	160,772	2,868	286,222	16,174	
Total to 30th							
June, 1948	1,580,022	1,645,670	598,446	151,307	1,191,536	454,134	

\* Wool Tax to 30th June, 1946; payments from Wool Use Promotion Fund in 1946-47 and later years. † Does not include exchange charges.

During the twelve years of its administration the Australian Wool Board has allocated £151,307 for scientific pastoral research in reference to sheep diseases, nutrition, external parasites, fertility, poison plants, pasture management, agrostology and wool investigations and in the eleven years ending 30th June, 1948, it contributed a total of £598,446 (excluding cost of transfer of funds overseas) to the International Wool Publicity and Research Fund. The sum of £454,134 was held in the Board's accumulated fund account at 30th June, 1948.

Publicity and research in relation to the pastoral industry is undertaken by Australian Pastoral Research Trust Limited. Its objects are to promote the growth, development, and best interests of the pastoral and grazing industry, especially through scientific and economic research relating to stock diseases, animal pests, harmful plant life, edible plants, and drought feeding problems. The work of the Trust is co-ordinated with that of the Council for Scientific and Industrial Research.

# Wool Industry Fund Act, 1946.

Moneys totalling £7,245,483 at 30th June, 1947 were accumulated by the Wool Realisation Commission as a result of certain activities of the Central Wool Committee which were not within the limits of the war-time wool purchase plan. The amounts accrued mainly in the handling of skin wools, and in respect of wool tops, noils and waste, and of deferred payments on the wool content of manufactures exported from Australia.

The Wool Industry Fund Act, 1946, established a fund of the same name to receive this money. The Commonwealth Treasurer after consulting the Ministers of Commerce and Agriculture, and Post-war Reconstruction and the Minister administering the Science and Industry Research Act, may apply the capital and income of the fund for scientific economic and cost research, and in co-ordinating and applying the results of such research in the production and use of wool and woollen goods, to

promote the use of woolin Australia and throughout the world, in assisting in marketing and in stabilising the price of wool, in the provision (if mecessary) of temporary relief for the wool industry, and to meet, wholly or in part, any loss which the Commonwealth may suffer through participation in the wool disposals plan. Payments to the fund totalled £7,095,000 in 1946-47 and £125,000 in 1947-48. In 1946-47 £50,000 was made available from the fund to the Council for Scientific and Industrial Research for research into wool and textile production.

## CATTLE.

Apart from dairying, industries connected with cattle, such, for instance, as the production of beef for export, have never existed on a large scale in New South Wales. Local production scarcely meets the requirements of local consumption, and cattle are imported from Queensland. The number of cattle depastured in 1922 (3,546,530) was the highest recorded in the State. Subsequently unfavourable markets led to a diminution in herds.

From 1930 to 1935, there was temporary revival in the breeding of cattle for the export trade in beef, and the number in the latter year was almost as high as in 1922. A decrease in imports, heavy slaughterings and unfavourable seasons in the dairying districts led to a decline in the next five years. Then the number commenced to increase as a result of the war-time expansion in the demand for beef, but re-expansion was checked by drought in 1946-47.

The number of cattle in the State, including dairy cattle, at various edates since 1861 is given on page 398 of this volume. The following table shows the number in various years since 1922:—

Year.	Cattle.	Year.	Cattle.	Year.	Cattle.
.1922	3,546,580	1939	2,811,884	1944	3,143,378
1930	2,686,132	1940	2,762,653	1945	3,144,701
$1935 \\ 1936$	3,482,831 3,388,538	1941	2,769,061 $2,878,450$	$1946 \\ 1947$	3,116,834
1938	3,019,581	1943	3,030,546	1948	3,129,740

Table 382.- Number of Cattle in New South Wales.

Particulars of cattle according to sex and age at 31st March, 1935 and in each of the last eleven years are shown below:—

Table 383.—Cattle According to Sex.

44 79 79		Cows and Heif	ers.	Bullocks,	Calves,	Grand	
As at 31st March. Bulls over 1 year.			Total.	Steers, etc.	under 1 year.	Total.	
1935 55,028 1938 50,906 1939 49,463 1940 49,361 1941 50,900 1942 53,195 1943 58,289 1944 59,142 1945 59,212 1946 59,565 1947 57,617	1,173,763 1,094,915 1,068,906 1,068,999 1,054,770 1,055,172 1,054,511 1,043,273 1,035,991 1,021,087 967,909 965,201	969,832 867,435 782,053 774,394 779,282 830,650 873,191 925,214 923,530 942,916 913,686 988,170	2,143,595 1,962,350 1,850,959 1,843,393 1,834,052 1,885,822 1;927,702 1,968,487 1,959,521 1,964,003 1,881,595 1,953,371	668,615 523,884 473,658 386,787 409,183 401,281 487,859 600,968 532,347 .570,568 486,167 542,173	.615,593 482,441 437,804 483,112 474,926 538,152 556,696 605,781 593,621 522,698 557,714 576,349	3,482,831 3,019,581 2,811,884 2,762,653 2,769,061 2,878,450 3,030,546 3,143,378 3,144,701 3,116,834 2,983,093 3,129,740	

Statistics showing separately the number of all cattle in registered dairies, milking cows not in registered dairies, and beef cattle were collected for the first time in 1942-43. Details for 1942-43, 1946-47, and 1947-48 are shown in the following table. Particulars for the three years 1944 to 1946 are given on page 529 of the 50th edition of the Year Book.

Particulars.	March, 1943.	March, 1947.	March, 1948.	Particulars.	March, 1943.	March, 1947.	March, 1948.
Cattle in Reg. Dairies — Bulls Cows — Milking Dry Heifers Calves Total (Reg. Dairies)	26,720 638,861 205,182 210,468 190,585	24,404 592,385 170,035 205,489 148,037	23,846 592,320 173,174 199,707 154,167	Milking Cows not in Reg. Dairies Beef Cattle— Bulls Cows and Heifers Calves Other Total (Beef)	82,556 31,569 790,635 366,111 487,859 1,676,174	<u> </u>	144,820 34,001 843,350 422,182 542,173 1,841,706 3,129,740

Table 384.—Cattle in Registered Dairies and Beef Cattle.

The number of cattle in registered dairies at 31st March, 1948 (1,143,214) was 128,602 fewer than in March, 1943 but 2,864 more than in March, 1947. Changes in the composition of the registered dairy herds between 1942-43 and 1947-48 were:—

Change from March.		Bulls.	Cows in Milk.	Dry Cows.	Heifers.	Calves.	Total.
4943 to 1947: Nσ.	•••	- 2,316	-46,476	35,147	- 4,979	42,548	<b>— 131,466</b>
per cent.	• • •	— 8·7··	— 7·8··	— 17·1	2.4	22.3	<b>—</b> 10⋅3
A947 to 1948: No.		- 558	65	+ 3,139	- 5,782	+ 6,130	+ 2,864
per cent.		— 2·3.	- 0.1	+· 1·8	- 2.8	+ 4.1	+, 0.3

Over the same periods milking cows not in registered dairies increased by 48,375 or 58.6 per cent. and by 13,889 or 10.6 per cent. Details of the number and size of registered dairy herds in New South Wales at 31st March, 1948 are given on page 459 of this volume.

Beef cattle increased by 124,011 between March, 1943 and March, 1946. Drought and increased slaughtering caused the losses to mount to 88,373 in the following year but these were offset by an increase of 129,894 to 1,841,706 by March, 1948, when the number was higher by 165,532 or 9.9 per cent than in March, 1943. All cattle in beef herds increased between March, 1943 and March, 1948, as follows:—

Increase from March—	Bulis.	Cows and: Heifers.	Calves.	Other Beef, Cattle.	Total.
1943 to 1948: No	2,432	52,715	56,071	54,314	165,532
per cent	7.7	6.7	15.3	11.1	9.9

## NUMBER AND SIZE OF BEEF CATTLE HERDS.

The number of beef cattle herds, classified according to size of herd, and the number of cattle in these herds in each statistical division of the State at 31st March, is given in the following table:—

Table 385.—Beef Cattle Herds on Holdings of one acre or more\*, at 31st March, 1948.

_							
Size of Beef Cattle Herds.	Coastal Belt.	Tablelands.	Western Slopes.	Central Plains and Riverina.	Western Division,	Total.	Proportion per cent. of Total.
			NUMBER	of Herds,			
Under 20 20- 49 50- 99 100-149 150-199 200-299 300-499 500 & over Total No. Per cent.	3,840 1,613 1,062 441 256 287 233 187 7,019 21-8	5,598 1,621 846 403 183 215 148 123 9,137 25·2	7,837 1,638 783 332 168 170 160 141 11,229 31.0	4,737 1,113 504 186 103 118 64 70 	548 272 114 53 17 25 18 22 1,069 3.0	22,560 6,257 3,309 1,415 727 815 623 543 36,249 100·0	62·2 17·3 9·1 3·9 2·0 2·3 1·7 1·5
		NUMBER OF	BEEF CATTL	E IN ABOVE	HERDS.*		_
Under 20 20- 49 50- 99 100-149 150-199 200-290 300-490 500 & over Total No. Per cent.	23,014 50,833 73,883 53,027 43,229 68,788 89,492 189,415 591,681 32·5	37,208 50,487 58,788 49,430 31,497 52,171 55,120 113,005 448,666 24·7	48,615 50,065 54,520 40,537 28,891 41,239 60,665 131,435 455,976 25-0	30,235 33,969 33,793 22,076 17,529 28,423 24,056 63,580 253,667 14-0	4,182 8,574 7,798 6,499 2,944 6,150 6,819 25,433 68,399 3.8	143,254 193,928 228,791 171,569 124,090 196,771 236,152 523,834 1,818,389 100·0	7.9 10.7 12.6 9.4 6.8 10.8 13.0 28.8

<sup>\* 23,317</sup> beef cattle on holdings of less than one acre in extent are not included.

Nearly one-third of all cattle were in the Coastal Division, where the average number per herd was somewhat higher than elsewhere in the State. The Tableland and Western Slopes divisions each had approximately one-fourth of the total number of beef cattle.

Herds of less than 20 cattle were the most numerous in 1948, representing 62.2 per cent. of the total. Next in numerical importance were those of 20 to 49 and 50 to 99, accounting for 17.3 and 9.1 per cent, respectively. Those of 100 or more together represented only 11.4 per cent. of the State's beef herds.

Herds of 500 and over were only 1.5 per cent. of all herds but they contained 28.8 per cent. of the beef cattle in the State, while herds of under 20 contained only 7.9 per cent. of the cattle. Herds of less than 100, 100 to 299, and of 300 or more contained 31.2 per cent., 27.0 per cent., and 41.8 per cent. of the cattle respectively.

## CALVING.

Information as to the number of calves dropped has not been collected since 1931, because unsatisfactory features rendered the returns of doubtful value. According to the returns received the average number was 893,719 per annum in the five years ended 1924-25, and 897,711 in the years 1925-26 to 1929-30, reaching a peak of 947,442 in 1930-31.

Particulars of calves slaughtered annually, and the number surviving at 31st March, 1936 and in each of the last eleven years are shown in the following table:—

Year	Calves.		Year	Cal	ves.	Year	Calves.		
ended 31st March.	Slaught- ered.	Surviving at end of Year.	ended	Slaught- ered.	Surviving at end of Year.	ended 31st March.	Slaught- ered.	Surviving at end of Year.	
1936 1938 1939	443,761 457,854 458.613	573,716 482,441 437,804	1941 1942 1943	402,345 421,564 348,151*	474,926 538,152 556,696	1945 1946 1947	388,683 435,358 376,175	593,621 522,698 557,714	

Table 386.—Calves Slaughtered and Number at end of Year.

1944

396,301\*

605,781

1948

385,921

576,349

1940

441.043

483,112

#### INTERSTATE MOVEMENTS OF CATTLE.

By reason of diseases among the cattle of certain districts, and the presence of cattle tick in the north-east of New South Wales and in parts of Queensland, the interstate movement of cattle is regulated closely.

The following table shows the number of live cattle (so far as recorded) which passed into and out of New South Wales during each of the last eleven years. Practically all the movement is overland, comparatively few cattle being transported by sea:—

	I	From New S	South Wale	s	To New South Wales.				
Year ended 30th June.	To Victoria,	To Queens- land.	To South Australia and by Sea.	Total,	From Victoria.	From Queens- land,	From South Australla and by Sea.	Total.	
	No.	No.	No.	No.	No.	No.	No.	No.	
1938	62,405	30,744	9,008	102,157	17,428	126,804	2,017	146,249	
1939	60,323	29,277	11,135	100,735	32,607	191,119	3,918	227,644	
<b>194</b> 0	125,432	26,256	18,561	170,249	20,785	237,242	2,378	260,405	
1941	95,532	11,183	14,168	120,883	21,496	251,556	3,680	276,732	
1942	54,117	10,236	12,163	76,516	16,450	227,477	4,799	248,72 <b>6</b>	
1943	63,990	9,359	33,786	107,135	12,574	392,459	3,344	408,377	
1944	52,451	10,969	12,385	75,805	15,493	272,353	2,772	290,618	
1945	51,701	16,301	6,759	74,761	13,096	277,388	6,661	297,145	
1946	54,765	22,445	6,833	84,043	11,537	380,645	1,374	393,556	
1947	121,170	16,483	10,661	148,314	27,065	369,466	2,882	399,413	
1948	82,743	16,280	12,789	111,812	33,560	374,812	2,800	411,172	

Table 387.-Interstate Movements of Cattle.

Although the effects of seasonal variations are apparent there is, on the whole, a heavy but fluctuating import of cattle to New South Wales from Queensland, and an appreciable export to Victoria. The interchange with South Australia is usually small.

During the last five years there was an excess of imports from Queensland of 1,592,186 cattle, and an excess of exports to Victoria amounting to 262,079, and to South Australia of approximately 32,938. The total net gain to New South Wales from all sources was 1,297,169.

<sup>\*</sup> Calendar Year ended three months earlier.

## INCREASE AND DECREASE OF CATTLE.

The number of cattle in New South Wales varies under the influence of three factors, viz., importation, slaughtering, and natural increase, or excess-of calving over deaths from causes other than slaughtering. Available-particulars of increases and decreases in recent years are shown below:—

Table 388.—Increase a	and Decrease	of	Cattle.
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(Year.	Net Import of Cattle.	Calves reared (Surviving at 31st March).	Cattle and Calves died from Disease, Drought, etc.	Cattle Slaughtered (excluding Calves).	Cattle at end of Year.
1937–38	44,092	482,441	134,721	764,375	3,019,581
1938-39	126,909	437,804	140,478	676,786	2,811,884
· 1939-40	90,156	483,112	69,279	681.425	2,762,853
1940-41	155,849	474,926	137,781	557, <b>3</b> 80	2,769,061
1941-42	172,210	538,152	*	4619,059	2,878,450
1942-43	301,242	556,696	*	639,953	3,030,546
1943-44	214,813	605,781	*	645,837	3,143,378
1944-45	222,384	593,621	123,967	608,452	3,144,701
1945-46	309,513	522,698	150,184	565,810	3,116,834
1946-47	251,099	557,714	192,008	681,267	2,983,093
1947-48	299,360	576,349	95,728	683,694	3,129,740

<sup>\*</sup> Not available.

The figures shown in the table do not balance from year to year because it is not possible to obtain all necessary data relative to calving and to disposal of calves. Nevertheless the table illustrates in a general way the influence of the various factors.

#### HORSES.

The number of horses in New South Wales was highest in 1913 when there were 746,170. The number was maintained near this level until a decline occurred during a drought which terminated in June, 1920. With increased use of motors for transport and tractors on farms the number of horses has decreased progressively and in 1948 was 376,043 or almost 50 per cent. below the record number and 166,819 fewer than in 1936. Nearly 90 per cent. of the horses are on rural holdings.

The number of horses in New South Wales at various dates since 1861 is given on page 398 of this volume. The number in the State at 31st March, 1936 and in each of the last eleven years is shown in the following table:—

Table 389.—Horses in New South Wales.

Year.	Horses.	Year.	Horses.	Year.	Horses.	Year.	Horses.
1936	542,862	1940	534,837	19 <b>43</b>	483,277	1946	403/645
1938	528,625	1941	531,776	1944	465,672	1947	379,774
1939	531,355	1942	525,697	'1945	436,443	1948	376,043

The horses recorded at 31st March included 213,158 draught horses in 1945, 192,617 in 1946, 174,982 in 1947, and 163,491 in 1948.

There is comparatively little interstate movement of horses except to and from Queensland, and practically no import by sea. Records of border crossings indicate that there was a net export of 3,961 in 1944-45, and 1,274 in 1945-46 and a net import of 2,033 in 1946-47 and 3,034 im 1947-48.

The landholders' returns indicate that 20,859 horses died from disease, drought, etc., on rural holdings in 1945-46 and 14,387 in 1947-48.

## HORSE BREEDING.

With the object of improving the breed of horses provision has been made in terms of the "Horse Breeding Act, 1940" (not enforced since 31st January, 1944), for the registration of stallions for breeding purposes after a veterinary officer of the Department of Agriculture has certified that the animal conforms to an approved standard. The Western Division of the State is outside the scope of the Act, and thoroughbred brosses registered in the Australian Stud Book are exempted from its provisions.

The following table shows the number of foals recorded at the end of certain years since 1921:—

30th Foals 31st Foals 31st Foals June. Surviving, March Surviving. March Surviving.	
) Surviving	31st Foals March., Snrwiving
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1946 16,209 1947 195,813 1948 16,590

Table 390.-Foals.

## PIGS, GOATS, CAMELS, DONKEYS, AND MULES.

Particulars of the number of pigs in the State are shown in Table 349 of this chapter and in the chapter relating to dairying.

The number of goats in New South Wales as recorded in March, 1941, was 14,156, including 1,640 Angora goats. Under the Dog and Goat Act, 1898, the use of dogs or goats for purposes of draught is prohibited.

In New South Wales many camels were used as carriers on the Western Plains, but their number has declined. At 31st March, 1941, there were only 245, as compared with 1,792 at the close of the year 1913.

Donkeys and mules are not used extensively in New South Wales, the numbers in 1941 being 181 donkeys and 45 mules. Most of these were in the Western Division, where they were used for purposes of transport.

#### PRICES OF LIVE STOCK.

The following statement shows the average prices of certain classes of fat stock in the metropolitan saleyards at Homebush during the years 1939 and 1944 to 1948. The averages stated are the means of the monthly prices in each calendar year, and the monthly prices are the averages for all stock sold each sale day during the month. Prices of certain types of pigs are given in Table 432. Monthly prices of these and other classes and grades of fat stock are published in the Statistical Register.

	Table 391;—Average	Prices of	Fat Stock	Homebush	Sale	Yards.
--	--------------------	-----------	-----------	----------	------	--------

Stock,	1989.	1944.	1945.	1946.	1947.	1948.
Cattle— Bullocks—Prime, Medium	£ s.	£ s. 17 ∍6	£ s.	£ s. 18 8	£ s. 20 18 <sub>1</sub> ,	£ s,
Cows and Heifers—Prime Heavy Sheep and Lambs— Merino Wethers—Prime Morino France Prime	8 16 s. d.  17 3  14 5	14 ±0 s, d, 23 ×4	14 14 s. d. 25 7	14 · 5 s. d. -29 · 3 25 0*	16 9 s. d.	1817 s. d. 1.5011
Merino Ewes-Prime Lambs and Suckers-Prime Heavy	114 5 20 11.	15 11 27 9	21 10* 31 3.	25 0* 36 3.	35 2 45 10	43 2 50 6

\*Prime Heavy.

Prices of livestock vary from year to year under the influence of seasonal conditions. When pastures are deteriorating during periods of dry weather fat stock are hastened to market and prices decline, but with the advent of relief rains stock are retained on the holdings for fattening or breeding and prices tend to rise. Under normal conditions prices of cattle at Flemington are influenced by the demand for beef for local consumption and by the condition of the export trade, particularly in its effect on the supply of cattle from Queensland for the New South Wales market. A downward trend in cattle prices in 1939 was arrested upon the announcement of the United Kingdom meat contract towards the end of the year. Transport difficulties affected the export trade in 1941, but further increases in prices occurred in later years as a result of expansion in demand for meat, and latterly because of drought.

The price of wool is a further factor affecting prices of sheep and lambs The average price of wool under the United Kingdom purchase agreement in September, 1939, was higher than the pre-war level, and it was increased by 15 per cent. in July, 1942. Heavy drought losses caused a sharp rise in sheep and lamb prices in the second quarter of 1944. High prices ruled thereafter, and when wool prices advanced upon the resumption of wool auctions, prices rose still higher in the latter half of 1946 to levels approximately twice as high as in 1939. Wool prices continued to advance throughout 1947 and 1948. In the latter year sheep were approximately 200 per cent. dearer and lambs 140 per cent. dearer than in 1939.

Monthly variations in the prices of typical grades of live stock are shown below:—

Table 392.-Monthly Prices of Live Stock, Homebush Sale Yards.

Month.		Bullocks Medium			erino She me Weth		Lambs and Suckers. Prime Heavy.			
	1939.	1947.	1948.	1939.	1947.	1948.	1939.	1947.	1948.	
January	£ s.	£ s. 23 18	£ s. 22 7	s. d. 14 3	s. d. 35 1	s. d. 48 3	s. d. 20 1	s. d. 40 6	s. d. 49 0	
February	11 5	21 16	20 6	15 5	36 3	49 4	21 3	45 0	48 8	
March	12 0	22 15	21 14	19 8	43 10	48 10	20 11	49 1	52 3	
April	11 1	20 14	21 3	18 6	41 3	47 0	21 1	46 8	51 4	
May	10 13	19 19	21 14	17 8	41 6	54 8	22 3	45 11	57 0	
.June	10 9	19 1	22 6	18 3	42 9	61 6	24 6	45 9	62 9	
July	10 3	18 13	23 9	18 5	39 10	60 11	23 11	45 0	57 11	
August	10 4	20 5	24 3	14 9	42 3	58 2	23 5	45 8	51 2	
·September	10 19	21 13	25 8	18 3	47 3	54 6	23 0	48 11	46 4	
October	11 14	21 1	25 0	18 6	41 5	48 10	18 7	46 2	42 1	
November	11 15	20 6	23 6	16 11	40 8	38 9	16 10	44 7	45 0	
December	12 7	20 9	23 1	16 2	43 1	40 4	16 10	46 3	42 7	
Average for year	11 3	20 18	22 16	17 3	41 3	50 11	21 0	45 10	50 6	

The quantity of wool carried affects the price of sheep considerably. As a general rule sheep at market in January and February have been shorn, during March and April they have growing fleece, from May to August they are woolly, and from September to the end of the year both shorn and woolly sheep are marketed.

#### SLAUGHTERING OF LIVE STOCK.

The slaughter of live stock for sale as food, either for local consumption or for export, is permitted only in places licensed for the purpose.

The following table shows the average number of slaughtering establishments and the number of stock slaughtered in the State in quinquennial periods since 1897 and particulars for each of the last nine years. The figures relating to the establishments prior to 1921 are in excess of the actual number, as they include a large number of butchers' shops in country districts.

Table 393.—Slaughtering of Live Stock.

		Sto	ck Slaugh	tered in	Establishme	nts and	on Farms	and Stati	ions.					
Period.	Slaughter- ing Establish-		Sheep.			Pigs.								
	ments.	Sheep.	Lambs,	Total.	Bullocks.*	Cows.	Calves,	Total.	rigs.					
Avge. 5 yrs., ended—		Thousands.												
1901 (Dec.) 1906 (Dec.) 1911 (Dec.) 1916†(June) 1926 (June) 1921 (June) 1931 (June) 1938 (Mar.) 1941 (Mar.) 1946 (Dec.)	926 1,077	4,868 3,760 5,780 5,279 3,788 3,625 4,272 4,581 4,040 5,129	158 188 389 476 337 809 1,364 2,309 2,889 3,558	5,026 3,948 6,169 5,755 4,125 4,434 5,636 6,890 6,929 8,687	231 201 260 306 275 397 312 323 350 361	117 87 138 217 136 218 246 218 326 267	22 20 42 64 55 139 154 292 449 390	370 308 440 587 466 754 712 833 1,125 1,018	214 238 251 278 296 348 421 488 569 538					
Calendar year— 1939‡ 1941‡ 1942‡ 1942 1943 1944 1945 1946 1947 1948	1,012 906 878 828 812 801 791 772 760 722	3,852 4,223 4,446 4,948 5,531 5,625 5,082 4,460 3,413 2,884	2,460 3,945 3,682 4,348 3,945 3,785 2,936 2,776 2,948 3,026	6,312 8,168 8,128 9,296 9,476 9,410 8,018 7,236 6,361 5,910	336 202 352 360 388 359 300 388 387 452	341 266 267 271 258 249 266 293 303 272	459 402 422 379 348 396 389 435 376 380	1,186 960 1,041 1,019 904 1,004 955 1,116 1,068 1,110	553 597 738 669 503 555 495 468 411 <b>4</b> 59					

<sup>\*</sup> Includes a small number of bulls.

Sheep were slaughtered in record numbers during the war years and notwithstanding decreases in 1945 and 1946 (due to drought reduction of flocks) the annual average in the years 1942 to 1946 was more than 25 per cent. greater than in the five years ended March, 1941. Cattle slaughtering increased in the nineteen-thirties and was well sustained in 1942-46, but after marked increase, pig slaughtering has latterly fallen below the pre-war level.

The following summary shows the distribution of slaughtering operations in New South Wales in the years 1947 and 1948. In this table the term "abattoirs" relates to establishments in which 100,000 or more sheep and lambs were slaughtered. The Newcastle District Abattoir is included with other large establishments under the heading "Other Abattoirs", and all licensed slaughter-houses, except those included as abattoirs, are included under the heading "Country Slaughter-houses". The slaughtering on rural holdings is shown under the heading "Stations and Farms".

<sup>† 4</sup>½ years.

<sup>‡</sup> Year ended March.

Table 394 .- Slaughtering Establishments and Number of Livestock Slaughtered.

					Cattle.	Ì	
District, and Establishments.		Sheep	Lambs.	Bullocks.	Cows.	Calves.	Pigs.
			1947.			<u> </u>	
State Abattoirs		942,096 683,270	1,389,157 1,221,167	81,238 83,913	93,965 41,159	57,665 43,351	104,439 35,346
Total Abattoirs Country Skughter-houses: Stations, and Farms ,		1,625,366 988,940 798,547	2,610,324 230,691 107,074	165,151 216,018 5,601	135,124 165,521; 2,648	101,016 272,613 2,546	139,785 265,523 5,433
Graud Total	•	3,412,853,	2,948,089	386,765	303,293	376,175	410,741
			1948.				
State Abattoirs Other Abattoirs		688,901 544,893	1,313,396 1,289,227	90,845 95,064	81,911 51,485	46,997 47,791	131,349 38,212
Total Abattoirs Country Slaughter-houses Stations and Tarms		1,233,794 858,097 792,221	2,602,623 312,527 110,841	185,909 260,575 5,032	133,396 135,892 3,059	93,788 287,788 4,345	169,561 282,946 6,705
Grand Total		2,884,112	3,025,991	451,566	272,347	385,921	459,212

# STATE ABATTOIRS.

The State Abattoirs are situated at Homebush Bay, near Sydney. Animals sold at Flemington Saleyards are inspected before being killed and those found to be diseased are destroyed, while "doubtful" beasts are marked for further special attention at the abattoirs. There is a staff of inspectors at the State Abattoirs and inspectors are stationed at private slaughtering premises throughout the County of Cumberland. The operations of the inspectorial staff are supervised by the veterinary officers of the Metropolitan Meater Industry Commission, who pay regular visits to the different establishments.

Particulars of stock slaughtered at the State Abattoirs, Homebush Bay, during recent years are shown in the following statement:—

Table 395.—Stock | Slaughtered at the State (Metropolitan) Abattoirs.

Year	1 1	Cattles		Calves.	Shee	р.	Lambs.		Pigs.,
	1.							1	_
1936*	1	208,514		146,268 .	1,369,		1,404,901	.	173,032
1938*	1.	253,494		141,383	1,570,	662	1,361,519	·	175,243
1939*		190,764		123,138	1,323,	226	1,293,157	-	153,825
1940*		190,850		89,985	1,349,	040	1,545,797		145,786
1941*		129,001		74,170	1,227,	563	2,202,882		176,364
1942*	1	134.509		65.142	1,324,	167	2.149.231		203,068
1942.		138,475		65,827	1,608,	095	2,194,138	l'	182,432
1943	1"	153,525		57.243	1,722,	685	1,865,415	- 1 :	139.079
1944		161,542	1	64.796	1,584	760	1,726,800		155,547
1945	- 1	158,500	ļ.	58,739	1,339	868	1,230,800		139,577
1946	1	186,758		65,368	1,256		1,280,246		124,055
1947	1,.	175,203		57,665	942.		1,389,157		104,439
1948		172,756		46,997	688,		1,313,396	- [	131,349

<sup>\*</sup> Year ended 31st March.

#### MEAT WORKS.

Apart from slaughtering, important subsidiary industries in the handling; of meat-have axisen in the form of refrigerating and meat-preserving; works. During; 1942,43 plants for drying, meat were installed at a number of establishments, in New South Wales. Particulars of the operations of meat, and fish, preserving, works are shown on page 117 of this volume.

#### MEAT EXPORT TRADE.

The meat export trade commenced to assume importance in New South Wales towards the end of the nineteenth century, when the export of frozen meat became possible through the provision of refrigerated space in ocean steamers. During 1932 a method was evolved for the transport of chilled meat from Australia and export of meat in that condition was expanding before the war, but shipment of chilled meat was then suspended and has not yet been resumed.

Special attention is given to preparation and transport of meat for export, the Department of Commerce and Agriculture stringently regulates inspection and shipment, and the work is closely supervised by Commonwealth veterinary authorities.

The stock available in New South Wales for slaughter for export depends mainly upon the season, as in periods of scarcity the local demand absorbs the bulk of the fat stock marketed.

The quantity of Australian frozen and chilled beef, mutton and larab, and of Australian tinned meats exported from New South Wales to oversea destinations in various years from 1911 is shown below. Ships' stores amounting annually to several million pounds in weight are not included in the table:—

Table	396.—	-Export	of	Meats	from New	South	Wales.
-------	-------	---------	----	-------	----------	-------	--------

	Frozen	or Chilled Bee	ef, Mutton ar	nd Lamb.	Preserved in Tins.		
Year.		Mutton and	Total of	foregoing,	Weight.		
	Beet.	Beef. Matton and Lamb.		Weight. Value.		Value.	
	ewt.	owt.	cwt.	.£	lb.	.£	
1911	65,097	535,259	600,356	758,155	20,783,779	401,384	
1920-21	110,727	166,039	276,766	937,040	4,479,460	235,80	
1930-31	19,019	327,757	346,776	663,690	2,438,624	81,84	
1935-36	82,370	437,071	519,441	1,377,946	3,655,186	120,39	
1938–39	105,761	401,643	507,404	1,310,861	2,326,403	78,10	
1939-40	248,860	750,528	999,388	2,329,445	6,626,783	'281,34	
1940-41	43,497	>832,074	875,571	2,446,799	44,935,252	706,59	
1941-42	60,978	453,645	514,623	1,519,443	30 989,187	1,506,25	
1942-43	65,203	580,518	645,721	1,937,846	32,405,514	1,543,20	
1943-44	91,870	243,443	335,313	1,073,767	50,832,390	2,586,81	
1944-45	111,176	167,382	278,558	901,196	47,611,160	2,746,92	
1945-46	125,760	145,759	271,519	907,747	40,528,048	2:986:86	
1946-47	145,034	265,838	-410,872	1,274,725	35,531,859	2,294,48	
1947-48	87,696	143,809	231,505	9876,701	30,295,996	1,882,44	

Frozen pork exports, until then usually small, increased considerably during the war years (1939-45), shipments reaching 3,329,000 lb., valued at £125,772, in:1948-44. In 1946-47, the figures were 1,048,000 lb. and £55,130, respectively and in 1947-48, 477,000 lb. and £26,287. Details for each recent year are given in Table 434 of this volume.

In the frozen meat trade, lamb has largely replaced mutton. In 1911 the oversea exports from New South Wales were 1,149,241 carcases of frozen mutton and 292,258 carcases of frozen lamb. The corresponding numbers were mutton 272,501 and lamb 1,060,507 in 1938-39; mutton 357,089, lamb 408,173 in 1946-47; and mutton 87,550, lamb 307,353 in 1947-48.

Great Britain provides the principal oversea market for Australian meat and in pre-war years more than 95 per cent. of the exports of frozen meat was sent to the United Kingdom. Since September, 1939, export to the United Kingdom has been under contract, as described below.

# CONTROL OF THE MEAT EXPORT TRADE.

The export of Australian meat is controlled by the Australian Meat Board under the provisions of the Meat Export Control Act, 1935-1946. The Board was appointed in January, 1936, and was reconstituted in November, 1946, when the war-time office of Controller of Meat Supplies was abolished. It consists of a representative of the Commonwealth Government as chairman, and representatives of lamb, mutton, beef and pig producers, meat exporting companies, publicly owned abattoirs and freezing works, and meat industry employees. A Meat Advisory Committee may be appointed in each State to assist the Board in carrying out its functions. In certain circumstances decisions of the Board to which the chairman dissents are subject to Ministerial approval and direction.

The Act empowers the Board to make recommendations for regulating exports of meat, meat products and edible offal, quality standards and grading of exports and export programmes, to foster scientific research and overseas trade in Australian meat, to regulate shipments, arrange shipping and insurance contracts, and to purchase, manage and sell meat on behalf of the Commonwealth. It may maintain a representative or representatives in London.

To make export control effective, meat, etc. may be exported only under license or Ministerial permit and subject to such conditions and restrictions as are prescribed after recommendation by the Meat Board. However, on request, the holder of an export license must slaughter and treat stock on an owner's account, on a weight and grade basis, for submission for export at rates and on conditions as specified from time to time by the Board.

Under the Meat Export Charges Act, 1935, proceeds of a small levy imposed on all meat exported from the Commonwealth were paid into a Meat Export Fund to provide for administrative expenses and research. The levy was discontinued from 7th May, 1947. From November, 1946, funds may be provided for the Board out of consolidated revenue and advances may be obtained from the Treasurer and the Commonwealth Bank for use on behalf of the Commonwealth. Details of the Board's income and expenditure for the last four years and its accumulated funds are as follow:—

Year ending 30th June.	Export Levies Collected,	Export Levies Collected in N.S.W.	Total Income.	Research Contributions	Total Expenditure.	Transfer to Accumulated Fund,
1944 1945 1946 1947	£ 6,226 6,217 3,856 7,345*	£ 893 692 539 1,033*	£ 7,323 7,333 4,968 8,442	£ 582 635 894 710	£ 6,136 5,528 9,068 9,506	£ 1,187 1,805 (—)4,100 (—)1,064

<sup>\*1</sup>st July, 1946 to 7th May, 1947.

During the twelve years of its administration the Board has provided £8,576 for scientific research in relation to meat. The accumulated funds of the Board at the 30th June, 1947 were £37,075.

From 1st October, 1946, when increased prices were paid under the contract with the United Kingdom Government, until 10th March, 1947, proportions of the purchase prices of certain classes of meat were retained by the Board with a view to establishing a price stabilization fund. The proposal was rejected by the industry and from the latter date full contract prices, less one per cent. (to cover the administration expenses of the Board), were paid to suppliers. The amount withheld, £195,005, together with £250,000 appropriated from trading profits of the Board in 1945-46 and 1946-47, was subsequently credited to the Meat Industry Advancement Trust Account, created in October, 1947, to be administered by the Board for the benefit of the industry generally.

#### WAR-TIME CONTROL OF THE MEAT INDUSTRY.

Following the outbreak of war in 1939, the United Kingdom Ministry of Food contracted with the Commonwealth Government for the purchase of Australian meat. In 1941-42, to overcome difficulties arising from shortage of shipping, the Commonwealth Government purchased meat for storage and re-sale to the Ministry of Food, and a Meat Canning Committee was set up to facilitate the supply of canned meats for defence purposes. The meat industry as a whole was brought under Government control in March, 1943, when a Controller of Meat Supplies was appointed, and from 17th January, 1944, until 21st June, 1948, sales of meat for civilian consumption in Australia were rationed by means of a coupon system. Further details of the war-time control of the industry are given on page 538 of Official Year Book No. 50.

# UNITED KINGDOM CONTRACTS FOR AUSTRALIAN MEAT.

Following the outbreak of war in 1939 the United Kingdom Government made arrangements with the Commonwealth Government for the purchase of Australian meat. The initial contract dated from 30th September, 1939, and the sale or export of meat to any person in the United Kingdom other than the Ministry of Food was prohibited by regulation under the National. Security Act. The contract was renewed annually until September, 1944, when the United Kingdom Government undertook to purchase the exportable surplus of Australian meat in the four years ending September, 1948. Subsequently the contract was extended for a further two years to 30th-September, 1950. The undertaking covered all meat (beef, mutton, lamb, pig meats and offals) other than that required for Australian civil and Service needs, for British and Allied personnel based on Australia, for relief, and for supply to other markets as agreed upon by the two Governments. The quantity of pig meat to be taken under the contract is fixed by negotiation; for the years ended 30th September, 1947 and 1948 it was the exportable surplus. The Agreement envisaged the resumption of the chilled meat trade (with the proportion of chilled space to be determined) as and when the shipping position permits. Prices under the long term contract are subject to annual review at the instigation of either Government.

Canned meat was not included in the original Agreement, but in 1941, when it appeared likely that refrigerated shipping space for frozen meat would be severely restricted, contracts were made with the United Kingdom Government, for the purchase of canned supplies. The quantity to be supplied in each year is the subject of annual negotiations.

# Prices of Meat under United Kingdom Contract.

The schedule of prices under the United Kingdom contracts includes many kinds and grades of meat. The point of sale is on shipboard, Australian port, and costs of storage in Australia and expenses from store to shipboard are payable by the sellers.

The prices of the principal types of meat as at 1st October, 1947 and 1948, are shown in the following table; prices in periods from 1939-40 to October, 1946, were shown on page 821 of the 1940-41 edition of the Year Book, page 755 of the 1941-42 and 1942-43 edition, and on page 540 of the 50th edition.

Table 397.—United Kingdom Meat Contracts: Prices f.o.b. Australia.

	As	at 1st O	ctober, 1	947.	As	As at 1st October, 1948.				
	1st G	1st Quality.		2nd Quality.		1st Quality.		uality.		
Kind and Class of Meat,	Per lb. Ster- ling.	Per lb. Australian Currency.	Per lb. Ster- ling.	Per lb. Aus- tralian Cur- rency.	Per lb. Ster- ling.	Per lb. Australian Currency.	Per lb. Ster- ling.	Per lb. Australian Currency.		
29 lb, to 86 lb	d, 81 711 751	d.; 10·41 9·96 9·74	d. 850 751 613 618	d. 10·19 9·18 8·51	$\begin{array}{c} \mathbf{d.} \\ 9_{10} \\ 9_{25} \\ 9_{25} \\ 9_{25} \end{array}$	d. 12·20 11·70 11·45	d. 9150 8150 850 850	d. 11·57 11·07 10·82		
EO 15 A. 70.11	. 4 <u>1.</u> . 4 <u>3</u> .	5·62 5·40	4.5 31	5·39 4·84	51 <sup>5</sup> 6 51 <sup>3</sup> 8	6·64 6·48	51 4   1	6·41 5·86		
Crong	. 6 18. . 4½	7·73 5·62	5 <u>₽</u> 4 ∱3	7·19 5·28	71. 5	8·91 6·25	61 4   1	7·81 5·86		
Porkers-25 lb, to 55 lb,	. 101	12.66	9≩	12.19	12}}	15.86	12 15	15.39		
Baconers—Wiltshire. sides— 50 lb, to 90 lb.	. 10 🙀	13.52	10 <sub>18</sub>	13.05	135	17:03	13 <u>‡</u>	16·5 <b>6</b>		

## PRICES OF MEAT.

WHOLESALE PRICES OF MEAT—SYDNEY.

Comparative statements of average wholesale prices of meat delivered to butchers' shops in Sydney in each month of certain years since January, 1939 are shown in the next two tables. The particulars for the earlier years relate to prices quoted by the Metropolitan Meat Industry Commission,

and the quotations from May, 1943, relate to prices fixed by the Prices Commissioner:-

Month.	Ox Bo per			Ox and Heifer (400 to 650 lb.) per lb.								
	1939.	1943.	1943.	1944.	1945.	1946.	1947.	1948.				
	d.	d.	d.	d.	d.	d.	d.	d.				
January	4.1.	6.4		5.5	5.5	5.5	. 6.6	6.5				
February	3.9:	5.8		5.5	5.5	5.5	7.3	6.5				
March	4.5,	5.3		5.5	5.5	5.5	6.9	6.5				
April	4.3	5.1		5.5	5.8	5.5	6.1	6.5				
May	3.8	4.9	5.8	5.5	5.8	5.5	. 6.0	6:5.				
June	3.6	5.4	5.6	5.5	5.8	5.5	6.0	6.7				
July	4.0	5.4	5.6	5.8	5.8	5.5	6.0	6.8				
August	3.9:	5.5	5.8.	5.8	5.8	5.5	6.0	6.8				
September	$4 \cdot 2$	5,5	5.8	5.8	5.8	5.5	6.0	6:7				
October	4.2	5.5	5.7	5.8	5.8	5.5	6.4	6:7				
November	4.1	5.2	5.5	5.6	5.7	6.3	6.5	7.3				
December	4.1	5.2	5.5,	5.5	5:5	6.3	6.5	7.6				
Average	4.1	5.5		5.6	5.7	5.6	6.4	6,8				

Table 398 - Wholesale Prices of Reaf Sydney

The wholesale price of beef (ox bodies) in 1940 and 1941 was on the average about 3d. per lb. dearer than in 1939, and there was further increase of ½d. per lb. in the average price for the year 1942. The average in 1945 and 1946 was slightly higher than in 1943, and in 1947 and 1948 further increases of approximately \( \frac{1}{4} d. \) and \( \frac{1}{2} d. \) per lb., respectively, carried the average price over 50 per cent. above the pre-war level.

A statement showing the monthly average prices of mutton and lamb follows:

Pence per lb. 1939. 1943. 1944. 1945. 1946. 1947. 1948. Month. M. Ъ. M. М., L. 3·3 3·2 4·0 January 5·9 6·5 6.6 7.4 7.0 February 4·8 5·2 5·3 5·5 5·5 11·0 10·7 6.5 10.5 6.5 6.5 6.5 7·0 7·0 March April May 3·4 3·3 5·5 5·5 6.5 10·5 10·5 9.5 7.3 8.7 8.8 7·5 7·1 7·2 6·0 6·4 5.4 9.0 5·5 5·4 9·5 9·3 6.5 10·5 10·5 14·1 13·9 June 2.9 4·0 7·3 7·5 7·5 7·5 7·5 July 3.1  $\frac{4.1}{4.5}$ August 5.5 8.8 6.5 4.6 4.5 4.5 4.5 September October  $\frac{3\cdot 2}{3\cdot 2}$ 7·6 7·9 5·0 4·9 5·5 5·0 8·6 7·6 7·3 7·3 5.0 5.0 8·8 8·8 6·5 6·5 10.5 10.5 10:8 9:9 6.3 November 3.5 5·0 5·0 5·5 5·5 6:5 6:8 6:5 10.2 10:5 10:5 December 4.5 10:0

Table 399.—Wholesale Prices of Mutton and Lamb, Sydney.

5.2M-Mutton; L-Lamb.

8.2

10.6

4.2

Average

4.7 7.6

The average prices of mutton and lamb in Sydney in 1948 were respectively 32d. or 109 per cent. and 5d. per lb. or 81 per cent. dearer than in 1939, having increased by about 14d. and 34d. since 1945.

#### VALUE OF PASTORAL PRODUCTION.

The gross farm values of pastoral production from the different kinds of stock as estimated for various years since 1901 are as shown below.

Table 400.-Pastoral Production: Gross Value at Place of Production.

		She	ep.	Cat	tle.	Horses-	Total	Value of	
Year.	Wool.	Slaught- ered.* Net Interstat Exports		Slaught- ered. Net Interstate Exports.		Stud Yearlings Sold.	Pastoral Production.	Production per head of Population.	
1901 1911 1928-29 1928-29 1929-30 1930-31 1931-32 1932-33 1932-33 1933-34 1934-35 1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47	£000 8,425 14,085 13,023 30,879 18,099 13,705 15,233 16,659 29,951 18,045 25,408 32,091 24,060 12,060 27,127 27,458 29,154 31,703 26,112 25,234 40,277 63,713	£000 2,071 2,811 2,813 2,801 2,732 1,795 1,543 1,113 2,288 3,352 4,357 4,704 3,537 4,704 3,537 4,513 3,964 6,229 7,251 7,510 7,875 7,503 8,663	£000  1,576 1,243 864 373 911 733 421 1,229 805 1,718 647 719 719 719 (—) 253 764 849	£000 1,229 1,689 2,973 5,814 4,508 2,767 2,632 2,615 2,585 2,896 3,721 4,735 4,495 4,763 5,312 5,945 6,876 6,531 5,966 8,075 8,637	£000   (-) 583 (-) 334 (-) 899 (-) 565 (-) 69 (-) 1,020 (-) 1,020 (-) 1,020 (-) 1,020 (-) 2,050 (-) 843 (-) 822 (-) 439 (-) 2,050 (-) 2,715 (-) 2,623 (-) 2,543 (-) 2,54	\$000 722 2,001 2,027 107 108 115 144 145 218 8 150 175 175 175 175 175 175 220 238 240 240 250	\$000 12,447 20,586 20,386 40,679 26,355 17,835 19,331 21,373 34,662 23,931 40,306 35,257 24,894 36,550 36,718 36,506 39,507 44,136 38,697 36,426 38,697 77,965	\$ s. d. 9 2 1 12 7 3 9 14 7 6 10 8 3 7 0 2 7 10 7 8 5 3 9 1 8 5 0 13 5 3 9 1 8 8 12 13 3 15 0 8 12 13 3 15 0 8 12 17 2 12 17 2 12 12 5 13 15 7 5 13 6 9 12 1 7 18 3 7 18 3 7 18 3 7	

<sup>(-)</sup> Denotes excess of imports.

It is estimated that the value of the principal materials used in the pastoral industry was £1,245,000 in 1944-45, £1,383,000 in 1945-46, £1,203,000 in 1946-47, and £1,343,000 in 1947-48.

## VALUE OF PASTORAL PRODUCTS EXPORTED.

The total value of pastoral products or by-products (apart from dairy and farmyard products) exported oversea from New South Wales is shown in the following table:—

Table 401.—Exports of Pastoral Products from New South Wales.

Products.	1938–39,	1941–42.	1942-43.	1943–44,	1944-45.	1945-46.	1946–47.	1947–48.
Wool Meat Live Stock Hides and Skins Other Pastoral	17,221 1,545 67 1,577 646	22,536 3,206 16 2,364 834	16,302 3,859 10 1,345 552	14,659 4,454 12 3,097 667	15,153 4,239 6 2,728 687	24,293 3,526 54 4,846 666	52,076 3,795 50 6,644 1,048	57,895 3,396 136 4,586 1,020
Total	21,056	28,956	22,068	22,889	22,813	33,385	63,613	67,033
Proportion to total exports (Mer- chandise)	ro.0	per cent. 53.5	per cent.	per cent.	per cent.	per cent.	per cent. 56.3	per cent 50.9

Figures relating to value of pastoral exports are not comparable with those relating to the value of production given in Table 400, since they contain items which have been enhanced in value by manufacture and other processes. Moreover, the exports are valued on the basis of f.o.b. Sydney and not at the place of production, and the figures relate to year of export, not to year of production.

<sup>\*</sup> Excluding value of wool on skins.

#### NOXIOUS ANIMALS.

The only large carnivorous animals dangerous to stock in Australia are the dingo, or so-called native dog, and the fox, which has been introduced from abroad; but graminivorous animals, such as kangaroos, wallabies, hares, and rabbits, particularly the last-named which are of foreign origin, are deemed by the settlers even more noxious. In the Western division the Western Lands Commissioner is required to take measures to destroy dingoes, and to maintain a dog-proof fence along the western border. A small rate is imposed on the land to pay expenses.

#### RABBITS.

The rabbit pest had been brought under control by landholders in many parts of the State. During the war scarcity of labour, fumigants, and wire netting prevented full exercise of the measures necessary to keep the pest in check and in recent years rabbits have been a serious menace in many parts of the State. The damage caused by rabbits is compensated to some extent by the use of rabbits for food and of the skins in manufactures, locally and for export.

Under National Security Regulations (continued in force to 31st December, 1949, by the Defence (Transitional Provisions) Act, 1948), the trade in rabbitskins has been controlled since June, 1940, to ensure adequate supplies of skins to local manufacturers at reasonable prices. Rabbitskins bought at auction by manufacturers for normal domestic requirements and for Service contracts are appraised and the manufacturers are compensated for any excess of open market over appraised prices from the proceeds of a levy on rabbitskins exported.

The following table shows the quantity and value of frozen rabbits and hares, and of rabbit and hare skins exported from New South Wales to countries outside Australia:—

Table 402.—Rabbits and Hares: Oversea Exports.

			Exports Oversea				
Year ended 30th June.	Frozen Rabbit	ts and Hares.	Rabbit and	Rabbit and Hare Skins.			
	Quantity.	Value.	Quantity.	Value.	Value.		
	pairs.	£	lb.	£	£		
1911*	6,806,246	330,741	5,795,839	295,476	626,217		
1921	2,830,315	301,615	3,387,480	609,570	911,188		
1926	3,510,311	340,171	11,044,446	2,231,637	2,571,808		
1931	3,526,033	252,074	4,679,429	415,245	667,319		
1936	1,442,087	83,998	6,177,386	1,157,753	1,241,75		
1938	224,027	19,362	2,753,341	647,611	666,973		
1939	324,362	27,531	1,661,935	197,707	225,238		
1940	695,474	52,759	3,718,616	491,440	544,199		
1941	233,390	20,366	4,444,529	1,075,737	1,096,103		
1942	45,964	3,856	4,148,045	1,655,848	1,659,704		
1943	27,235	2,634	2,735,779	950,071	952,70		
1944	94,298	10,034	5,119,842	2,255,580	2,265,614		
1945	72,091	9,122	5,247,467	1,909,908	1,919,030		
1946	146,377	19,631	7,618,708	3,271,092	3,290,723		
1947	149,137	22,378	7,459,348	3,684,264	3,706,642		
1948	1,069,365	171,680	5,339,769	1,867,945	2,039,62		

The export trade in frozen rabbits and hares had dwindled, but increased again in 194748 to larger proportions than in any year since 1935-36. The volume of skins exported is subject to pronounced fluctuation, and was greater in 1945-46 than in any year since 1928-29. The value of skins exported in 1946-47 (£3,684,264) was the highest ever recorded, but quantity and value decreased in 1947-48 by 28.4 and 49.3 per cent., respectively.

# Wire-netting Advances for Rabbit-proof Fences.

Under the Pastures Protection Act, 1934, advances from funds provided by Parliament may be made to settlers for the purchase of wire netting or other materials for use in the construction of rabbit-proof or dog-proof fences, etc., for protection from and the destruction of noxious animals. Payment for these materials, etc., with interest, is made by annual instalments extending over such period as the Minister for Lands may determine.

No advances have been made since 194142. The aggregate amount of advances to 30th June, 1948, was £1,440,334, and the balances outstanding at this date amounted to £156,174.

#### PASTURES PROTECTION BOARDS.

For the purpose of administering the Pastures Protection Act which relates to travelling stock, sheep brands and marks, destruction of rabbits and noxious animals, and certain other matters, the State is divided into Pastures Protection Districts, and in each there is constituted a board of eight directors, elected every three years from among their own number by landholders who pay pastures protection rates. There are also stock inspectors and rabbit inspectors, who are paid from the funds of the Pastures Protection Boards to which they are attached.

Rates to provide funds for the purposes of the boards are levied upon owners of ten or more head of large stock, or 100 or more sheep, at a rate not exceeding fourpence per head of large stock and one half-penny per head of sheep, but a rebate of one-half may be made to occupiers of holdings enclosed with wire-netting fences which in the opinion of the board are rabbit-proof, provided the holdings have been kept reasonably free from rabbits during the preceding calendar year. The funds so raised may be applied by the boards in defraying expenses incurred in administering the Act, and for any other purpose approved by the Minister. The boards are required each year to pay 3 per cent. of their revenue to the Colonial Treasurer to cover the cost of administration.

The boards levy rates on travelling stock in the Eastern and Central Divisions to constitute a fund for the improvement of travelling stock and camping reserves. They are empowered also to erect rabbit-proof fences as "barrier" fences wherever they deem necessary, to pay a bonus for the scalps of noxious animals, and to enforce the provisions for the compulsory destruction of rabbits.

#### REGISTRATION OF BRANDS.

Stock brands are registered under the Registration of Stock Brands Act, and the number of standing registrations of large stock brands is approximately 76,000. These brands may be used on either cattle or horses.

Sheep brands, of which the registrations are approximately 44,000, are issued for Pastures Protection Districts and may not be duplicated in any one district; the same brand may, however, be issued in several Pastures Protection Districts.

#### ANIMAL HEALTH.

Diseases of various kinds exist amongst live stock in New South Wales, but it is free from many of the more serious epizootic and parasitic diseases which cause heavy loss in other pastoral countries, e.g., rinderpest, foot and mouth disease, rabies, glanders, sheep scab, and trypanosomiasis. Certain diseases are notifiable under the Stock Diseases Act, 1923-1934, and necessary powers are provided for the inspection of stock and for the detention, seizure, treatment, quarantine and destruction of diseased stock.

Movements of livestock interstate are controlled, and inspectors are maintained where required along the borders. This work is of particular importance along the Queensland border owing to the presence of cattle tick. Power is provided to enforce the dipping of cattle before they enter New South Wales.

The work in connection with the inspection of stock for disease is administered by the Animal Industry Division of the Department of Agriculture. Veterinary officers and inspectors of stock are stationed throughout the country, under supervision of district veterinary officers, enabling diseases such as anthrax and pleuro-pneumonia to be dealt with expeditiously. Cattle on dairies, particularly those supplying milk for human consumption, are inspected rigorously.

Schemes for the creation of tubercule-free herds are in operation in various parts of the State, and it is required by the Milk Board that raw milk sold in Sydney or Newcastle must be the product of tubercule-free cows.

Work at the well-equipped veterinary research station at Glenfield, under the control of the Director of Veterinary Research, is co-ordinated with the work of the veterinary officers in the field.

At the McMaster Animal Health Laboratory located in the grounds of the University of Sydney, extensive scientific investigation of matters affecting animal health is undertaken by the Council for Scientific and Industrial Research in co-ordination with similar activities in other States and the Faculty of Veterinary Science of the University of Sydney. The Council acquired an area of 1,250 acres at St. Mary's which is used mainly as a field station in connection with the laboratory and for genetic work on sheep.

#### Cattle Tick Eradication.

Cattle tick eradication is a difficult problem confronting the veterinary authorities. Restrictive efforts have confined the infestation to a relatively small part of the State, and reduced the occurrence of tick fever to isolated instances. Continuous and costly work is necessary to prevent the spread of the tick, and under an arrangement, the Commonwealth Government shares the cost with the States of New South Wales and Queensland. Contributions by the Commonwealth totalled £53,325 in each of the years 1944-45 to 1947-48. These amounts included grants for the construction of dips. The Cattle Tick Control Commission created in 1926 has brought about increased co-ordination between the authorities of the States concerned. Dips are provided by the Government, and private dips constructed in accordance with the plans and specifications of the Department are subsidised.

# Swine Compensation Act, 1928.

Following an outbreak of swine fever in 1928, the Swine Compensation Act was passed to provide for the payment of compensation for pigs condemned on account of the presence of certain diseases and for carcases condemned in slaughter-houses as unfit for human consumption. The funds required for payment of compensation are collected by the sale of swine duty stamps, which are affixed to a register kept at each slaughtering establishment to indicate the number of pigs slaughtered. In this way information is obtained as to the herds likely to be affected with tuberculosis.

During 1946-47 receipts under the Act amounted to £26,885 and disbursements to £23,579, of which £23,482 was paid as compensation. In 1947-48 receipts were £26,216, and disbursements £34,789 including £34,690 compensation.

# Veterinary Surgeons Act, 1923.

The Veterinary Surgeons Act came into operation on 5th December, 1923, to provide for the registration of veterinary surgeons, and to regulate the practice of veterinary science. A Board of Veterinary Surgeons has been established to administer the Act, which specifies the qualifications for registration and prohibits practice by unregistered persons.

The number of registered veterinary surgeons on 31st December increased from 192 in 1943 to 247 in 1948.

# DAIRYING, POULTRY, Etc.

Dairying developed slowly as a national industry in Australia until, towards the end of the 19th century, refrigeration enabled producers to overcome disabilities in manufacturing and distributing perishable dairy products in a warm climate, and to export the surplus oversea. Pasteurisation and the application of machinery to the treatment of milk and the manufacture of butter, the development of the factory system, and improvements in regard to ocean transport have enabled production to expand. Butter and processed milk products have become important items of the export trade.

The nature of the soil, the mild climate, and abundant rainfall in the coastal portions of New South Wales are most suitable for the maintenance of dairy herds. Natural pasture is generally available throughout the year, and dairy cattle do not require housing to maintain production during winter months.

In the inland districts dairy-farming is undertaken mainly to supply local needs, and a number of well-equipped factories has been established in proximity to towns. Dairying is conducted also on the Murrumbidgee irrigation areas. The principal regions in which dairying is an important industry are indicated in the diagrammatic map at page 10 of this Year Book.

In the coastal division 15,204 holdings were used for dairying in 1945-46, viz., 11,075 exclusively and 4,129 for dairying combined with other purposes. In the other parts of the State, the industry is conducted usually in conjunction with agriculture and grazing—there being only 1,082 holdings used solely for dairying and 1,818 for dairying in combination with other rural pursuits. The total number of holdings used for dairying in New South Wales decreased from 20,704 to 18,104, or by 2,600 between 1939-40 and 1945-46, the decrease in the Coastal Division being 1,764.

Most of the native grasses of the State possess milk-producing as well as fattening qualities. Imported grasses are planted also to increase the carrying capacity of the land and the milk yield per cow. In the winter the herbage is supplemented by fodder crops, such as maize, barley, oats, rye, lucerne, and the brown variety of sorghum, or the planter's friend. Ensilage also is made for fodder. The extent of fodder conservation of this type is indicated in Tables 249 and 250. Much of the large area sown with grasses is used for dairy cattle and the manuring of pastures has extended in dairying districts. Particulars of the use of manures on pastures are shown in Tables 247 and 248.

## Supervision of Dairying and Dairy Products.

Legislation relating to dairying and dairy products enacted by the State and the Commonwealth provides for the supervision of production and distribution and for organised marketing.

The State Acts are the Dairies Supervision Act, 1901-1930; the Dairy Industry Act, 1915-1940; and the Dairy Products Act, 1933-1938. Legislation relating to the milk supply of the Metropolitan (Sydney), Newcastle, Erina (Gosford district), and Wollongong milk distributing districts is supervised by the Milk Board, as described in the chapter "Food and Prices" of this volume.

The Federal Acts are concerned mainly with the export trade, viz., the Commerce (Trade Descriptions) Act, 1905-1933; the Dairy Produce Export Control Act, 1924-1947, the Dairy Produce Export Charges Act, 1924-1937; and the Dairying Industry Assistance Act, 1943. During the war (1939-45), National Security Regulations were issued by the Commonwealth from time to time to meet emergency conditions affecting the industry, but, with the exception of the Dairy Produce Acquisition Regulations, these lapsed when the National Security Act expired on 31st December, 1946. The Dairy Produce Acquisition Regulations were continued in force by the Defence (Transitional Provisions) Acts, 1946 and 1947 until 30th June, 1948, when they were repealed by the Dairy Produce Export Control Act, 1947.

The Dairies Supervision Act, 1901-1930, consolidated laws designed to prevent the spread of disease through unhygienic conditions in the handling of milk and milk products. It requires all dairymen and milk vendors to register their premises with local authorities, renders the premises subject to inspection, and makes illegal the sale of milk or milk products from unregistered premises.

By the Dairy Industry Act provision is made for regulating the manufacture of dairy produce and of margarine. Dairy produce factories and stores must be registered. Cream supplied to a dairy factory must be tested and graded at the factory, and the farmer is paid on the basis of the butter-fat content, or on the amount of commercial butter obtained from his cream. Butter must be graded on a uniform basis and packed in boxes bearing registered brands indicating the quality of the product and the factory where it was produced. The testing and grading at the factory may be done only by persons holding certificates of qualification. In 1938 a Dairy Produce Factories Advisory Committee was constituted to advise the Minister regarding applications for registration of premises as a dairy produce factory. The Minister may refuse any application if he is satisfied that registration is opposed to the best interests of the dairying industry in New South Wales.

The State has been divided into eleven dairying districts, and in each an experienced dairy instructor is appointed to supervise the dairy factories and to administer the Dairy Industry Act and regulations thereunder. He acts as inspector, instructs the factory managers and cream-graders in matters connected with the industry, advises the dairy-farmers, exercises supervision over the quality of butter produced and organises herd recording units.

The Dairy Products Act, 1933-1938, relates to the Australian equalisation scheme described below. The Act is administered by the New South Wales Dairy Products Board, which consists of a Government representative appointed by the Minister for Agriculture and six other members representing the proprietary and co-operative manufacturers and the Primary Producers' Union. The Board advises the Minister in determining the quotas of butter and cheese for home consumption, and may enter into arrangements with boards in other States for the purposes of stabilisation. Its administrative expenses are met by imposing a fee of 6d. per ton of butter and 3d. per ton of cheese manufactured.

The supervision of dairy products for oversea export in terms of the Dairy Produce Export Control Act, 1924-47, is a function of the Australian Dairy Produce Board appointed by the Commonwealth to control the export and oversea distribution of Australian butter, cheese and processed

milk products. The Board was reconstituted on 1st July, 1948, and assumed functions relating to the acquisition or purchase of dairy products formerly exercised by the Dairy Produce Control Committee. The Board, subject to direction by the Minister for Commerce and Agriculture, controls the purchase, shipment, and sale of dairy produce exported on behalf of the Commonwealth, issues licenses to exporters of dairy produce, and maintains an agency in Great Britain to advise as to market conditions, etc. Expenses of administration are paid from proceeds of a levy of 1/40d. per lb. on butter and 1/80d. per lb. on cheese exported.

Butter for export is graded by Commonwealth official graders, according to grades fixed by regulation, and each box is branded to indicate the quality of the butter and the factory which made it. A national brand (the kangaroo) is stamped on all boxes of "choicest" quality butter. The trade description for "choicest" must contain the word "Anstralia" in the centre of an outline map of Australia; the name of the State; the registered number of the factory; and the net weight. In addition, a word registered by the factory may be added to the approved design. Only a very small proportion of the Australian butter is classified as second or lower grade.

The Dairying Industry Assistance Act, 1943, provides for the granting of assistance to producers and the determination by the Commonwealth Court of Conciliation and Arbitration of rates of wages and other conditions of employment in the industry.

# WAR-TIME CONTROL OF DAIRY PRODUCTS.

A Dairy Produce Control Committee was appointed under the National Security (Dairy Products Acquisition) Regulations in November, 1939, to act on behalf of the Commonwealth in fulfilling the terms of the various contracts with the United Kingdom Government (see below) and to deal with emergency problems in the dairying industry. Details of the Committee's activities are given on pages 763 and 764 of the 1941-42 and 1942-43 edition of the Year Book and pages 548 and 549 of Official Year Book No. 50.

All supplies of dairy products were brought under Commonwealth control in 1943, when a Commonwealth Controller of Dairy Products and a Dairy Industry Advisory Committee in each State were appointed. The consumption of butter by civilians has been rationed since 7th June, 1943; the ration of 8 oz. per person per week was reduced to 6 oz. in June, 1944.

The Dairy Produce Export Control Act, 1947, repealed the Dairy Produce Acquisition Regulations and from 30th June, 1948, the reconstituted Australian Dairy Produce Board replaced the Committee (then terminated) in administering the United Kingdom contracts. The office of Commonwealth Controller of Dairy Products and the State Dairy Industry Advisory Committees: lapsed in 1947.

## United Kingdom Purchase of Australian Dairy Products.

Following the outbreak of war in September, 1939, the United Kingdom Government contracted with the Commonwealth Government to purchase large quantities of Australian butter and cheese during the period ended 30th June, 1940. The contract was renewed year by year until June, 1944, then for a four year period from 1st July, 1944, and for a further period

of seven years from 1st July, 1948. Under the current agreement the United Kingdom Government will purchase the exportable surplus of Australian dairy produce after provision has been made for Australian consumption and for the export of limited quantities of butter and cheese to other countries. Prices are to be reviewed annually but in any year may not be more than 7½ per cent. above or below those of the preceding year. Information as to the contract prices to 30th June, 1949, is shown later in this chapter. The quantities of butter and cheese exported from Australia to the United Kingdom under contract from the date of first acquisition (20th November, 1939) to 30th June, 1948, are shown below:—

Table 403.-Butter and Cheese Supplied under United Kingdom Contracts.

	1939–40*	1940–41.	1941–42.	1942–43.	1943–44.	1944–45.	1945–46.	1946-47.	1947-48.
Butter (tons.)	66,882	77,843	46,847	48,911	41,564	37,356	58,738	50,950	77,616
Cheese (tons.)	11,063	10,118	6,569	6,067	3,75 <b>6</b>	2,700	8,621	18,352	18,036

<sup>\*</sup> From 20th November, 1939.

## THE AUSTRALIAN EQUALISATION SCHEME.

A voluntary marketing scheme known as the "Paterson Plan" was inaugurated in Australia on 1st January, 1926, as an outcome of efforts towards stabilisation in the various butter-producing States. Information regarding the scheme is given in the 1934-35 edition of the Year Book at page 530.

As from 1st May, 1934, the Paterson plan which applied to butter only was superseded by a compulsory equalisation scheme in terms of legislation passed by the States of New South Wales, Victoria, Queensland, Tasmania and South Australia and the Dairy Produce Act of the Commonwealth. The scheme included butter of South and Western Australia from April, 1946, and cheese of Western Australia from January, 1947. The proportion or quota of butter and cheese made in each State which manufacturers may sell within the State is determined under State Acts. The Federal law provided for the determination of corresponding export quotas. In 1936 the Privy Council decided that the Commonwealth had not the power in terms of the Constitution to control the interstate movement of products. But the legislation of the States was not invalidated and the scheme has been continued by the voluntary co-operation of producers,

For the administration, members of the Dairy Products Boards of the States concerned and other persons representing manufacturers of dairy products were organised in 1934 as a limited company—the Commonwealth Dairy Produce Equalisation Committee Ltd. The Committee enters into agreements with manufacturers securing to them equal rates of returns from sales of dairy produce, and fixes basic prices at which dairy produce sold for local consumption in Australia or export is to be taken into account for equalisation.

A practical effect of the scheme is that the local trade, which usually has been the more remunerative, and the export trade are distributed in equitable proportions amongst the manufacturers by means of quotas. The proceeds of sales of butter are equalised as between factories, the "quota" being the proportion of output upon which the local price is paid to each.

The quotas for butter and cheese and the values at which sales are taken into account for equalisation are identical in all the States concerned in the scheme. The quotas for local consumption in each month, since July, 1942 are shown in the following statement:—

Table 404.—Butter and Cheese: Quotas for Local Consumption.

			Bu	tter.			Cheese.					
Month.	1942- 43.	1943- 44.	1944- 45.	1945- 46.	1946- 47.*	1947- 48.	1942– 43.	1943- 44.	1944- 45.	1945- 46.	1946- 47.*	1947- 48.
July August	84 76	86·66 81·25	98 92·33	96·3 84·4	69·6 68·75	71·23 65·82	68 50	88 70	96·66 75	96·8 68	86·7 78·05	67·23
September October	53 41	66 45	61·5 40	60·0 44·25	57·29 40·74	52 38·8	43 33·33	59 49	51·5 37·25	48·65 35·5	52·94 36·36	34·4 25·8
November	39	41	33.33	48.27	40.44	36.62	31	42	36	40.82	35.86	25.4
December	38	37.33	35.66	45.76	43.65	37.68	34	46	39.5	42.86	40.91	29.09
January	44	44	41.25	46.43	44.35	41.27	42.5	55	53	58.06	57.14	38.1
February	47	60	81.25	57.95	61.36	44.07	52	66.66	79	75	60.0	44.12
March	58	67	89-66	59.76	64.29	54.17	61	75	86.8	78.26	58.62	50
April	68	79	96.3	70.59	76.47	65	86	97	97	96.04	68.55	56
May	86	93.75	96.3	81.05	78.79	68.42	88	97	96.5	96-66	80.95	59.32
June	87.5	95	96.3	75.97	78.79	71.23	96	97	98.2	94.94	89.19	57.14

Revised since last issue.

Under normal conditions the requirements for home consumption do not vary greatly from month to month, and variations in the quota are the result of variations in production. Butter and cheese for local consumption and export overseas respectively are taken into account at basic prices determined for each equalisation period by the committee and the realisations of individual factories are equalised on the basis of the average price covering all sales on all markets.

Basic prices for equalisation purposes were determined monthly until 1942, when manufacturers agreed to the substitution of equalisation periods based on seasons. The first seasonal period under the new plan was the months March to June (inclusive), 1942. In April, 1945 the equalisation period was extended to twelve months.

The average equalisation values determined by the Equalisation Committee in each year since the commencement of the scheme are shown below; the values are stated as per cwt. of commercial butter.

Table 405.—Butter Equalisation Values.

Year Prended June,	Average Equalisation Value per cwt.	Year ended June.	Average Equalisation Value per cwt.	Year ended June.	Average Equalisation Value per cwt.
1935 1936 1937 1938 1939	s. d. 101 6 117 5 123 2 136 6 136 3	1940 1941 1942 1943 1944	s. d. 141 10 143 1 145 5 152 0 153 0	1945 1946 1947 1948	s. d. 154 4 171 3 183 2 210 2

The average in each year represents the net return to the factories at agent's floor, Australian port of shipment or other recognised centre of distribution. The values provide the basis on which payments are made by the factories to dairy farmers who supply milk or cream for manufacture. Government subsidy, paid in 1942-43 and later seasons, is not included in the values.

The upward trend in equalisation values of butter since 1938-39 was due firstly to a decline in production and consequent diminution in the quantity available for export at values which in that period were lower than local prices, and secondly, to an increase of 1d. per lb. in local price as from 6th March, 1942. The increases in 1945-46 and later years were due to increased prices under the contract with the United Kingdom Government and an increase of 2.7d, per lb. in local price in December, 1947.

## GOVERNMENT ASSISTANCE TO THE DAIRYING INDUSTRY.

To encourage dairy farmers to maintain production at an adequate level the Commonwealth Government has subsidised dairy production. Dairy farmers supplying cream and milk to butter and cheese factories in the period 1st July, 1942 to 31st March, 1943, were subsidised under the Dairy Industry Assistance Act, 1942. Producers who, during this period, supplied milk to manufacturers of processed milk products were assisted by means of temporary increases in prices of these goods, and from 1st April, 1943 to 30th June, 1948, they were subsidised under the Dairy Industry Assistance Act, 1943.

Subsidy was paid at rates calculated to raise returns to dairy farmers to an average price varying according to accepted costs of production, but in 1946-47 covering also the amount accrued from the export of butter at a price in excess of accepted production costs. The objective return to producers in pence per lb. commercial butter equivalent, inclusive of subsidy, as adopted from time to time since 1st July, 1942 was:—

		Pence.			Pence.
1942–43	July 1 to Mar. 31	17.50	.1946-47	Apr. I to Mar. 31	19.97
1943-44	Apr. 1 to Mar. 31	18.00	1947-48	Apr. 1 to June 30	24.00
1944-45	Apr. I to Oct. 31	19.31	1948 - 49	July 1 to June 30	26.00
1945 - 46	Nov. 1 to Mar. 31	19.50		·	

An account of the arrangements relating to the subsidising of dairy products and of the subsidy paid in the seasons ended March, 1943 to 1946, are given on pages 766 to 778 of the Year Book for 1941-42 and 1942-1943, and corresponding details for the year ended 31st March, 1947 are given on page 552 of the 50th edition of the Year Book.

In November, 1946, the Commonwealth Government appointed a Joint Dairying Industry Advisory Committee, comprising five representatives of Commonwealth departments and four representatives of the dairying industry, to advise it on matters relating to the industry, including costs of production of butter and cheese. Following a sample survey of dairy farms by the Committee between January and July, 1947, the objective net return to producers was raised to 2s. per lb. of commercial butter, retrospective to 1st April, 1947, and the Commonwealth Government guaranteed a price to the industry for five years from that date. Production costs are to be reviewed annually and, if necessary, the basic price will be adjusted from 1st July each year. In addition a grant, not exceeding £250,000 per annum, is to be made for five years from 1st July, 1948, to promote improved farm practices in the industry. Of this amount £54,066 is to be allocated to New South Wales in 1948-49, and £67,583 in succeeding years.

The principle of providing subsidy to raise the equalisation value to the objective net return to producers was followed again in 1947-48 and 1948-49. For the period 1st April, 1947, to 30th June, 1948, the objective return per cwt. of butter or its equivalent in cheese was 245s. 6d. to manufacturers and 224s. to producers. Interim subsidy was paid at the rates per cwt. of 59s. 6d. for butter and 29s. 4.9d. for cheese from 1st April to 30th November, 1947, and at 30s. 6d. and 15s. 4.9d., respectively, from 1st December, 1947, to 30th June, 1948.

Matching the increase of 2d, per lb. in the guaranteed price from 1st July, 1948, the objective return per cwt. of butter or its equivalent in cheese for the ensuing twelve months was raised to 266s 6d. to manufacturers and 242s, 8d. to producers, but the rate of interim subsidy was unchanged at 30s. 6d. and 15s. 4.9d. per cwt. of butter and cheese, respectively.

The following summary shows the average rate of Commonwealth Government subsidy paid, on butter produced in New South Wales in each year ended 30th June since 1942-43:—

Subsidy per commercial lb. of butter; season ended 30th June.

1943. 1944. 1945. 1946. 1947. 1948. 1.24d. 4.00d. 4.63d. 3.80d. 3.12d. 4.21d.

Since 1st July, 1948; the Australian Dairy Produce Board has withheld and paid into a Dairy Industry Stabilisation Fund the excess of the United Kingdom contract prices over the amount required to ensure the objective return to producers, the deductions being 20s, 7½d, per cwt. of butter and 3s. 11d. per cwt. of cheese.

Subsidy has been provided on cheese and other dairy products manufactured in: Australia at rates calculated to ensure to dairy farmers a return equivalent to that available to them in respect of butter.

## Fresh Milk Subsidies.

From 14th April, 1944 to 2nd September, 1948 producers of fresh milk, for human consumption in the New South Wales Milk Board's distributing districts were paid fixed prices for milk delivered to country depots, plus a basic subsidy in the months of low production, supplemented by special subsidies when seasonal conditions were adverse. Throughout the period subsidies were paid by the Commonwealth Government, which also shared with the State Government the provision of drought relief in 1945, 1946 and 1947. Producers in other parts of the State were paid fixed prices and similar subsidies from 1st July, 1944, to 30th September, 1948.

Subsidy arrangements for the Milk Act area, embracing the greater part of the Hunter and Manning, Metropolitan, the northern section of the South Coast and a small part of the Central Tableland divisions, were administered by the Milk Board. Severe drought prevailed in the milk producing areas in 1944-45 and 1945-46 and the Board's suppliers were paid special subsidies and had their income from milk guaranteed by the Commonwealth and State Governments. Again, from 4th October, 1946, to 2nd January, 1947, drought relief subsidy (1d. per gallon) was provided by these Governments in equal shares. Total payments amounted to £231,697 under the 1944-45 scheme, £26,441 under the 1945-46 scheme, and £63,646 under the 1946-47 scheme. Further information regarding these drought relief schemes, of the prices at country factory, the rates of basic and special subsidies, and the amounts disbursed as subsidy by the Board in each year from 1944 to 1946 are given on page 553 of the Official Year Book No. 50.

For whole milk supplies in the New South Wales Milk Board's distributing districts the prices per gallon to producers at country factories in successive periods in 1947 and 1948 were:—

Jan. 1 to Oct. 30	•••	16.0d.	May 14 to Sept., 9	•••	21.5d.
Oct. 31 to May 13	•••	17.5d.	Sept. 10 to Dec., 31		20.0d.

Changes in the rate of basic subsidy during those years were made as follows (subsidy ceased on 2nd September, 1948):—

Date of	Rate	Date of		Rate	Date of	$\mathbf{Rate}$
Change.	per gal.	Change.		per gal.	Change.	per gal.
	d.			d.		d.
To 30-1-47	1	29 - 8 - 47	• • •	4.0	5-3-48	$2.73$
31-1-47	4	3-10-47	• • •	1	2-4-48	3.75
28-2-47	5.5	31-10-47		1.75	14-5-48	2.0

The following statement gives particulars of the amount of subsidy paid in 1946-47 and 1947-48 under the arrangements described above in respect of milk delivered for consumption in the districts under the administration of the Milk Board.

	Basic Su	bsidy.	Special Subsidy*		Droug	ht Relie	f Schem	.es.	
Year ended 30th June.	Milk Board Suppliers.	Producer Vendors.	Producer Vendors.	Milk E   1944   -45.	30ard Sup 1945 –46	pliers. 1 1946 -47.	Producer 1944 -45.	Vendors. 1946 -47.	Total Subsidy Paid.
occur and	£	£	£	£	£	£	£	£	£
1947	703,900	100,186	1,013	3,725	25,083	55,009	385	8,294	897,595
1948	684,205	124,085	]		1,358	•••	•••	342	809,990
			*For mil	k in Janu	lary, 1946				-

Subsidy arrangements for other parts of the State were administered by the Commonwealth Prices Commissioner, who determined maximum prices of milk and the rates of basic subsidy in defined areas. Details of the areas, prices and rates of subsidy in each year from 1944 to 1946 are given on page 554 of the Official Year Book No. 50.

Description.

In 1947 the defined areas were as follows:-

Division.

Area.

$N_0. \ 1. \ N_0. \ 2. $	The coastal districts excluding Milk Act Area.
No. 3.	Couthorn ment of C.W. Clance division and Chilesian China
TAO, 0,	Southern part of S.W. Slopes division and Culcairn Shire.
No. 4.	N. Tableland division and N.W. Slopes division excluding Ashford,
	Barraba, Bingara, Liverpool Plains and Yallaroi Shires and
	Barraba and Guunedah Municipalities.
No. 5.	Central W. Slopes division and Central Tableland division excluding
	City of Blue Mountains (then Shire of Blue Mountains and
	Municipalities of Blackheath and Katoomba), Abercrombie,
	Blaxland, Crookwell and Oberon Shires and Lithgow Munici-
	pality; and including Berrigan, Coreen, Wade and Willimbong
	(now Lecton) Shires and Corowa Municipality in Riverina

- No. 6. Balance of Central Tablelands division (except Blue Mountains and Colo Shires—in Milk Act Area), S. Tablelands division, A.C.T. and Tallaganda Shire.
- No. 7. Balance of Riverina division, Bland Shire and Balranald Municipality.
- No. 8. Balance of State, excluding the area within 5 miles of Broken Hill Post Office (administered by Deputy Prices Commissioner of South Australia).

The maximum prices and rates of subsidy fixed for each area in 1947 are shown below.

Table 406.—Whole Milk Outside N.S.W. Milk Board's Distributing Districts: Prices and Rates of Subsidy per gallon, 1947.

Particulars.	Defined Area.							
Tarvoulars,		Nos. 1 and 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.	No. 8
20 - 1 1 vv 13 1- vv 1	Nov.*—	d. 12·5‡ 14·0‡	d. 14·5 16·0	d. 16·5 18·0	d. 16·5 18·0	d. 18•5 20•0	d. 18·5 20·0	d. 22·5 24·0
Basic Rate of Subsidy, 1947†— Months		Apr July.	Feb July.	Apr Sept.	Apr Sept.	Apr Sept.	Feb July,	Feb July,
Rate		2	2	4	4	4	_4	4_

\* Variations: Area No. 3; Kyeamba and Mitchell Shires and Wagga Wagga Muni ipality, 2d. per gallon higher.

Area No. 4; Manilla (town), 4d. higher.

Area No. 5; Cobbora, Gilgandra, Talbragar and Timbrebongie Shires, Bathurst, Dubbo, Orange and Wellington Municipalities, and Gulgong (town), 2d. bigher.

† Variations: Area No. 5; Berrigan, Coreen and Gundagai Shires and Corowa Municipality, 2d. per gallon, February to July.

‡ Increased by 2d. per gallon from 1st August.

The defined areas were re-grouped on 18th November, 1947 and maximum prices were increased by 2d. per gallon for area No. 1 and by 4d. per gallon for other areas. The areas as adjusted comprised:-

New Area.		Former Area.
No. 1,		No. 1 and No. 2.
No. 2,	1	No. 3, excluding Culcairn, Kyeamba and Mitchell Shires and Wagga Wagga
		Municipality.
No. 3		No. 3 (balance), No. 4 and No. 5.
No. 4		No. 6 excluding A.C.T. and Blackheath, Katoomba and Lithgow Municipal-
		ities (then included in Milk Board's Distributing districts) and Arca No. 7.
No. 5		No. 8

The basic rate of subsidy paid in 1948 was two-thirds that paid in preceding years. Details of the prices and rates of subsidy determined for each of the re-defined areas in 1948 are shown in the following statement:-

Table 407.—Whole Milk Outside N.S.W. Milk Board's Distributing Districts: Prices and Rates of Subsidy per gallon, 1948.

	Area (as re-defined),							
Particulars,				No	. 4.			
	No. 1.	No. 2.	No. 3.	Former No. 6.	Former No. 7.	No. 5.		
Maximum Price from 18th Nov.,	d.	d.	d.	d.	d.	d.		
Producer to Depot or Factory Producer to Vehicle Vendor	16·5 18·0	18·5 20·0	20·5 22·0	22·5 24·0	22·5 24·0	26·5 28·0		
Basic Subsidy, 1948†— Months Rate		Feb July. 11	Apr Sept. 23	Apr Sept. 2§	Feb July. 2§	Feb July. 23		

Variations: Area No. 1; Grafton and South Grafton Municipalities, 2d. higher.
Area No. 2; Batlow (town), 4d. higher.
Area No. 3; Narraburra Shire, Temora Municipality and Gulgong (town), 2d. higher; Manilla (town), 4d. higher.
† Variations: Area No. 3; Culcairn, Kyeamba and Mitchell Shires and Wagga Wagga Municipality, 14d., February to July; Berrigan, Coreen and Gundagai Shires and Corowa Municipality, 2d. February to July.

## DAIRY INSTRUCTION AND RESEARCH.

Educational and experimental work relating to dairying is conducted by the Department of Agriculture at the State experiment farms, and at the Hawkesbury Agricultural College. Scientific investigation is undertaken at the Glenfield Veterinary Research Station, and the McMaster Animal Health Laboratory (at the University of Sydney) conducted by the Commonwealth Council for Scientific and Industrial Research is active in investigations associated with the welfare of the dairying industry.

The breeds of stud cattle kept at the various experiment farms comprise Australian Illawarra Shorthorn at Grafton, Guernsey at Wollongbar, Ayreshire at Bathurst, Jersey at Wagga Wagga, Glen Innes and Yanco, and Jersey and Friesian study at Hawkesbury Agricultural College.

To enable factory managers and butter-makers to improve their scientific knowledge, dairy-science schools are held for short terms at different dairying centres, and certificates are given to those who pass examinations in the grading of cream and in the testing of milk and cream. The schools were attended by 59 students in 1946, 71 in 1947, and 72 in 1948.

### HERD RECORDING.

Herd records enable farmers to ascertain the productivity of individual cows, to cull unprofitable animals, to retain the progeny of those of higher grade and to determine the merit of the sire.

A herd production improvement scheme is conducted by the State Department of Agriculture in two divisions, viz., (1) registered pure bred cows for which official production certificates are required; and (2) grade cows and registered pure bred cows for which a certificate is not sought. The aim is to ascertain the milk and butter-fat production of each cow in the herd. Records of the production of each cow during one day (24 hours) are made at intervals of approximately thirty days. The recording period is either 273 days in eight sub-periods of 30 days and one of 33 days, or 365 days in eleven sub-periods of 30 days and one of 35 days. Milk and butter-fat yields are calculated by multiplying the yield on the day of record by the number of days in each sub-period, and the sum of the results for the sub-periods represents the official record for each cow.

Details of the yields of all cows are supplied to owners and in the case of recordings under Division (1) an official production certificate is issued for each cow which attains the required standard. For 273 days record, the standard ranges from 230 lb. to 350 lb. of butter-fat. The standard for mature cows (5 years and over) is 350 lb. Cows at ages 2 to 4 years are classified as junior if the date of freshening occurs in the first six months, or as senior if in the second six months of the year of age, and the standards are as follows:—Age 2 years, junior, 280 lb.; senior, 250 lbs.; 3 years, junior, 270 lb.; senior, 290 lb.; 4 years, junior, 310 lb.; and senior, 330 lb.

The fees for recording are—for pure-bred cattle, a herd entry fee of £2, together with a fee of 10s per cow for each lactation period; for cows recorded under the second division of the scheme, a flat rate of 6d perhead for each month in which production is recorded.

From October, 1946, the scheme was extended to provide a calf marking service, a sire survey and a Register of Merit for cows recorded in either division of the recording scheme. The calf marking service fixes identity of young stock by ear tattoo, and by hallmark in the case of a calf sired by a registered bull of a dam with a certificate of production. The sire survey enables farmers to estimate a sire's worth from figures supplied of dam-daughter production.

The register of merit contains an Intermediate Register and a Lifetime Register in which is an Elite Section. Cows qualify for entry in these, in order, by producing 1,100 lb., 2,240 lb., and 3,600 lb. of butter-fat in three, not more than eight and not more than ten lactation periods of 273 days, respectively. A Merit Certificate is issued for cows in both sections of the Life-time Register.

Approximately 100,000 cows were recorded in 1929-30. The practice was greatly curtailed for some years and a tendency to increase again was reversed during the war period. Relatively few cows were recorded between 1942-43 and 1944-45, but there was a marked increase in 1945-46. The number of cows recorded in 1938-39 and the last six years was:—

Particulars.	1	Year ended 30th September.								
: Farticulars,	1939.	1943.	1944.	1945.	1946.	1947.	1948.*			
Uncertified Record	1,767 1,860 43,426	683  1,215	769  1,379	1,012  4,110	1,748 30,713	2,291 32,229	2,328 31,917			
Total Cows Recorded	47,053	1,898	2,148	5,122	32,461	34,520	34,24			

Table 408 .- Dairy Cows Recorded.

# DAIRY CATTLE.

In the dairy herds the Shorthorn preponderates. This breed was introduced into the Illawarra or South Coast districts in the early period of dairying, before the Shorthorn had been developed by English breeders into a beef-producing type. By an admixture with other strains, a useful type of dairy cattle, known as the Illawarra, has been developed. There is also a large number of Jersey cattle, and the use of the breed for the production of butter is increasing. The Ayrshire is well represented in the dairy herds. It is noted for hardiness, but is better suited for producing milk for human consumption as fresh milk than for butter-making.

<sup>\*</sup> Nine months ended 30th June.

The number of cows used for milking in the State in each year since 1932 is shown below:—

Table ·	409.—	Milking	Cows.
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		Cows	in Registered I	Dairies,		
31st March.			Hei	fers.		Cows not in Registered Dairles being
	Milked.		Springing.	Other over one Year.	Total.	Milked.
1928*	465,773	290,914	53,022	108,397	918,106	84,731
1929*	482,568	293,754	49,655	115,413	941,390	81,797
1930*	487,919	289,896	55,285	126,394	959,494	80,455
1931*	532,604	281,227	62,851	129,447	1,006,129	88,057
1932	644,217	229,623	51,959	129,930	1,055,729	95,148
1933	675,660	247,939	52,908	147,499	1,124,006	92,098
1934	705,398	239,508	55,789	155,105	1,155,800	97,147
1935	711,358	246,629	49,626	166,150	1,173,763	105,248
1936	696,502	243,731	43,720	173,631	1,157,584	107,609
1937	681,125	236,600	45,469	165,034	1,128,228	106,694
1938	660,167	245,345	44,273	145,130	1,094,915	97,547
1939	691,105	195,806	41,048	140,947	1,068,906	98,340
1940	659,404	223,638	46,721	139,236	1,068,999	97,237
1941	668,101	192,802	43,036	150,831	1,054,770	97,499
1942	651,186	199,157	46,163	158,666	1,055,172	94,569
1943	638,861	205,182	210,	468	1,054,511	82,556
1944	609,867	227,268	206,		1,043,273	123,083†
1945	626,272	196,885	212,		1,035,991	119,165†
1946	594,809	192,083	50,949	183,246	1.021.087	118,335†
1947	592,385	170,035	39,359	166,130	967,909	130,931†
1948	592,320	173,174	47,218	152,489	985,201	144,820†

<sup>\*</sup> At 30th Tune

The number of cows in registered dairies in New South Wales reached the maximum, 1,173,763 in March, 1935, then declined in the next four years to 1,068,906 and a further decrease occurred in 1940-41. The number fell by 89,310 between March, 1943, and March, 1948, when it was 208,562 or 17.8 per cent. below the peak of 1935.

More than 90 per cent. of the cows in registered dairies were in the coastal districts, principally the North Coast and Hunter-Manning divisions, less than 4 per cent. in the Tableland divisions and 5 per cent. in the Western Slopes divisions. The number in the hinterland in March, 1948, was only 95,145, of which 38,093 were in the South-Western Slopes division. The principal dairying regions of the State are indicated in the diagrammatic map at page 10 of this volume.

Particulars of the number of cows in registered dairies in the various divisions in each year since 1935 are as follow:—

Table 410.—Cows in Registered Dairies in Divisions.

				Div	ision.				
At 31st March.			Coastal.		Table-	Wastorn	Central Plains,	Total New South	
	North Coast.	Hunter- Manning.	Metro- politan.	South Coast.	Total Coastal,	lands.		Riverina and Western.	Wales.
1936 1938 1939 1940 1941 1942 1943 1944 1946	534,893 518,617 516,880 525,062 515,379 516,566 516,740 512,773 508,534 510,586	276,348 268,283 268,047 261,093 258,609 259,518 261,421 258,167 257,857 256,910	35,485 34,337 32,243 32,684 30,282 29,833 30,617 31,953 30,461 27,804	150,681 149,330 144,632 139,469 136,356 130,658 132,841 131,524 133,154 127,905	997,407 970,567 961,802 958,308 940,626 942,575 941,619 934,417 930,006 923,205	64,479 47,066 42,099 41,306 39,171 39,374 41,506 39,982 37,749 36,797	91,301 65,413 54,539 57,008 60,979 60,504 57,701 57,344 56,263 50,548	20,576 11,869 10,466 12,377 13,994 12,719 13,685 11,530 11,973 10,537	1,173,763 1,094,915 1,068,906 1,068,909 1,054,770 1,055,172 1,054,511 1,043,273 1,035,991 1,021,087
1947 1948	476,045 472,752	246,182 249,070	25,216 23,780	126,372 125,454	873,815 871,056	34,108 33,780	48,137 47,530	11,849 12,835	967,909 965,201

<sup>†</sup> All milking cows, dry and in milk, not in registered dairies.

The decline since 1935 has been general in all divisions. The decrease to 1948 was 126,351 or 12.7 per cent. in coastal areas, 30,691 or 47.6 per cent. on the tablelands, and 43,771 or 47.9 per cent. in the Western Slopes with 17,670 or 31.7 per cent. fewer in the South-Western Slopes division.

#### NUMBER AND SIZE OF REGISTERED DAIRY HERDS.

The number of registered dairy herds in size groups ranging from under 5 to 100 or more cattle and the number of dairy cattle in these herds in each of the coastal divisions and the rest of the State at 31st March, 1948 are given in the following table:—

Table 411.—Dairy Cattle Herds on Holdings of One acre or more at 31st March, 1948.

Size of Herd (Dairy Cattle		Coa	stal Divisio	ns.		T-10-3	Total
in Registered Dairies).	North Coast.	Hunter and Manning.	Metro- politan.	South Coast.	Total.	Inland Divisions,	New South Wales.
		Nu	MBER OF DA	AIRY HERDS.	* /	·	
Under 5 5-9 10-14 15-19 20-29 30-49 50-99 100 and over Total	16 34 63 85 342 1,703 4,254 1,312 7,809	11 20 74 124 430 1,288 2,060 555 4,562	3 10 10 16 57 119 98 68	9 10 32 53 150 538 914 367	39 83 179 278 979 3,648 7,326 2,302	65 179 249 250 394 616 671 215	104 262 428 528 1,373 4,264 7,997 2,517
		Nu	MBER OF DA	AIRY CATTLE.	,*		
Under 5 5-9 10-14 15-19 20-29 30-49 50-09 100 and over	40 255 742 1,436 8,678 69,330 302,297 173,192	37 151 882 2,115 10,666 51,148 141,968 82,423	6 67 118 266 1,411 4,518 6,510 13,184	24 138 406 924 3,693 21,684 64,505 59,164	107 611 2,148 4,741 24,448 146,680 515,280 327,963	185 1,272 2,927 4,241 9,565 23,736 46,796 31,116	292 1,883 5,075 8,982 34,013 170,416 562,076 359,079
Total	555,970	289,390	26,080	150,538	1,021,978	119,838	1,141,816

<sup>\* 40</sup> registered dairies with 1,308 dairy cattle on holdings of less than one acre are not included.

The 1,141,816 registered dairy cattle on holdings of 1 acre and upwards in New South Wales at 31st March, 1948 were distributed over 17,473 dairy herds. Of the cattle, 89.5 per cent, and of the herds, 85 per cent. were in the coastal belt. Most of the remainder were in the Tableland and Western Slopes divisions. The distribution in the coastal divisions was North Coast, cattle 42.7 per cent., herds 44.7 per cent.; Hunter and Manning, cattle 25.3 per cent., herds 26.1 per cent.; Metropolitan, cattle 2.3 per cent., herds 2.2 per cent.; and South Coast, cattle 13.2 per cent., herds 11.9 per cent. Herds of 50 to 99 cattle comprised nearly one-half the number in the coastal belt. They represented 54.5 per cent, of all herds in the North Coast division, 45.2 per cent. in the Hunter and Manning division, 43.9 per cent. in the South Coast division, and 25.7 per cent. in the Metropolitan division. Groups next in importance were those of 30 to 49 and of 100 or more cattle, respectively. Herds of less than 30 cattle accounted for only 10.6 per cent. of the herds in coastal districts. In inland areas also herds of 50 to 99 were the most numerous, but they represented only 25.4 per cent. of the herds; herds of less than 50 cattle together accounted for 66.5 per cent. and those with 100 or more cattle, 8.1 per cent. of all inland herds.

In coastal districts 50.4 per cent. of the cattle were in herds in the 50 to 99 group. The proportions in the various divisions were North Coast 54.4 per cent., Hunter and Manning 49.1 per cent., Metropolitan 25 per cent., and South Coast 42.8 per cent. Herds of 100 or more and of 30 to 49 contained 32.1 per cent. and 14.4 per cent., respectively, and those of less than 30 only 3.1 per cent. of the registered dairy cattle in coastal districts. In inland areas 84.8 per cent. of the cattle were in herds ranging from 30 to over 100 and 15.2 per cent. were in herds of less than 30 cattle.

## DAIRY FARMS.

Under the Dairies Supervision Act, every person who keeps cows to produce milk for sale for human consumption in any form must register his premises and conform to prescribed standards of cleanliness, etc. Some persons so registered, however, conduct operations on a very limited scale. The number of registered dairies decreased progressively from 20,123 in 1942-43, to 17,799 in 1946-47, and 17,513 in 1947-48.

The following statement of the number of holdings of one acre an upwards used for dairying operations on a commercial scale shows an increase from 18,838 in 1928-29 to 22,911 in 1933-34 and a subsequent decline to 18,104 in 1945-46; data are not available for later seasons:—

Year ended 31st March.	Holdings of one acre and upwards used principally for—									
	Dairying.	Dairying and Agriculture.	Dairying and Grazing.	Dairying, Grazing and Agriculture,	Total used for Dairying					
1929†	12,985	2,942	1,722	1,189	18,838					
1931†	14,484	3,371	1,148	1,146	20,149					
1934	15,033	4,315	1.498	2,065	22,911					
1935	14,929	4,226	1,474	1,952	22,581					
1936	14,969	4,066	1,445	1,834	22,314					
1937	14,521	4,178	1,394	1,716	21,809					
1938	14,136	4,072	1,316	1,592	21,116					
$1939^{-}$	14,129	3,660	1,331	1,489	20,609					
1940	14,210	3,752	1,309	1,433	20,704					
1941	14,098	3,675	1,252	1,461	20,486					
1945	12,473	3,821	1,639	1,239	19,172					
1946	12,157	3,578	1,341	1,028	18,104					

Table 412.--Holdings Used for Dairying.

The figures quoted above indicate the principal purposes for which the holdings were used. A large proportion of the holdings engaged in dairying operations are single purpose farms.

## DAIRY FACTORIES.

Although there is some seasonal variation, approximately 75 per cent. of the milk production of the State is treated in factories either as cream or whole milk for the manufacture of butter, cream, cheese or preserved milk, the balance being sold for consumption as fresh milk or used on the farms. Most of the factories are situated in the country districts at convenient centres, and many are conducted on co-operative principles, with the dairy farmers as shareholders. Particulars of the operations of the dairy factories are shown in the chapter "Factories" of this Year Book.

<sup>†</sup> Year ended 30th June?

### RAINFALL INDEX—DAIRYING DISTRICTS.

The following table provides a monthly index of rainfall in the coastal dairying districts of New South Wales. The index represents the ratio of actual to normal rainfall in each month, normal being the average over a long period of years and represented by 100 in all cases. The annual index is the mean of the monthly averages.

Table 413.—Index of Rainfall in Coastal Dairying Districts.

Month.	Average Production of Butter in Factories.*	1935–36.	1936–37.	1937–38.	1938-39.	1939-40.	1940-41.	1941–42.	1942-43.	1943–44.	1944-45.	1945-46.	1946-47.	1947-48.
հ <b>յ</b> սկу	mill, lb,	00	40	87		10	18	40		6	148	100	2	11
Ammet	5.3	93	43		98	46	90	38	86 31	156	234	139 47	16	65
September	7.0	100	42	130 21	147 53	102	50	30		,	65	50	88	67
0-4-1	1 1	196	77			77			23	128				
October	10.1	102	55	173	102	203	85	53	332	147	34	89	85	74
November	12.1	45	23	275	78	87	82	88	153	209	56	115	73	146
December	12.3	93	179	110	18	49	167	30	140	176	50	82	72	208
January	12.9	88	99	172	91	58	144	26	75	178	70	77	140	121
February	12.1	79	139	133	13	47	102	180	60	37	99	140	204	56
March	12.2	128	199	84	248	104	87	108	44	50	41	160	101	130
April	10.3	58	63	105	107	88	88	45	48	28	142	152	131	76
May	7.9	94	11	205	53	39	63	32	216	59	90	18	79	129
June	5.8	48	187	50	32	58	68	73	25	57	373	44	29	293
Year	113.0	89	93	129	87	80	87	62	103	103	117	93	85	115

Average Production of Commercial Butter per Cow-lb.†

Estimate for Season	156.7	147.8 1	153.8	174.0	162.2 144.8	167-2	156.8	132.9	148.6	139.9	167.6
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<sup>\*</sup> Five years ended 1940.

The seasonal distribution of rainfall is an important factor in dairy production; protracted dry periods at any season have serious effects and good pasturage is particularly important in the spring and summer when production normally moves from low winter levels to a seasonal peak. Rainfall was much below normal in the spring and summer of each 1944-45 and 1945-46, and May to December, 1946, was one of the driest periods on record; hence the relatively low yields per cow in these seasons, and the further decline in production in 1946-47. The drought was broken early in 1947 and conditions were then relatively favourable in all districts until the end of the autumn of 1946-47. The winter and early spring months of the next season were dry but, except in February and April, rainfall was above normal from November to June, and the estimated average yield per cow was the best in this decade and 26.1 per cent. above the poorest, in 1944-45.

The index of rainfall (normal rainfall each month 100) in dairying districts is compiled for three sections of the coastal division; particulars for each month from July, 1945, are as follows.

<sup>†</sup> See Table 416.

Table 414.—Index of Rainfall: Sections of Coastal Dairying Districts.

Month.	Northern.	Central.	Southern.	Northern.	Central.	Southern	Northern.	Central.	Southern,
July August Sentember October November December	164 44	1945.   126   61   18   80   129   69	40. 34 21 77 82 67	1 20 101 103 45	1946. 2 3 76 51 66	7 19 52 66 225	8 61 82 78 143	1947. 17 35 48 70 150	17 146 34 65 170
January February March April May	-	1946. 44 77 197 291 22	67 100 63 136 30	79 190 198 126 127 78	77   77   1947.   75   242   70   113   101	34 31 160 39 186 32	88 42 141 92 123	1948. 150 66 151 40 117	256 220 99 36 71 186
June Year	94	99	74	90	78	76	363	108	156

# DAIRY PRODUCTION.

The following statement shows the production of butter, cheese and bacon in each division of the State in the years 1938-39, 1946-47, and 1947-48, the annual figures for these three items being factory production during the year ended 30th June, plus farm production during the year ended three months earlier.

Table 415.—Butter, Cheese and Bacon Production.

Thousand lb.

				. HO (Build:	· D.•				
Division.	Bı	ıtter Made	·.	Cl	heese Mad	le.	Bac	con and H Made.	lam,
·	1938–39,	1946–47.	1947–48.	1938–39.	1946-47.	1947-48.	1938–39.	1946–47.	1947–48
Coastal-	1								
North Coast Hunter and	65,259	39,641	51,761	1,170	2,006	2,802	7,122	4,031	3,121
Manning Metropolitan	29,683 579	8,507 263	10,945 293	784 34	165 49	316 25	1,780 15,559	3,877 24,272	3,585 21,632
South Coast	11,056	6,314	6,548	5,497	2,329	2,713	440	67	61
Total	106,577	54,725	69;547	7,485	4,549	5,856	24,901	32,247	28,399
Tableland-									
Northern	1,661	1,125 841	1,310 914	•••	•••	•••	323 76	1,732 39	1,831
Central Southern	1,369 455	302	308	•••			17	7	65 6
Total	3,485	2,268	2,532				416	1,778	1,902
Western Slopes-			004						
North Central	1,687 712	582 378	807 445	•••	•••	•••	29 37	8 · 89	80 80
South	5,326	5,183	5,282			63	954	1,297	1,330
Tdtal	7,725	6,143	6,584		•••	63	1,020	1,894	1,416
Plains—									
North Central	134		104 142				5 9	3 3	2 6
Central Riverina	128 737	114 1,015	1,167	1	•••	:::	66	84	26
Total	999	1,219	1,413	1.			80	.40 (	34
Western Division	35	30	40				2		
Total	*118,821	*64,385	*80,066	7,486	4,549	5,919	†26,419	†35,459	†31,751

<sup>\*</sup>Tricindes 749;139 lb; in:1938-39, 531,868 b. in:1946-47, and 706,454 lb. in 1947-48, made from Queensland or Victorian cream.

<sup>†</sup> Includes 4,265,331 lb. in 1938-89,/2,191,2351 b. int 946-47, and 1,946,700 lb. in 1947-48, made om green bacon imported interstate.

This statement shows that dairying activities are conducted mainly in the coastal division and are relatively inextensive in the remainder of the State (see pages 458 and 459). In this area about 90 per cent. of the cows in registered dairies are depastured and 88 per cent. of the butter and practically the whole of the cheese are produced. About 60 per cent. of the butter of the State is made in the North Coast division. The Hunter and Manning division is next in importance, then the South Coast, and the South-Western Slopes. The manufacture of cheese is of relatively small extent and approximately one half of the total output is made in the South Coast division. The bacon factories are situated for the most part in the Coastal division.

A graph on page 467 illustrates the production of butter, cheese and bacon in each season since 1910.

### MILK.

Particulars of the consumption and supply of milk and milk products are published in the chapter "Food and Prices" of this Year Book.

Cows used for producing milk for sale are inspected by Government officers, who have power to condemn and prevent the use of diseased animals. The standard of milk sold for human consumption is prescribed, the quality of the milk sold is tested frequently, and prosecutions are instituted where deficiencies are found. By these means the purity and wholesomeness of dairy products are protected.

Under the Milk Act, 1931-1942, a Board regulates and controls the supply of milk and cream within the Sydney metropolitan, Newcastle, Erina and Wollongong milk distributing districts. Its functions include the improvement of methods of collecting and distributing milk and the fixation of prices.

The total yield of milk is not accurately recorded, but is estimated approximately. Few dairy farmers actually measure the quantity of milk obtained from their cows throughout the year. The majority are concerned principally in producing cream for manufacture into butter. In recent years, however, it has been found possible to make checks against supplies to factories, and results show that the farmers' estimates are approximately correct. Moreover, herd recording has given a fair indication of the butter-fat content of the milk.

# AVERAGE YIELD PER COW.

An approximate estimate of the productivity per cow in registered dairies in New South Wales in terms of commercial butter is published in the next table. For the purposes of this estimate it is assumed that the mean of the number of cows in milk and dry at the beginning and end of any given year represents the average number kept for milking in registered dairies during that year, and an estimate is made (on the basis of butter fat content) of the quantity of commercial butter which may be produced from milk used for purposes other than butter-making.

The following table relates to all cows in registered dairies in New South Wales, and covers a period of years since 1927-28:—

Table 416.—Cows in Registered Dairies: Average Yield.

Thousand lb.

		ļ.	Butter I	Produced.			
Year,	Cows Dry and in Milk in Registered Dairies at end of Year.	Estimated Number of Cows Dry and in Milk in Registered Dairies during Year.	In Factories from Milk produced in New South Wales	On Registered Dairy Farms.	Dairies used for other Purposes.	Total Commercial Butter Broducedor Producible from Milk of Cows.iu Registered Dairies,	Estimated: Production: of Commercial: Butter per Cow.
	(A)	(B)	(C)	(D)	(E)	(F)	(G).
	· 			·	<u> </u>		lb.
1927 – 28	756,687	753,322	96,246	1,276	24,945	122,467	$162 \cdot 6$
1928 – 29	776,322	766,504	$91,\!424$	1,091	24,328	116,843	$152{\cdot}4$
1929 - 30	777,815	777,069	100,603	1,025	23,783	125,411	$161 \cdot 4$
1930-31	813,831	795,823	109,133	1,113	23,777	134,023	168.4
1931 - 32	873,840	843,836	119,372	1,437	22,930	143,739	170.3
1932 - 33	923,599	898,720	126,266	1,624	24,240	152,130	169.3
1933 - 34	944,906	934,252	141,762	1,606	26,329	169,697	181.6
1934-35	957,987	951,446	145,843	1,635	26,740	174,218	183-1
1935 - 36	940,233	949,110	119,195	1,683	27,878	148,756	156.7
1936 – 37	917,725	928,979	107,142	1,433	28,733	137,308	147.8
1937 - 38	905,512	911,618	118,111	1,171	30,236	149,518	164.0
1938 – 39	886,911	896,212	105,537	1,054	31,251	137,842	153.8
1939-40	883,042	884,977	121,658	935	31,446	154,039	174 0
1940-41	860,903	871,973	106,065	881	34,530	141,476	$162 \cdot 2$
1941-42	850,343	855,623	86,170	757	36,935	123,862	144.8
1942-43	844,043	847,193	101,438	830	39,374	141,642	167.2
1943-44	837,135	840,589	91,665	795	39,371	131,831	156-8
1944 - 45	823,157	830,146	70,670	959	38,723	110,352	132.9
1945-46	786,892	805,024	75,459	863	43,304	119,626	148:6
1946-47	762,420	774,656	61,230	944.	46,174	108,348	139.9
1947-48	765,494	763,957	77,480	870	49,719	128,069	167.6

The estimated number of cows dry and in milk in registered dairies during the year shown in the column B above represents the mean of the numbers at the beginning and end of the year concerned as shown in column A. The estimated production per cow shown in column G is obtained by dividing the average number of cows (column B) into the commercial butter in respective years shown in column F. It represents, therefore, an average of all milking cows in registered dairies irrespective of periods of lactation, and includes heifers with first calf, aged cows, and cows disabled from any cause.

The averages shown in the table should be considered in conjunction with the index of rainfall in dairying districts published in Tables 413 and 414. The sharp decline in productivity per cow in 1935-36 and 1936-37 was occasioned by the very dry conditions in the former and an epidemic of ephemeral fever which occurred in the summer of the latter year. Conditions of drought prevailed in the dairying districts in 1941-42 and the average yields was far below normal. There was improvement in 1942-43, but in the

following seasons there were periods of exceptionally low rainfall in dairying edistricts; the average in 1944-45 was the lowest recorded since 1923-24 and below normal in 1945-46 and 1946-47. Following good seasonal conditions in the late summer and the autumn of 1946-47 and from November to June, 1947-48, productivity per cow increased again in the latter season to its highest since 1939-1940.

### USES OF MILK.

The following statement shows the estimated amount of milk produced in New South Wales and used for various purposes in 1927-28, 1938-39, and certain recent years:—

Table 417.—Uses of Milk.
Thousand gallons.

	ountilla Barr	OIID.			
		Year e	nded 31st 1	Iarch.	
Purpose for which Milk was used.	1928.	1939.	1945.	1947.	1948.
Butter making—					
On farms	14,553	14,315	12,915	11,791	11,712
In N.S.W. factories	200,194	211,250	147,625	124,195	156,372
In other States	710	3,125	3,055	4,098	4,313
Total used for butter	215,457	228,690	163,595	140,084	172,397
Cheese making—					
On farms	224	302	94	4	11
In factories	7,494	7,413	4,467	4,797	5,962
Total used for Cheese	7,718	7,715	4,561	4,801	5,973
Sweet cream, ice cream, condensing, etc Pasteurised for Milk Board Distributing	6,633	9,645	18,340	21,159	25,182
Districts	19,922	26,457	37,281	51,998	55,687
Balance sold as raw milk and used otherwise‡	33,316	38,877	39,162	36,052	36,132
Total milk (produced in N.S.W.)	283,046	311,384	262,939	254;094	295,371

<sup>\*</sup> Sydney and Newcastle in 1928, 1989 and 1945. Wollongong and Erina added January, 1946, and Blue Mountains-Lithgow added December, 1947. † Excludes and ‡ includes approximately 11 million gallons of raw milk produced and sold for local consumption in the metropolis and Newcastle.

The proportions of the estimated total production of milk used for various purposes in the years covered by Table 417 were:—

Table 418.—Milk: Proportion per cent. Used for Various Purposes.

Purpose for w	hich M	ilk w	as Use	d.	1927–28.	1938–39.	1944 45.	1946–47.	1947-48.
Butter making Cheese making Sweet cream, ice Consumed as fres						73.4 $2.5$ $3.1$ $21.0$	$\begin{array}{c} 62.2 \\ 1.7 \\ 7.0 \\ 29.1 \end{array}$	55·1 1·9 8·3 34·7	58·4 2·0 8·5 31·1
Total		•••			100.0	100.0	100.0	100.0	100:0

In recent years the consumption of fresh milk and manufacture of processed milk products have increased while the proportion of total milk production used for butter and cheese making has declined. The quantity of milk pasteurised for the Milk Board distributing districts was 32.8 per cent. greater in 1938-39 than in 1927-28 and 41 per cent., 97 per cent. and 110 per cent. greater in 1944-45, 1946-47 and 1947-48, respectively, than in 1938-39.

Further particulars regarding the consumption of fresh milk are shown in the chapter relating to "Food and Prices" of this Year Book.

#### BUTTER.

The production and consumption of butter in New South Wales and the net export of butter from New South Wales in the six years ended 1939-40 were as follow; later details of the consumption and net export of butter are not available.

Table 419.—N.S.W. Butter Production, Consumption and Export.

Million lb.

Year ended 0th June.	Butter Produced.	Butter Consumed.	Net Export of Butter,	Year ended 30th June.	Butter Produced,	Butter Consumed.	Net Export of Butter.
1935	146·1	88·3	59·0	1938	120·9	93·7	25·6
1936	125·2	91·8	30·5	1939	118·8	93·0	20·6
1937	109·8	92·0	16·8	1940	116·8	95·0	*

<sup>\*</sup> Not available.

The following statement shows the annual production of butter in New South Wales since 1895. The figures include the butter made in factories from cream produced in other States; the quantity was 577,281 lb. in 1944-45, 528,201 lb. in 1945-46, 531,368 in 1946-47 and 706,454 in 1947-48.

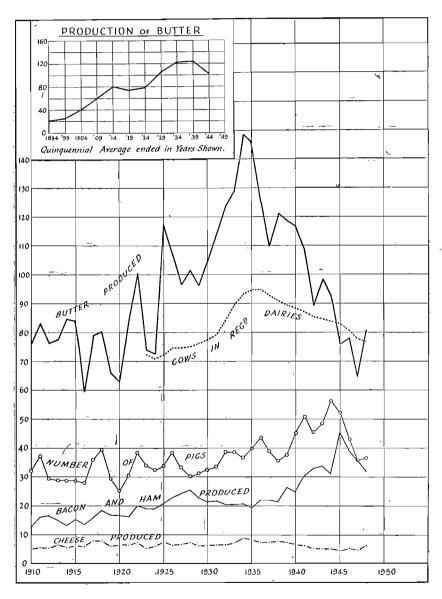
Table 420.—Butter Production.

			1	ı	1
	1		I	I	
		1934	143,208	5,660	148,868
		1938	115,930	4,952	120,882
2,930 5,	689 28,619	1939	113,841	4,980	118,821
6,313 4,	248 40,561	1940	112,020	4,794	116,814
4,752 4,	$502 \mid 59,254$	1941	103,782	4,781	108,563
5,239 4,			85,116	4,107	89,223
	131 69,722	1943	93,775	4,500	98,275
5,073 4,	639 89,712	1944	87,857	4,500	92,357
6,536 4,	740   101,27 $\epsilon$	1945	71,722	4,500	76,222
6,946 5,	445 132,391	1946	74,280	4,000	78,280
2,978   5,	$325 \mid 118,303$	1947	60,385	4,000	64,385
8,450 4,	478 92,928	1948	76,066	4,000	80,066
֡	6,313 4, 4,752 4, 5,239 4, 5,591 4, 5,073 4, 6,536 4, 6,946 5, 2,978 5,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

<sup>\*</sup> Calendar years until 1914-15. † Twelve months ended 31st March, from 1932.

The highest level of production was reached in the bountiful seasons 1933-34 and 1934-35. This was due in part to a temporary expansion of dairying in the hinterland and to farmers' efforts to offset low prices by increasing production. Production in the last ten years has been affected by periods of scanty rainfall (see Table 413), shortages of farm labour and materials (still not wholly relieved), and, recently, by the large and increasing proportions of the milk produced used for processed milk products or for sale as fresh milk (see Table 418). The output in 1946-47 was the smallest since 1919-20 and 56.8 per cent. below that of 1933-34. Seasonal conditions were good in the late summer and the autumn of 1946-47 and from November to June in 1947-48, and production in the latter season was the highest since 1943-44.

# DAIRY PRODUCTION IN NEW SOUTH WALES.



The numbers at side of graph and inset represent 1,000,000 lb. of butter, cheese and bacon and ham, 10,000 cows (in milk and dry—estimated mean number over season) and 10,000 pigs at end of season.

# Monthly Production of Butter.

The following table shows the quantity of butter produced in factories in New South Wales in each month of 1928-29, 1933-34 (the season of greatest production), 1938-39, and since July, 1943.

Table	421.—Butter	Production	in	Months.
	mi			

Month.	1928–29.	1933–34.	1938–39.	1943-44.	1944–45.	1945-46.	1946-47.	1947–48.
July August September October November December January February March April May June	4,136 4,631 6,086 8,250 7,808 7,336 8,483 9,785 12,090 10,273 7,781 5,087	5,929 6,306 8,102 13,046 15,607 17,606 18,293 14,950 15,480 12,064 9,135 6,690	4,437 4,887 6,915 10,842 12,589 11,423 9,707 10,826 12,137 11,880 10,456 7,742	3,313 3,279 4,933 8,626 11,553 13,079 12,821 10,184 8,440 5,165 3,870 2,594	2,462 3,065 5,397 8,488 8,169 7,532 8,004 6,769 8,261 5,811 4,477 3,287	3,286 4,008 5,007 7,557 7,387 8,820 8,146 8,146 8,498 6,185 4,468 2,772	2,641 2,758 3,254 4,446 5,070 6,372 6,386 7,384 8,051 5,741 4,458 3,824	3,004 2,833 4,025 6,464 6,858 10,628 11,369 8,689 8,214 6,146 4,753 3,083
Total	91,746	143,208	113,841	87,857	71,722	74,280	60,385	76,066

<sup>\*</sup> Compiled from monthly returns of the Division of Dairying, Department of Agriculture.

These monthly records show the seasonal nature of the production. It increases in a marked degree during the summer months, usually attaining a maximum between December and March and decreases during the winter, reaching a minimum usually in June or July. The figures for 1946-47 show the disastrous effects of extreme dryness in spring and summer months, whilst the seasonal pattern in 1947-48 was very similar to that of 1933-34.

### EXTERNAL TRADE AND LOCAL CONSUMPTION OF BUTTER.

Particulars of the external trade in butter to and from New South Wales in the years 1934-35 to 1938-39 were published in the Year Book for 1939-40, at page 841. Later information regarding oversea exports is shown in Table 435, but details of interstate trade in butter are not available.

It is estimated that the average annual consumption per head of population in the five years ended June, 1940, was 34.4 lb. Particulars are shown in chapter "Food and Prices". Butter for civilians was rationed from 7th June, 1943 at 8 oz., and since 5th June, 1944 has continued at 6 oz. per person per week, equivalent to 19½ lb. per annum.

## PRICES OF BUTTER.

Since May, 1934, the wholesale price of butter for local consumption has been fixed under the "equalisation" agreement referred to on page 450 of this volume. The price so fixed was 140s. per cwt. in May, 1934, increased to 149s. 4d. on 29th June, 1937, and was 158s. 9d. on 8th June, 1938. The maximum wholesale price, Sydney, which was fixed by the Commonwealth Prices Commissioner at 166s. 10d. on 6th March, 1942, was increased to 192s. 6d. on 1st December, 1947, and to 215s. 10d. from 1st July, 1948. In addition a box charge of 2s. 6d. per cwt. is customary. Since 20th September, 1948, the New South Wales Prices Commissioner has exercised control over prices of butter in the State.

The prices of butter sold to the United Kingdom Government since 1939-40 were fixed under contracts described on page 449; those for choicest, first and second grade butter were as follows:—

Table 422.—Prices of Butter, United Kingdom Contract.

Per ewt. f.o.b. Australian port.

The start	Cho	icest.	First	Grade.	Second Grade:		
Period.	Sterling.	Aust. Currency.	Sterling.	Aust. Currency.	Sterling.	Aust. Currency	
1939-40 to 1941-42 1942-43 and 1943-44 1944-45 and 1945-46 1946-47 1947-48 1948-49	s. d. 109 9 114 3 147 9 173 6 203 6 233 6	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8. d. 108 6 113 0 146 6 172 3 202 3 232 3	$\begin{array}{c} \text{s. d.} \\ 135 & 7 \\ 141 & 3 \\ 183 & 1 \\ 215 & 4 \\ 252 & 9\frac{3}{4} \\ 290 & 3\frac{3}{4} \end{array}$	8. d. 104 11 109 5 142 11 168 6 198 6 228 6	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	

Prices Received by Dairy Farmers.

Dairy farmers who supply cream to butter factories are paid according to its butter-fat content, and the return they receive—calculated as per lb. of butter—depends on the relative proportions of the factory output consumed in Australia and exported oversea, as well as the prices realised in home and oversea markets.

The average prices paid to dairy farmers for cream supplied to butter factories in New South Wales in recent years are shown below. The averages are stated as per pound of commercial butter, and those for the years 1942-43 to 1947-48 include Government subsidy as shown on page 453.

Table 423.—Cream for Butter: Average Prices Paid to Dairy Farmers.

		Редсе ре	rlb.		
Year ended 30th June,	Average Price to Suppliers.	Year ended 30th Jame.	Average Price to Suppliers.	Year ended 30th June;	Average Price to Suppliers.
$\begin{array}{c} 1924-25 \\ 1925-26 \\ 1926-27 \\ 1927-28 \\ 1928-29 \\ 1929-30 \\ 1930-31 \\ 1931-32 \end{array}$	13·0 15·8 16·2 16·0 17·1 15·8 12·6 11·2	1932-33 1933-34. 1934-35 1935-36 1936-37 1937-38 1938-39 1939-40	9·4 8·4 9·4 11·4 12·2 13·0 13·6	1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	13·6 13·6 16·0* 18·6* 19·3* 20·3* 20·3* 23:9*

\* Including Government subsidy.

The foregoing averages relate to all butter made from milk produced in New South Wales by factories in New South Wales, Victoria and Queensland. Price to suppliers moved up steadily after 1933-34, but it was ten years before the pre-depression level was regained. The upward trend continued and in 1947-48 farmers received 46 per cent. and 85 per cent. more per lb. than twenty and ten years earlier, respectively.

Each month the dairy farmer is paid for his cream at a price estimated to be slightly less than the probable proceeds from sales of butter, and at the end of each half-year he receives such further sums in the form of "deferred pay" as accrue made when the actual proceeds of sales are known. The half-yearly adjustments on this account by the principal North Coast factories have varied from \$\frac{1}{6}\$d, to 1.7/16d, per pound in the last ten years.

A comparison of monthly prices paid to suppliers of cream to the principal North Coast factories is shown below; deferred pay and subsidy are included:—

Table 424.—Cream for Butter: Monthly Prices Paid to Dairy Farmers. (North Coast Factories, N.S.W.).

_	Pence per	lb. of Comi	nercial But	ter (includi	ng deferred	pay and su	ibsidy).	
Month.	1938–39.	1941–42.	1942–43.	1943-44.	1944–45.	1945-46.	1946-47.	1947-48.
July August	14·31 14·31	13·75 13·5	15·54 15·54	18·55 18·55	19·88 19·88	22·38 22·38	19.60 19.60	23·67 23·67
September	13.06	13.38	15.54	18.55	19.88	21.50	19.60	23.67
October November	$\begin{array}{c c} 12.31 \\ 11.81 \end{array}$	$13.12 \\ 13.12$	15.54 15.54	18.05 18.05	$19.25 \\ 17.38$	19.25 $18.75$	19.60 19.60	23.67 23.50
$\mathbf{December}$	11.56	13 13·25	15.54 15.27	18.05 18.49	17·38 18·25	18·75 18·69	19·60 19·75	23.50
January February	13·31 13·56	13.25	15.27	18.49	18.25	18.69	19.75	23·75 23·75
March April	13.56 13.31	13.5 13.5	15.27 $18.71$	18·49 20·53	20·00 20·62	20·94 20·16	$19.75 \\ 23.92$	23·75 23·75
May	13.06	14	18.71	20.69	22.62	20.16	23.92	23.75
June	13.56	14.5	18.68	20.69	22.62	20.16	23.92	23.75
State Av. for Year		13.57	15.99	18.59	19.34	20.27	20.32	23.94

Before the war, sharp movements in oversea prices and changes in the proportions marketed locally and oversea caused rather wide month to month variations. Latterly, the monthly rate paid has varied mainly upon infrequent changes in local and oversea prices and in the rate of subsidy.

#### CHEESE.

Although favourable conditions exist in New South Wales for the production of cheese the industry has shown no significant expansion in the past thirty years. Adverse seasons affected production in recent seasons until 1947-48, but although in that season more cheese was made than in any other since 1940-41, the quantity was about 20 per cent. below the prewar average. This is said to be due to the fact that production of cheese is not as profitable as other dairying pursuits. The annual production is not sufficient for local requirements and appreciable quantities are imported from other States. Approximately one-half to three-fifths of the cheese made in New South Wales is produced in the South Coast division. The graph on page 467 illustrates trend of cheese production since 1910. The following table shows the production of cheese in factories and on farms in New South Wales since 1910:—

Table 425,—Cheese: Production in New South Wales.
Thousand Ib.

Year ended 30th June.	Made in Factories.	Made on Farms.†	Total,	Year ended 30th June.	Made in Factories.	Made on Farms.†	Total.
Average 5 years ended. 1910–15* 1916–20 1921–25 1926–30 1931–35 1936–40 1941–45	4,625 6,154 6,285 6,480 7,408 7,147 5,312	1,192 717 235 154 156 267 91	5,817 6,871 6,520 6,634 7,414 5,403	1934 1939 1942 1943 1944 1945 1946 1947 1948	8,864 7,193 5,225 5,146 5,374 4,400 4,858 4,545 5,909	208 293 37 119 151 92 110 4	9,072 7,486 5,262 5,265 5,525 4,492 4,968 4,549 5,919

<sup>\*</sup> Calendar years. † Years ended 31st March, 1932, and later years.

The average annual consumption of cheese in New South Wales prior to the war was approximately 11,000,000 lb., or 4 lb. per head of population, and currently it is upwards of 50 per cent. greater.

The equalisation scheme and Commonwealth subsidies for dairy products described in this chapter apply to cheese produced in factories in New South Wales.

Particulars regarding contracts for the purchase of Australian cheese by the United Kingdom Government are shown on page 449. The contract prices for choicest and first grade cheese per cwt. were as follow:—

Currency.	l to	l to	l to	to	l to	July, 1947, to June, 1948.	to
Sterling Australian	s. d. 61 3 76 7	s. d. 67 0 83 9	s. d. 70 0 87 6	s, d. 86 0 107 6	s. d. 101 0 126 3	s. d. 116 6 145 7½	s. d. 131 6 164 4½

### CONDENSED AND POWDERED MILK.

In 1947-48 there were 9 factories for the manufacture of condensed, concentrated and powdered milk in New South Wales. The quantities made in 1938-39 and in each of the past five years were as follows:—

Product.	1938–39,	1943-44.	1944-45.	1945-46,	1946-47.	1947-48.
Concentrated milk Condensed milk Powdered milk	0 551 710	1b. 19,597,801 7,547,365 9,186,227	lb. 18,448,198 6,514,023 5,697,349	lb. 19,510,583 5,055,968* 10,078,530	1b. 20,435,991 1,081,942 8,713,519	lb. 20,633,405 4,851,342 10,470,513

Table 426.—Preserved Milk: Production (N.S.W.).

In making these and other milk products such as sterilised cream and malted milk, 17,129,555 gallons of milk were used in 1945-46, 14,635,483 gallons in 1946-47, and 20,200,602 gallons in 1947-48.

## PIGS.

Pig breeding in New South Wales is carried on usually in association with dairy farming, but during the war it expanded considerably as a mixed farming activity and steps were taken to encourage increased production from the industry. Pig meats were included in war-time contracts with the United Kingdom Ministry of Food, and further particulars are given in the chapter "Pastoral Industry".

Pigs in the State at 31st March reached the record number of 561,294 in 1944, having increased by 183,950 compared with 1939, but the number declined in later years and in 1948 it was 196,123 less than in 1944 and 12,173 less than in 1939.

The extent of pig-raising is illustrated by particulars of slaughtering in conjunction with the number at the end of each season. The number of pigs slaughtered in 1948 was 336,610 below the record number of 737,882 slaughtered in 1941-42, and was 27.9 per cent. below the annual average (560,889) in the five seasons ended March, 1939. Shortages of feeding grain and concentrates and adverse dairying seasons were factors in the decrease in more recent years.

<sup>\*</sup> Amended since previous issue.

A comparative statement of pigs at end of season and annual slaughterings is shown below:—

Table 427 .- Pigs in New South Wales.

Five Years ended—	Pigs at end of Period.	Pigs Slaugh- tered per annum. (average.)	Year ended 31st March.	Pigs at end of Year.	Pigs Slaugh- tered during Year.	Year ended 31st March.	Pigs at end of Year.	Pigs Slaugh- tered during Year.
1905 (Dec.) 1910 (Dee.) 1916 (June) 1921 (June) 1926 (June) 1931 (June) 1936 (Mar.) 1941 (Mar.)	310,702 321,632 281,158 306,253 382,674 334,331 436,944 507,738 432,612	231,374 244,618 286,338 296,279 348,461 420,747 488,016 568,596 *591,965	1929 1930 1931 1932 1933 1934 1935 1936 1937	†311,605 †323,499 †334,331 385,846 388,273 367,116 397,535 436,944 390,780 356,765	\$406,187 \$405,639 \$417,502 \$425,385 \$452,807 \$461,205 \$505,059 \$595,624 \$613,957 \$536,868	1939 1940 1941 1942 1943 1944 1945 1946 1947	37 44 451,064 507,738 454,102 486,960 561,294 523,917 432,612 358,417 365,171	552,939 542,359 596,851 *737,882 *668,930 *503,039 *554,679 *495,297 *468,336 *404,272

<sup>\*</sup> Year ended three months earlier.

† At 30th June.

1 Year ended 30th June.

Trends in the industry are revealed also by changes in the number of breeding stock from year to year. Particulars to show these have been collected in each year since 1942-43, and are as follows:—

Table 428 .- Pigs: Breeding Stock and Other.

At 31st March.	Boars.	Breed- ing Sows.	Other Pigs.	Total Pigs,	At 31st March.	Boars.	Breed- ing Sows.	Other Pigs.	Total Pigs.
1943 1944 1945	14,719 14,382 12,073	69,793 69,331 60,616	402,448 477,581 451,228	486,960 561,294 523,917	1946 1947 1948	10,663 9,672 10,017	51,902 45,005 50,472	370,047 303,740 304,682	432,612 358,417 365,171

The following statement shows the number of pigs in divisions of the State in various years since 1921:—

Table 429.—Pigs in Divisions.

Division,	1921 (June).	1931 (June).	1939 (March),	1945 (March).	1947 (March).	1948 (March).
North Coast Hunter and	117,220	152,243	176,394	198,793	150,066	157,087
Manning Metropolitan South Coast	49,424 20,863 21,396	64,287 16,924 26,958	$81,860 \\ 18,627 \\ 31,279$	57,840 30,013 26,262	31,575 26,980 22,565	31,914 $27,217$ $24,264$
Total, Coastal	208,903	260,412	308,160	312,908	231,186	240,482
Tablelands Western Slopes Other	29,700 39,599 28,051	20,553 35,503 17,863	$21,842 \\ 31,218 \\ 16,124$	36,844 117,678 56,487	27,067 64,021 36,143	27,059 64,442 33,188
Total, New South Wales	306,253	334,331	377,344	523,917	358,417	365,171

At 31st March, 1948, the pigs in the North Coast division represented 43 per cent. and in other coastal divisions 22.8 per cent. of the total, and 17.6 per cent. were in the Western Slopes divisions, where numbers had decreased after marked expansion between 1939 and 1944.

## SIZE AND DISTRIBUTION OF PIG HERDS.

The number of pig herds, classified according to size of herds, on holdings of one acre or more, and the number of pigs in these herds, in each coastal division and inland districts of the State at 31st March, 1948, are shown in the following table:—

Table 430,-Pigs: Number and Size of Herds, 31st March, 1948.

				Siz	ze of He	rds.			
Division.	1-4	5-9	10-14	15–19	20-29	30-49	50-99	and over.	Total
		N	IMBER O	F HERDS	s. <b>*</b>				
Coastal— North Coast Hunter and Manning Metropolitan South Coast	553 704 80 191	849 409 28 134	954 293 18 101	819 186 16 90	1,466 229 23 140	1,326 138 28 128	498 73 52 62	45 24 77 29	6,510 2,056 322 875
Total	1,528	1,420	1,366	1,111	1,858	1,620	685	175	9,763
Tableland Western Slopes Central Plains and	641 916	195 353	109 271	65 211	84 267	96 298	63 240	58 109	1,311 2,665
Riverina Western Division	515 31	196 7	117 5	83 1	142 4	129	118 8	48 3	1,348 61
New South Wales, No Per cent.	$\substack{3,631\\24\cdot0}$	$2,171 \\ 14.3$	1,868 12·3	1,471 9·7	2,355 15·5	$2,145 \\ 14 \cdot 2$	1,114 7·4	393 2·6	15,148 100·0
	N	UMBER C	F Pigs	IN ABOV	E HERDS	.*			
Coastal— North Coast Hunter and Manning Metropolitan South Coast	1,509 1,502 166 430	6,175 2,964 186 889	11,326 3,445 212 1,204	13,865 3,148 275 1,506	35,232 5,436 545 3,341	49,695 5,107 1,079 4,786	31,001 4,744 3,780 4,116	7,237 4,349 19,702 7,798	156,040 30,695 25,945 24,070
Total	3,607	10,214	16,187	18,794	44,554	60,667	43,641	39,086	236,750
Tableland Western Slopes Central Plains and	1,331 2,021	1,300 2,415	1,284 3,195	1,098 3,541	1,980 6,365	3,727 11,327	4,360 16,004	9,627 19,204	24,707 64,072
Riverina Western Division	$^{1,091}_{64}$	1,349 47	1,400 57	1,420 18	3,501 88	4,875 73	8,068 529	$7,770 \\ 1,254$	29,474 2,130
New South Wales, No Per cent.	8,114 2·3	15,325 4·3	22,123 6·2	24,871 7·0	56,488 15·8	80,669 22·6	72,602 20-3	76,941 21·5	357,133 100·0

<sup>\*</sup> Excludes 8,038 pigs on holdings of less than one acre.

Nearly two-thirds of the herds and the pigs were in the coastal divisions, within which 67 per cent. of the herds and 66 per cent. of the pigs were in the North Coast division, and 21 per cent. of the herds and 13 per cent. of the pigs were in the Hunter and Manning division. Herds of 20 to 29 and 30 to 49 pigs were the more numerous, accounting for 19 per cent. and 16.6 per cent. of the coastal total, respectively, while the four size groups with less than 20 pigs together represented 55.6 per cent. of all coastal herds. Herds of 30 to 49, 20 to 29, 50 to 99, and of 100 or more pigs contained 25.7 per cent., 18.8 per cent., 18.5 per cent., and 16.5 per cent., respectively, of the pigs in the coastal divisions and those with less than 20 pigs together contained 20.5 per cent. of this total.

In inland districts 49.5 per cent. of the herds and 53.2 per cent. of the pigs were in the Western Slopes divisions, 25 per cent. and 24.5 per cent., respectively, were in the Central Plains and Riverina divisions, and 24.4 per cent. and 20.5 per cent., respectively, were in the Tableland divisions. Small herds predomiated in the hinterland; those with less than 5 pigs were 39 per cent. of all inland herds and those with 5 to 9 and 10 to 14 pigs accounted for 14 per cent. and 9.3 per cent. of this total, respectively. Herds of 100 or more and 50 to 99 pigs contained 31.5 per cent. and 24.1 per cent., respectively, of the pigs in the hinterland; those with 20 to 49 pigs together contained 26.5 per cent. of this total and the balance, 17.9 per cent., were in herds of less than 20 pigs.

### PIG BREEDING IN ASSOCIATION WITH DAIRYING.

An indication of the degree to which pig breeding is associated with dairy farming in New South Wales is given in the following table, which shows the number of holdings with registered dairies which had both cattle and pigs at 31st March, 1948. The holdings are classified according to the size of both dairy herds and pig herds and the number of pigs in pig herds of varying sizes and in relation to the size of the dairy herds with which they were associated is also shown.

Table 431.—Pig Herds and Pigs on Holdings with Registered Dairies, 31st March, 1948.

Size of Dairy Herd		]	Dairy Ho	oldings c	arrying	Pigs in I	Herds of			Dairy
(Cattle in Registered -Dairies).	1-4	5-9	10-14	15–19	20-29	30-49	50-99	100 and over.	Total.	Holdings with no Pigs.
			N	UMBER O	F HOLD	ings,				
1-4 5-9 10-14 15-19 20-29 30-49 50-99 100 and over	8 45 72 91 187 409 525 105	1 13 26 30 122 479 716 119	1 7 13 17 65 424 753 169 1,449	1 1 5 17 31 289 676 158	1 9 10 12 39 305 1,206 861	2 4 10 14 17 146 998 511 1,702	1 3 5 3 9 33 315 310	 2 1 3 3 6 31 44	15 84 142 187 473 2,091 5,220 1,777	89 178 286 341 900 2,173 2,777 740
	-		1	Number	of. Pigs					NUMBER OF CATTLE.
1-4 5-9 10-14 15-19 20-29 30-49 50-99 100 and over	11 92 160 213 453 1,016 1,309 257	9 93 169 207 830 3,351 5,136 843 10,638	12 77 148 200 784 4,964 8,991 2,032 17,208	15 18 84 280 533 4,904 11,432 2,658 19,924	20 231 238 308 905 7,231 28,902 8,761 46,596	73 161 403 497 617 5,285 37,077 19,467 63,580	91 171 314 196 602 2,059 19,461 20,043 42,937	311 111 620 483 1,345 4,225 6,999	231 1,154 1,627 2,521 5,207 30,155 116,533 61,060 218,488	250 1,352 3,371 5,800 22;183 85,659 191,175 112,262 422,052

Pig breeding was associated with dairying on 9,989, or 57.2 per cent., of of the holdings of one acre or more carrying registered dairy cattle at 31st March, 1948 and at that date 37 per cent. of the registered dairy cattle, 66 per cent. of the pig herds and 61.2 per cent. of the pigs in New South Wales were on such holdings. Dairy herds of 50 to 99, 30 to 49 and 100 or more cattle were associated with 52.3 per cent., 20.9 per cent. and 17.8 per cent., respectively, of the pig herds on dairy farms and the 9 per cent. remaining of these pig herds were on holdings carrying less than 30 cattle. In the size groupings of pig herds on dairy holdings, those of 20 to 29 and 30 to 49 pigs were the more numerous, accounting for 19.5 and 17 per cent. of such herds respectively, while those in the first four groups (less than 20 pigs) together comprised 55.8 per cent. of the total number.

On dairy holdings having pigs, those carrying 50 to 99 cattle had 45.3 per cent. of the cattle and 33 per cent. of the pigs, followed by those with herds of 100 or more cattle (26 per cent. and 27.9 per cent. respectively), and then by those with from 30 to 49 cattle, in which were 20.3 per cent. of the cattle and 13.8 per cent. of the pigs. On such holdings 29.1 per cent. of the pigs were in herds of 30 to 49 pigs, 21.3 per cent. in those of from 20 to 29 pigs, and 19.6 per cent. were in herds of 50 to 99 pigs. Herds of less than 20 and of 100 or more pigs contained 23.5 and 6.5 per cent., respectively, of the pigs on dairy holdings.

# Prices of Pigs.

The average prices of certain representative classes of pigs in the metropolitan saleyards at Flemington in 1939, and each of the past three years are shown below. The averages were compiled from reports of the State Marketing Bureau.

Month.	Hea	Bac avy and Me	oners, edium Weig	hts.	Porkers, Heavy and Medium Weights.				
Monott.	1939.	1946,	1947.	1948.	1939.	1946.	1947.	1948.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
January	73 1	115 1	122 3	159 11	46 1	78 0	73 9	99 11	
February	72 8	117 5	130 8	153 6	47 2	78 3	75 2	91 2	
March	73 5	113 2	138 5	135 11	47 5	75 10	<b>78</b> · 10	81 4	
April	73 1	109 0	136 11	130 8	48 2	67 8	82 2	79 10	
May	71 8	100 10	128 11	135 5	45 6	60 8	80 11	82 3	
June	73 0	101 10	128 4	145 3	46 1	61 8	80 9	88 5	
-July	74 7	106 10	128 6	151 8	47 5	62 6	83 8	91 5	
August	77 0	109 9	137 1	162 2	49 9	73 8	88 0	102 4	
September	81 0	120 8	142 0	171 9	49 9	81 3	88 9	109 9	
October	83 1	126 2	148 9	166 6	52 2	82 2	93 0	109 0	
November	84 0	132 9	149 4	145 3	51 6	84 7	92 4	101 7	
December	81 10	131 10	155 7	141 0	50 10	84 2	98 2	98 <b>7</b>	

Table 432.-Average Prices of Pigs, Sydney.

Prices of both baconer and porker pigs were more than 50 per cent. higher in 1946 and 80 and 95.5 per cent. higher, respectively, in 1948 than in 1939.

149 11

137

115

### Bacon and Hams.

The output of bacon and hams from factories and farms in New South Wales since 1910 is shown hereunder:—

Table 433.—Bacon and Ham Production.
Thousand lb.

-	Production	n of Bacon	and Ham.		Production	n of Bacon	and Ham.
Year ended 30th June.	Factory.†	Farm.‡	Total Production.	Year ended 30th June.	Factory.†	Farm.‡	Total Production
Average 5 years ended, 1915* 1920 1925 1930 1935 1940 1945	12,757 13,935 17,627 22,535 19,670 20,880 31,394	2,397 2,343 1,584 1,014 1,051 629 490	15,154 16,278 19,211 23,549 20,721 21,509 31,884	1928 1939 1942 1943 1944 1945 1946 1947 1948	24,524 21,722 28,319 29,430 29,853 43,848 37,494 33,119 29,667	955 431 504 485 485 484 144 149	25,479 22,153 28,823 29,915 30,338 44,332 37,638 33,268 29,804

<sup>\*</sup>Calender years to 1913. † Exclusive of bacon cured from green bacon imported interstate (see note to Table 415). 

† Twelve months ended 31st March, 1932 and later years.

Average

<sup>\*4255—10</sup> 

The production of bacon and ham increased slowly between 1910 and 1930, then fluctuated at a slightly lower level until 1939-40. It increased appreciably in 1940-41, gradually in the next three years and sharply in 1944-45 and then declined steadily in each year from 1945-46 to 1947-48. Although production in 1947-48 was 14,528,000 lb. or 32.8 per cent. less than the record of 44,332,000 lb. in 1944-45, it remained about 38.5 per cent. above the average in 1936-40.

### FROZEN PORK.

Relatively little frozen pork was exported from New South Wales prior to 1938-39, but the quantity increased in later years and reached a peak of 3,329,000 lb. (valued at £125,772) in 1943-44. The following statement gives particulars of frozen pork exported oversea in 1928-29, 1938-39 and each of the last six years.

Particu-lars. 1943-44. 1946-47. 1928-29, 1938-39. 1942-43. 1944-45. 1945-46. 1947-48. Quantity thous. lb. 2,847 1,048 477 107 1,009 769 3,329 448 Value. 29,993 39.130 125,772 114,564 21,267 55,130 26,287 4,595

Table 434.—Frozen Pork Exported Overseas.

### LARD.

Statistics showing the total production of lard are not available. The recorded quantites represent only a portion of the total output and exclude lard produced in many other establishments. The quantity extracted in factories, and the value at the factory in recent years (ended June) were as follows:—

Particulars.	1938-39.	1943-44.	194445.	1945–46.	1946–47.	194748.
Quantity, lb.	662,352	961,967	2,201,494	1,175,584	1,024,530	953,972
	15,678	<b>2</b> 6,502	64,257	31,095	28,354	33,888

### EXPORTS OF DAIRY PRODUCTS.

The following table shows the principal dairy products (not exclusively or completely the produce of the State) exported oversea from New South Wales, inclusive of ships' stores, at intervals since 1911. In recent years a substantial quantity of butter from New South Wales has been shipped abroad from Brisbane, Queensland.

Table 435.—Oversea Exports\* of Butter, Cheese, Milk and Bacon.

Year ended	Bu	tter,	Che	ese.		reserved, sed, etc.	Bacon aı	nd Ham.
30th June.	Quantity.	Value.	Quantity.	Value,	Quantity.	Value.	Quantity.	Value.
1911† 1921 1931 1985 1937 1938 1938 1940 1941 1942 1943 1944 1945	thous. lb. 33,044 28,429 31,793 53,028 20,787 31.758 24,391 32,554 20,049 10,035 16,246 10,143 7,092	£ 1,518,993 3,458,280 1,698,835 2,182,429 1,033,007 1,919,132 1,382,876 2,021,335 1,271,307 1,118,480 674,612 636,773	thous. lb. 141 807 189 2,136 424 1,081 294 850 4,219 2,399 5,408 10,274 10,840	£ 3,723 49,813 8,969 55,413 15,724 46,263 12,121 35,214 185,102 131,266 340,497 661,863 656,720	thous. lb. 1,127 11,576 497 2,569 2,342 3,210 2,979 6,754 9,466 9,613 8,625 11,361 13,666	£ 17,471 691,122 18,006 196,668 154,923 207,516 309,184 366,279 343,639 346,908 484,753 622,914	thous. lb. 618 1,357 552 591 740 659 464 1,742 2,614 3,070 1,690 6,065 4,980	£ 17,561 132,075 28,646 33,825 41,182 42,250 28,268 112,085 178,597 210,293 140,440 495,418 445,213
1946 1947 1948	13,594 4,450 15,499	1,261,587 437,485 1,721,521	5,665 1,973 1,827	293,245 161,389 151,374	17,156 16,959 16,155	725,017 860,638 1,020,635	7,348 3,246 1,775	699,866 261,097 170,262

<sup>\*</sup> Including Ships' Stores.

The quantity and value of eggs and poultry exported oversea are given in Table 442. Exports of frozen pork are shown in Table 434.

### POULTRY-FARMING.

In recent years poultry farming has grown in importance as a distinct industry in New South Wales and it is conducted also in conjunction with dairying and other rural pursuits. The estimated farm value of eggs and poultry produced in New South Wales, as far as ascertainable, was approximately £10,391,000 in 1947-48.

Statistics of poultry production are collected under the Census Act from occupiers of rural holdings of one acre or more and, as far as practicable, information is obtained also regarding poultry on smaller holdings. Owing to the relatively small area of land required for poultry farming, it is difficult to make a complete annual survey of the industry, but special efforts were made in 1934-35 and 1944-45 to remedy the deficiency in the collection of data. The resultant figures shown below are believed to reflect fairly the development of the industry during the period covered:—

Table 436 .- Poultry in New South Wales.

As at	Fowls,	Ducks.	Geese,	Turkeys,	Year ended 31st March.			
31st March,	Chickens, etc.	etc.	etc.	etc.	Eggs Produced.*	Gross Farm Value of Production, †		
1935 1940 1945 1946 1947 1948	5,521,000 5,474,000 9,809,000 8,643,000 8,625,000 8,044,000	219,000 202,000 256,000 208,000 215,000 197,000	31,000 23,000 21,000 20,000 22,000 22,000	244,000 213,000 247,000 208,000 242,000 266,000	million doz. 51·2 56·2 89·1 .01·2 95·4 89·0	£million, 2·8 3·5 8·7 9·1 9·5 10·4		

<sup>\*</sup> Estimated.

<sup>†</sup> Calendar year.

A period of relative stability was followed by rapid expansion of poultry farming during the war years, encouraged by higher prices and measures taken to meet war-time demands. The number of young stock raised in 1944-45 was easily a record, but the shortage and or dearness of feeding stuffs caused an appreciable decrease in the number of poultry in the following three years.

The numbers shown in the foregoing table relate to poultry on rural holdings one acre or more in extent and estimates made by local collectors in other areas. In 1948, there were approximately 5,533,000 fowls, chickens, etc., on holdings with 150 or more hens and pullets; approximately 345,000 fowls, chickens, etc., on holdings with 40 and less than 150 hens and pullets, and approximately 2,166,000 on other holdings.

The following table shows the development of poultry farming in respect of holdings with 150 or more hens and pullets:—

Table 437 .-- Poultry on Commercial Poultry Farms.

(With 150 or more laying stock.)

Year ended 31st March.	Total Fowls and Chickens.	Chickens Hatched.	Chickens Sold.	Year ended 31st March.	Total Fowls and Chickens.	Chickens Hatched.	Chickens Sold.
1935	2,321,000	3,958,000	1,278,000†	1946	6,055,000	10,947,000*	6,135,000*2.
1940	2,647,000	5,940,000*	3,119,000*†	1947	6,046,000	10,761,000*	7,580,000*±
1945	6,897,000	12,339,000*	9,109,000*‡	1948	5,533,000	9,103,000*	5,535,000*‡

<sup>\*</sup> Including hatcheries,

The 5,533,000 stock as at 31st March, 1948, included 2,932,000 pullets hatched in 1947 and 2,110,000 hens hatched in 1946 or earlier years. In addition there were 170,000 cocks and cockerels and 321,000 chickens under three months old.

Since 1945 the United Kingdom Government has contracted with the Commonwealth Government for the purchase of "boiler" type poultry. The current contract, operative since 1946, requires the poultry to be packed at premises approved by the Commonwealth Department of Commerce and Agriculture. Details of contract prices from 1945 to September, 1948, are given on page 574 of the Official Year Book No. 50. Prices, from October, 1948, in sterling (Australian currency equivalent in parenthesis) per lb., frozen weight, undrawn, f.o.b. Australian ports are:—fowls, 1s. 1Qd. (2s. 3½d); chickens, 2s. 2d. (2s. 8½d.); turkeys, first grade, 2s. 4d. (2s. 11d.), second grade, 2s. 2½d. (2s. 9¼d.), and ducks, 2s. 0d. (2s. 6d.).

Special attention is devoted to improving the laying qualities of the different breeds, and egg-laying competitions, organised originally by private subscriptions, have been conducted since 1901 at the Hawkesbury Agricultural College. The most successful laying breeds have proved to be the Australorp, the White Leghorn, the Rhode Island Red, and the Langshan. In the Australorp, produced in Australia, Black Orpington blood predominates. A Government Poultry Expert and staff carry out experimental work and assist poultry farmers in selecting breeding stock, culling the hens, and in dealing with general problems associated with the industry.

<sup>†</sup> Day old.

<sup>‡</sup> Under 1 month old.

Calculations covering the maintenance of fowls competing in the Hawkesbury Agricultural College laying tests in recent years show that feeding costs (with food purchased at wholesale rates and freight and cantage added) amounted to 9s. 5d. per bird per year in 1946-47 and 10s. 1d. in 1947-48. As the feeding costs in this competition are based upon Sydney market prices plus freight and cartage, they are indicative of the average costs of feeding on commercial poultry farms. The feeding costs per hen per annum were as follows:—

Table 438.—Cost of Feeding Fowls.

Year ended March.	Cost of feeding per hen.	Year ended March.	Cost of feeding per hen,	Year ended March	Cost of feeding per hen.	Year ended March.	Cost of feeding per hen,
1929 1930 1931 1932 1933	s. d. 8 7 9 10 7 3 5 9 7 0	1934 1935 1936 1937 1938	s. d. 6 3 5 9 7 2 8 8 9 6	1939 1940 1941 1942 1948	sd. 7 0 6 3 7 3 8 0 7 11	1944 1045 1946 1947 1948	s. d. 8 3 7 7 8 3* 9 5 10 1

\* Revised.

The course of prices of wheat, maize, bran and pollard is indicated in Table 276. The prices of wheat for stock feeding are given on page 356.

### PRICES OF EGGS.

The average monthly wholesale prices of new-laid hen eggs per dozen in Sydney are shown in the following table, together with the average price in each year weighted in accordance with the seasonal expectation of laying:—

Table 439.--Wholesale Prices of Eggs.

Month.	Weight.	1929.	1939.	1941.	1,943.	1944.	1945.	1946.	1947.	1948.
January February March April May June July August September October November	13 11 7 6 4 6 10 16 10 19 17 16	d. 19·0 24·0 25·0 30·0 33·0 22·0 18·0 16·0 16·0 18·0	d. 18·3· 22·5· 17·3· 20·1· 21·0· 20·3· 15·0· 12·7· 12·0· 12·0· 14·0·	d. 15·8 18·0 18·4 21·0 21·0 17·9 15·2 14·0 14·0 13·8 18·0	d. 22·4 24·0 24·0 24·0 24·0 22·0 22·0 19·0 19·0 20·2	d. 24·0 24·0 24·0 24·0 24·0 24·0 24·0 10·0 10·4 20·8	d. 24·0 24·0 24·0 24·0 24·0 22·0 10·0 19·0 20·0	d. 21·0 23·0 24·0 24·0 24·0 21·0 19·0 19·0	d. 21.6 24.0 25.5 27.0 27.0 26.0 23.0 21.0 22.0 24.0	d. 28·0 33·0 30·5 35·0 36·0 27·0 27·0 27·0 27·0 28·5
(Est'd weighted yearly av'ge).	144	19.8	15.1	15.2	21.4	21.7	21.4	20.9	23:2	28.9

The monthly averages are unweighted and represent the mean of the daily quotations. Prices are quoted also for medium and pullet eggs, but these are not included above.

The average wholesale price of eggs was relatively stable between 1939 and 1941 but it increased markedly in later years, particularly in 1948. Increases on the 1939 level were approximately 33d, per dozen in 1942, 64d, to 62d, in 1943, 1944 and 1945, 53d, in 1946, 8d, in 1947 and 133d, in 1948.

## Egg Marketing Board.

The Egg Marketing Board was constituted in 1928 in terms of the Marketing of Primary Products Act and has authority over the marketing of all eggs produced in New South Wales except in remote areas where production is negligible. As re-constituted in November, 1946, the Board is comprised of five representatives of producers and two Government nominees. Further details regarding the Board and its functions and the area of its jurisdiction are given in the 1941-42 and 1942-43 edition of the Year Book on page 792.

From July, 1943, to December, 1947, the powers of the Board were limited by the operation of National Security (Egg Industry) Regulations and the Board acted as agent in New South Wales for the Controller of Egg Supplies, appointed by the Commonwealth to control the distribution of eggs in Australia. Details of the marketing arrangements in this period are given on page 576 of the Official Year Book No. 50. Control of marketing in the State reverted to the Egg Marketing Board on 1st January, 1948, when the Egg Industry Regulations were repealed by the Egg Export Control Act, 1947.

A summary relating to the operations of the Egg Marketing Board is shown below:—

Dool		gs under Boai dministration		Local by Bo		Paid to Producers by Board,†		
Year.	Year. Sold by Handled exempt by Producers. Board.		Total.	Quantity.	Average per dozen.	Amount.	Average per dozen.	
1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	15,670 14,837 12,769 12,215 15,655 16,076	nousaud dozer 26,976 27,213 34,600 37,666 38,445 34,552	42,646 42,050 47,369 40,881 54,100 50,628	dozen. 24,126,634 16,353,412 20,590,559 19,728,769 17,775,388 16,295,255	d. 19·61 21·81 21·84 21·30 22·07 26·62	£ 2,193,000 2,353,209 2,992,438 3,158,517 3,246,296 3,444,432	d. 19·51 20·77 20·69 20·06 20·27 23·92	

Table 440.—Egg Marketing Board of N.S.W.: Operations.

The quantity of eggs under the Board's administration was 42,646,000 dozen in 1942-43—the first full year of its present jurisdiction. The number rose to 54,100,000 dozen in 1946-47 and was 50,628,000 dozen in 1947-48, notwithstanding the exemption of flocks with 20 to 40 fowls or ducks from 1st November, 1943.

Particulars regarding payments to producers (subject to pool deduction) in respect of eggs handled by the Board in each year since 1942-43 are shown in the preceding table.

Consignors to the Egg Marketing Board and producer agents contributed to the pool at the rate of 1d. per dozen from 1st June, 1942; 1½d. from October, 1942; 3d. from 3rd May, 1943; 1½d. from 5th July, 1943, and 1d. per dozen from 4th October, 1943. As agent for the Controller of Egg Supplies the Board was allowed handling and selling charges of 1¾d. per dozen until 27th January, 1947, when the rate was increased to 2½d. per dozen.

<sup>\*</sup>As Agent for Controller of Egg Supplies, July, 1943, to December, 1947.

<sup>†</sup> Subject to pool deduction (see below).

## CONTROL OF EXPORT OF EGGS.

The Australian Egg Board, appointed under the Egg Export Control Act 1947, assumed the control of oversea marketing of Australian eggs and egg products, formerly exercised by the Commonwealth Controller of Egg Supplies, on 1st January, 1948 (see page 577 of the 50th edition).

The Board, consisting of ten members representing various interests in the industry and the Commonwealth Government, controls the export of Australian eggs; purchases, manages, controls and sells eggs on behalf of the Commonwealth; makes recommendations to the Minister for Commerce and Agriculture regarding the making of regulations under the Act, the quality, standards and grading of eggs for export and export programmes; appoints overseas representatives; makes arrangements likely to improve the quality, or prevent deterioration before or during transport from Australia, of eggs produced in Australia; promotes oversea sales and issues licences to exporters. Eggs for export are purchased from the State Egg Boards at weekly intervals. Administrative expenses of the Board are met out of the proceeds of a charge on all eggs and egg products exported from Australia and from the Board's profit on sales. The rate of charge for eggs in shell is 1s. 3d. per thirty dozen.

United Kingdom Purchase of Australian Eggs and Egg Products.

Since 1945-46 the United Kingdom Government has contracted with the Commonwealth Government for the purchase of Australian eggs and egg products. The contracts for 1945-46 to 1947-48 are described on page 577 of the Official Year Book No. 50.

A new five years' contract commenced on 1st July, 1948, superseding a contract which otherwise would have been effective until June, 1950. The contract provides for progressive increases in quantity from 1949-50, sets an export target of 105,000,000 dozen eggs per season, to be achieved as soon as practicable, and gives the United Kingdom Government the right, in January, 1951, to review the quantities it is committed to purchase in the last two years if shipments in the two years ending 1950-51 fall below the equivalent of 135,000,000 dozen. Prices for 1951-52 and 1952-53 are to be determined at least sixteen months prior to the commencement of each season. Packing of eggs in shell is to cease on 24th December each year but pulp and powder may be packed at any time. The sequence of preference for packing is eggs in shell, frozen liquid whole egg, sugared dried egg and dried whole egg. As far as possible in 1948-49 and invariably thereafter, eggs in shell are to be oil processed prior to shipment. The contract also provides for the export of limited quantities of eggs in shell to destinations other than to the United Kingdom from January to May each year.

Prices paid and to be paid by the United Kingdom Government under the contracts since 1945-46 are shown below; the prices are expressed in Australian currency and are f.o.b. Australian ports:—

Product,	1945 ai 1946		1947	-48. †		48–49   to 50–51, †	Product.		1945–46 and 1946–47.	1947-48. †	1948–49 to 1950–51. †
Eggs in shell (15 lb. per 10 doz.)* doz. Liquid whole egg lb.	1	d. 8 5	8. 2 1	d. 1 6‡	8. 2 1	d. 4 89/10	Liquid egg white Dried whole egg Sugared dried egg	lb. lb. lb.	s. d. 6 6 	s. d. 1 93 6 64 4 113	s. d. 1 11 <sup>9</sup> /10 7 0 5 1

<sup>\*</sup> Prices for other weight grades (13½, 14, 16, and 17 lb. per 10 doz.) pro rata. † Australian equivalent; contract prices determined in sterling.

The quantities of eggs and egg products exported from New South Wales and Australia under the United Kingdom contracts in the last three years, as stated by the Australian Egg Board, were:—

Table 441.—Eggs and Egg Products Exported under Contract to the United Kingdom.

G	From	New South	Wales.	From Australia.			
Commodity	1945–46.	1946-47.	1947–48.	1945–46,	1946-47.	1947–48.	
Eggs in shell Liquid whole egg Liquid egg white Dried whole egg Sugared dried egg	doz. lb. lb. lb.	1,226,735	6,326,760 8,170,680 353,920 1,287,920	5,481,270 5,635,812 	7,224,570 12,534,000 1,910,479	16,420,950 21,111,080 1,233,730 2,594,511	14,525,250 20,567,172 90,920 172,816 961,417

<sup>\*</sup> Sugar content approximately one-third.

## EXPORT OF EGGS AND POULTRY.

The following table shows particulars of the oversea export trade in eggs and poultry:—

Table 442.—Eggs and Poultry: Oversea Exports from New South Wales,

Year		Eggs.		Frozen	Poultry.	Total
ended 30th June	In Shell.	Other.	Value.	Quantity.	Value.	Value.
	doż.	lb.	£	pairs.	£	£
1936	5,137,424		263,595	25,763	21,447	285,042
1937	5,429,732		322,082	25,433	23,598	345,680
1938	4,381,506	800	268,350	27,377	28,995	297,345
1939	3,427,702	686	205,801	19,294	18,295	224,096
1940	3,789,747		195,458	49,019	37,563	233,021
1941	8,255,527	293,608	524,091	42,672	26,531	550,622
1942	175,540	3,534,303	553,367	19,049	14,209	567,576
1943	358,670	2,303,498	291,072	8,072	4,164	295,236
1944	278,455	1,662,866	162,326	36,496	30,265	192,591
1945	281,700	669,654	198,781	42,773	42,787	241,568
1946	3,736,965	5,190,795	802,663	136,350	130,344	933,007
1947	7,121,126	12,198,743	2,099,583	360,053	442,427	2,542,010
1948	5,196,892	6,938,840	1,315,006	726,157	759,815	2,074,821

The supply of eggs available for export oversea declined after 1941-42 owing to increased requirements for Australian and Allied Forces based in Australia. No shipments were made to the United Kingdom in 1943-44 and 1944-45, but shipments in shell and as egg pulp and egg powder were resumed in 1945-46 following a decline in Service requirements and the value of exports far surpassed all previous records in 1946-47 and relative to all other years was again high in 1947-48. In that year far more frozen poultry was exported than ever before.

### BEE-KEEPING,

The bee-keeping industry is inextensive, and is conducted generally as an adjunct to other rural occupations. There is, however, a number of commercial apiaries, and migratory bee-keeping has tended to increase. Good table honey is obtained from the flora of native eucalypts of many varieties. The industry is subject to regulation in terms of the Apiaries Act in order to prevent the spread of disease amongst bees. Frame hives must be used and box hives are prohibited.

In terms of an amending Act, which was brought into operation in February, 1945, bee-keepers are required to register annually each apiary in which bees are kept. Where a bee-farmer with at least fifty hives of bees in a registered apiary has carried out work to improve it as a site for bee-farming, the apiary may be registered as a protected apiary. No person may establish an apiary within a prescribed distance (up to two miles) of a protected apiary without Ministerial consent.

Statistics collected under the Census Act up to 1944-45, which are published below represent, in the main, the extent of bee-keeping on holdings of one acre and upwards, but hives are maintained on smaller areas. and information regarding many of these is not available. No Census Act collection has been made since 1944-45, but the results of returns obtained from all registered beekeepers by the Department of Agriculture have been inserted for later years. The records shown below, therefore, are not fully comparable between years prior to and from 1945-46.

		Bee Hives.	_		Average Yield	
Season.	Productive.	Un- productive.	Total.	Honey.	of Honey per Productive Hive.	Beeswax.
	No.	No.	No.		lb.	1b.
1935 - 36	76,481	19,875	96,356	4,577,097	59.8	62,886
1936-37	67,807	25,277	93,084	2,935,282	43.3	52,461
1937–38	74,301	20,345	94,646	3,356,609	45.2	49,945
1938 – 39	60,346	25,895	86,241	2,723,719	45.1	43,780
1939-40	59,670	22,779	82,449	2,477,381	41.5	42,393
1940-41	69,898	16,738	86,636	4,771,422	68.3	.68,670
1941-42	*	*	*	<b>†7,465,926</b>	*	†124.432
1942 - 43	*	*	*	+1,744,560	*	129,076
1943 - 44	66,200	14,214	80,414	†7,733,102	116.8	1105,688
1944-45	<b>*</b>	*	*	18,534,640	*	142,244
1945-46‡	76,340	42,124	118,464	3,915,519	51.3	57,490
1946-47‡	93,622	29,506	123,128	9,016,638	96:3	111,916
1947-48‡	102,731	38,267	140,998	9,775,673	95.2	113,211

Table 443.—Bee Hives and Honey Production.

The yield per productive hive is subject to marked fluctuations according to seasonal conditions. The flow of honey was relatively poor in each year 1936-37 to 1939-40, in 1942-43 and in 1945-46. The production as recorded in 1947-48 was greater than in any earlier year. The estimated gross value at place of production of the production from bees was £119,000 in 1945-46, £272,000 in 1946-47 and £293,000 in 1947-48. The quantity of honey and beeswax produced in each division in 1940-41 and 1943-44 (the only recent years for which particulars are available) was as follows:-

Table 444.—Honey	and	Beeswax Produced,	1940-41	and 1943-44.
		1940-41.		1948-44.
Division.	-			

. ,	1940	0-∉1.	1948-44.		
Division.	Honey.	Beeswax.	Honey.	Beeswax.	
Coastal	1b. 1,225,633 1,372,420 1,814,053	1b. 23,720 18,204 23,986 2,760	1b. 1,846,266 3,632,116 2,099,982	1b. 25,191 48,892 29,373	
Total	1 771 199	68,670	7,733,102	2,232	

<sup>\*</sup> Not collected. † Estimated from receipts; includes production on holdings less than an acre in extent. # From returns from all registered apairists to Department of Agriculture.

## VALUE OF DAIRY AND FARMYARD PRODUCTION.

The gross farm value of production in the dairying and farmyard industries in 1947-48 amounted to £31,916,000. Dairying, apart from pigs, yielded £18,760,000; pigs, £2,472,000; poultry, £10,391,000; and bees, £293,000. The value in 1947-48 was easily a record and 95 per cent. greater than in 1938-39, due mainly to higher prices, but also in a measure to increased production from poultry and bees. The farm value of production since 1928-29 was as follows:—

Table 445.—Dairy and Farmyard Production; Gross Farm Value. £ thousand.

				t tnous	anu.				
Year.	Milk for Butter.	Milk for Cheese.	Milk (not used for Butter or Cheese).	Milch Cows, etc.	ghtered. Pigs.	Total Dairying.	Poultry and Eggs.	Bees.	Grand Total.
1928–29	6,822	228	2,658	571	1,237	11,516	2,999	44	14,559
1929–30	6,884	234	2,608	524	1,105	11,355	3,140	44	14,539
1930–31	5,974	176	1,964	456	839	9,409	2,584	46	12,039
1931–32	5,821	182	1,887	276	730	8,896	2,595	34	11,525
1932–33	5,098	190	2,138	514	747	8,687	2,728	47	11,462
1933–34	5,221	199	2,206	641	821	9,088	2,603	22	11,713
1934-35	5,800	179	2,304	771	913	9,967	2,823	95	12,885
1935-36	5,846	188	2,521	973	1,077	10,605	3,439	68	14,112
1936–37	5,629	217	2,740	1,017	1,242	10,845	3,704	43	14,592
1937–38	6,582	240	2,876	1,169	1,299	12,166	3,896	51	16,113
1938–39	6,489	223	3,177	1,224	1,350	12,463	3,853	43	16,359
1939–40	6,666	203	3,173	1,203	1,403	12,648	3,498	42	16,188
1940-41	6,241	212	3,578	1,153	1,542	12,726	3,997	102	16,825
1941–42	5,119	178	3,994	1,222	1,997	12,510	3,902	146	16,558
1942–43†	6,607	216	5,196	1,239	2,772	16,030	5,314	40	21,384
1943–44†	7,130	251	5,250	1,347	2,227	16,205	7,143	196	23,544
1944–45†	6,106	207	6,083	1,330	2,756	16,482	8,693	228	25,403
1945–46†	6,619	260	7,299	1,482	2,421	18,081	9,108	119	27,308
1946-47†	5,504	237	7,413	1,743	2,372	17,269	9,507	272	27,048
1947–48†	8,030	371	8,465	1,894	2,472	21,232	10,391	293	31,916

† Values for milk and milk products are inclusive of subsidy (see page 452).

# PRICES OF FARMYARD PRODUCTS.

Ine average wholesale prices obtained in the Sydney markets for the principal kinds of dairy and poultry farm produce in 1939 and each of the last eight years are shown in the following table. The average quoted for the year represents the mean of the prices ruling each month, and does not take into account the quantity sold during the month. Prices for poultry were quoted per lb. live weight in the months December, 1943 to April, 1944.

Table 446.—Prices (Wholesale) of Dairy and Farmyard Products.

Dairy and Poultry Farm Produce.	193	39,	19	<u>.</u>	19	42.	19	43.	19	44.	19	45.	19	46.	19	47.	19	)48,
Milk gal. Butter lb. Cheese , Hams , Bacon (sides) , Eggs (new laid) doz. Poultry— Fowls— (Cockerels) pr.	$1 \\ 1 \\ 0 \\ 1$	d. 5·2 5 11 3·9 11·7 4·4	1 1	d. 5·2 5 10·8 4·3 0·1 4·3	s. 1 1 1 1 1 1 8	d. 8.8 5.8 0 5.9 1.7 7.8	1 1 1 1 1	d. 9.3 5.9 0.2 7.2 2.8 10.2	1 1 1 1	d. 9.3 5.9 0.2 7 3 10.5	s. 1 1 1 1 1 1 1	d. 8.7 5.9 0.2 7.2 3.5 11.2	8. 1 1 1 1 1 1 1	d. 8.5 5.9 0.2 7.2 3.5 9.8	s. 1 1 1 1 1 2	d. 8.8 6.1 0.3 7.4 3.7	1 1 1	d. 10·4 9·9 1·8 11·2 7·3 6
Drakes— (Muscovy) " Ducks—	9	9	10	3	13	5	10	1*	17	1*	14	8	14	9	15	9	20	
(Muscovy) ,, Turkeys (cks.) ,,	$^{6}_{28}$	5 1	6 23	6 9	8 32	3 4	16 44	7* 1†	9 44	8* 7*	8 46	6 7	8 43	9	9 45	$\begin{array}{c} 2 \\ 11 \end{array}$	10 50	9 4
Bee produce— Honey lb. Wax ,,	0 1	4·1 4·9	0 2	4·8 0·9	0 2	5·3 4·5	0 2	6·1 5·4	0 2	6·2 5·8	0 2	7·5 6	0 2	7·5 6	0 2	7·5 6	0 2	7·5 8·5

Average, January to November, inclusive, in 1943 and May to December, inclusive, in 1944.
 † Average, April to November, inclusive, 1943.

A table showing index numbers of prices of dairy and farmyard products, compiled from the weighted average prices of butter, cheese, bacon, ham, eggs, condensed milk, honey and lard was published on page 797 of the 1941-42 and 1942-43 edition of the Year Book.

The index numbers showed that the general level of prices of these commodities decreased by 36 per cent. during the years of depression, 1929 to 1933, rose steadily from 1934 to 1938, remained at about 20 per cent. below the level of 1929 from 1938 to 1941 and then in 1942, moved up to within 13 per cent. of the pre-depression level.

War-time distortions affecting weighting and consistency of quotation precluded compilation of index numbers for later years but preparation of a new index series on a revised and broadened basis is proceeding.

# **FORESTRY**

### THE FOREST ESTATE.

The forest lands of the State containing timber of commercial value consist of about 11 million acres, of which about 8 million acres are Crown lands. Over 6½ million acres of the Crown lands are dedicated or reserved for the preservation and growth of timber.

Areas suitable for permanent use for forestry purposes may be declared as National forests, and the dedication may be revoked only by Act of Parliament. Land dedicated as a State forest may be withdrawn from forestry purposes by a resolution of both Houses of Parliament. Timber reserves are usually temporary reservations, revocable by executive act, protecting forest lands pending removal of timber, examination as to suitability for permanent dedication, or disposal of the lands for settlement or other public purposes.

As at 30th June, 1947, there were 708 State and National forests containing a total area of 5,350,638 acres of Crown lands (including 30,532 acres of forest plantations) which had been dedicated permanently and 412 timber reserves with 1,297,660 acres which had been set apart tentatively.

The forests contain a great variety of useful timbers, which in hardwoods include renowned constructional woods such as ironbark, tallow-wood, spotted gum, blackbutt, red mahogany, and turpentine. Other varieties include valuable timbers such as cedar, beech, brushbox, hoop pine, coachwood, native cypress pine, and teak. It is estimated that, in the National and State forests, extending over 5,200,000 acres, some 2,800,000 acres carry hardwood forest, 1,630,000 acres carry cypress pine with some ironbark, and 690,000 acres carry brushwoods and mixed hardwood brush. The balance of the Crown forest lands consist of timber reserves (1,296,000 acres) carrying poorer quality hardwood for fuel and general purposes.

A description of the forest regions of New South Wales was published on page 671 of the Year Book for 1928-29.

## GOVERNMENTAL AUTHORITIES.

## Forestry Commission.

The Forestry Commission of New South Wales, comprising one member appointed for seven years, administers the Forestry Act, 1916-1946 under the control of the State Minister for Conservation. The Commission is responsible for the control and management of the State forests and timber reserves, the conversion, marketing, and economic utilisation of forest produce, the licensing of timber-getters and sawmills, and the organisation of research and a system of education in scientific forestry. The Act provides, in addition, for the permanent dedication of reserves for the preservation of natural flora, the protection of water supply catchment areas, and the prevention of erosion.

The Commission may undertake the sylvicultural management of the catchment area of any system of water supply and the direction of tree planting schemes of public authorities.

The following statement summarises the financial operations of the Forestry Commission during 1946-47 and earlier years. Payments by the Commission are directed substantially to the development of forest areas,

From which no immediate return may be expected; the receipts and payments for any particular year may therefore not be related. "Sales" comprises mainly proceeds from disposal of timber converted by the Commission, expenditure on which is included in the contra item "logging operations."

Table 447.—Finances of Forestry Commission.

			O'CREY .			
Item.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.
		RECEIPTS (	€).			
Royalty on Timber Permits, Inspection Fees, etc Rent of Forest Lands Sales Penalties, Damages, etc Total Receipts	308,526 10,729 25,035 46,896 2,016	335,092 11,213 25,433 90,778 5,425 467,941	338,546 12,494 27,777 166,318 15,685	326,574 13,525 28,142 187,666 16,409 572,316	299,737 16,464 27,980 175,370 6,043 525,594	342,570 15,859 31,579 190,982 1,747 582,737
· • · · · · · · · · · · · · · · · · · ·	<u>'</u>	PAYMENTS (:	€).		<u> </u>	•
Administrative—Central District  Research Development and Reafforestation Acquisition of Land Forest Surveys Sylviculture and Nurseries Protection Access Roads Other Improvements, Plant, etc. Supervision of Operations Logging Operations	52,145 65,633 16,195 4,394 6,589 41,723 58,872 109,783 111,806 20,621 40,632	52,455 68,981 17,999 5,760 5,551 29,304 46,485 74,737 107,682 25,462 83,205	57,369 92,581 19,918 7,242 6,740 31,473 45,693 81,825 100,824 30,581 124,723	62,508 68,906 20,881 9,942 5,968 31,971 56,770 69,089 110,220 36,257 117,768	40,859 84,160 25,587 3,058 13,014 42,751 55,841 58,674 124,206 41,953 105,347	115,771 97,405 35,458 3,769 40,943 74,756 69,155 76,450 260,772 50,555 133,731
Total Payments	528,393	517,621	598,969	590,280	595,400	958,765

# Forestry and Timber Bureau.

The Commonwealth Forestry Bureau established in 1925 was reconstituted in 1946 as the Commonwealth Forestry and Timber Bureau. The Bureau conducts sylvicultural and other forest research work, provides education and professional training in forestry (through the Australian Forestry School), and advises the Commonwealth and State Governments with regard to oversea trade in timber and the supply, production, and distribution of timber in Australia.

## Australian Forestry School.

The Australian Forestry School at Canberra was established in 1926 by the Commonwealth Government to provide professional training in forestry. Under the Forestry Bureau Act, 1944, a Board of Higher Forestry Education was appointed to maintain the standard of the training and to advise as to the pre-requisite university courses. Selected officers of the N.S.W. Forestry Commission are seconded for training at the School.

### FOREST MANAGEMENT.

Plans of development have been laid down for some of the principal National and State Forests after intensive survey and detailed mapping with the object of sustaining productive capacity. Cutting is controlled with due regard to regeneration and supplemented by sylvicultural treatment to increase the forest yield. Regeneration of indigenous species is almost entirely natural, but the planting of some valuable varieties is necessary. The Government has approved a twenty-six years' programme of planting of exotic and hoop pine.

Since 1935 plantations of exotic species of timber may be established only with Ministerial consent, after proof of the suitability of sites. During the war, a large supply of case timber was obtained by thinning from the plantations, and considerable areas of land on the tablelands have been recommended for afforestation with exotic pine as part of post-war plans to meet expansion in local demand for such timber.

Sylvicultural and fire-protection work is continuous. There is an extensive system of forest access roads and fire-breaks, fire-lines, and fire-roads (which also give access for logging) have been established for fire protection. Other works include look-out towers at strategic points, an interlocking system of forest water supplies, equipment buts and telephone lines, and radio systems where other communication is inadequate. The Royal Australian Air Force makes daily summer patrols of forest areas on the coast and southern tablelands and special observation flights in periods of great fire hazard.

### EMPLOYMENT.

The next table shows the number of persons occupied in forestry activities in the major forest regions of New South Wales at 30th June, 1947, and the total number in the State recorded at other recent census and quasi-census enumerations:—

Year and Month.	Persons,	Regions.	Persons at 30th June, 1947.
1933—June	5,800	Northern Coastal Hardwoods and Brushwoods Southern Coastal Hardwoods North-western Ironbark and Cypress Pine Central Inland—mainly Cypress Pine Other Total—New South Wales	3,748
1939—July	8,200		808
1943—July	5,450		767
1945—June	6,200		701
1947—June	6,307		283
1948—June	7,100		6,307

Table 448.—New South Wales: Persons Occupied in Forestry.

### Value of Production From Forestry.

The value of forestry production as at the place of production in New South Wales during 1947-48 and selected earlier years is shown below. The substantial increase in recent years in the value of production reflects the rising prices and output of logs, hewn timber, and other forest products. In 1947-48, the value was 174 per cent. greater than the average for the five years ended 1938-39 and 27 per cent greater than in 1946-47.

			æ ono	usana.			
Year ended 30th June.	Value.	Year ended 30th June.	Value.	Year ended 30th June.	Value.	Year ended 30th June.	Value.
1901* 1906* 1911* 1916 1921 1926 1927	554 1,008 998 1,045 1,656 2,202 2,177	1928 1929 1930 1931 1932 1933 1934	2,011 1,862 1,738 1,237 1,158 1,476 1,737	1935 1936 1937 1938 1939 1940 1941	1.922 2,014 2,096 2,179 2,261 2,347 2,576	1942 1943 1944 1945 1946 1947	3,159 3,155 3,285 3,321 3,745 4,508 5,741

Table 449.—Value of Forestry Production. £ thousand.

### PRODUCTION AND CONSUMPTION OF TIMBER.

The quantity of sawn timber produced in New South Wales sawmills from native and imported logs, the number of mills operated, and the average number of employees in 1947-48 and earlier years is shown below. (Further particulars of the operations of sawmills are given on page 119 of this volume). In addition to the sawn timber shown in this table, a large quantity of other timber, e.g., sleepers, piles, poles, fencing material, timber used in mining and as fuel, is produced, information regarding which is incomplete.

				•		-					
			Sawn Timber Produced.								
Year ended 30th June.	Mills Operated.	Average Number of Em- ployees.*	From Na	tive Logs.	From Impo	orted† Logs.	Total.				
		1 10 1111	Softwood.	Hardwood.	Softwood.	Hardwood.	10001				
	No.	No.		thous	and super.	feet.	_				
1928	468	4,178	48,716	97,859	1,764	1,123	149,462				
1938	425	4,925	48,518	119,524	120,345	627	289,014				
1939	435	4,981	49,840	129,510	101,051	768	281,169				
1940	447	4,915	63,201	129,273	75,291	696	268,461				
1941	485	5,229	81,275	137,745	40,433	1,468	260,921				
1942	556	5,665	95,916	160,988	11,543	2,972	271,419				
1943	532	5,431	85,806	164,211	454	165	250,636				
1944	585	5,474	88,751	170,284	2,825	1,099	262,959				
1945	605	5,733	75,769	170,204	769	596	247,338				
1946	645	6,277	72,082	180,025	1,017	1,026	254,150				
1947	713	7,226	83,618	212,313	1,610	694	303,235				
1948	818	8,162	83,921	248,671	4,457	877	337,926				

Table 450.—Sawmills: Sawn Timber Produced.

The marked expansion in the output of sawn softwoods from imported logs from 1,764,000 sup. ft. in 1927-28 to 120,345,000 sup. ft. in 1937-38 followed a change in customs duties which led to lumber for local sawing being imported in place of sawn timber. During the war and post-war years, the output declined materially, partly because of the world shortage of lumber and partly because of import controls. The total quantity of sawn timber produced in the mills declined during the war years, but by 1947-48 had risen to 337,926,000 sup. ft. or 20 per cent. above 1938-39. The output of sawn hardwood timber rose 92 per cent. from 130,278,000 sup. ft. in 1938-39 to 249,548,000 sup. ft. in 1947-48, and the softwood sawn from native logs rose 68 per cent. from 49,840,000 sup. ft. to 83,921,000 sup. ft.; the production of sawn softwood timber from imported logs declined by 96 per cent. from 101,051,000 sup. ft. to 4,457,000 sup. ft. and of all softwood timber produced the proportion from imported logs declined from 67 to 5 per cent.

The following table shows the gross consumption in New South Wales during 1946-47 and earlier years of timber produced in the State and imported from other States or overseas, as estimated by the Forestry Commission.

<sup>\*</sup> Average over whole year.

<sup>†</sup> Interstate and Oversea.

Table 451.—New South Wales: Estimated Consumption of Timber.

Thousand cubic feet.

	Tir	nber Produced	in New South Wa	des.	Timber	
	'Softwood.	Hardwood.	Pole and Pile Timber and Fuel.	Total.	Imported from Other States and Oversea.	Timber Consumed.
Ann. Avge.		1	1		<del></del>	
1925-29	7,120	20,392	18,023	40,535	17,040	57,575
1930-34	4,417	15,971	12,113	32,501	7,447	39,948
1935-39	8,587	26,260	14,424	49,271	17,000	66,271
1940-44	11,034	27,004	15,657	53,695	5,000	58,695
1945-47	10,572	37,143	6,353	54,068	4,600	58,668
1937	9,060	27,147	16,000	52,207	· •	*
1938	8,774	23,955	15,010	47,739	-20,000	67,739
1939	8,202	28,137	10,911	47,250	17,000	64,250
1940	8,616	29,336	17,902	55,854	13,000	68,854
1941	12,249	25,786	20,049	58,084	4,000	62,084
1942	13,317	24,502	11,980	49,799	3,000	52,799
1943	10,405	25,550	14,414	50,369	2,000	52,369
1944	10,582	29,846	13,941	54,369	3,000	57,369
1945	10,407	33,617	8,667	52,691	2,500	55.191
1946	10,271	85,105	5,514	50,890	5,800	56,690
1947	11,037	42,709	4,878	58,624	5,500	64,124

<sup>\*</sup> Not available.

Under the Timber Marketing Act, 1945, which came into operation on 1st April, 1946, timber must be sold true to description. For the protection of consumers restrictions are placed on the use in buildings and articles for sale of untreated borer-susceptible timbers and of unseasoned timber in furniture, joinery, flooring and mouldings, where borer attack or excessive moisture would prejudice its serviceability.

## OVERSEA TRADE IN TIMBER.

The following table shows the oversea imports and exports of timber to and from New South Wales during 1947-48 and selected earlier years. The imports comprise mostly undressed timber—in pre-war years, predominantly softwoods—drawn from Canada, the United States of America, and, in some years, New Zealand and Sweden. The exports are almost wholly undressed timber, mostly shipped to New Zealand.

Table 452.-New South Wales: Oversea Trade in Timber.

Year		Imp	orts.		Exports (Australian Produce).					
ended 30th June.	th Undressed Timber.		Other Timber.		Undressed	l Timber.	Other Timber.	Total		
	Quantity.	Value.	Value.	'Value.	Quantity.	Value.	Value.	Value.		
	thous.	£A fo.b.	£A f.o.b.	£A:f,o,b,	thous.	£A.	£A.	£A.		
1921 1929 1931 1938 1939 1940 1941 1942 1944 1945 1944 1946 1947 1948	93,303 187,009 47,825 209,513 199,123 150,481 50,683 35,372 19,729 30,744 54,758 66,004 65,835 72,097	1,732,698 1,747,060 314,611 1,051,497 880,422 883,142 422,931 326,990 256,500 354,540 664,378 882,391 1,745,162 2,035,962	159,408 274,222 15,438 71,389 65,305 52,656 47,102 24,660 46,281 93,827 184,123 93,736	1;891;866 2,021,282 380,049 1,122,886 945,727 935,673 476,587 374;092 281,160 400,832 725,659 980,718 1,929,285 2,129,608	23,202 13,989 16,884 28,108 27,251 19,098 16,305 12,943 9,985 8,809 12,708 13,510 23,890	447,653 (241,504) 228,561 416,494 382,584 306,322 270,236 360,876 278,409 229,526 209,972 300,805 336,489 651,396	17,072 7,408 13,431 41,453 39,053 57,958 74,833 84,015 11,443 1,363 3,138 12,265 70,351 43,897	464,725- 248,912- 241,992- 457,947- 421,637- 364,280- 444,891- 289,852- 230,889- 213,110- 813,070- 406,840- 605,298		

# **FISHERIES**

The waters along the coast of New South Wales contain many species of fish of high commercial value, but the fishing industry has not been developed to its full capacity. The supply of marine fish is obtained from the coastal lakes and estuaries, the sea beaches, and ocean waters, and a large quantity by deep-sea trawling. Murray cod and perch are taken from the inland rivers.

## CONTROL OF THE FISHERIES.

Fisheries in New South Wales are regulated under the Fisheries and Oyster Farms Act, 1935-42, which came into operation on 16th November, 1936. The Chief Secretary administers the Act, which provides for the protection, development, and regulation of the fisheries of the State within territorial limits. Fisheries in Australian waters beyond territorial limits are within the jurisdiction of the Commonwealth; the Commonwealth Whaling Act, 1935 gives effect to the Convention for the Regulation of Whaling signed at Geneva on 4th September, 1931, and governs operations in Australian waters beyond territorial limits by all ships under Commonwealth jurisdiction.

Inspectors appointed under the Fisheries Act assist in administering the law and inspectorial powers may be entrusted to members of the police force and honorary vigilance committees. The Act authorises the closing of waters to the taking of fish, either wholly, as to a certain season, or in respect of prescribed species or sizes of fish; the licensing of fishing boats and fishermen operating for pecuniary gain; the regulation of the use of nets; and the prohibition of the use of explosives in fishing. Other provisions govern the consignment and sale of fish, the licensing of fish agents and salesmen, and the furnishing of returns disclosing the nature and extent of fishing operations.

Under the Fisheries and Oyster Farms Act, 1935-1942, the areas available for oyster culture are classified under the Act as special, average or inferior lands, according to productive capacity. Leases of special lands are granted for a term of fifteen years and may be renewed for a similar term; these leases are offered by public auction or public tender at a rental determined by the Minister. Average lands may be leased for a term of fifteen years and renewed for a like term, and the rental is fixed by the Minister. The rent of inferior lands, which are leased for ten years, but may not be exploited in the first year of the lease, is also fixed by the Minister; in the last year of the lease the area may be reclassified and the lease renewed for fifteen years if determined as average lands or for ten years if the classification is unaltered. In all cases rental is subject to reference to the Local Land Board.

The discoverer of a natural oyster bed has a statutory prior right to a lease of the area, unless it be classified as special lands. Existing lessees have a preferment right to apply for renewal of leases or for additional leases of inferior or average lands within thirty days of the right arising. In certain circumstances, a similar preferment right is conferred upon non-lessee applicants and lessees whose area is deemed inadequate.

Leased areas must be kept free from disease, and may be closed when over-dredged, or subject to disease, or for other reason deemed by the Minister to warrant that course.

Public oyster reserves may be notified, and such areas, unless specifically declared closed, are open to the public for the taking of oysters for their own immediate consumption.

For the purpose of stocking waters with trout and salmon, acclimatisation districts are declared, and acclimatisation societies are registered to control the fisheries therein. Suitable streams, viz., practically all those above an altitude of 2,500 feet, have been stocked with trout, and fish up to 8 and 10 lb. are occasionally caught. The close season for trout is from 1st May to 30th September of each year, but may be varied by proclamation. A license is required for trout or salmon fishing, and the method of trout fishing is subject to regulation.

# Fishing Licences, etc.

The next table summarises the number of fishing licences issued and the number and value of boats engaged in fisheries in 1947-48 and certain earlier years. Fishermen and oyster vendors pay annual licence fees of £1 and 5s. respectively. Licence fees for fishing boats in territorial waters are £1 per year; for boats trawling and net fishing in extraterritorial waters, the fee is £5 for vessels up to 100 tons, £7 10s. from 100 to 200 tons, and £10 for vessels exceeding 200 tons, and for boats in extra-territorial waters not trawling or netting, £2 up to 30 feet in length and £3 more than 30 feet.

					<u> </u>			
Year ended	r	icences issue	d.	Boats er	ıgaged.†	Value of Boats and Equipment,		
30th June.	Fishermen's.	Fishing Boats.	Oyster Vendors,	General Fisheries.	Oyster Fisheries.	General Fisheries.	Oyster Fisheries.	
1939* 1945 1946 1947 1948	2,635 4,509 6,047 4,892 3,419	1,777 3,234 3,892 3,395 2,916	482 335 383 406 445	1,779 2,215 1,873 3,199 2,920	746 804 818 770 760	£ 174,000 501,219 688,974 1,485,179 1,791,898	£ 33,650 41,266 40,753 43,053 54,061	

Table 453.—Fisheries: Licenses Issued, Boats Engaged.

The following statement shows the number and area of leases granted for oyster culture during and to the end of 1947-48 and earlier years:—

Table	454.—	-Oyster	Culture:	Leases.
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	Lease	s granted during	g Year.	Leases at end of Year.			
Year ended 30th June.	Number.	Length of Foreshore Granted.	Off-shore Area Granted.	Number.	Length of Foreshore Granted.	Off-shore Area Granted.	
1939 1945 1946 1947 1948	453 316 240 253 *	yards. 88,509 90,909 48,275 47,513	acres. 543 180 267 205	4,493 4,651 4,667 4,703 4,953	yards, 913,571 946,302 944,237 945,993 953,862	acres. 3,439 4,212 4,298 4.063 6,604	

<sup>\*</sup> Not available.

<sup>\*</sup> Calendar vear.

<sup>†</sup> Includes trawlers, steamers, punts and launches.

## Marketing of Fish.

In furtherance of the Government's policy in the marketing of fish, fishermen's co-operative societies are operating at Byron Bay, Ballina, Evans Head, Grafton, Nambucca-Coff's Harbour, Jerseyville, Port Macquarie, Laurieton, Tuncurry, Newcastle, Tacoma, Palm Beach, Nowra, Bateman's Bay, Bermagui, and Eden. The societies arrange for the handling of fish at the point of catch and its transport to market and provide the bulk of the fish requirements in Sydney, Newcastle, and Wollongong, where markets are conducted as a State enterprise. In certain instances, the sale of fish direct to consumers is permitted by ministerial "consents" granted to licensed fishermen.

At the present time, the various producing interests in the fishing industry are represented on the Fish Industry Advisory Committee, which assists the Chief Secretary to co-ordinate their activities.

## Fisheries Research.

The Division of Fisheries of the Council for Scientific and Industrial Research has its headquarters and central laboratory at Cronulla (N.S.W.) and is engaged in exploring and surveying the marine resources of Australian waters and in the scientific investigation of all aspects of the fishing industry.

# PRODUCTION OF FISH, ETC.

The following table shows the production of fish, oysters, prawns, crabs and crayfish by commercial enterprises during 1947-48 and earlier years:—

Year ended 30th June.		Fish.				
	Trawled.	Captured Otherwise.	Total.	Oysters.	Prawns.	Crabs and Crayfish.
	lb.	lb.	lb.	bags.*	1b.	doz.
1938†	14,145,583	15,236,835	29,382,418	44,521	1,580,580	19,070
1939†	13,340,940	17,502,445	30,843,385	40,681	1,069,050	17,350
1940†	9,897,810	17,428,600	27,326,410	43,324	993,480	14,127
1941†	5,278,070	18,690,140	23,968,210	42,965	982,180	13,600
1942	6,862,800	18,984,683	25,847,483	45,566	1,064,695	14,998
1943	2,240,062	19,523,470	21,763,532	41,473	1,551,747	14,059
1944	2,275,140	21,526,226	23,801,366	32,112	1,489,971	10,213
1945	10,069,807	19,980,816	30,050,623	34,811	1,692,024	17,267
1946	12,791,875	17,876,977	30,668,852	38,642	1,246,857	36,845
1947	16,022,480	18,134,380	34,156,860	42,445	1,345,252	35,419
1948	15,179,836	17,633,407	32,813,243	41,085	1,398,898	33,205
			<u> </u>	<u> </u>	<u> </u>	,

Table 455.-Production of Fish, Oysters, etc.

† Calendar year.

The most important kinds of salt-water fish produced are mullet, flat-head, morwong (sea bream), redfish (nannegai), Australian salmon, leatherjacket, luderick (blackfish), bream and schnapper, and kingfish. Murray cod and perch are the principal varieties of fresh-water fish.

The diversion of fishing vessels to war purposes and the consequent contraction of trawling operation accounted for the war-time decrease in fish production. Production expanded rapidly during 1944-45 as the trawling fleet was enlarged, and by 1945-46 had approximately regained its pre-war level. The quantity of fish captured rose further to 34,156,860 lb. in 1946-47 and declined to 32,813,243 lb. in 1947-48, when it was 51 per cent. and 6 per cent. greater than in 1942-43 and 1939, respectively. In 1946-47 and 1947-48, 13 steam trawlers and 52 and 103 Danish Seine boats were operated.

<sup>\*</sup> Three bushels.

During 1947-48, the trawled fish included 4,250,777 lb. of flathead, 3,993,233 lb. of morwong, and 3,490,725 lb. of redfish, and the inland catch included 125,586 lb. of Murray cod. Of the fish captured otherwise, there were 6,210,787 lb. of mullet, 1,860,384 lb. of salmon, 1,688,150 lb. of leatherjacket, 1,299,590 lb. of luderick, 880,995 lb. of black and 614,380 lb. of red bream, 701,218 lb. of flathead, and 86,444 lb. of kingfish.

The next table shows the quantity of fish captured from the major fishing grounds by commercial enterprises during 1947-48 and recent years:—

 Production by Fishing Grounds. Thousand lb.
 Year ended 30th June.

	Year ended 30th June.						
Grounds.	1944.	1945.	1946.	1947.	1948.		
North Coast—Q'land Border to Macleay R Hunter-Manning—Hastings R. to Terrigal H. Metropolitan—Hawkesbury R. to P. Hacking South Coast—I. Illawarra to Vic. Border Ocean Waters—Undefined Trawled Fish Trawled Fish	7,894 5,247 2,657 4,912 574 2,275 242	6,373 5,631 2,299 4,787 702 10,070 189	6,588 4,939 1,900 3,883 368 12,792 199	6,111 4,763 1,454 5,589  16,023 217	6,511 4,777 1,374 4,716  15,180 255		
Total Fish Produced	23,801	30,051	30,669	34,157	32,813		

Sales at the Sydney and Newcastle Fish Markets amounted to 20,230,576 lb. and 1,431,788 lb., respectively, in 1945-46, 22,335,158 lb. and 1,633,985 lb. in 1946-47, and 23,715,949 lb. and 1,391,768 lb. in 1947-48. Most of the recorded production of fish is distributed through these markets.

### VALUE OF FISHERIES PRODUCTION.

The value of the production from fisheries of New South Wales is estimated as at the place of production and excludes fish condemned, fish sold without passing through the market (and not recorded) or used for fertiliser and oil, and the value of molluses other than oysters. The following table shows the value of production from fisheries in 1947-48 and earlier years:—

Table 457.—Value of Fisheries Production.
£ thousand.

Year ended 30th June.	Fish.	Oysters.	Prawns, etc.	Total.	Year ended 30th June.	Fish.	Oysters.	Prawns, etc.	Total.
1921 1926 1931 1938* 1939* 1940*	402 412 506 481 387 389 484	65 82 54 83 81 87 86	24 59 75 56 40 41 49	491 553 635 620 508 517 619	1943 1944 1945 1946 1947 1948	597 562 781 795 1,019 876	124 96 157 174 191 215	109 70 85 77 92 133	830 728 1,023 1,046 1,302 1,224

<sup>\*</sup> Calendar year.

### OVERSEA TRADE IN FISH.

Particulars of the oversea trade in fish and fish products in 1947-48 and selected earlier years are given in the following table. Imports of fish are mainly tinned and normally constitute a considerable proportion of the State's supply. Exports are almost wholly re-exports of fish imported from other countries, although there is a small export trade in locally produced fresh and frozen oysters and fish and tinned fish.

Table 458.-New South Wales: Oversea Trade in Fish.

	Imports.		Exports.				
Year and Item.			Australian Produce.		Australian Produce and Re-exports.		
	Quantity.	Value,	Quantity.	Value.	Quantity.	Value.	
1938-39—Total 1944-45—Total 1945-46—Total 1946-47—Total	lb. 19,444,703 12,940,216 4,364,524 5,876,449	£A. f.o.b. 733,027 749,952 304,859 405,249	lb. 42,743 184,259	£A. f.o.b. 1,381 10,975	lb. 628,636 3,845,818 9,123,437 2,109,332	£A, f.o,b, 25,606 187,957 612,160 142,058	
1947-48—Fresh or Frozen— Oysters in the shell Other Smoked or dried	3,844,759	63 207,380	92,512 30,596	6,025 3,617	92,512 38,086	6,025 4,264	
(not salted)	1,694,075	87,417	15,828	1,018	26,440	2,185	
Potted or concen- trated Preserved in tins, etc	554,482	95,277	44,508	7,131	44,526	7,136	
Fish Shellfish	8,838,029 330,996	998,582 51,770	100,216 2,555	12,373 224	1,572,266 2,555	84,540 224	
Other (including salted)	156,240	8,254	4,480	336	4,928	702	
Total	15,418,581	1,448,743	290,695	30,724	1,781,313	105,076	

<sup>\*</sup> Not available.

# FISH PRESERVING.

Fish of many kinds specially suitable for treatment by canning, smoking, or salting is obtainable in the waters along the coast of New South Wales. During 1947-48, 1,952,265 lb. (valued at £167,460) of fish preserved in tins were produced in canneries at Narooma and Eden on the South Coast and in meat and fish preserving works.

# LAND SETTLEMENT

An account of the land legislation of New South Wales in relation to the progress of settlement, describing the many forms of acquisition and tenure from the Crown is given in the 1941-42 and 1942-43 and previous issues of the Year Book. The review of these matters given in this chapter affords a general indication of the manner in which the law relating to the control and disposal of Crown lands is administered, and indicates the class of tenures under which landholders hold their lands.

## LAND AREA, TERRITORIAL DIVISIONS AND LAND DISTRICTS.

The area of New South Wales is 198,037,120 acres, but excluding the surface covered by rivers, lakes, etc., the land area is 195,068,040 acres or about 304,793 square miles. The State is divided into three territorial land divisions—Eastern, Central and Western, bounded by lines running approximately north and south, as shown on the map in the frontispiece of the volume of this Year Book. The Eastern Division embraces the coastal and tablelands districts (exclusive of 601,000 acres of Commonwealth territory) covering 60,661,296 acres. The Central Division, extending over most of the western slopes and central plains, contains 57,055,846 acres, and the plain country beyond comprises the Western Division of 80,319,348 acres, most of which is under sparse pastoral occupation because of low rainfall.

### LAND ADMINISTRATION.

The administration of the Crown lands passed entirely under local control on the establishment of responsible government in 1856. The Secretary for Lands, a Cabinet Minister, is responsible for the administration, and he is assisted by a Permanent Under Secretary with subordinate powers. Since 1901 the lands of the Western Division have been administered separately, first by a Board, and since 1934, by a Commission or Commissioner, responsible to the Secretary for Lands.

The principal enactments governing the control and disposal of Crown lands are the Crown Lands Consolidation Act, 1913, as amended, the Closer Settlement and Returned Soldiers' Settlement Acts, the Irrigation Acts, and the Western Lands Acts.

Since 1938, the Catchment Areas Protection Board, comprising the Minister for Conservation (as chairman), the Director of the Soil Conservation Service, and representatives of the Departments of Lands, Agriculture, and Mines, and of the Water Conservation and Irrigation and the Forestry Commissions, has exercised oversight over the disposal of lands within the principal catchment areas of the State (see page 295).

## Land Boards and Land and Valuation Court.

The Eastern and Central Divisions are divided into eighty-eight Land Districts with a Crown Land Agent in each. The Land Districts are grouped into eleven Land Board Districts, with a District Surveyor in each. There are special Land Board Districts for the Yanco, Mirrool and Coomealla Irrigation Areas. Land Districts of the Western Division coincide with Pastures Protection Districts.

In each Land District, a Local Land Board with an official chairman and two local members, sitting in open court, determines many matters under the Lands and other Acts. The Local Land Boards of the Western Division are comprised of the Commissioner, an Assistant Commissioner, and one local member.

The Land and Valuation Court, which superseded the Land Appeal Court in 1921, gives awards and judgments having the same force as those of the Supreme Court on appeals, references and other matters under the Crown Lands Acts, Closer Settlement Acts, and certain other Acts concerned with the use, value and ownership of land. Further particulars regarding Local Land Boards and the Land and Valuation Court are given in the chapter "Law Courts".

#### RESERVES.

Throughout the State considerable tracts of land, totalling 18,022,580 acres at 30th June, 1948, have been reserved from sale (some from lease, also) in the public interest, for various purposes, the principal being travelling stock reserves, temporary commons, mining, forestry, and recreation reserves and parks. Some lands are reserved pending survey and classification. The reserves are subject to review periodically, and are revocable by executive act when their retention is found unnecessary. The following is a statement of reserved areas; it excludes land permanently dedicated for State Forests, National Parks, commons, railways, cemeteries, etc., and thus does not purport to show the area of Crown lands set aside for community purposes:—

Classification.	Area.	Classification.	Area.
Travelling Stock Water and Camping Mining Forest Temporary Common	acres. 5,327,695 833,309 1,215,757 2,083,095 272,033	Recreation and Parks  For Classification and Survey From Conditional Purchase in Goldfields  Other  Total	acres. 420,665 4,155,138 418,783 3,296,105

Table 459.—Reserves, Kinds and Areas, 30th June, 1948.

Apart from these land reservations, there are considerable portions of the coastal and tableland regions which are too rugged and barren to be suitable for settlement. It is estimated, however, that the area of land within the State unfit for occupation of any kind is less than 5,000,000 acres.

# CLASSES OF LAND TENURES: HISTORICAL SURVEY.

In New South Wales the area of rural land under private tenancy is relatively inextensive; most of the land is held in fee simple or in process of purchase or under lease from the Crown. In the early days of settlement up to 1884 lands were alienated by grants from the Governor; sales from the Crown commenced in 1831, and leasehold tenures were given to "squatters" after 1832. Conditional purchase under the "free selection before survey" system was introduced in 1861 to open to landseekers a means of acquiring land already held under lease, and the system continued until

1884. Since 1895, the principles governing the disposal of Crown land have been pre-classification of land, survey before selection, each holding of sufficient size to provide a "living area", one man one selection, and bona fide selection. Sales at or after auction have decreased in importance. Closer settlement, described later herein, has been an important factor in providing for new settlers during the greater part of this century.

In general, the methods of disposal of Crown lands have been designed to ensure individual private ownership. Various leasehold tenures were introduced around the turn of the century, but as the result of recent provisions for the conversion of home maintenance areas within leases from the Crown to leases in perpetuity, most of the lands of the State are now either alienated or in course of alienation, or carry rights to alienation. Nearly all tenures of land carrying rights of alienation have been granted and made transferable subject to a condition of residence by the holder, and many of the tenures require substantial improvements to be effected within a prescribed period. These provisions have as their objects the promotion of settlement and prevention of the aggregation of large areas under private ownership.

A historical review of the development of land settlement in New South Wales is given in the Annual Report of the Department of Lands for 1946-47.

# ALIENATION OF LAND.

In the Eastern and Central Divisions there were 101,828,411 acres under occupation at 30th June, 1948, and of that area 92,510,323 acres (or 98 per cent.) were absolutely or virtually alienated, in course of alienation or held under leases wholly alienable by lessees. Practically all of the Western Division is suitable for sparse pastoral occupation only; most of it is leasehold, generally in the form of perpetual leases (see Table 461). The progress of alienation of land within the State at intervals since 1861 is indicated in the following statement:—

Table 460.—Area of Alienated Lands.

Area of Area of Freehold Area Freehold Area At 31st At 30th At 30th Remaining Absolutely Remaining Absolutely Resumed Resumed December. Absolutely June. June. Alienated. for Refor Re-Alienated. Alienated. Settlement. Settlement. 1861  $7,147 \\ 8,631$  $\frac{1911}{1921}$ 36,234 39,680 44,075 2,517 2,517 2,574 ลกล 1944 51,208 1871 1,857 1945 51,446 51,688 2,406 2,414 1881 19,615 1931 1946 1947 1891  $\hat{1}93\hat{6}$ 23,683 46:204 3.00151:489 1901

Thousands of Acres.

Particulars of the various ways in which alienation had been effected up to 30th June, 1944, are given in Table 752 of the 1941-42 and 1942-43 edition of the Year Book, pages 816 to 818 of which describe the methods of purchase. Of the total area absolutely alienated up to 30th June, 1948, that acquired by conditional purchase was 32,231,143 acres, by grant or sale by private tender or public auction prior to 1862 was 7,146,579 acres, and by auction or after-auction purchase and under deferred payment sales since 1862, 11,596,458 acres.

The foregoing statement includes only land in respect of which deeds had been issued; the additional areas in respect of which the Crown is committed to confer freehold title upon holders upon completion of payments and fulfilment of conditions are indicated in the next table. Beside 16,840,590 acres in course of alienation or virtually alienated, 26,924,920 acres were within leases alienable in their entirety, and a further 1,317,670 acres were within long-term leases carrying limited rights of alienation. Of the area under long-term leases in the Western Division, 54,326,271 acres, or over 70 per cent., comprised leases in perpetuity.

#### DISPOSAL OF LANDS AND AREA OF TENURES.

The next table provides a brief summary of the manner in which the lands of the State were held at 30th June, 1948, distinguishing those in the Western Division from the remainder of the State:—

Table 461.—Disposal of Lands and Area of Tenures, 30th June, 1948.

Acres	· · · · · · · · · · · · · · · · · · ·	***	
Manner of Disposal.	Eastern and Central Divisions.	Western Division.	Whole. State.
Alienated In course of alienation Virtually alienated Alienable leases (long-term and perpetual) Long-term leases with limited rights of alienation  Total of foregoing tenures Perpetual leases with no right of alienation Other long-term leases Short-leases and temporary tenures Forest leases and permits within State Forests	1,666,351 26,839,548 1,223,847 93,734,170 1,608,331 4,122,773	$2,040,516 \left\{ \begin{array}{c} 1,119\\ 85,372\\ 93,823* \end{array} \right.$ $2,220,830\\ 54,232,448\\ 17,040,382\\ 6,011,851$	50,871,820 15,173,120 1,667,470 26,924,920 1,317,670 95,955,000 55,900,779 17,040,382 2,1221,545
Mining leases and permits	181,592	14,358 799,479	195,950 16,688,840
Total Area	117,717,772	80,319,348	198,037,120

<sup>\*</sup> Perpetual.

Of the land in process of alienation, 12,964,458 acres were held as conditional purchase, 1,797,181 acres as settlement purchases, 188,147 acres as soldiers' group purchases, and 158,772 acres as irrigation land purchases. The land virtually alienated comprised homestead grants and homestead selections.

Within the Western Division, the greater part of the land was let originally by the Crown under long-term leases in very large holdings. Since 1934 the State, acting under successive Western Lands Amendment Acts, has withdrawn very substantial areas in stages from these leases to provide land for new settlers or to build up to reasonable size the holdings of existing settlers with inadequate areas. As a result there have been significant changes in the number and average size of holdings in this division during recent years (see table 251).

Special provisions relating to the disposal of prickly-pear infested land, together with a brief statement regarding its extent, and the methods used for the control and extermination of prickly-pear, are outlined on page 599 of the 50th edition of the Year Book. During 1947-48, the Prickly Pear Destruction Commission treated an area of 133,732 acres of prickly-pear by poisoning.

#### KINDS AND AREA OF LAND LEASES.

The total area of Crown land in New South Wales held under lease, occupation license and permissive occupancy was 115,303,340 acres at 30th June, 1948, inclusive of 35,409,615 acres under the Crown Lands Act, 77,316,361 acres under the Western Lands Act, 2,105,393 acres under the Forestry Act, 195,950 acres under the Mining Act, and 276,021 acres under the control of the Water Conservation and Irrigation Commission. The area under each tenure at 30th June, 1948, is shown below:—

Table 462.—Kinds and Area of Leases of Crown Land, 30th June, 1948.

Nature and Name of Tenure.	Area.	Nature and Name of Tenure.	Area.
Virtually Alienated—	acres.		acres.
Homestead Selection and Homestead Grant	1,667,470	Perpetual, No Right of Alienation— Closer Settlement Lease Group Purchase Lease	502,657 206,714
Alienable—Long-term and Perpetual—	4.782.046	Settlement Purchase Lease Western Lands Lease	958,960 54,232,448
Homestead Farm Suburban Holding Settlement Lease*	53,615 2,770,819	Group Total	55,900,779
Crown Lease* Conditional Purchase Lease* Conditional Lease* Returned Soldiers' Special Holding Week-end Lease Town Lands Lease On Irrigation Areas—	7,285,895 157,644 11,733,894 13,695 172 66	Other Long-term— Western Lands Lease, Ordinary	17,040,382
Irrigation Farm Lease  Non-Irrigable Lease  Town Lands Lease	$^{111,758}_{14,994}_{322}$	Short-term and Temporary— Snow Lease Annual Lease Occupation License	672,671 467,335
Group Total	26,924,920	Preferential Occupation License Permissive Occupancy	$\begin{array}{c} 675,485 \\ 419,155 \\ 7,750,031 \end{array}$
Long-term, Limited Rights of		Irrigation Area Lease	149,947
Improvement Lease Scrub Lease	$57,141 \\ 51,716$	Group Total	10,134,624
Inferior Lands Lease Church and School Lands Lease Conditional Lease brought under	25,513 8	Forest Lease and Occupation Permit	2,121,545
Western Lands Act (Perpetual)	93,823	Mining Lease and Permit	195,950
Prickly Pear Lease Residential Lease Special Lease	148,068 5,398 936,003	Grand Total	115,303,340
Gronp Total	1,317,670		

<sup>\*</sup> New leases mainly perpetual; old leases convertible to perpetual leases.

The tenures listed in the foregoing table and the rights and obligations of their holders are described in the chapter "Land Legislation and Settlement" of the Official Year Book for 1941-42 and 1942-43. The multiplicity of tenures has arisen from legislative measures taken from time to time to adapt the conditions of occupation and acquisition of Crown land to the changing character of rural settlement.

#### LAND IN IRRIGATION AREAS.

Settlers within irrigation areas generally hold their land under free-hold title, tenures leading to alienation, or under leases convertible to alienable tenures. A residence condition frequently applies under Crown tenures and a requirement of improvements and satisfactory development of the land is usual. The principal tenures of irrigable lands in irrigation areas carry water rights varying according to the type and area of the holding.

At 30th June, 1948, there were in irrigation areas 2,568 acres alienated as Irrigation Farm Purchases, 158,772 acres in course of alienation as Irrigation Land Purchases, 127,074 acres in long-term alienable leases and 149,947 acres in other leases (including 42,502 acres outside irrigation areas but under control of the Water Conservation and Irrigation Commission).

#### CLOSER SETTLEMENT.

The circumstances leading to the adoption in 1906 of the "Closer Settlement Policy" are described on page 680 of the Year Book for 1928-29. On pages 832-838 of the 1941-42 and 1942-43 edition the manner of provision and disposal of land under this policy is dealt with in some detail.

The Closer Settlement Acts provide that private land and long-term leases may be acquired by the Crown in certain circumstances, by direct purchase or resumption, to provide for new holdings and for additions to existing holdings. Acquisition must be recommended by the Settlement Advisory Board and approved by Parliament. Under the Closer Settlement Promotion Act, three or more persons, or one or more discharged soldiers with prescribed qualifications, may enter into agreements with private land-owners to buy private lands, and ex-servicemen may agree to buy certain Land Act holdings on subsisting title from their holders. Given Ministerial approval, the Crown acquires the land from the vendors and disposes of it to settlers by instalment purchase or lease.

Closer settlement operations have been concerned largely with the settlement of ex-servicemen of the wars of 1914-18 and 1939-45. The following table shows particulars of the estates acquired for closer settlement up to 30th June, 1948, and the method and purpose of acquisition:—

Table 463.—Closer Settlement: Estates Acquired to 30th June, 1948.

Particulars.	Estates.	Area, acres.	Purchase Price. £	Farms after Subdivision
м	ETHOD OF ACQU	ISITION.		
Direct Purchase Crown Lands Act (s. 197) Closer Settlement Acts— Promotion Provisions Ordinary Provisions Resumption of Long-term Leases Total Acquired	30 23 1,735 125 70 1,983	90,164 36,222 2,176,343 2,041,571 806,217 5,150,517	506,855 295,614 10,298,274 8,844,590 200,802 20,146,135	673 376 4,233 3,877 784
	Purpose of Ac	QUISITION.		
Joldiers only, 1914–18 War War Service Land Settlement, 1939–45 War Other Purposes  Total Acquired	1,531 129 323 1,983	1,710,272 1,005,485 2,434,760 5,150,517	8,113,956 5,038,562 6,993,617 20,146,135	4,009 858 5,076 9,943

#### SETTLEMENT OF EX-SERVICEMEN.

1914-1918 WAR.

Conditions under which ex-soldiers of the 1914-18 war acquired their holdings and assistance rendered to them in subsequent years are outlined in the Year Book for 1941-42 and 1942-43 and previous issues. Operations under this scheme are now confined to the administration of existing holdings and monetary advances made thereon. From land acquired and crown lands made available for Soldier Settlement, 9,882 farms had been provided up to 30th June, 1948. Farms numbering 5,468 had been transferred or reverted to the Crown to that date and 4,414 farms comprising 5,648,358 acres remained under occupation.

#### 1939-1945 WAR.

Commonwealth-State Land Settlement Agreement, 1945.

Following the introductory War Service Land Settlement Act, 1941 (described in the Year Book 1941-42 and 1942-43) an Agreement made between the Commonwealth and State Governments in November, 1945, was ratified by the Parliament of New South Wales by the War Service Land Settlement Agreement Act, 1945. Under the Agreement, the State finds, subdivides, and improves and develops the land to make it quickly productive after allocation to settlers. Half the cost of so providing and developing the land is borne by the Commonwealth Government.

The State receives and deals with applications from ex-servicemen within five years of their discharge or the cessation of hostilities, whichever is the later; selected applicants, who are chosen by the State, are trained and maintained by the Commonwealth during training and the first year of occupation. The Commonwealth also bears half the cost of remission of rent and interest payments during the first year of occupation, and any loss to the State arising from advances made to settlers with Commonwealth concurrence.

Principles governing the settlement of ex-servicemen were defined as follows: settlement to be undertaken only where economic prospects for the production concerned are reasonably sound; settlers to possess farming aptitude and experience; holdings to be of a size enabling settlers to operate efficiently and to earn a reasonable labour income; lack of capital not to preclude selection, but settlers expected to invest a reasonable proportion of their capital in the holdings; and all settlers to be given adequate guidance and technical advice.

Implementation of this agreement made it necessary to amend a number of State Acts with the object of facilitating the settlement of ex-servicemen on acquired lands.

#### Classification of Applicants.

All applicants for participation in the Land Settlement Scheme appear before a Classification Committee of three members constituted under the War Service Land Settlement Act, 1941, and, if considered eligible and suitable, are issued with a qualification certificate. The Committee, which commenced operations in July, 1943, issued many certificates to applicants still serving in the Forces. Up to 30th June, 1948, 21,406 applications for certificates had been received and 14,031 certificates had been issued for purposes as follows: pastoral, 4,766; pastoral and farming, 6,558; farming, 314; dairying, 1,364; orchards, 689; other purposes, 340. The holder of a qualifying certificate is entitled to apply for inclusion in a ballot for a subdivision of acquired land, or to submit a proposal under the "promotion" provisions of the Scheme described later.

#### ACQUISITION OF LAND.

The Agreement provides that the State shall acquire compulsorily or by agreement, private lands or lands under lease from the Crown, comprised in an approved plan of settlement. Lands acquired in this manner through the State Department of Lands have been "picked" properties in good rainfall areas or with assured water supplies. Private lands are acquired by either the "Ballot or Acquisition" method or the "Promotion" method.

# "Ballot or Acquisition" Method.

The acquisition of properties for subdivision and disposal by ballot. is carried out under the provisions of the Closer Settlement (Amendment) Act, 1907, by the Closer Settlement Advisory Boards, which report to the Minister on the suitability of properties in their respective areas for closer settlement. They make recommendations for the acquisition of properties, reporting as to value, capacity, and number of farms into which these could be subdivided. Upon selection, such lands are safeguarded against dealings, and made transferable only with the Minister's consent. Then follows a joint inspection of the land by a Closer Settlement Advisory Board and by Commonwealth representatives, who determine whether a detailed investigation by the State is warranted. The latter includes a topographical survey, comparison with sales of neighbouring lands, a soil classification and survey, erosion survey and a report from the Local Closer Settlement Advisory Committee, which is a voluntary advisory body, composed of representatives of local organisations. On these reports, the Closer Settlement Advisory Board and Commonwealth representatives confer as to suitability, the number and type of farms into which the estate can be divided, and the developmental work necessary. Formal concurrence of the Commonwealth is then obtained, and thereupon the Board negotiates with the owner to decide the value of the property, which must not exceed that at 10th February, 1942, plus the value of any improvements since that date. The Board finally recommends to the Minister either that the estate be purchased at a price agreed upon by the Board and the owner or, failing agreement, that it be resumed at a price determined by the Board. Approval of the Parliament of New South Wales is necessary before acquisition is completed.

At 30th June, 1948, Parliament had approved of the acquisition of 56 estates, comprising 720,982 acres, for a total purchase price of £3,591,937. It was anticipated that 651 farms would be provided from these areas. Estates actually acquired at 30th June, 1948, numbered 47, with a probable 580 farms, covering 650,935 acres; the cost was £3,218,004. Farms made available for application to the same date totalled 337; of these, 281 farms comprising 250,715 acres had been allotted to settlers.

#### "Promotion" Method.

"Promotion" cases are dealt with under the previsions of the Closer Settlement Amendment (Conversion) Act, 1943. The Act provides that three or more (amended to one or more in December, 1947) ex-servicemen holding a qualification certificate, who desire to acquire any private lands from the one owner may, with the owner's consent, apply to the Minister to acquire the property on his or their behalf at the price shown in the application. A Closer Settlement Advisory Board values the land, but its valuation must not exceed the value as at 10th February, 1942, plus improvements effected since that date. The application is refused if the price

approved by the applicant and the owner exceeds this valuation, and in other cases detailed investigation similar to that for the "ballot or acquisition" method is undertaken by the State. If, after investigation, the Closer Settlement Advisory Board believes the property suitable, the concurrence of the Commonwealth in its acquisition is sought. Unless Commonwealth approval is obtained, no further action is taken. Final approval to purchase is given by the State Minister; parliamentary consent is not required.

Under the "promotion" provisions of the Closer Settlement Acts, 760 groups, composed of 1,570 ex-servicemen, had submitted proposals for the acquisition and subdivision of 760 estates up to 30th June, 1948. Agreement with owners on acquisition and price had been reached in 115 cases aggregating 497,788 acres, valued at £2,488,698. It was proposed to subdivide this area into 377 farms. Purchase was completed in 82 of these cases, aggregating 353,010 acres subdivided into 278 farms. Applications were refused in 205 cases, and the remainder were still under consideration.

# Tenure of Farms.

The two main methods of settlement in operation, viz., "ballot or acquisition" and "promotion," are described in the preceding subsection. Under the "ballot or acquisition" method, the State subdivides the land into farms of adequate size; advertises the farms as available for application; and allots them to qualified ex-servicemen by way of ballot, conducted by the Local Land Board for the district. Under the "promotion" method, after the Crown has purchased the property, it subdivides the land into farms where necessary, and vests the title of the farms in the applicants.

The tenure granted under both methods is a lease in perpetuity, known as a Closer Settlement Lease. Its principal features are:—

The annual rental is 2½ per cent. of the capital value of the farm, inclusive of "ground improvements."

Structural improvements on the holding are paid for separately. Principal must be repaid in not more than 35 equal annual instalments. The interest rate is  $2\frac{1}{2}$  per cent. per annum and interest only is payable during the first five years.

Lessees must reside on the holding for a term of five years, commencing within six months of allowance by the Land Board.

Lessees are required to use proper methods of land husbandry, to destroy noxious animals and vegetation, to preserve timber on the land, and to prevent land erosion and overstocking.

Ministerial consent is necessary to transfer, convey, assign, mortgage or otherwise deal with the lease.

The lease is not transferable until ten years after commencement except to another qualified serviceman or, in the event of death of the lessee, to his widow or children.

At 30th June, 1948, the outstanding capital value of Closer Settlement Leases actually granted under the scheme was £1,867,042, and the capital value of structural improvements to such leases amounted to a further £183,053.

# Development of Farms.

Existing structural improvements on a farm, which are the property of the Crown, are paid for separately, as indicated previously. Further "developmental" improvements under the War Service Land Settlement Act, whether effected before or after the settler enters into occupation, are paid for by him under similar terms.

The extent of "developmental" work authorised is:-

Fencing of external boundary; provision of an essential water supply; erection of a dwelling (cost must not exceed £1,500—maximum up to 1947 was £750); erection of a utility shed; erection of a dairy, bails and yard (dairy farm only); and clearing or timber treatment (cost is added to the capital value of the farm, on which rent is payable in perpetuity at  $2\frac{1}{2}$  per cent. per annum).

The plan of development of every farm is a matter for discussion and agreement between the Closer Settlement Advisory Boards and the Commonwealth Director of Land Settlement. In addition, where pasture improvement is carried out by the State, it is charged against the settler's Advance Account, with interest at 3½ per cent. per annum. If the settler is also required to develop the farm by pasture improvement, the requirement is made an actual condition of the lease and, where necessary, finance is granted as an advance carrying interest at 3½ per cent. per annum.

Under the Agreement, the State develops and improves land acquired for settlement to a stage where it can be brought into production by a settler within a reasonable time. Shortages of materials and labour have made it possible for the State to do this in only a few instances; in most cases the settlers secure tenders to effect these improvements or to carry them out themselves after obtaining Departmental approval of their plans. Roads within a settlement are constructed by the State, mostly through the agency of the local shire councils.

Expenditure from the General Loan Account of New South Wales for the acquisition, development and improvement of estates for the settlement of ex-servicemen of the 1939-45 war was £4,316,229 to 30th June, 1948.

# Advances for Stock, Plant, etc.

In terms of the Agreement, the Minister for Lands may make such advances as he deems necessary for the satisfactory occupation and development of settlers' farms. Advances, applications for which are examined closely, are made for working capital, effecting further improvements (internal fencing, further water supply, farm buildings, etc.), and for the purchase of stock, plant and equipment. These are repayable within varying maximum periods in equal annual instalments, and all carry an interest rate of 3½ per cent. per annum on the outstanding balance. They are secured by mortgages, bills of sale, etc. Advances for all purposes approved to 30th June, 1948, numbered 308 for an amount of £921,863 an average per advance of almost £3,000. Money actually advanced to that date was £396,942.

#### Living Allowances Granted to Settlers.

A living allowance may be granted to a settler for a period of twelve months after he commences to occupy and work the farm. The rates and conditions of the living allowances are determined by the Commonwealth, and vary according to the settler's marital status and the number of his

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dependants. Allowances are paid by the State from moneys made available by the Commonwealth. At 30th June, 1948, living allowances were being paid to 305 settlers. Allowances paid during 1947-48 amounted to £55,583.

# Training Courses for Settlers.

Each settler who obtains a holding is eligible to undertake a short "refresher" course of training designed to impart knowledge of modern farming and farm management, particularly the business side of his farm. It is a residential course of about eight weeks, conducted by experts at State Agricultural Experimental Farms. Trainees are paid rail fares and allowances. To 30th June, 1948, 89 ex-servicemen had completed this course and 57 others had completed a course on approved farms. Another 83 ex-servicemen were undergoing training at this date.

# Summary of Settlement.

Operations under the settlement scheme to 30th June, 1948, showing the position at different stages of the transfer, are set out in the following table:—

Table 464.—Ex-Servicemen's Land Settlement Scheme, 1939-1945 War:
Operations to 30th June, 1948.

		Farms after		Purchase	
Particulars.	Estates. No.	Subdivision.	Area acres.	Price £	
	" Ballot or A	cquisition " Estat	ES.		
Approved by Parliament Actually acquired Under occupation	56 47 	651 580 281	720,982 650,985 250,715	3,591,937 3,218,004	
	"PROMO	TION " ESTATES.			
Approved by Minister Actually acquired Under occupation	115 82 82	377 278 278	497,788 353,010 353,010	2,488,698 1,818,139 1,818,139	
	Тотаь	ALL ESTATES.		_	
Approved Actually acquired Under occupation	171 129 	1,028 858 559	1,218,770 1,005,485* 603,725	6,080,635 5,038,562*	

<sup>\*</sup> Including 1,540 acres for £2,419 acquired under the Crown Lands Act.

In addition, at 30th June, 1948, ex-servicemen of the 1939-1945 war were occupying 14 Irrigation Farm Leases with an area of 9,321 acres, 685 miscellaneous holdings amounting to 95,191 acres on Crown Lands, and 66 Western Lands Leases comprising 2,163,768 acres in the Western Division.

# OVERSEA TRADE

CONTROL OF OVERSEA TRADE.

The Commonwealth Parliament makes laws with respect to trade and commerce with other countries and among the States of Australia.

The first Commonwealth Act relating to customs came into operation by proclamation on 4th October, 1901. The Act, with amendments, provides administrative machinery in relation to customs, prescribes the manner in which duties are to be computed and paid, and authorises the inspection of imports and exports.

Prior to federation, a different tariff was in operation in each State, and interstate trade was subject to the same duties as oversea trade. On 8th October, 1901, when the Customs Tariff Act of 1902 was introduced in the Commonwealth Parliament, a uniform tariff for all the States was imposed, trade and commerce between the States became free, and the power of the Commonwealth to impose duties of customs and excise became exclusive, except that the State of Western Australia was given the right to levy duty on interstate imports for a period of five years.

 $Control\ of\ Imports\ and\ Exports—Department\ of\ Trade\ and\ Customs.$ 

Matters relating to trade and customs are administered by the Commonwealth Department of Trade and Customs, which is under the direction of a Commonwealth Minister.

By the Customs Act certain imports are prohibited, and the prohibition may be extended to other commodities by regulation. The conditions under which goods for export are prepared may be prescribed by regulation, and the exportation of goods which do not conform to the required standards may be prohibited. In terms of the Commerce (Trade Descriptions) Act, 1905-1933, the importation or exportation of any goods may be prohibited by regulation unless they bear a prescribed trade description.

Regulations under the Banking Act, 1945, prohibit the export of goods except under license, and prescribe the terms and conditions of such licenses.

# Department of Commerce and Agriculture.

The Commonwealth Department of Commerce and Agriculture supervises matters relating to the oversea marketing of Australian produce. Its functions include the collection and dissemination of commercial and industrial data, the supervision of the grade and quality of goods exported, the investigation of matters affecting trade, commerce and industry, and the control of the Trade Commissioner service abroad. The department is under the control of a minister of the Crown and is assisted by an Export Advisory Committee, consisting of representatives of Australian exporters and of various Commonwealth Departments, including Trade and Customs.

Under the Commerce (Trade Descriptions) Act, official control is exercised over the preparation, manufacture, quality, grading, packing and labelling of practically all foodstuffs exported.

A number of marketing organizations has been constituted by the Commonwealth to control the export and distribution abroad of certain Australian commodities.

Trade representation abroad is conducted by Trade Commissioners who have been appointed for service in the United Kingdom, Canada, New Zealand, Sonth Africa, India, Ceylon, Malaya, Hong Kong, Egypt and the United States of America, by a Commercial Secretary in France, and by a Commercial Counsellor in Japan. The Agent-General is the official representative of the Government of New South Wales in London.

# Tariff Board.

The Tariff Board was appointed to assist the Minister under an Act which came into operation in March, 1922. The Board consists of four members, including an administrative officer of the Department of Trade and Customs, who is chairman. The Tariff Board Act, 1921-1934, prescribes that the Minister shall refer to the Board for investigation such matters as appeals against the decisions of the Comptroller-General in respect of the interpretation of the tariff; the necessity for new, increased, or reduced duties or for bounties; the effect of bounties; proposals for applying preferential tariffs to any country; and questions such as whether undue advantage is being taken of tariff protection by charging unnecessarily high prices. In addition, the Minister may require the Board to inquire into the classification of goods under by-law items in the tariff or the determination of the value of goods for duty, and he may request it to report as to the effect of the customs and excise tariffs and of the customs laws on the industries of the Commonwealth, and on other matters affecting the encouragement of industries in relation to the tariff.

#### War-time Regulations and Mutual Aid Agreements.

A description of war-time Mutual Aid Agreements and an outline of war-time regulations relating to oversea trade are given in previous issues of the Year Book (see No. 50, page 118).

#### Post-war Control of Oversea Trade.

Since the war, Australian oversea trade has been seriously affected by a continuing adverse balance of payments between countries of the sterling group and the dollar countries (United States and Canada). In order to

conserve dollar exchange and reduce the adverse balance, the Commonwealth Government has retained strict control of foreign exchange and oversea trade.

Under the Banking (Foreign Exchange) Regulations, which came into force in January, 1947, foreign exchange transactions are subject to control by the Commonwealth Bank. The Regulations prescribe that a license must be obtained from the Department of Trade and Customs for the export of any goods not specially exempted from control. Foreign currency arising from the sale of Australian products overseas is placed at the disposal of the Commonwealth Bank, which pays the exporter an equivalent amount in Australian currency.

Imports into Australia are controlled under the Customs (Import Licensing) Regulations, promulgated on 1st December, 1939. During the war, the importation of some classes of goods was prohibited; others were admitted on a percentage basis (quantity or value) relative to imports in 1938-39, and in some cases applications for permission to import goods were dealt with on their merits without reference to past importations. After the war, many classes of goods were removed from the prohibited or quota-basis lists, and by 1948, except for a limited range of non-essential commodities, there were no restrictions on imports from the United Kingdom and other sterling countries. However, licenses were still required for the import of all goods from non-sterling countries.

In May, 1947, as a result of the increasing shortage of dollar exchange, the granting of new licenses to import goods from the United States and Canada was suspended. In September of the same year, restrictions (including some prohibitions) were imposed on imports into Australia of an extensive range of commodities of which newsprint, motor vehicle chassis, tobacco and petrol were the most important. At the same time fewer dollars were allocated for film royalties and travel expenditure. Import quotas were reduced again in December, 1947. In particular, imports of American tobacco leaf were to be halved in 1948-49, and imports of motor vehicles from North America to be limited to a value of £A3,000,000 between December, 1947, and June, 1948, and to £A6,000,000 in 1948-49.

# INTERNATIONAL TRADE ORGANIZATION.

A Preparatory Committee of the International Conference on Trade and Employment sponsored by the United Nations Economic and Security Council was constituted early in 1946, and in September of that year a proposed charter for an International Trade Organization was discussed in London by the Committee, upon which Australia was represented.

At Geneva, in April, 1947, the Preparatory Committee sponsored negotiations for tariff variations on a country-to-country and product-by-product basis. In this connection, Australia published schedules (a) of items regarding which other countries had signified a desire to negotiate, (b) of items upon which tariff concessions were proposed to be sought by Australia, and (c) of certain Australian goods given preferential treatment in British markets which might be affected by negotiations. A draft charter for the International Trade Organization was considered by delegates of seventeen nations at Geneva on 22nd August, 1947, and was finally adopted at a further world trade conference representing fifty-seven governments held at Havana from 21st November, 1947, to 24th March, 1948; the Havana Conference also set up an Interim Commission with an Executive Committee of eighteen members, on which Australia is represented. A General

Agreement on Tariffs and Trade was adopted at the Geneva Conference, and new tariffs were provisionally applied from 18th November, 1947, by the Australian Government and by the governments of eight other countries, including the United Kingdom, the United States and Canada. The Charter and Agreement were ratified by Act of the Commonwealth Parliament in December, 1947.

# Charter of the International Trade Organization.

The Charter of the International Trade Organization requires each member nation to maintain high levels of employment and purchasing power within its own territory. Any member with a continuing favourable balance of trade likely to cause balance of payment difficulties in other countries, must endeavour to correct this position, primarily by increasing imports. All member nations are required to assist in the development of under-developed countries.

There is provision in the Charter for negotiation between membernations for the reduction of preferences and tariffs. Preferences existing in 1946 between the countries of the British Commonwealth are specifically preserved but may be reduced by mutual consent. The granting of further preferences is restricted, and each member nation is required to extend equal tariff treatment ("unconditional most-favoured nation treatment") to other members.

The Charter imposes some restrictions on export subsidies but expressly permits stabilization schemes for the marketing of primary products. Restrictions on imports or exports other than duties or taxes are prohibited, except for purposes such as the relief of a domestic shortage of essential commodities. Anti-dumping duties may be imposed when necessary.

#### The General Agreement on Tariffs and Trade.

The General Agreement on Tariffs and Trade provides for a general reduction in tariff rates by the signatory countries and includes certain provisions relating to imports and exports. These provisions are designed to prevent any reduction in tariff rates from being rendered ineffectual by trading restrictions or discriminatory measures, except where such measures are justified by the economic conditions within the country applying them.

Important Australian export items on which the United States reduced import duties under the agreement were wool (25 per cent. reduction), and beef, mutton, lamb and butter (50 per cent. reduction). United States import duties were reduced on other items, including apples, dried eggs, tannic acid, eucalyptus oil, copper concentrates, zinc and zinc ores, and tanning extracts. Australia also obtained valuable concessions from France, Belgium, Czechoslovakia and other countries, chiefly in regard to the export of primary products.

Concessions in Australian duties were negotiated after consultation with the United Kingdom and other British Commonwealth countries. Australian concessions took two forms: (a) concessions in British preferential margins, and (b) reductions in Australian tariffs. Existing preferences on important items such as meat, butter, sugar and fresh apples in the United Kingdom were not affected. In the United Kingdom market the preference concessions affected raisins, certain canned fruits, dried tree-fruits, honey and some other items. In the Canadian market the most important concessions related to raisins, canned fruits, fruit pulp and

edible gelatine. Negotiations with the United States resulted in reductions in the Australian tariff on motor vehicle chassis, motor body panels, type-writers, adding machines, cash registers and motor cycles.

More than one hundred agreements in which Australia took no direct part were arranged between negotiating countries at Geneva. Under the terms of the General Arrangement, Australia will benefit from these separate agreements. In all, there were about 12,000 items separately listed in the tariff schedules under the Agreement.

A further world conference (representing 34 nations) on trade and tariffs began at Annecy in France on 11th April, 1949.

#### CUSTOMS TARIFF.

The Australian Customs Tariff provides customs duties under three headings—the British Preferential, the Intermediate, and the General Tariff.

The British Preferential Tariff applies to goods wholly produced or wholly manufactured in the United Kingdom. It also covers goods of which the factory or works cost is represented by not less than 75 per cent. of United Kingdom, or United Kingdom and Australian labour and material; if the goods are scheduled as not commercially manufactured in Australia, the minimum percentage is 25 per cent., and in certain cases 50 per cent. It is an essential condition that the final processes of manufacture take place in the United Kingdom, and that the goods are consigned direct to Australia. This tariff extends to certain produce of British Crown colonies, protectorates, or territories under British mandate. By separate trade agreements the British Preferential Tariff has been applied to some products of Newfoundland, of the Dominions of Canada and New Zealand and of the Territories of New Guinea and Papua, except where special duties are provided.

The Intermediate Tariff, which was a feature of the Australian Customs Tariff until 14th October, 1932, was brought into operation again on 1st January, 1937, and applied to certain items in order to facilitate the implementation of trade agreements. The benefits of the Intermediate Tariff were extended in whole or in part by proclamation to a large number of countries with which Australia's balance of trade was generally favourable.

Trade agreements were completed in 1936 with Belgium, Czechoslovakia, France, and the Union of South Africa, and the Intermediate Tariff applied as from 1st January, 1937, to certain specified importations from these countries, and as from 30th December, 1938, to certain commodities imported from Switzerland under an agreement made with that country in 1938. Brazil became subject to intermediate tariff rates from 1st January, 1940, Greece from 17th June, 1940, and the United States of America from 18th February, 1943. These agreements were modified in November, 1947, by the General Agreement on Tariffs and Trade (see page 510).

The General Tariff applies to all goods other than those brought under the British Preferential Tariff or Intermediate Tariff and those which are entitled to special import duties under the preferential tariffs of various Acts of Parliament.

Revenue collected from customs' duties, according to classes of goods, is shown in Table 488.

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# Primage Duties.

A primage duty of 2½ per cent. ad valorem was imposed for revenue purposes from 10th July, 1930, upon almost all goods, in addition to duties collected in accordance with the tariff. The rate was increased to 4 per cent. on 6th November, 1930, and to 10 per cent. on most items on 11th July, 1931. Primage duties on certain goods under the British Preferential Tariff were reduced on 5th October, 1933.

Under the Customs Tariff (Primage Duties) Act, 1934, ad valorem primage duties at rates of 4 per cent., 5 per cent., or 10 per cent. are levied according to the origin and type of goods. Goods the produce or manufacture of Norfolk Island, New Zealand, Fiji, Papua, and the Territory of New Guinea, and a number of specified goods for use by primary producers are exempt from primage duty. Many machines, tools of trade, and raw materials not manufactured or produced in Australia are also free of primage duty when subject to the British Preferential Tariff. Primage duties at the rates applicable to the British Preferential Tariff are imposed on Canadian goods admissible under the British Preferential Tariff and on proclaimed commodities from British non-self-governed colonies and protectorates. As from 1st January, 1937, all countries whose products were admissible under the Intermediate Customs Tariff were accorded a reduction of rate to 4 per cent. or 5 per cent., or exemption from primage duty in respect of specified tariff items. In November, 1947, the primage duties were eliminated in some cases under the terms of the General Agreement on Tariffs and Trade (see page 510). Revenue from primage duties in New South Wales is shown in Table 488.

#### Special War Duty.

An additional (war-time) customs duty, representing 10 per cent. of the sum of customs and primage duties, was payable on all goods except unmanufactured tobacco, petrol and similar petroleum and shale products from 3rd May, 1940, to 15th November, 1946. Collections are shown in Table 488.

#### Exchange Adjustment.

The Customs Tariff (Exchange Adjustment) Act, 1933, and subsequent mendments, provided for adjustments to be made in ordinary customs duties because of the depreciation of Australian currency in relation to the currencies to which the benefit of the British Preferential Tariff extended. The Acts were repealed in November, 1947, when the basis of valuation of goods for duty purposes was changed from British to Australian currency. An outline of these Acts was given in previous issues of the Year Book (see No. 50, page 137).

# Ottawa Agreement.

As a result of the Imperial Economic Conference held in Ottawa during July and August, 1932, an agreement was made between the Governments of the Commonwealth and the United Kingdom for increased trade preference. The agreement was ratified by the United Kingdom and Australia Trade Agreement Act, 1932. The term of the agreement expired in August, 1937, after a currency of five years, but it continues in force, as neither party has denounced it. The terms of the agreement and subsequent negotiations for its review are described on page 316 of the 1938-39 issue

of the Year Book. Reductions in British preference were agreed to in respect of certain items under the General Agreement on Tariffs and Trade negotiated at an international conference at Geneva in November, 1947 (see page 510).

# Reciprocal Tariffs and Trade Agreements.

An historical review of the pre-war development of reciprocal trading arrangements between Australia and certain other countries was given in earlier editions of this Year Book. The trade agreements and reciprocal tariff arrangements current in 1946 were modified and extended in November, 1947, by the General Agreement on Tariffs and Trade (see page 510).

#### Industries Preservation Act.

The Customs Tariff (Industries Preservation) Act, 1921-1936, provides that the Minister, after inquiry by the Tariff Board, may under certain conditions impose dumping duty or dumping freight duty on imports in order to protect Australian industry from the dumping of foreign goods.

Similarly a special exchange duty may be imposed on goods imported from a country whose currency has depreciated in relation to Australian currency, if the sale of these goods by reason of such depreciation is detrimental to Australian industry.

#### Sales Tax.

Since 1st August, 1930, certain goods imported into Australia, as well as local secondary products, have been subject to the Sales Tax. Where the sales tax is payable on imports, it is collected by the customs authorities at ports of entry, unless the importer is a manufacturer or wholesaler registered under the Sales Tax Assessment Act. It is payable on the sum of the following:—(a) the value of the goods for duty purposes; (b) the customs duty payable; and (c) 20 per cent. of the sum of (a) and (b). Certain imports from Fiji, New Zealand, Papua, New Guinea and Norfolk Island are exempt. Particulars as to rates of sales tax, etc., are published in the chapter, "Public Finance."

The total amount of sales tax paid in New South Wales in 1947-48 was £14,938,872, and of this sum £1,110,150 or 7.4 per cent. was collected by the Trade and Customs Department.

#### STATISTICS OF OVERSEA TRADE.

#### Source of Statistics.

Statistics relating to the oversea trade of the various States of Australia are compiled by the Commonwealth Statistician from records of the Department of Trade and Customs. The particulars of imports as shown in this chapter include those re-exported for consumption in other States or elsewhere. Exports classified as "Australian Produce" include products of other Australian States which have been shipped oversea at ports in New South Wales, but they do not include products of New South Wales despatched abroad from ports in other States.

The values, as shown in the following tables relating to goods imported and exported oversea, are based on the values recorded by the Department of Trade and Customs.

# Valuation of Imports.

The values of goods imported from oversea, as shown in this chapter, are expressed on a revised basis in Australian currency free on board at port of shipment. This basis was adopted, as from 15th November, 1947, for the valuation of goods for ad valorem duty, in terms of the Customs Amendment Act, 1947. Conversion to Australian currency is based on the commercial rates of exchange.

In previous issues of the Year Book, the values of oversea imports were shown, as recorded, in British currency, and represented the sum of the following:—(a) The actual price paid by the Australian importer plus any special deduction, or the current domestic value in the country of export at the date of exportation, whichever was the higher; (b) all charges for placing the goods free on board at the port of export; and (c) 10 per cent, of the amounts (a) and (b).

# Valuation of Exports.

The value of goods exported is recorded in Australian currency and includes the cost of containers. Until 1st July, 1937, most commodities were assessed at their value in the principal markets in Australia, though a different method as described in the Official Year Book, 1938-39, was adopted at various dates for sugar, wool, wheat, flour and butter.

Since 1st July, 1937, the values of exports generally have been assessed as follows:—

- (1) Goods sold to oversea buyers before export—the f.o.b. equivalent of the price at which the goods were sold, e.g., as regards wool, the actual price paid by the oversea buyer plus the cost of all services incurred by him in placing the wool on board ship.
- (2) Goods shipped on consignment—the Australian f.o.b. equivalent of the current price offering for similar goods in the principal markets of the country to which the goods were despatched for sale. As regards wool, the f.o.b. equivalent of the current price ruling in Australia normally provides a sufficient approximation of the f.o.b. equivalent of the price ultimately received.

#### Oversea Trade in the War Years.

An account of "civil" and Government oversea trade during the war years is given on pages 121 and 122 of Official Year Book No. 50.

During the war (1939-1945), lend-lease and mutual aid agreements resulted in heavy imports on Commonwealth Government account. In 1943-44, imports of merchandise into New South Wales free of duty for the Commonwealth Government amounted to £70,141,000 or 62 per cent. of total imports of merchandise. In the same year, exports of merchandise on Government account from New South Wales were valued at £18,757,000 or 35 per cent. of total exports. Thereafter there was a gradual decline (except for a slight increase in the proportion of Government exports in 1944-45), and in 1947-48 the proportion of imports and exports on Government account in New South Wales trade was only 3 per cent.

The statistics of New South Wales trade in this chapter exclude certain unentered exports from Australia on Government account which cannot be apportioned amongst the States. These exports are estimated at £12,600,000 in 1941-42, £2,500,000 in 1942-43, £10,000,000 in 1943-44, and £2,000,000 in 1944-45.

The amounts payable for imports or receivable for exports during the war years are not indicated accurately by the recorded trade figures. Exports to Australian Forces and imports and exports under Lend-Lease and mutual aid arrangements required no current payment, and payments were made under contracts by the United Kingdom Government for wool and some minor items irrespective of actual shipment of these, as well as for some unrecorded exports of war material. Moreover, certain war material was recorded in trade statistics in years later than those in which payment was made for it by Australia.

Goods imported or exported direct by Allied Forces temporarily resident in New South Wales are excluded from the trade statistics of the war years.

# Oversea Imports and Exports—Total Value.

The following table shows the total value of the oversea imports and exports of New South Wales, relative to those of Australia, during various years from 1920-21 to 1947-48. The figures do not include the value of exports in the form of ships' stores.

In the total oversea trade of Australia in 1947-48, the share of New South Wales was 38.2 per cent.; exports were 32.9 per cent. and imports 44.7 per cent. of the Commonwealth totals. A relatively high share of imports is usual; Sydney is the port of entry for some merchandise destined ultimately for other States.

Table 465.—Oversea Imports and Exports, New South Wales and Australia, Including Bullion and Specie.

Year ended	N.S.W.	N.S.Y	W. Oversea E	xports.	N.S.W.	Australia.
30th June,	Oversea Imports.	Australian Other Produce. Produce.		Total.	Total Trade Oversea.	Total Trad Oversea.
	VALUE I	n £ Australia	n, Free on I	BOARD AT POR	rs.	
1921 1929 1931 1938 1939 1940 1941 1942 1943 1944 1945 1945 1946 1947	65,944 413 57,776,022 28,115,820 58,253,622 52,808,424 62,841,614 55,587,024 63,990,298 98,360,530 116,118,320 115,402,289 87,714,058 94,021,250 151,916,904	48,302,717 47,170,407 30,340,929 45,018,310 41,527,687 67,370,087 61,435,967 62,425,210 61,779,355 51,345,268 58,220,694 73,650,903 113,073,930 131,730,413	4,299,089 2,118,483 1,517,998 3,393,191 4,375,393 3,023,660 1,991,738 1,711,704 2,483,970 2,243,615 2,616,194 3,190,312 3,506,042 3,020,035	52,601,806 49,288,800 31,864,927 48,411,501 45,903,080 70,393,747 63,427,705 64,136,914 54,263,395 54,088,888 76,841,275 116,579,972 134,750,448	118,546,219 107,935,812 59,980,747 108,665,123 98,801,504 138,235,361 119,014,729 128,127,212 152,623,855 170,202,203 176,239,177 164,555,338 210,601,222 286,667,352	281,218,57 272,334,99 170,230,09 287,746,32 257,250,34 307,454,90 285,168,46 342,570,52 371,319,45: 391,031,65 370,279,11: 402,144,70 518,513,45:
	<u> </u>	VALUE PER H	EAD OF POPU	LATION.		
1921 1929 1931 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948	£ s. d. 31 11 3 23 5 2 11 0 11 21 9 11 19 0 9 22 14 7 19 18 5 22 14 10 34 11 2 40 8 8 39 15 5 29 18 2 31 14 6 50 10 7	£ s, d. 23 2 4 18 19 9 11 18 6 16 12 3 15 3 7 24 7 4 22 0 4 22 3 9 18 3 11 18 1 1 20 1 3 25 2 3 38 3 1 43 16 4	£ s. d. 2 1 2 0 17 11 1 5 1 1 12 0 1 1 12 0 1 12 0 1 14 3 0 12 2 0 17 5 0 18 0 1 1 3 8 1 0 1	£ s. d. 25' 3 6 19 16 10 12 10 5 17' 17 4 16 15 7 25 9 3 22 14 7 22' 15 11 19' 1 4 ; 18 16 8 20 19 3 26' 4 9 44' 16 5	£ s. d. 56 14 9 43 2 0 23 11 4 39 7 3 36 2 4 48 3 10 42 13 0 45 10 9 58 12 6 59 5 4 60 14 8 566 2 2 71 1 3 95 7 0	\$ s, d. 51 19 7 42 17 5 26 4 0 41 17 8 37 29 0 43 17 11 40 5 11 47 19 1 47 19 1 51 10 10 58 15 6 50 7 9 51 2 6 67 17 8 98 2 6

Recovery of oversea trade from the effects of the economic depression of the early nineteen-thirties began in 1932-33. Thereafter there was a steady annual increase in the value of imports and exports until 1937-38, when the value of the oversea trade of New South Wales was approximately equivalent to that of the year 1928-29. There was a decline of about 7 per cent. in 1938-39, followed by an increase of 35 per cent. in 1939-40.

Apart from minor fluctuations, the values of imports and exports have continued to increase since 1941-42. Up to 1945-46 this was partly due to the expanded volume of trade caused by the war, but increases of 73 per cent. in the value of imports and 43 per cent. in the value of exports in 1947-48 as compared with 1945-46 were mainly due to the continuous upward trend of import and export prices.

Products of the primary industries comprise the bulk of the exports from New South Wales, and seasonal conditions cause great variation in the quantities available for shipment oversea. Wide fluctuations in prices of the principal export commodities, added to changes in volume, normally render the total value of exports liable to sharp increase or decrease from year to year. The export of manufactures and semi-manufactures, such as textiles and clothing, iron and steel, electrical and other machinery, has become of considerable importance in recent years.

Particulars of the quantity and value of the principal commodities imported and exported are shown in Tables 472 to 479 of this chapter, and further particulars are published in the Statistical Register of New South Wales.

Oversea Imports and Exports-Merchandise and Bullion and Specie.

The annual values of imports and exports shown in Table 465 include consignments of bullion and specie (mainly gold), which relate to the trade of the Commonwealth rather than that of New South Wales. Particulars of merchandise and bullion and specie exported are given in the following statement.

Table 466.—Imports and Exports of Merchandise and Bullion and Specie (N.S.W.).

_				ousand,	1.0.0.					
	Imp	orts.	Exports.							
$\mathbf{Y}$ ear ended		D11!	M	erchandis	e.	Bullion and Specie.				
30th June.	Mer- chandise.	Bullion and Specie.	Aus- tralian Produce.	Other,	Total.	Aus- tralian Produce.	Other.	Total.		
1921	65,918	26	44,533	4,283	48,816	3,770	15	3,785		
1929	57,585	192	46,994	2,089	49,083	177	29	206		
1931	27,859	257	28,885	1,289	30,174	1,462	229	1,691		
1938	55,986	2,267	41,209	1,384	42,593	3,810	2,009	5,819		
1939	49,907	2,991	36,320	1,367	37,687	5,208	3,008	8,216		
1940	58,517	4,324	51,654	1,350	53,004	15,716	1,674	17,390		
1941	52,335	3,252	48,129	1,493	49,622	13,307	499	13,806		
1942	61,590	2,400	54,100	1,457	55,557	8,325	255	8,580		
1943	96,738	1,623	51,776	2,482	54,258	3	2	5		
1944	112,588	3,525	51,842	2,237	54,079	3	7	10		
1945	112,814	2,588	58,211	2,616	60,827	10		10		
1946	86,076	1,638	73,530	2,860	76,390	121	330	451		
n 1947	93,030	991	113,043	3,476	116,519	31	30	61		
1948	150,352	1,565	131,655	3,007	134,662	75	13	88		
	I	I	!	I	I	1	1	l		

£A thousand, f.o.b.

#### OVERSEA TRADE BY PORTS.

The great bulk of the oversea trade of New South Wales is handled at the port of Sydney; in 1947-48 only 3.1 per cent. of the imports and 10.5 per cent. of the exports passed through other ports. Particulars of the oversea trade of the principal ports of New South Wales in 1938-39 and the last six years are given in the following table:—

Table 467.—Oversea Trade of N.S.W. by Ports, including Bullion and Specie.

£ Australian, free on board at ports.

Year ended 30th June. Sydney.		Newcastle. Port Kembla.		Other Ports,	Total.
_		Impe	orts.		
1939	50.961.778	1,849,186	87,460		52,898,424
1943	97,247,025	958,264	155,241		98,360,530
1944	114,836,311	941,371	335,638	******	116,113,320
1945	114,161,635	914,818	324,762	1,074	115,402,289
1946	86,048,182	1,166,068	499,808	1,0,1	87,714,058
1947	91,885,423	1,568,052			94,021,250
1948	*147,434,673	2,718,734	1,763,497	•••••	151,916,90
		Expo	rts.		
1939	42,203,489	2,893,563	724,277	81,751	45,903,080
1943	51,166,054	1,984,551	1,066,737	45,983	54,263,32
1944	51,145,259	1,852,951	1,030,773	59,900	54,088,88
1945	56,917,354	2,502,792	1,379,618	37,124	60,836,88
1946	69,758,921	5,769,684	1,250,887	61,783	76,841,27
1947	105,555,202	9,411,965	1,601,464	11,341	116,579,97
1948	120,745,665	12,785,022	1,219,297	464	134,750,44

<sup>\*</sup> Includes airports of Mascot and Rose Bay, £53,515.

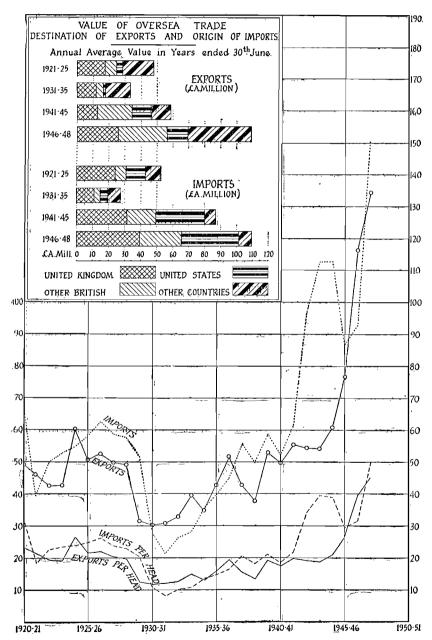
The proportion of total oversea imports handled at Newcastle was 3.5 per cent. in 1938-39 and 1.8 per cent. in 1947-48, and the proportion of exports was 5.1 per cent. and 9.5 per cent. respectively. Exports from Newcastle in 1947-48 included wool £7,074,889, wheat and flour £3,526,417, iron and steel £964,134, and eggs £160,724.

Between 1938-39 and 1946-47, oversea imports at Port Kembla increased from £87,460 to £567,775; in 1947-48 they were valued at £1,763,497, or 216 per cent. more than in the previous year, and they included copper and copper-base alloys £1,329,710, petrol and kerosene £303,284, and phosphatic rock £93,786. Although the value of oversea exports from Port Kembla was 68 per cent. greater in 1947-48 than in 1938-39, they comprised a smaller proportion of the total. Exports from ports other than Sydney, Newcastle and Port Kembla in 1947-48 were negligible.

# DIRECTION OF TRADE.

Trade between New South Wales and other British countries usually shows a pronounced excess of imports from the United Kingdom, Canada, India and Ceylon, and an excess of exports to New Zealand and the Pacific Islands. The excess of imports in trade with the United Kingdom was

# OVERSEA TRADE, NEW SOUTH WALES. MERCHANDISE.



The main graph shows the total value of exports and imports of merchandise in £A million free on board at ports, and the per capita value of the exports and imports in pounds (Australian).

\*\*approximately £7,100,000 in 1938-39, and £17,800,000 in 1947-48, and in trade with Canada was about £3,300,000 and £6,300,000, respectively. With India and Ceylon there was an excess of imports of about £7,200,000 in 1947-48, compared with £1,800,000 in 1938-39. Exports to New Zealand exceeded imports therefrom by about £3,500,000 in 1938-39 and by about £5,700,000 in 1947-48. Total imports of merchandise from British countries exceeded exports by £16,607,000 or 22 per cent. in 1947-48, as compared with £7,126,000 or 33 per cent. in 1938-39.

In trade with most European countries there is a substantial excess of exports; for instance, exports of merchandise to France exceeded imports therefrom by about £3,615,000 in 1938-39 and by £13,383,000 in 1947-48. In normal years, imports considerably exceed exports in the case of Persia, Netherlands Indies and the United States of America; in 1947-48 imports of merchandise from the United States exceeded exports by £20,566,000 or 201 per cent. Total exports of merchandise to foreign countries exceeded imports by £4,511,000 in 1947-48, as compared with an excess of imports amounting to £3,979,000 in 1938-39.

The direction of the oversea trade of New South Wales is indicated in the following statement, which shows the value of imports from and of exports to the principal countries in 1938-39 and the last two years. Particulars of the imports relate to the country of origin.

Table 468.—Direction of Oversea Trade of N.S.W. £ Australian, free on board at ports.

		Imports.			Exports.	_						
Country.	1938–39.	1946-47.	1947-48.	1938-39.	1946-47.	1947-48.						
Merchandise.												
United Kingdom	20,218,700	30,883,665	56,990,349	13,107,027	22,843,553	39,224,310						
Canada and Newfoundland	0.070.054	0.000.051	7.015.000	005.050	1 505 000	1 017 074						
NT 17 1 1	3,879,354 $732,811$	8,268,951 1,406,892	7,315,636 1,953,273	607,853 4,270,151	1,595,229 6,569,482	1,017,874 7,680,686						
r- 44 . 1 O - 3	2,167,357	10,788,369	15,208,228	382,601	6.604.519	8,032,739						
e# 1 1 0°	435,181	1,580,058	1,746,886	767,162	6,389,719	2,835,569						
Malaya and Singapore Hong Kong	23,939	93,026	154,481	217,533	3,123,076	2,809,253						
Union of South Africa	147,036	528,869	1,651,133	158,739	1,889,102	1,001,281						
New Guinea and Papua	261,055	448,056	1,001,155	805,384	2,269,251	3,185,106						
Other Pacific Islands	311,697	213,842	313,194	878,280	2,216,743	2,985,381						
Other British Countries	464,239	2,840,522	6,080,803	320,830	1,655,512	7,035,557						
•												
Total, British	28,641,369	57,052,250	92,415,138	21,515,510	55,156,186	75,807,756						
European Countries—												
Ď-1t	532,208	729,088	2,389,396	2,306,136	8,809,799	9,726,139						
Eropes	590,447	882,230	1,550,966	4,205,074	10,359,047	14,944,274						
Italy	388,556	1,582,966	1,254,958	568,885	6,165,379	4,058,905						
Other	4,369,344	2,174,250	8,179,279	2,345,648	4,686,245	8,665,481						
Asiatic Countries—	1,000,011	2,114,200	0,110,210	2,010,010	1,000,210	0,000,101						
Persia (Iran)	296,359	3,049,408	2,619,706	34	148,439	92,834						
China	314,490	715,275	1,007,038	1,753,644	2,936,773	1,151,620						
Japan	2,027,865	78,158	774,014	2,005,194	5,214,263	1,966,739						
Other	324,464	1,454,017	2,434,289	183,672	1,409,960	2,826,973						
Netherlands Indies	2,961,698	50,480	908,282	505,970	146,776	41,967						
Egypt	46,017	271,640	435,165	129,913	1,913,655	1,609,744						
United States	8,005,671	18,895,935	30,778,595	1,396,934	17,720,338	10,212,774						
Other Foreign Countries	293,211	867,499	2,011,289	770,377	1,822,043	3,557,107						
Total, Foreign	20,150,330	30,750,926	54,342,977	16,171,481	61,362,717	58,854,557						
*Country not stated	1,115,589	5,226,695	3,594,331	· · · · · · · · · · · · · · · · · · ·	144							
Total, All Countries	49,907,288	93,029,871	150,352,446	37,686,991	116,519,047	134,662,313						
<u> </u>		Bullion .	AND SPECIE.	·		•						
British Countries	2,990,213	990,212	1,562,151	169,509	44,044	85,713						
Foreign Countries	923	1,167	2,307	8,046,580	16,881	2,422						
Total	2,991,136	991,379	1,564,458	8,216,089	60,925	88,138						

<sup>\*</sup> Includes "outside packages and containers."

The relative importance of trade with certain countries has undergone considerable change. For instance, in merchandise trade with British countries, 16.4 per cent. of the imports came from India and Ceylon in 1947-48 as compared with 7.5 per cent. in 1938-39; exports to those countries comprised 1.8 per cent. and 10.6 per cent. in the respective years. In 1947-48 imports from and exports to South Africa were about eleven and six times their respective values in 1938-39. Between 1938-39 and 1947-48 the United States' share in exports of merchandise from New South Wales to foreign countries grew from 8.6 per cent. to 17.3 per cent. and in foreign imports from 39.7 per cent. to 56.6 per cent.

The following table shows the value of imports of merchandise from British and foreign countries in each year since 1937-38:—

Table 469.—Origin of Oversea Imports of Merchandise, N.S.W.

		ļ				Country	of Origin.				
Year ended 30th June.				British.			Fore			Total Imports	
			United King- dom.	Other.	Total.	Europe.	U.S.A.	Other.	Total.	Not Stated.	
			•	VALUE IN	£A THOUS	SAND, FRE	E ON BOA	RD AT PO	rts.		
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948			22,871 20,219 21,313 22,668 26,270 36,021 31,753 40,648 29,993 30,884 56,990	9,083 8,422 11,890 12,298 14,137 20,155 23,854 20,924 16,773 26,168 35,425	31,954 28,641 33,203 34,966 40,407 56,176 55,607 61,572 46,766 57,052 92,415	6,355 5,880 4,273 698 293 196 177 187 805 5,369 13,375	9,356 8,006 11,523 8,507 13,234 36,799 51,402 41,606 22,751 18,896 30,779	7,104 6,264 8,219 7,037 6,486 2,387 3,214 7,530 7,964 6,486 10,189	22,815 20,150 24,015 16,242 20,013 39,382 54,793 49,323 31,520 30,751 54,343	1,217 1,116 1,299 1,127 1,171 1,180 2,188 1,919 7,790 5,227 3,594	55,986, 49,907 58,517 52,335 61,591 96,738 112,588 112,814 86,076 93,030 150,352
			Prop	ORTION PE	ER CENT.	OF TOTAL	IMPORTS	OF MERC	HANDISE.		
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947			40·9 40·5 36·4 43·3 42·6 37·2 28·2 36·0 34·9 33·2 37·9	16·2 16·9 20·3 23·5 23·0 20·9 21·2 18·6 19·5 28·1 23·6	57·1 57·4 56·7 66·8 65·6 58·1 49·4 54·6 54·4 61·3 61·5	11·3 11·8 7·3 1·3 0·5 0·2 0·1 0·1 0·9 5·8 8·9	16·7 16·0 19·7 16·2 21·5 38·0 45·7 36·9 26·4 20·3 20·5	12·8 12·5 14·0 13·5 10·5 2·5 2·9 6·7 9·2 7·0 6·7	40·8 40·3 41·0 31·0 32·5 40·7 43·7 36·5 33·1 36·1	2·1 2·3 2·3 2·2 1·9 1·2 1·9 1·7 9·1 5·6 2·4	100 100 100 100 100 100 100 100 100 100

During the war years, the value of imports of merchandise from Europe declined to negligible proportions, and imports from other countries underwent considerable fluctuation. Before the war, the proportion of imports from the United Kingdom averaged between 38 and 40 per cent. per annum; the proportion fell to 28.2 per cent. in 1943-44 but rose to pre-war level in 1947-48. The share of other British countries in imports rose from 16.9 per cent. in 1938-39 to 23 per cent. in the early war years, but declined to 18.6 per cent. in 1944-45; in 1947-48 there was an increase to 23.6 per cent., which compares with an annual average of about 12 per cent. in the ten years 1926-27 to 1935-36, and 16 per cent. in the five years 1936-37 to 1940-41.

Since the end of the war, the proportion of imports of merchandise from Europe has risen to 8.9 per cent., approaching the pre-war average of about 11 per cent. During the war years, the bulk of foreign imports came from the United States; imports from that country reached a peak of 94 per cent. of all foreign imports in 1943-44. In 1947-48 the proportion of imports from the United States declined to 20.5 per cent., but remained above the pre-war average of 16 per cent. Imports from foreign countries other than Europe and the United States comprised 6.7 per cent. of total imports in 1947-48, as compared with 12.5 per cent. in 1938-39.

The value and proportion of exports to British and foreign countries in 1947-48 and the preceding ten years are shown in the following table:—

Table 470.—Destination of Oversea Exports of Merchandise from New South Wales.

			C	ountry of	Destinati	on.			
Year ended 30th June.		British.	_		For	eign.		Not	Total Exports
	United Kingdom	Other.	Total.	Europe.	U.S.A.	Other.	Total.	Stated.	
	v	ALUE IN	£a. thou	SAND, FRE	E ON BOA	RD AT PO	orts.	-	
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	 17,153 13,107 28,065 13,742 10,632 12,293 11,942 15,294 15,621 22,843 39,224	8,421 8,408 10,494 11,634 13,851 23,513 21,519 19,575 22,684 32,313 36,584	25,574 21,515 38,559 25,376 24,483 35,806 33,461 34,869 38,305 55,156 75,808	12,081 9,426 5,710 36 581 1 114 654 7,519 30,021 37,395	1,288 1,397 2,114 11,582 19,585 10,408 9,645 11,790 17,720 10,213	3,650 5,349 6,365 9,857 5,600 2,517 4,359 3,743 7,624 13,622 11,246	17,019 16,172 14,189 21,475 25,766 12,926 13,776 14,042 26,933 61,363 58,854	256 2,771 5,308 5,527 6,842 11,917 11,152	42,593 37,687 53,004 49,622 55,557 54,259 54,079 60,828 76,390 116,519 134,662
	PROPO	RTION PE	R CENT. C	F TOTAL	Exports	of Merci	HANDISE.		
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948	 40·3 34·7 62·9 27·7 19·1 22·7 22·8 25·1 20·4 19·6 29·1	19·7 22·4 19·8 23·4 25·0 43·2 39·1 37·8 29·7 27·7 27·2	60·0 57·1 72·7 51·1 44·1 65·9 61·9 62·9 50·1 47·3 56·3	28·4 24·9 10·8  1·0  1·1 9·9 25·8 27·1	3.0 3.6 4.0 23.3 35.2 19.2 17.2 15.9 15.4 16.2 7.6	8.6 14.4 12.0 19.9 10.2 4.7 8.3 6.1 9.9 11 7 9.0	40·0 42·9 26·8 43·2 46·4 23·9 25·5 23·1 35·2 52·7 43·7	0.5 6.7 9.5 10.2 12.6 14.0 14.7	100 100 100 100 100 100 100 100 100 100

During the war, the proportional distribution by countries of exports of merchandise from New South Wales fluctuated rather more than did that of imports. The United Kingdom's share fell sharply from 52.9 per cent. in 1939-40 to 19.1 per cent. in 1942; it rose to 29.1 per cent. in 1947-48, but was still below the annual average (about 40 per cent.) of the nineteenthirties. The share of other British countries rose from 22.4 per cent. in 1938-39 to 43.2 per cent. in 1942-43, but has since declined to 27.2 per cent.

Exports to Europe had virtually ceased by 1942-43, but in 1947-48 the proportion (27.1 per cent.) was slightly higher than in 1938-39. The bulk of the merchandise exported to foreign countries during the war years was sent to the United States; its share in the total exports of merchandise

was 3.6 per cent. in 1938-39, 35.2 per cent. in 1941-42 and 7.6 per cent. in 1947-48. The war years were marked by a high proportion (14 per cent. in 1944-45 and 14.7 per cent in 1945-46) of exports not recorded by country of destination. The proportion of merchandise exported to foreign countries other than Europe and the United States in 1947-48 was approximately the same as in 1937-38 and about 5 per cent. less than in 1938-39.

#### Classification of Imports and Exports.

A classification of oversea imports and exports (New South Wales) in 1938-39 and the last two years is shown in the following table. The items are grouped in accordance with a statistical classification adopted by the Department of Trade and Customs.

Table 471.—Classification of Oversea Imports and Exports, N.S.W. Value in £A. thousand, free on board at ports.

Classification.		Imports.			Exports.	
Classification,	1938–39.	1946-47.	1947-48.	1938–39,	1946-47.	1947-48.
I. Foodstuffs of Animal Origin II. Foodstuffs of Vegetable Origin,	949	672	1,766	3,729	9,706	9,616
Beverages (non-alcoholic), etc	2,365	4,799	7,779	5,092	17,402	35,138
III. Spirituous and Alcoholic Liquors	548	238	477	100	460	368
IV. Tobacco and Preparations thereof	1,460	2,520	4,554	186	210	205
V. Live Animals	129	292	220	83	80	174
VI. Animal Substances not Foodstuffs	739	1,254	1,548	19,050	58,925	62,691
VII. Vegetable Substances and Fibres	1,327	4,005	5,519	119	281	331
VIII. (a) Yarus and Manufactured Fibres	1,552	3,603	9,507	92	574	544
(b) Textiles	6,105	17,623	31,743	150	2,029	1,536
(c) Apparel	834	1,470	2,824	74	2,013	1,079
IX. Oils, Fats, and Waxes	3,466	8,129	12,483	300	1,187	1,191
X. Pigments, Paints and Varnishes	418	595	916	155	318	566
X1. Rocks and Minerals (including Ores and Concentrates)	487	947	1,260	546	1,465	1,532
XII. (a) Metals and Metal Manufactures	401	947	1,200	540	1,403	1,552
(except Electrical Appliances and				l í		
Machinery)	7,621	10,488	18,659	4,545	9,121	8,686
(b) Dynamo Electrical Machinery and	7,021	10,400	10,000	3,040	0,141	0,000
Appliances	2,944	2,852	5,063	319	610	784
(c) Machines and Machinery (except	2,011	_,00_	0,000	0.0	010	•02
Dynamo Electric)	4,728	6,426	10.935	335	1,943	2.699
XIII. (a) Rubber and Rubber Manufactures	827	2,830	2,326	62	633	159º
(b) Leather and Leather Manufactures	64	65	147	355	796	615
XIV. Wood and Wicker	1,106	2,088	2,379	506	561	839°
XV. Earthenware, China, Glass, etc	968	1,707	3,299	146	558	ر419
XVI. (a) Paper and Board, incl. Pulp	2,282	4,492	8,542	64	192	41
(b) Paper Manufactures and						
Stationery	949	1,605	2,373	220	535	510-
XVII. Fancy Goods, Jewellery, Timepieces	810	1,572	2,113	86	323	222
XVIII. Optical, Surgical, and Scientific Instru-			0.000	015		507
ments	1,191	1,831	2,893	215	444	521
XIX. Drugs, Chemicals, and Fertilisers	2,260	3,932	4,996	541	2,461	1,842
XX. Miscellaneous	3,968	7,350	6,031	617	3,692	2,354
Less Currency Adjustments not allocated to classes	190	355				
allocated to classes	190	393		•••	•••	•••
Total Merchandise	49,907	93,030	150,352	37,687	116,519	134,662
37 77 TO 111 Y O 1	2,991	991	1,565	8,216	61	88
XXI. Bullion and Specie		991				
Total	52,898	94,021	151,917	45,903	116,580	134,750
		′ - 1	_ ′	, i	'	

Machinery, metals and metal manufactures formed the most important class of imports in 1938-39, the value being £15,293,000 or 30.6 per cent. of the total imports of merchandise. In 1947-48, however, the value of imports in this class, viz., £34,657,000 or 23.1 per cent. of the total, was exceeded by the value of yarns, textiles and apparel, which amounted to

£44,074,000 or 29.3 per cent. of all merchandise imported. Other important classes, with the proportion of all imports of merchandise in 1947-48 shown in brackets, are as follows: oils, fats and waxes (mainly petroleum oils), £12,483,000 (8.3 per cent.); paper, £8,542,000 (5.7 per cent.); foodstuffs and beverages of vegetable origin (mainly tea), £7,779,000 (5.2 per cent.); vegetable substances and fibres, £5,519,000 (3.7 per cent.); and tobacco, etc., £4,554,000 (3.0 per cent.).

Foodstuffs and animal substances (mainly wool and skins) form the bulk of the merchandise exported; together, these classes were valued at £27,871,000 or 73.9 per cent. of all merchandise exported in 1938-39, and £107,445,000 or 79.8 per cent. of the total in 1947-48.

Exports of metals, metal manufactures and machinery in 1947-48 were valued at £12,169,000 or 9 per cent. of the total, as compared with £5,199,000 or 13.8 per cent. in 1938-39. Exports of yarns, textiles and apparel are of increasing importance; the value of these items in 1947-48 was £3,159,000, or about ten times the value in 1938-39.

#### ARTICLES IMPORTED.

Particulars of the more important articles imported in 1938-39 and the last two years are given in Tables 472 to 476 inclusive. The following statement shows the principal items of food, beverages and tobacco imported into New South Wales in those years.

Table	472.—Oversea	Imports,	N.S.W.—Food,	Beverages	and	Tobacco.

				Quantity.		Value.					
Item and Unit of	Quantity.		1938-39.	1946–47.	1947–48.	1938–39,	1946-47.	1947-48,.			
				thousands	,	£A	£A thousand, f.o.b.				
Tea Coffee		lb. lb. lb. lb. gal. lb.	25,646 2,234 8,137	3,192 25,399 4,035 11,171 118 13,042	9,169 26,481 3,066 11,886 204 20,850	515 1,496 53 92 445 1,460 1,261	245 3,256 181 454 210 2,520 1,363	1,050- 4,928- 201 1,064- 332: 4,554- 2,447			
Total, Classes I to	IV incl.					5,322	8,229	14,576			

In 1947-48 the value of imports of articles in the food, beverages and tobacco group was nearly three times the value in 1938-39, although changes in the quantities imported were mostly slight. There was an increase of 38 per cent. in the quantity of tobacco and cigarettes imported in 1947-48 as compared with the pre-war year, and a similar increase of 46 per cent. in the case of cocoa beans.

The following table shows the principal items of skins, fibres, textiles, etc., imported. All items in this group increased in value in 1947-48 as compared with 1946-47 and 1938-39. The value of piecegoods imported was £4,764,000 in 1938-39, £14,982,000 in 1946-47, and £26,494,000 in 1947-48. Imports of raw cotton increased from £130,000 in 1938-39 to £1,351,000 in 1947-48, and cotton and rayon yarns from £463,000 to £4,057,000. In respect of quantities imported, cotton and linen piecegoods increased by 13 per cent., rayon piecegoods by 23 per cent. and raw cotton by 194 per cent., as compared with 1938-39.

Table 473.—Oversea Imports, N.S.W.—Skins, Fibres, Textiles, etc.

				Quantity.			Value.		
Item and Unit of Q	uantity.		1938–39.	1946-47.	1947-48.	1938–39.	1946-47.	1947-48.	
			thousands.			£A thousand, f.o.b.			
Goatskins		No.	*	1,124	1,085	157	471	526	
Linseed		cwt.	546	253	225	287	651	693	
Cotton, Raw		lb.	5,137	12,629	14,919	130	913	1,351	
Plastics, Gums and Resir	s					230	980	1,313	
Cotton Yarns		lb.	1,767	2,264	6,465	160	542	1,844	
Rayon Yarns		lb.	2,744	2,745	6,521	303	720	2,213	
Bags and Sacks		doz.	1,974	1,209	2,631	735	1,876	4,637	
Piecegoods—						ļ			
Not Knitted or Lockst									
Cotton and Linen	sq.	yds.	89,250	53,837	100,775	2,541	5,632	13,346	
Rayon	sq.	yds.	26,650	24,613	32,816	1,188	6,067	8,450	
Other		•••				1,035	3,283	4,698	
Apparel and Attire						362	389	690	
Trimmings and Ornament	s	•••				233	753	1,161	
Linoleum	sq.	yds.	3,613	1,360	3,404	219	217	761	
Carpets	sq.	yds.	1,528	927	2,240	477	847	2,270	
Other Items		•				2,500	4,614	7,188	
Total, Classes VI to V	III incl					10,557	27,955	51,141	

<sup>\*</sup> Not available.

The next statement shows the quantity and value of oils, pigments and minerals imported. Petroleum oils constitute by far the largest item in this group; their value in 1947-48 was £10,376,000 or 71 per cent. of the total for the group.

Table 474.—Oversea Imports, N.S.W.—Oils, Pigments and Minerals.

Ti 17.0 Co. W.		Quantity.			Value.	
Item and Unit of Quantity.	1938–39.	1946-47.	1947–48.	1938–39.	1946-47.	1947-48.
		thousands		£A	thousand, i	f.o.b.
Petroleum Oils— Crude Petroleum gal. Petroleum and Shale Spirit gal. Kerosene (Power and Other) gal. Residual Oil gal. Lubricating Oil gal. Other	116,957 16,242 27,699	44,793 125,579 20,134 62,278 10,233	61,029 106,303 27,794 68,461 9,375	209 2,026 225 202 342 119 3,123	921 3,138 442 1,619 980 336 7,436	2,184 3,538 879 1,844 1,080 851
Colour Pigments for Paints cwt. Asbestos, Crude and Fibre cwt. Other Items		150 186 	201 138 	376 110 762	557 352 1,326	827 287 3,169
Total, Classes IX, X and XI				4,371	9,671	14,659

Particulars of metals and metal manufactures (including machinery), rubber and timber imported in 1938-39 and the last two years are as follows:—

Table 475.—Oversea Imports, N.S.W.—Metals, Metal Manufactures, Rubber and Timber.

• • • • • • • • • • • • • • • • • • • •					Quantity,		Value.			
Item and Unit o	f Quai	ntity.		1938–39.	1946–47.	1947-48.	1938–39.	1946-47.	1947-48.	
Iron and Steel—				thousands.			£A thousand, f.o.b.			
Plate and Sheet			ewt.	715	537	610	1,052	1,332	1,734	
Other			ewt.	327	70	102	613	311	485	
Aluminium and Alloys	3		cwt.	18	95	58	133	472	376	
Safety Razor Blades								293	326	
Hand Tools			•••				372	462	1,087	
Aircraft and Parts				•••	•••		257	249	282	
Motor Vehicles and P	arts			•••			3,338	5,190	9,236	
Tractors and Parts							354	664	1,255	
Electrical Cable and V	Vire		ewt.	138	28	97	732	304	1,077	
Telephone and Telegra	aph E	quipn	nent				537	647	542	
Electrical Equipment,	Other						1,675	1,901	3,444	
Office Machinery							425	792	921	
Textile Machinery							376	889	1,338	
Metal-working Machin	егу						704	711	1,669	
Rubber, Crude			ewt.	143	275	230	615	2,194	1,294	
Timber, Undressed		su	p. ft.	199,196	65,835	72,097	880	1,745	2,036	
Other Items							5,227	6,593	12,427	
Total, Classes XII	to XI	V inc	al				17,290	24,749	89,509	

<sup>\*</sup> Not recorded separately.

The quantities imported were less in 1947-48 than in 1938-39 for all items shown quantitatively other than aluminium and alloys and crude rubber. The quantity of iron and steel imported in 1947-48, viz., 35,600 tons, was 46 per cent. less than in 1938-39, but the value, £2,219,000, was 33 per cent. greater. Imports of motor vehicles, tractors and parts increased from £3,692,000 in 1938-39 to £10,491,000 in 1947-48, and in the same period the value of electrical machinery and equipment imported increased from £2,944,000 to £5,063,000. Imports of office, textile and metal-working machinery were valued at £1,505,000 in 1938-39 and £3,928,000 in 1947-48. The quantity of undressed timber imported in 1947-48 was only 36 per cent. of that imported in 1938-39, but the value, £2,036,000, was 130 per cent. greater. In the latest year, imports of metals, metal manufactures, rubber and timber comprised 29 per cent. of the total imports of merchandise, as compared with 34 per cent. in 1938-39.

The principal items of miscellaneous merchandise imported are shown in Table 476. Most of the items recorded in respect of quantity in this group

show a decline in volume since 1938-39, but writing and wrapping paper increased by 44 per cent. and 164 per cent., respectively. All items increased in value in 1947-48 as compared with 1938-39, and also (except for arms and ammunition) as compared with 1946-47. The value of crockery and glass, surgical instruments, and drugs and medicines imported in 1947-48 was in each case about three times that of the prewar year. In 1947-48 paper constituted 28 per cent. of the miscellaneous group, and the group itself, 23 per cent. of all imports of merchandise.

Table 476 .- Oversea Imports, N.S.W .- Principal Miscellaneous Items.

T T			Quantity.		Value.			
Item and Unit of Quantit	у.	1938–39.	1946–47.	1947–48.	1938–39.	1946–47.	1947–48.	
			thousands		£A thousand, f,o.b.			
Crockery, Glass and Glassware					725	1,266	2,463	
Paper—Pulp	ton	18	8	11	166	247	478	
Printing	ton	87	90	61	1,314	2,621	3,556	
Writing and Typewriting	cwt.	133	95	191	250	424	1,079	
Wrapping	cwt.	110	97	292	197	536	1,549	
Other					355	664	1,880	
Total, Paper					2,282	4,492	8,542	
Books and Periodicals  Jewellery and Timepieces					514 493	924 803	963	
• •	lin, ft,		74,523	57,447	525	591	683	
Surgical and Dental Instruments			·   '		205	525	722	
Drugs and Medicines			,		441	1,110	1,375	
Fertilizers	cwt.	2,162	1,924	1,907	155	299	315	
Salts of Acids					422	620	1,034	
Arms, Ammunition and Explos	ives				690	3,834	1,069	
Other Items					6,105	8,317	11,998	
Total, Classes V and XV to X	X incl.			····	12,557	22,781	30,467	

#### ARTICLES EXPORTED.

Raw materials and foodstuffs form the great bulk of the oversea exports of Australian produce from New South Wales. In regard to wool, wheat, butter, etc., the quantities available for export depend mainly on local seasonal conditions, but during the war, restrictions on shipping, etc., impeded the flow of exports, particularly of wool.

The next table shows the quantity and value of the principal commodities in the food, beverages and tobacco group exported from New South Wales during 1938-39 and the last two years.

Table 477.—Oversea Exports, N.S.W.—Australian Produce—Food, Beverages and Tobacco.

					Quantity.			Value.	
Item and Unit o	f Qua	ıntity	·.	1938–39.	1946–47.	1947-48.	1938-39.	1946-47.	1947-48
• •					thousands		£A	thousand, f	.o.b.
Butter			lb.	23,966	4.098	15,247	1,420	402	1,693
Butter Substitutes			lb.	151	13,829	3,371	5	702	309
Processed Milk			Ib.	1,893	14,208	12,679	93	686	869
Eggs in Shell			doz.	3,425	7,121	5,197	206	612	566
Eggs not in Shell			lb.		12,199	6,939		1,488	750
Meats—Frozen Beef			lb.	11,800	16,244	9,808	205	498	329
" Lamb			lb.	34,104	14,382	12,060	933	470	399
,, Mutto			lb.	10,880	15,392	4,047	173	307	148
", Offals			lb.	*	6,538	8,288	*	208	292
Tinned Meats		• • • •	lb.	2,326	35,532	30,296	78	2,295	1,882
Other Meats	•••		•••				326	1,021	1,417
Total Meats		•••	•••				1,715	4,799	4,468
Wheat			bush.	15,031	3,386	19,322	2,041	1,730	18,353
Flour		• • • •	entis.	5,863	5,423	4,362	1,853	7,418	9,296
Total Wheat and	Flour	(as l	ushels						
of Wheat)				29,103	16,402	29,791	3,894	9,148	27,649
Rice							147	610	755
Biscuits			lb.	1,141	3,279	2,567	46	142	115
Vegetables and Pulse-				_,		_,,,,,	1		
Dried or Concentrat			lb.	†	10,079	3,055	2	964	346
Preserved in Liquid	l or P	ulped	l lb.	†	15,861	11,550	6	560	371
Other						i	29	337	312
Total, Vegetables	and	Pulse					37	1,861	1,028
Fruits-Fresh			lb.	17,223	12,222	14,921	146	316	324
Dried			ĺb.	8,521	2,187	821	120	95	48
Preserved			Ĩb.	11,754	24,707	14,370	199	717	461
Total Fruits							465	1,128	838
Jams		•••	lb.	898	28,852	22,000	15	993	804
Confectionery (incl. cal	ces. ch	1000-			,00_	,000		""	
late, etc.)			lb.	1,093	8,612	4,407	93	635	340
Alcoholic Beverages				-,		,,	66	431	347
Tobacco and Cigarette	es, etc	c	lb.	316	507	372	92	203	141
Other Items, Classes	I to l	LV					605	3,405	4,350
Total, Classes I t	o IV						8,899	27,245	45,018
All Other Mercha							27,421	85,798	86,637
Total Exports (Aust. Produce)		derch	andise				36,320	113,043	131,655

<sup>\*</sup> Not recorded separately.

Apart from the general increase in values mainly due to high prices, the significant feature of the table is the expansion since 1938-1939 in the quantities of processed foodstuffs exported. These include butter substitutes, processed milk, eggs not in shell, tinned meats, preserved vegetables, jams and confectionery. In 1947-48 there were 3,371,000 lb. of butter substitutes exported as compared with only 151,000 lb. in 1938-39, although the total quantity of butter and substitutes was 23 per cent. less than in 1938-39. Between those years, the quantity of processed milk exported increased more than six times to 12,679,000 lb., and the quantity of tinned meats more than thirteen times to 30,296,000 lb., but exports of frozen meats, particularly lamb, declined considerably. Exports of jams were 22 million lb, in 1947-48, as compared with less than one million lb. in 1938-39.

The amount of wheat and flour exported in 1947-48 was only slightly greater than in 1938-39, but the value (£27,649,000) was more than seven times as great, owing to exceptionally high export prices; the smaller quantity exported in 1946-47 was the result of a very poor harvest. The total value of exports in the food, beverages and tobacco group in 1947-48, viz., £45,018,000, represented 34 per cent. of all exports of Australian origin from New South Wales, as compared with 25 per cent. in the pre-war year.

<sup>†</sup> Not available.

The following table shows the quantity and value of the principal articles of merchandise, other than food, beverages and tobacco, exported from New South Wales in 1938-39 and the last two years.

Table 478.—Oversea Exports, N.S.W.—Australian Produce—Articles other than Food, Beverages and Tobacco.

		Quantity.			Value,		
Item and Unit of Quantity.	1938-39.	1946-47.	1947-48.	1938-39.	1946–47.	1947-48.	
		thousands		£A thousand, f.o.b.			
Hides and Skins-	1.000	7.450	7 040	100	0.004		
Rabbit and Hare lb. Sheepskins No.	1,662 2,992	7,459 5,920	5,340 3,613	198 583	3,684 2,026	1,868 2,294	
Other No.	2,552	0,020		796	934	424	
Total				1,577	6,644	4,586	
Wool-Greasy lb.	317,755	471,335	349,402	15,003	42,982	48,636	
Scoured and Carbonized lb.	22,600	55,433	46,908	1,633	7,316	7,706	
Tops, Noils, etc lb.	5,738	6,430	5,792	585	1,778	1,553	
Total Wool (as in Grease) lb.	379,200	605,400	463,600	17,221	52,076	57,895	
Yarns				14	456	382	
Blankets			•••	1 1	506	144	
Woollen Piecegoods (not knitted) sq. yd.	14*	1,799	947	4*	790	356	
Cotton Piecegoods (not knitted) sq. yd.	53*	2,289	1,335	. 2*	279	102	
Garments-Knitted	•••		i	†	259	103	
Not Knitted	•••				827	253	
Coal ton	382	44	59	347	55	91	
Zinc and Zinc Concentrates			2.5.	47	820	901	
Iron and Steel cwt.	4,338	3,964	1,541	1,872	3,132	1,981	
Pig Lead cwt.	1,278	623	778	1,295	2,093	3,795	
Electrical Machinery and Equipment  Machinery Other than Electrical			•••	225 235	577 1.597	738 2,383	
Tr a ma-1-			•••	235	273	2,388 336	
57-1-1 1 1 D			•••	77	1.011	498	
Rubber Tyres and Tubes				l 's	486	89	
Leather and Manufactures				352	718	574	
Timber, Undressed sup. ft.	27,251	13,510	23,890	383	337	651	
Books and Periodicals	.,	,	-1,210	103	268	278	
Stationery			***	91	251	210	
Drugs, Chemicals and Fertilizers			***	498	2,336	1,773	
Arms, Ammunition and Explosives				41	1,347	576	
Other Items, Classes V to XX			•••	3,022	8,660	7,942	
Total, Classes V to XX			•	27,421	85,798	86,637	
Food, Beverages and Tobacco			•••	8,899	27,245	45,018	
Total Exports of Merchandise							
(Anst. Produce)	•••			36,320	113,043	131,655	

<sup>\*</sup> Includes Knitted.

Wool comprised 47 per cent. of all Australian merchandise exported from the State in 1938-39 and 44 per cent. in 1947-48; the quantity exported in 1947-48, viz., 463,600,000 lb. (as in the grease), was 22 per cent. greater than in 1938-39. The unusually heavy exports in 1946-47 were due to shipments of wool bought under war-time contract by the British Government and stored in Australia during the war years.

Hides and skins, another important export item, amounted to £4,586,000 in 1947-48. Since 1938-39, the quantity of rabbit skins exported has increased by more than 200 per cent. and sheepskins by 21 per cent. Other raw materials for which particulars of quantity are given, show a considerable decline since 1938-39. In particular, exports of coal fell from 382,000 tons to 59,000 tons, and iron and steel from 216,900 tons to 77,000 tons. Exports of undressed timber in 1947-48, viz. 23,890,000 super feet, were 12 per cent. less than in 1938-39. However, because of the upward trend of export prices, the value of all these items, except coal, was greater than before the war.

<sup>†</sup> Not recorded separately.

During the war years there was a considerable expansion in exports of some types of manufactured goods. Although there was a rather sharp decline in 1947-48 as compared with 1946-47, values in some cases were still considerably higher than before the war. In particular, machinery (other than electrical) increased from £235,000 in 1938-39 to £2,383,000 in 1947-48, hand tools from £6,000 to £336,000, and vehicles and parts from £77,000 to £498,000. Other significant increases were yarns from £14,000 to £382,000, and cotton and woollen piecegoods from £6,000 to £458,000.

The next statement traces the variations since 1928-29 in exports of certain locally produced commodities, comprising mainly manufactured goods, and shows the value of these relative to all exports of Australian produce from New South Wales. Important staple items, e.g., processed foodstuffs (see page 527), which undergo treatment in varying degree, are excluded, but the table in some measure reflects the growth of local secondary industries.

Table 479.—Oversea Exports, N.S.W.—Principal Classes of Merchandise other than Foodstuffs, Wool and other Primary Products.

£Α	thousand,	f.o.	b.

Class or Sub-Class.	1928-29.	1938–39.	1944–45.	1945-46.	1946–47.	1947–48.
Spirituous and Alcoholic Liquors	73	66	890	804	431	347
Tobacco, Cigarettes, etc	208	92	669	593	203	141
Manufactured Fibres	29	33	111	258	562	498
Textiles	38	78	331	1,151	1,941	907
Apparel	56	62	295	1,834	1,844	645
Iron and Steel	21	1,872	803	2,664	3,132	1,981
Electrical Appliances and		•		ĺ	,	
Equipment	37	225	227	369	577	738
Machinery (other than						
Electrical)	103	235	289	608	1,597	2,383
Metal Manufactures	442	829	1,525	2,137	3,094	2,332
Rubber Manufactures	38	60	288	344	599	153
Paper and Stationery	119	251	368	358	655	525
Drugs, Chemicals and						
Fertilizers	388	498	1,305	1,924	2,336	1,773
Arms, Ammunition and			·		•	
Explosives	8	41	9,132	3,700	1,347	576
-				,	,	
Total of Foregoing	1,560	4,342	16,233	16,744	18,318	12,999
Foregoing as Proportion of		per cent.	per cent.	per cent.	per cent.	per cent.
Total Exports of Australian Produce	3.3	12.0	27.9	22.8	16.2	9.9

During the decade preceding the war, there was a significant increase in the proportion of merchandise other than foodstuffs, wool, etc., exported from New South Wales. The proportion increased again from 12 per cent. in 1938-39 to 27.9 per cent. in 1944-45, mainly owing to the expansion in exports of arms and ammunition from £41,000 to £9,132,000. Thereafter the percentage fell to 16.2 in 1946-47 and to 9.9 in 1947-48, the decline in the last year being largely due to the abnormally high proportion of foodstuffs exported.

Total

OVERSEA IMPORTS BY CLASSES AND COUNTRIES OF ORIGIN.

Of the textiles, metal manufactures, machinery and some other classes of manufactured goods imported into New South Wales, a larger proportion comes from the United Kingdom than from any other country, but substantial quantities are imported from the United States. Tobacco comes mainly from the United States and most of the tea from India and Ceylon. The bulk of the petroleum oils is imported from the Bahrein Islands, Persia and the United States. India supplies most of the raw cotton, hessian and jute goods, and bags and sacks.

The following table shows oversea imports in classes in 1947-48, according to the principal countries of origin.

Table 480.—Oversea Imports, N.S.W.—Classes and Countries of Origin, 1947-48.

£A thousand, f.o.b,

New United Other and Ceylon. Class. Canada. U.S.A. Total, Kingdom Zealand Countries. I. Foodstuffs of Animal 272 90 324 1.766 Origin 5 158 917 II. Foodstuffs of Vegetable 1,856 7,779 5,228 122 398 175 Origin Alcoholic Liquors ... V. Tobacco, etc. V. Live Animals 3,032 4,554 2201.024 11 487 11280 VI. Animal Sul Foodstuffs Substances not 563 535 24 1,548 65 17 344 VII. Vegetable Substances and Fibres ... 1,385 994 VIII. (a) Yarus and Ma tured Fibres ... (b) Textiles ... 333 81 96 2.630 5,519 and Manufac-2.261 4.564 1,708 962 9,507 835 (c) Apparel ...
IX. Oils, Fats and Waxes
X. Pigments, Paints, etc.
XI. Rocks and Mineral 5,319 568 31,743 14.617 2,445 8,518 2,124  $7\overline{3}2$ 2,072 29785 27 42 9,52512,483 916 112 784 500 115 86 6 204 1,200 65 XII. (a) Metals and Manufactures (except Electrical and Machinery) ....
Electrical Electrical 11,373 1,976 3,442 1,843 18,659 11 Dynamo Machinery and pliances (c) Machines 205 962 5,063 3.693 15 188 Machand inery (except Dynamo Electric) ... ... 6,353 335 60 3.622 565 10,935 XIII. (a) Rubber and Manufactures 567 14 2 286 1,421 2,326 36 and Manu-(b) Leather factures 119 XIV. Wood and Wicker 131 976 272 749 248 2,379 3,299 XV. Earthenware, China, etc. 224585 2,105 13 78 294XVI. (a) Paper ... ... ... (b) Stationery, etc. ... XVII. Fancy Goods, Jewellery ...<sub>2</sub> 3,921 1,699 8,542 33 1,892 10 302 134 2,373 etc. XVIII. Optical, 1,141 32 61 38 34 807 2:113 Surgical and Scientific Instruments... Drugs, Chemicals an 1,727 132 1 9 901 123 2,893 XIX. Drugs, Ch Fertilizers and 2,439 19 23 1,026 4,996 XX. Miscellaneons ... XXI. Bullion and Specie 1,449 35 43 96 422 1,200 814 3,245 1,565 749

Note,-Imports of outside packages and containers are excluded.

15,208

2,702

In 1947-48, the United Kingdom supplied textiles valued at £14,617,000 and metals, metal manufactures, and machinery, valued at £21,419,000, representing 46 per cent. and 62 per cent., respectively, of all imports of these goods. Other imports from the United Kingdom were yarns £2,261,000, earthenware, china, etc., £2,105,000, paper and stationery £3,689,000, and drugs and chemicals £2,439,000. Imports of tobacco, etc. (£1,024,000), consisted mainly of cigarettes.

6.944

56,990

Imports from Canada in 1947-48 included metals and metal manufactures £1,976,000, timber £976,000, and paper £1,699,000; these items together comprised 67 per cent. of all imports from Canada. Imports from India and Ceylon included foodstuffs of vegetable origin (mainly tea), £5,228,000, and yarns, manufactured fibres and textiles (mainly raw cotton and jute goods), £7,009,000; these items together constituted 80 per cent. of all imports from India and Ceylon, Imports from New Zealand are mainly primary products; £1,514,000 or 77 per cent. of the merchandise imported from that country in 1947-48 consisted of foodstuffs, animals, animal and vegetable substances and timber. Imports of rubber come mostly from Malaya.

Predominant among goods imported from the United States in 1947-48 were tobacco, etc., £3,032,000; yarns and textiles, £10,226,000; oils, £2,072,000; metals and metal manufactures, £3,442,000; and machinery, £4,584,000. These items together represented 76 per cent. of all imports from the United States.

OVERSEA EXPORTS BY CLASSES AND COUNTRIES OF DESTINATION.

Oversea exports of Australian produce in classes in 1947-48, according to the principal countries of destination, are shown below:—

Table 481.—Oversea Exports, N.S.W.—Australian Produce.—Classes and Countries of Destination, 1947-48.

£A thousand, f.o.b.

Class.	United Kingdom.	Canada.	India and Ceylon.	New Zealand.	U.S.A.	Other Countries.	Total.
I. Foodstuffs of Anima							
Origin II. Foodstuffs of Vegetable	5,247	74	526	196	10	3,483	9,536
Origin	8,095	. 5	5,901	578	20	20,396	34,995
III. Alcoholic Liquors IV. Tobacco. etc		10	1	47	1	$\begin{vmatrix} 167 \\ 141 \end{vmatrix}$	347 141
V. Live Animals			14	23	37	92	166
VI. Animal Substances no Foodstuffs	20,058	839	15	78	9,439	32,233	62,662
VII. Vegetable Substances and	l  ΄		l '				
Fibres	30	1	2	80	65	94	272
factured Fibres	3		4	156		335	498
(b) Textiles	a o	18	33	318 67	$\begin{array}{c} 6 \\ 12 \end{array}$	513 487	907
(c) Apparel IX. Oils, Fats and Waxes	100	1 1	16 258	21	4	355	645 802
X. Pigments, Paints, etc	0.4		5	202	1	835	564
XI. Rocks and Minerals	465		4	57	170	787	1,483
XII. (a) Metals and Meta Manufactures (except							
Electrical Appliances							
and Machinery)	3,410	7	621	2,355	46	2,016	8,455
(b) Dynanio Electrica Machinery and Ap							
Machinery and Appliances	31		32	234	14	427	738
(c) Machines and Mach							100
inery (except Dynamo			000	0.70			0.000
Electric) XIII. (a) Rubber and Manu-	29	1	339	816	18	1,180	2,383
factures	ļ ,	•••	2	81	1	69	153
(b) Leather and Manu-						701	
factures XIV. Wood and Wicker	345 48	3 18	17 4	16 564	$\frac{2}{22}$	191 155	574 811
XV. Earthenware, China, etc.	2		10	210		182	404
XVI. (a) Paper	<b></b> -		1	14		22	37
(b) Stationery, etc	35	4	4	282	9	154	488
XVII. Fancy Goods, Jewellery	6	1	2	45	21	126	201
XVIII. Optical, Surgical and		1		40	21	120	201
Scientific Instruments	29	•••	26	193	4.	15 <b>7</b>	409
XIX. Drugs, Chemicals and Fertilizers	123	15	60	413	131	1,031	1,773
XX. Miscellaneous	200	15 15	46	279	85	1,586	2.211
XXI. Bullion and Specie	34			- 3		38	75
Total	38,576	1,013	7,943	7,328	10,118	66,752	131,780
	I		·		· ·	i i	

Exports to the United Kingdom consist mainly of wool, foodstuffs and metals (chiefly lead). Of the total exports of Australian produce to the United Kingdom in 1947-48, viz., £38,576,000, foodstuffs comprised £13,342,000, or 35 per cent., animal substances (mainly wool) £20,058,000, or 52 per cent., metals and metal manufactures £3,410,000, or 9 per cent., and all other items £1,766,000, or 4 per cent.

In 1947-48, exports to Canada consisted mainly of wool and other animal substances (not foodstuffs), valued at £839,000, or 83 per cent. of the total. Of the exports to India and Ceylon, foodstuffs (mainly wheat and flour) comprised £6,427,000, or 81 per cent., and metal manufactures and machinery £932,000, or 12 per cent. The most important group of exports to New Zealand is metals, metal manufactures and machinery; in 1947-48 these items amounted to £3,405,000, or 46 per cent. of all Australian produce exported to that country from New South Wales. Other exports to New Zealand included foodstuffs (£774,000), timber (£564,000), yarns and textiles (£474,000), and drugs and chemicals (£413,000). Of the State's exports of Australian produce to the United States in 1947-48, viz., £10,118,000, wool, hides, and skins (chiefly rabbit furs) and other animal substances accounted for £9,439,000, or 93 per cent.

The wool, skins, etc., exported to "other countries" in 1947-48, viz., £32,233,000, or 51 per cent. of the total, were sent mainly to European countries, including France (£12,127,000), Belgium (£8,326,000) and Italy (£3,447,000). The exports of foodstuffs of vegetable origin included £20,396,000, or 59 per cent. (consisting mainly of wheat and flour), shipped to countries not specified in the table.

In 1947-48, 35 per cent. of the yarns, textiles and apparel exported from New South Wales were sent to the countries listed, and most of the balance went to New Guinea, Papua, Fiji and Hong Kong. Exports of machinery not distributed amongst the principal countries amounted to £1,607,000, or 51 per cent. of the total; most of this was sent to South Africa, the Pacific Islands and the countries north of Australia (particularly Malaya and Hong Kong).

EXPORTS OF STAPLE ITEMS—COUNTRIES OF DESTINATION.

Particulars are shown in the following statement regarding the destinations of the exports of the staple commodities in 1938-39 and each of the last three years:—

Table 482.—Destination of Principal Exports, N.S.W.—Australian Produce.

	Quantity.					Value.					
Country.	1938-39.	1945-46.	1946-47.	1947-48.	1	1938–39.	1945–46.	1946-47.	1947-48.		
	tho	usand lh.	as in the	WO	OL		thousand	.fob	_		
				310450/1		~11	- Uno de di ind	, 1.0.0.			
United Kingdom	133,900	107,000	119,500	174,900	Ш	6,200	8.279	9,758	19,511		
Canada	5,700	6,400	10,300	5,600		275	536	828	775		
France	90,400	41,000	112,800	91,800		3,729	3,232	9,161	10,410		
Belgium	55,900	35,300	108,400	77,900		2,225	2,581	7,766	8,201		
Other European Countries	47,200	12,900	93,600	55,300	Ш	2,387	996	8,625	9,024		
United States	10,100	103,400	135,400	43,200		596	7,535	12,920	7,438		
Other Countries	36,000	13,700	25,400	14,900		1,809	1,134	3,018	2,536		
Total	379,200	319,700	605,400	463,600	-	17,221	24,293	52,076	57,895		

Table 482.—Destination of Principal Exports, N.S.W.—Australian Produce—continued.

				_		contin					
		-			Quai	ntity.			Va	lue.	
Countr	у.			1938-39.	1945–46.	1946-47.	1947-48.	1938–39.	1945-46.	1946–47.	1947-48
<u> </u>						н	IDES AN	D SKINS.		nousand, f	o.b.
United Kingdom .								314	481	820	529
France					•••		•••	456	477	843	1,714
O41 C		•••						403 404	$\frac{3,516}{372}$	3,905 1,076	1,937 406
Total								1,577	4,846	6,644	4,586
					thou	FROZE	N LAMB	AND MU	_	ousand, f	o.h
							1 1	1		· ·	
Other Committee	••	•••	•••	$41,497 \\ 3,487$	$12,014 \\ 3,687$	$25,558 \\ 4,216$	13,868 2,239	$1,024 \\ 81$	346 96	666 110	423 125
Mak at a to J					624				13		125
Total			•••	44,984	16,325	29,774	16,107	1,105	455	776	548
							TINNED	MEATS.			
					thou	sand lb.			£A tì	ousand, f	.o.b.
				515	8,612	16,298	21,152	17	447	1,053	1,191
South Africa Malaya and Singapor	 FA			93 96	544 690	2,000 3,508	1,189 543	5 4	$\frac{23}{44}$	158 194	88 55
Pacific Islands .			•••	1,357	2,100	1,628	2,443	43	129	105	158
Office demonstrates				265	$1,537 \\ 12,648$	$^{4,431}_{7,667}$	161 4,808	9	96 590	229 556	18 372
Mat stated					14,397				1,058		
Total			•••	2,326	40,528	35,532	30,296	78	2,387	2,295	1,882
					thou	sand lb.	BUTT	ER.	£A tl	ousand, f	.o.b.
United Kingdom .					7 470	000	10.001	1 177	007	۱ ۵٬	
Пон и 17 и				$19,941 \\ 632$	$7,479 \\ 125$	$\frac{262}{186}$	10,024 1,068	1,177 38	667 11	24 20	$\begin{array}{c c} 1,118 \\ 120 \end{array}$
Japan		•••	•••		465	1,406	851		53	127	72
Other Comptition	••		•••	$348 \\ 3,045$	953 1,660	609 1,635	525   2,779	183	84 159	63 168	$\begin{vmatrix} 61 \\ 322 \end{vmatrix}$
	••				2,386	<b>.</b>			238		•••
Total				23,966	13,068	4,098	15,247	1,420	1,212	402	1,693
				Ag Isu	chale of w	WI neat—thou	HEAT AN	D FLOUR		ousand, f	o h
				25 00	alicis of #1	1540 01100		1	211 01	l (Lindson	1
United Kingdom .				6,115	156	896	5,776	849	75	608	5,040
Continental Europe China			•••	$1,747 \\ 11,510$		903	5,208	225 1,497		451	5,456
India and Ceylon .				395	4,543	6,000	6,218	53	2,205	3,232	5,645
Malaya and Singapo New Zealand	ore		•••	$\frac{1,615}{1,685}$	$2,448 \\ 340$	$\frac{3,370}{1,780}$	475 331	219 221	$1,161 \\ 169$	1,871 871	410 115
Pacific Islands .			• • • • • • • • • • • • • • • • • • • •	799	1,201	1,222	1,107	118	536	759	1,023
Other Countries .		•••	•••	5,237	2,795	2,231	10,676	712	1,221	1,356	9,960
Total	••		•…	29,103	11,483	16,402	29,791	3,894	5,367	9,148	27,649
					te	ons.	RON AND	STEEL.	£A tl	ousand, f	.o.b.
United Kingdom				47,200	100,850	76,150	7,150	369	1,295	1,004	200
India and Ceylon .				16,500	18,900	11,500	1,459	122	271	193	48
Malaya and Singapo New Zealand	ore	•••	•••	19,300 61,850	$150 \\ 27,450$	1,300 63,450	$\frac{1,842}{52,146}$	218 696	$\frac{4}{537}$	1,011	84 1,188
Other Comments	.,			72,054	22,323	45,782	14,439	467	557	883	461
Total				216,904	169,673	198,182	77,036	1,872	2,664	3,132	1,981

Of the total quantity of wool exported from New South Wales in 1947-48, 38 per cent. was sent to the United Kingdom, 49 per cent. to European countries, and 9 per cent. to the United States. In the same year, 42 per cent. of the hides and skins exported went to the United States and 38 per cent. to France, as compared with 26 per cent. and 29 per cent., respectively, in 1938-39.

The bulk of the frozen lamb and mutton, tinned meats and butter is exported to the United Kingdom. The proportion of wheat and flour exported to the different countries fluctuates from year to year according to the size of the Australian crop and the shortage or surplus of grain in the importing countries; in 1947-48 large quantities were sent to India and Ceylon (28 per cent.), the United Kingdom (19 per cent.) and Europe (17 per cent.).

New Zealand took 29 per cent. of the iron and steel exported from New South Wales in 1938-39, and the United Kingdom 22 per cent., but in 1946-47 the proportions were 32 per cent. and 38 per cent. respectively. In the following year, the total quantity exported was only 77,036 tons (or 69 per cent. less than in 1946-47), and of this 52,146 tons or 68 per cent., was sent to New Zealand and 7,150 tons, or 9 per cent., to the United Kingdom.

#### RE-EXPORTS.

The value of merchandise re-exported oversea from New South Wales was £1,366,956, or 3.6 per cent. of all merchandise exported in 1938-39 and £3,007,553, or 2.2 per cent., in 1947-48. The principal items re-exported in 1938-39 and each of the last four years are shown below.

Table 483.—Re-exports of Merchandise Oversea from New South Wales. £A, free on board at ports.

Commodity.	1938–39.	1944-45.	1945-46.	1946–47.	1947–48.
Petroleum and Shale Oils Foodstuffs and Beverages Textiles aud Apparel	77,647 113,036 84,059	1,295,488 354,572 433,086	1,059,861 913,918 286,782	584,488 524,846 256,769	376,706 245,339 1,063,582
Machinery and Electrical Equipment Metals and Metal Manu-	194,005	37,215	102,108	379,370	362,087
factures All other Items	143,985 754,224	54,541 441,292	129,035 368,575	548,729 1,182,084	231,330 728,509
Total, Re-exports of Merchandise	1,366,956	2,616,194	2,860,279	3,476,286	3,007,553

In 1938-39 the largest item of re-exports was machinery; during the war, petroleum and shale oils comprised nearly half of the total, and in 1947-48 about one-third consisted of textiles and apparel. Most of the merchandise re-exported was sent to countries near Australia, particularly New Guinea, New Zealand and the Pacific Islands.

#### OVERSEA EXPORTS—SHIPS' STORES.

The figures relating to oversea exports, as shown in the foregoing tables, do not include exports in the form of ships' stores. This is an important

branch of the trade of the State, as may be seen from the following statement of the value of ships' stores exported from New South Wales in 1938-39 and the last six years.

Table 484.—Ships' Stores Exported Oversea from New South Wales. £A., free on board at ports.

Year ended 30th June,	Fuel Oil.	Bunker Coal.	Foodstuffs.	Other Items.	Total.
1939	93,503	497,145	290,336	181,813	1,062,79
$1943 \\ 1944$	1,428,865 2,608,576	$349,461 \\ 216,258$	389,830 451,292	365,138 $426,919$	2,533,294 3,703,044
1945	3,499,853	236,766	900,867	683,294	5,320,78
1946	1,123,281	253,697	1,236,603	795,830	3,409,41
$1947 \\ 1948$	$\begin{array}{c c} 620,520 \\ 1,125,373 \end{array}$	460,048 $431,327$	750,355 656,212	480,025 497,785	2,310,94; 2,710,69

The amount of bunker coal exported as ships' stores in 1938-39 was 516,655 tons, and the value was £497,145, or 47 per cent. of the total; in 1947-48 the amount was only 233,657 tons, valued at £431,327, or 17 percent. of the total. Fuel oil has increased in importance from 9 per cent. of all ships' stores exported in 1938-39 to 40 per cent. in 1947-48. Food-stuffs comprised 24 per cent. of the total in 1947-48, as compared with 27 per cent. in the pre-war year.

Australian produce comprised £895,899 or 84 per cent. of the ships' stores exported in 1938-39 and £1,486,270 or 55 per cent. in 1947-48. The bulk of the produce re-exported as ships' stores consists of fuel and other oils.

#### AUSTRALIAN IMPORT AND EXPORT PRICES.

The following table shows index numbers of Australian oversea import prices for the last four years, as compiled by the Commonwealth Bank of Australia. The base of the index is the weighted average prices of selected groups of commodities during the years 1936-37 to 1938-39, taken as 100.

Table 485.—Import Price Index Numbers, Australia. Base: Average of 3 years ended 30th June, 1939 = 100.

Year ended 30th June.		Quarter ended								
oun June.	September.	December.	March.	June.	Average.					
1937 to 1939 1945 1946 1947 1948	* 196 202 216 259	* 201 202 228 265	* 199 202 235 274	* 203 208 251 278	100 199 203 232 269					

• Not available.

The index shows that at the end of the war the general level of import prices was about double the pre-war average. Since 1945-46 import prices have risen more rapidly than during the war, and in the last quarter of

1947-48 they were almost three times as high as before the war. Increases in the prices of certain groups of commodities have been much greater than in others; in 1947-48 the index numbers for vehicles and for secondary industry raw materials were only about two and a half times the pre-war average, as compared with nearly four times in the case of piecegoods and raw materials for primary industries.

A series of price index numbers for imports from sterling and nonsterling areas, compiled by the Bank on the same basis, showed index numbers for the quarter ended 30th June, 1948, as follows: United Kingdom, 270; other sterling areas, 306; United States and Canada, 259.

The table below shows a series of Australian export price index numbers compiled by the Commonwealth Statistician from the prices of 20 commodities which constitute about 80 per cent, of all exports. The prices of the commodities are multiplied by the average annual exports (production in the case of gold) during the three years, 1933-34 to 1935-36. The percentage distribution of the base aggregate for "All Groups" is as follows: Wool, 45.6; Wheat, 17.0; Butter, 11.4; Metals, 6.9; Meats, 6.6; Gold, 7.0; and a group of items not shown in the table (Sugar, Dried Fruits, Tallow and Hides), 5.5.

Table 486.—Export Price Index Numbers, Australia.

Base of each section: Average of 3 years ended 30th June, 1939 = 100.

Per	flod.			Wool.	Wheat.	Butter.	Metals.	Ments.	Gold.	All Groups (including gold).
Year—										
1938-39				79	66	101	84	96	103	83
1939-40				98	82	103	92	102	118	98
1940-41				101	102	110	95	103	121	104
1941 - 42				101	105	110	101	109	120	106
1942 - 43				117	106	114	100	112	ι19	114
1943-44	• • •			117	116	114	113	113	119	117
1944-45				117	154	147	129	122	120	130
1945-46	•••			117	213	147	196	123	122	146
1946-47	• • •			173	305	173	308	139	122	203
1947-48	•••	•••		287	419	194	372	146	122	283
Month-										
1947—Sept	ember			249	386	173	352	145	122	255
Dece	ember			1275	401	204	359	145	122	275
1948—Marc	ch			1302	456	204	379	145	122	298
June	•			362	471	204	425	155	122	333
			J							

During the war years, export price index numbers were comparatively stable at a level somewhat above the pre-war average, until the last year, 1944-45, when there were considerable increases in the case of wheat and butter. During the next three years, the index numbers for wool, wheat and metals increased very rapidly. The index for wool moved from 117 in 1944-45 to 362 in June, 1948, wheat from 154 to 471, and metals from 129 to 425, but those for gold and meats showed only moderate increases. The index number for all export items in June 1948, was four times the number in 1938-39 and three times the pre-war average.

#### EXCISE TABLET.

Excise duties are levied by the Commonwealth on a number of articles manufactured and consumed in Australia. Duties on stimulants and narcotics are the chief source of revenue. Rates of duty on most dutiable commodities increased considerably between 1939 and September, 1942, since when there has been only slight alteration; duties on methylated spirits, carbonic acid gas and dry batteries and cells were abolished in November, 1946, and duties on petrol and matches were reduced in November, 1946, and in July, 1948, respectively.

The following table shows at annual intervals the rates of duty on principal articles since 1938 and the gross amount collected in respect of each article in 1947-48.

Table 487.—Excise Tariffs—Rates of Duty and Duty Levied on Principal Articles.

		R	ate of E	ccise Dut	y at 31st	Decemb	er,	Year e 30th Jui	ended ne, 1948.
Commodity,	Unit of Quantity.	1938.	1939.	1940.	1941.	1942.	1943 to 1948.	Quantity on which Excise was paid in N.S.W.	Gross Excise Duty Collected in N.S.W.*
	<u> </u>	Shill	ings and		£				
Веег	gallon	1-9	2-0	2-9	3-0	4-7	4-7	41,818,414	9,583,386
Spirits— Brandy	proof gal.	26-0	26-0	38-0	38-0	53-6	53-6	172,162	460,532
Gin	,,	28-0	29-0	41-0	41-0	56-6	56-6	304,778	860,998
Whisky	,,	26-0	27-0	39-0	39-0	54-6	54-6	132,658	361,494
Rum	,,	28-0	29-0	41-0	41-0	56-6	56-6	424,304	1,198,661
Tobacco†	lb.	5-2	5-2	7–2	8–3	10–11	10-11§	7,158,198	3,713,685
Cigarettes†	lb.	7-0	7-0	9–9	12-9	20-9	20-9§	3,431,883	3,400,354
Cigarette papers and tubes	60 papers	0-11	0-11	0-13	0-13	0–13	0-13	55,864,075	407,342
Playing cards	doz, packs	2-0	2-0	2-0	2-0	10-0	10-0	82,500	41,250
Petrol— From Aust. shale	gallon		0-1	0-4	0-4	0–4	0-3‡	ן וו	
Other	,,	0-51	0-61	0-91	0-91	$0-9\frac{1}{2}$	0-8 <u>1</u> ‡		
Matches	gross boxes	0-6	0-6	20	4-0	8-0	7–3¶		2,125,985
Wireless valves	each	1-9	1-9	1-9	3-9	3–9	3-9	<sub>  </sub>	

<sup>\*</sup> See also Table 488. † Rates on imported leaf. ‡ From 15th November, 1946, only. § Less 4½ per cent. since November, 1943. ¶ From 1st July, 1948, only. ∥ Not available for publication separately.

#### CUSTOMS AND EXCISE REVENUE.

The following statement shows the net amount of customs and excise revenue (including Special War Duty) collected in New South Wales under each division of the tariff during 1938-39 and each of the last four years. The collections include receipts on account of goods which were

transferred for consumption in other States, but do not include duties on goods from other States consumed in New South Wales:—

Table 488.—Customs and Excise Revenue Collected in New South Wales.

Tariff Division,	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.
Qustoms—	£	£	£	£	£
Stimulants, Ale, Beer, etc.	694,264	254,202	306,567	345,198	514,199
Narcotics (Tobacco)	2,233,312	3,280,846	3,197,323	4,999,835	6,411,015
Sugar	., 5,450	6	23	721	3,930
Agricultural Products an Groceries	d 667,764	391,600	484,371	501,328	651,987
Apparel and Textiles	1,219,018	506,125	654,122	1,704,115	2,707,767
Metals and Machinery	1,118,322	546,133	549,713	1,173,741	1,963,445
Olls, Paints, and Varnishes .	3,453,278	3,055,786	4,131,585	5,430,885	4,477,246
Earthenware, etc	252,547	74,650	159,108	275,333	501,120
Drugs and Chemicals	167,554	109,760	109,205	202,737	250,368
Wood, Wicker etc	335.723	170,198	220,670	301,514	304,830
Jewellery and Fancy Goods .	292,714	302,863	424,019	515,376	642,210
Hides, Leather and Rubber .	230,767	101,000	98,141	327,324	368,952
Paper and Stationery	216,256	38,907	57,535	225,883	406,107
Vehicles	753,187	17,911	96,034	579,754	905,014
Musical Instruments	18,119	210	1,894	7,242	25,451
Miscellaneous	477,001	486,095	762,419	904,491	1,666,420
Primage Duty	1,788,802	966,884	1,464,705	2,837,210	3,063,365
Special War Duty *		363.154	549,267	306,713	() 4,816
Other Receipts	141,431	83,099	127,251	168,207	548,267
Total, Customs	14,065,509	10,749,429	13,393,952	20,807,607	25,407,377
Excise—					
Beer	2,850,644	8,201,615	8,063,175	10,970,584	9,579,363
Spirits	709,799	2,099,399	3,153,485	2,852,037	3,222,745
Tobacco	1,646,079	4,931,174	5,162,326	6,031,510	3,713,685
Cigars and Cigarettes	1,246,318	5,049,137	5,113,168	6,071,100	3,414,794
Cigarette Papers	113,740	386,711	375,167	523,292	407,320
Licenses	3,687	4,960	4,855	6,501	5,842
Other Excise Duty	409,109	837,798	1,057,973	1,444,830	2,142,553
Total, Excise	6,979,376	21,510,794	22,930,149	27,899,854	22,486,302
Fotal, Customs and Excise	21,044,885	32,260,223	36,324,101	48,707,461	47,893,679
Per head of population	£ s. d. 7 13 10	£ s. d. 11 2 4	£ s. d. 12 7 8	£ s. d. 16 8 8	£ s. d. 15 18 7

<sup>\*</sup> Levied from 3rd May, 1940, to 15th November, 1946.

<sup>(-)</sup> Denotes excess of refunds.

Customs duties collected in New South Wales increased by 90 per cent. In 1947-48 compared with 1945-46. Rates of duty were practically unchanged. The increase, common to all classes of goods, was the result of higher prices and larger quantities imported. The latter included certain special imports, subject to heavy rates of duty, to overcome local shortages; e.g., gross duty paid on cigarettes imported into New South Wales increased from £9,094 in 1945-46 to £2,105,630 in 1947-48.

Collections of excise duties in New South Wales rose substantially between 1938-39 and 1942-43, following steep increases in the rates of duty on stimulants and narcotics (see Table 487) and a further rise in collections in 1946-47 was due to increased output. Collections declined in 1947-48 as a result of decreased production of beer caused by an industrial dispute in breweries from February to May, 1948, and an alteration in the State of payment of excise duty on tobacco and cigarettes manufactured in New South Wales but consumed in other States of Australia. Although collections from tobacco and cigarettes in this State declined substantially in 1947-48 compared with 1946-47, the quantity of these items manufactured in New South Wales was almost unchanged.

The item "Other Excise Duty" principally comprises revenue from excise on petrol, matches and wireless valves, separate particulars of which are not available for publication.

There is some variation from one period to another in the relationship between the quantity of dutiable goods consumed in any one State and the quantity in respect of which duty is paid in that State; a more satisfactory comparison of the incidence of customs and excise tariffs from year to year is therefore provided by collections in the Commonwealth. The following table shows net collections in Australia (including Special War Duty) of all customs and excise duties annually since 1937-38:—

Table 489.—Customs and Excise Revenue Collected in Australia.

S7 3-3	Tota	al Net Collecti	ions.	Per Head of Population,			
Year ended 30th June,	Customs.	Excise.	Customs and Excise.	Customs.	Excise.	Customs and Excise.	
1938 1930 1940 1941 1942 1943 1944 1945 1946 1947	£ 32,972,066 31,160,462 34,830,306 29,409,666 25,208,806 20,806,321 20,600,703 21,487,538 28,898,682 45,871,085 57,597,154	£ 15,410,839 16,471,903 18,994,600 24,370,117 31,572,002 44,077,799 46,684,718 45,689,133 49,066,962 56,375,304 58,007,486	£ 48,383,005 47,632,365 53,824,906 53,779,783 56,780,808 64,878,120 67,201,416 67,176,671 77,960,644 102,246,389 115,604,640	£ s. d. 4 16 0 4 9 11 4 19 5 4 3 1 3 10 7 2 17 9 2 16 8 2 18 6 3 17 9 6 2 0 7 10 9	£ s. d. 2 4 10 2 7 6 2 14 3 3 8 11 4 8 5 6 2 4 6 8 5 6 4 4 6 12 1 7 9 11 7 11 10	£ s. d. 7 0 10 6 17 5 7 13 8 7 12 0 9 0 1 9 6 1 9 2 10 10 9 10 13 11 11 15 2 7	

# INTERSTATE TRADE BY SEA.

Statistics of interstate trade were published in some detail in the 1939-40 and earlier issues of the Year Book. The figures were compiled from data obtained from the Maritime Services Board, the railway authorities of New South Wales, Victoria and South Australia, and persons and firms engaged in interstate trade. Statistics of goods moved interstate by the railways have not been available since 1939-40. The particulars given in this chapter have been obtained from the Commonwealth Statistican, from the Maritime Services Board of N.S.W., and from official statistics of Western Australia and Tasmania; they are incomplete in various respects and relate to the seaborne trade only.

Details of interstate cargoes discharged and shipped in New South Wales are compiled by the Commonwealth Statistician (see page 549). In 1947-48 there were 2,740,166 tons weight and 368,166 tons measurement of interstate cargoes discharged in New South Wales, and 3,242,016 tons weight and 352,083 tons measurement shipped; interstate tonnages discharged and shipped were 24 per cent. and 87 per cent. greater, respectively, than oversea tonnages.

#### Direction of Interstate Trade.

The following table shows the direction of interstate trade handled in the Port of Sydney in 1946-47:—

Table 490.—Port of Sydney—Direction of Interstate Trade, 1946-47. (Source: Maritime Services Board of N.S.W.)

	Imp	orts.	Exports.		
State of Origin or Destination.	Tons (Weight and Measurement).	Proportion of Total.	Tons (Weight and Measurement).	Proportion of Total.	
Queensland South Australia . Western Australia .	267,075 300,103 205,891 74,570 216,150	per cent. $25 \cdot 1$ $28 \cdot 2$ $19 \cdot 4$ $7 \cdot 1$ $20 \cdot 2$	124,000 120,000 83,000 51,000 95,000	per cent. 26·2 25·4 17·5 10·8 20·1	
*Total .	1,063,789	100.0	473,000	100.0	

\* Excludes Darwin and Thursday Island (imports 15,000 tons and exports 9,292 tons). NOTE.—Tonnages are weight and measurement tons combined (1 measurement ton  $\pm$  40 cubic feet).

The interstate shipping trade is subject to fluctuation, particularly in respect of agricultural and pastoral products. For instance, abnormal quantities of wheat were imported from Victoria, South Australia and Western Australia in 1946-47 and 1947-48, to supplement the very poor 1946-47 harvest in New South Wales. Staple items imported from Queensland in 1946-47 included sugar (155,789 tons) and molasses (13,147 tons). Imports from South Australia in 1946-47 included 24,581 tons of lead.

The bulk of the interstate trade handled at Newcastle consists of ironstone brought from South Australia, and coal, which is exported to all States except Queensland. A small proportion of interstate trade is handled at other New South Wales ports. INTERSTATE TRADE—PRINCIPAL ITEMS, SYDNEY AND NEWCASTLE.

The next table shows the principal items of interstate imports and exports handled at the port of Sydney in 1938-39 and the last two years. Certain items were recorded in tons weight and others in tons measurement, and the totals are the sum of both units. The statistics are compiled by the Maritime Services Board on a slightly different basis from that of the cargo statistics shown in Table 502.

Table 491.—Interstate Imports and Exports, Port of Sydney.
(Source: Maritime Services Board of N.S.W.)

$\mathbf{Commodit}$	у.		Unit.	1938–39.	1946-47.	1947–48.
		'	Interstate	IMPORTS.		
Milk and Cream, Pre	eserved		40 cubic ft.	10,918	9,258	10,077
Barley			tons	*	17,948	12,102
Wheat			,,	54	106,818	95,596
Potatoes			,,	58,930	71,559	73,433
Fruit—Fresh	•••		40 cubic ft.	62,203	33,377	28,574
Canned, etc.	•••		,,	*	11,082	13,584
Jams	•••		tons	2,757	3,300	5,018
Sugar	•••	•••	,,	100,975	155,789	164,231
Molasses and Syrup			,,	21,721	13,171	9,166
Wines and Spirits	•••		40 cubic ft.	9,718	10,100	9,241
Hides and Skins			,,	14,035	9,022	8,189
Wool			bales	56,835	43,675	45,300
Tallow			40 cubic ft.	*	14,030	24,118
Pig Iron			tons	2	17,226	31,799
Lead			,,	*	24,581	25,768
Motor Vehicles and	Parts		40 cubic ft.	*	57,499	62,638
Timber, Undressed			super feet	23,082,342	14,394,240	14,232,000
Cement			tons	29,353‡	1,155	1,594
Paper (Newsprint)			,,	*	17,646	14,178
†Other Items			,,	} 805,595	385,868	348,983
†Transhipments	•••		,,	3 800,000	72,122	59,357
	Total		tons	1,187,058	1,078,789	1,045,313
			Interstate ]	Exports.		
Wheat			tons	4,960	14	25
Marg <b>ar</b> ine	•••		,,	4,802	1,889	2,286
Hides and Skins	•••	•••	40 cubic ft.	1,951	1,081	1,634
Wool			bales	15,568	55,632	47,400
Coke		[	tons	3,857	15,654	9,293
Timber, Undressed			super feet	2,256,139	498,720	457,440
Cement			tons	19,076	3,888	1,564
†Other Items	•••	•	,,	710,112	436,484	476,875
	Total		tons	797,988	482,292	511,790

<sup>\*</sup> Not available.  $\dagger$  Weight and measurement tons (1 ton measurement = 40 cubic feet).  $\ddagger$  Includes plaster.

In 1947-48 the tonnages of interstate imports and exports handled at the port of Sydney were 12 per cent. and 36 per cent., respectively, less than in 1938-39. The volume of imports in 1947-48 was more than twice that of exports.

Since 1938-39, the interstate trade has undergone some marked changes. The quantity of sugar imported in 1947-48 was 164,231 tons or 63 per cent. more than in 1938-39, and imports of pig iron increased between those years from 2 tons to 31,799 tons. The quantity of timber imported in 1947-48, viz., 14,212,000 super feet, was 39 per cent. less than in 1938-39.

Particulars of interstate imports and exports through the port of Newcastle in the last two years are shown below:—

Table 492.—Interstate Imports and Exports, Port of Newcastle. (Source: Maritime Services Board of N.S.W.)

Impor	ts.		Exports.
Commodity.	1946-47.	1947-48.	Commodity. 1946-47. 1947-48.
Ironstone tons	1,307,435	1,817,401	Coal (Bunker and Cargo) tons 2,383,118 2,531,817
Iron and Steel (Scrap) "	27,474	19,891	Coke ,, 134,138 95,657
Ore Products, Crude Manufactures ,,	3,010	8,520	Calcine Ore ,, 19,850 37,216
Salt, Crude and Fine "	9,953	8,051	Corrugated and Sheet 1ron ,, 59,165 51,654
Zine Slabs ,,	11,702	15,871	Pipes and Tubes ,, 63,114 63,768
Timber super ft,	584,640	532,800	Wire ,, 48,886 47,001
Other Items tons	41,471	30,931	Other Iron and Steel Products ,, 133,203 .119,560
•Transhipments ,,	1,236	3,190	Timber super ft. 343,200 978,240
			*All Other Items tons 29,244 .28,267
*Total, Imports ,,	1,403,499	1,404,965	*Total, Exports ,, 2,871,428 2,976,978

<sup>\*</sup>Includes tons measurement (1 ton measurement = 40 cubic feet).

In 1947-48 ironstone comprised 94 per cent. of interstate imports at the port of Newcastle, and coal constituted 85 per cent. of the exports. The quantity of iron and steel products exported to other States in 1947-48 was 281,983 tons.

The total tonnages shown in the tables above do not afford a satisfactory basis of comparison of the interstate trade of the port of Sydney with that of the port of Newcastle, because of the different nature of the goods handled, and the fact that most of the Newcastle trade is recorded in tons weight and much of the Sydney trade in tons measurement.

TRADE OF N.S.W. WITH WESTERN AUSTRALIA AND TASMANIA.

Statistics of trade between their respective States and New South Wales are compiled by the Government Statistician, Western Australia, and the Deputy Commonwealth Statistician, Tasmania. Similar details in respect of the other States are not available.

The following table shows the principal items of the trade between Western Australia and New South Wales in 1938-39 and the last two years:—

Table 493.—Interstate Trade of N.S.W. with Western Australia (excluding Bullion and Specie).

		•			una spec			
G - 111				Quantity.	į		Value.	
Commodity.			1938-39.	1946-47.	1947–48.	1938–39.	1946-47.	1947–48.
			Exports :	ro Westeri	N AUSTRALIA	١.		
Foodstuffs and Bevera	<b>7</b> 00-	_				£	£	Æ
Confectionery	_	lb.	2,313,968	974,319	1,245,746	168,567	133,987	129,692
0/1	•••		, ,		1,210,110	310,739	381,231	507,446
	•••	 lb.	941,025	979,762	1,231,802	507,629	1,275,388	816,113
robacco, etc rextiles and Apparel	•••	-	041,020		1,201,002	549,908	783,564	1,125,34
~ •	•••	tono	66,081	107,507	81,247	90,669	169,605	134,39
	•••	tons	. 00,081	593,821	804;550	**	761,067	1,130,76
iron and Steel Non-ferrous Metals	•••	cwt.	•		·		154;086	214,414
	•••	•••	•••		•••	, ,	194,080	752,80
Electrical Equipment	•••	•••	•••	***	•••	662,600	610,351	878,17
Machinery (not electric			•••	•••	•••	)	,	
Metals and Manufactur	•	Otner	•••		•	993,442	564,798	721,40
Rubber Manufactures	•••	•••	•••	•••		136,192	301,223	381,14
Stationery, etc	•••	• • • •	•••	•••	•••	112,506	187,781	297,63
Drugs and Chemicals	•••		•••	•••	•••	402,861	646,550	748,998
Miscellaneous	•••	•••				609,602	962,479	1,261,82
Total, Exports			•••			4,544,715	7,424,121	9,099,290
			IMPORTS FI	ROM WESTER	RN AUSTRAL	IA.	· · · · · · · · · · · · · · · · · · ·	
Foodstuffs and Bevera	ges-	_				£	£	,£
Wheat	•••	bush.		2,669,932	1,381,412		2,071,341	1,105,11
Other			l	′	,	98,772	188,767	133,98
Wool and Skins						56,984	66,807	162,45
Metals, Metal Manufa	etur	es and		l			,	
Machinery		•••			;	64,571	99,847	162} <b>29</b>
Miscellaneous	•••	•••	•••		;	270,000	455,831	492,88
Total, Imports		•…				490,327	2,882,593	2,056,67

<sup>\*</sup> Not available; included in "Metals and Manufactures, Other."

Exports to Western Australia from New South Wales in 1947-48 were valued at £9,099,290 or approximately double the amount in 1938-39, the increase being mainly due to higher prices. Excluding the abnormal imports of wheat due to the shortage of grain in New South Wales, imports in 1947-48 were also about double their value in the pre-war year. Metal manufactures and machinery predominated amongst the exports to Western Australia in 1947-48, amounting to £2,352,081 or 26 per cent. of the total. Other important groups were iron and steel (£1,130,763) and textiles and apparel (£1,125,341), each representing about 12 per cent. of the total.

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Particulars of the Tasmanian trade with New South Wales are given below:—

Table 494.-Interstate Trade of N.S.W. with Tasmania.

a				Quantity.			Value.					
Commodity.			1938–39.	1946-47.	1947-48.	1938–39,	1946-47.	1947-48.				
EXPORTS TO TASMANIA.												
Foodstuffs— Sugar Other Tobacco, etc		tons	13,355 	18,116 	17,319 	£ 427,365 427,387 161,002	£ 579,700 442,327 78,439	£ 599,606 592,850 183,856				
Metals, Metal Manufac Machinery Ores Fextiles and Apparel Other Items	ture	es and tons 	25,215 	23,245 	41,178 	701,535 61,392 151,604 654,930	1,436,489 121,088 298,031 1,581,310	1,800,522 215,500 355,724 2,501,478				
Total, Exports		•••	•••			2,585,215	4,537,384	6,249,544				
			Тмро	rts from T	ASMANIA.							
Fruit— Fresh Preserved, etc. Jams Potatoes Metals and Ores— Copper, Blister Tln Zine Other Woollen Manufactures		bush, lb. lb. tons tons tons tons	1,374,292 8,693,648 4,601,580 66,350 12,563 2,069 32,064 	502,057 19,063,155 4,162,600 85,064 7,955 1,065 29,201	276,104 24,298,201 4,073,484 85,775 5,210 1,181 34,021 	£ 409,136 108,344 102,997 825,943 566,209 323,424 490,924 101,171 371,067	£ 219,509 303,223 123,274 1,053,501 813,196 270,765 668,816 135,860 866,223	£ 121,480 406,258 124,914 1,094,185 804,300 312,516 748,747 228,474 1,283,200				
Other Items Total, Imports					:	965,594 4,264,809	6,743,789	7,553,66				

The value of exports to Tasmania was 39 per cent. less than the value of imports in 1938-39 and 18 per cent. less in 1947-48. The principal items of exports are metals, metal manufactures and machinery, and foodstuffs; in 1947-48 the value of these goods was £2,992,978 or 48 per cent. of total exports.

The principal items of imports from Tasmania and their value in 1947-48 were as follows: metals and ores, £2,094,041; woollen manufactures, £1,283,205; potatoes, £1,094,182; and fruit, £527,747. The value of these commodities together represented 66 per cent. of the imports. Since 1938-39, imports of fresh fruit from Tasmania have declined to one-fifth of their former volume, but imports of preserved fruit have grown from 8,693,648 lb. to 24,298,201 lb. In the same period the quantities of copper and tin imported fell by 51 per cent. and 43 per cent., respectively.

# **SHIPPING**

# Control of Shipping.

The Commonwealth of Australia Constitution Act empowers the Commonwealth Parliament to make laws with respect to trade and commerce with other countries and among the States, including navigation and shipping, and in relation to such matters as lighthouses, lightships, beacons and buoys, and quarantine.

Navigation and shipping are regulated under the Commonwealth Navigation Act, 1912-1942, which is drafted on the lines of the Imperial Merchant Shipping Act and of the Navigation Act of New South Wales which preceded it, and embodies the rules of the International Convention for Safety of Life at Sea and the International Load Line Convention.

The part of the Commonwealth Navigation Act which relates to pilotage has not been brought into operation, and this service is regulated under the State Navigation Act of 1901-1949.

The provisions of the Navigation Act apply to ships registered in Australia (except those engaged solely in the domestic trade of any one State) and other British ships whose first port of clearance and whose port of destination are within the Commonwealth. The High Court of Australia has decided that clauses relating to manning, accommodation, and licensing do not apply to vessels engaged in purely intrastate trade.

A ship other than an intrastate vessel may not engage in the coastal trade of Australia unless licensed to do so; a ship in receipt of a foreign subsidy may not be licensed. Licensees, during the time their ships are so engaged, are obliged to pay to the seamen wages at current rates ruling in Australia, and, in the case of foreign vessels, to comply with the same conditions as to manning and accommodation of the crew as are imposed on Australian registered vessels. Power is reserved to the Marine Administration to grant permits, under certain conditions, to unlicensed British ships to engage in the coastal trade and to authorise unlicensed ships of any nationality to carry out specified services without being deemed to engage in the coastal trade.

The Commonwealth Shipping Act, 1949, provides for the appointment of an Australian Shipping Board with authority to form a Commonwealth Shipping Line, and to license vessels engaged in the Australian coastal trade.

Matters relating to seaboard quarautine are administered by the Commonwealth, and the State Government aids in carrying out the law relating to animal and plant quarantine. Imported animals or plants may not be landed without a permit granted by a quarantine officer. The master, owner, and agent of a vessel ordered into quarantine are severally responsible for the expenses, but the Commonwealth Government may undertake to bear the cost in respect of vessels trading exclusively between Australasian ports. Quarantine expenses in the case of animals, plants and goods are defrayed by the importer or owner.

Vessels arriving from oversea ports are examined by a quarantine officer at the first port of call in Australia. If the vessel is less than fourteen days from the last oversea port of call (certain South Pacific Island ports excepted) it is inspected again at the next Australian port of call. The quarantine station of New South Wales is situated in Sydney Harbour, near the entrance to the port.

The liability of shipowners, charterers, etc., in regard to the transportation of goods in intrastate and other seaborne trade is defined by State and Commonwealth Sea-carriage Acts passed in 1921 and 1924 respectively.

Administrative control over the ports of New South Wales is vested in the Maritima Services Board of New South Wales, which is described on page 554. There is also an Advisory Committee to advise the Board in respect of Newcastle.

War-time and Post-war Control of Shipping in Australia.

An outline of the war-time control of shipping in Australia was given in previous issues of the Year Book (see No. 50, page 143).

The Australian Shipping Board was set up under the National Security (Shipping Co-ordination) Regulations, continued in force until 31st December, 1949 by the Defence (Transitional Provisions) Act. The Board's functions are to requisition, charter and operate vessels, and at 30th June, 1948 there were 24 Commonwealth-owned and 19 chartered vessels under its control. The functions of the Board will be assumed by the new Australian Shipping Board to be set up under the Shipping Act, 1949 (see page 547).

The Australian Shipbuilding Board was set up in March, 1941, under National Security (Shipbuilding) Regulations, which have been continued in force until 31st Degember, 1949. The Board is attached to the Department of Supply and Development and, subject to the direction of the Minister, it controls the building, repair and maintenance of merchant vessels and the provision of dockyards. The Board enters into agreements with contractors for the construction of ships and the provision of facilities for construction and repair.

The stevedoring industry in Australia was controlled by the Stevedoring Industry Commission until July, 1949, when the Commission's powers were transferred to a Stevedoring Industry Board.

The hours and conditions of labour, accommodation, discipline, etc., of seamen employed on Australian merchant ships are regulated by the Martime Industry Commission (see page 565).

# Stevedoring Industry Board.

A Stevedoring Industry Commission was established by the (Commonwealth) Stevedoring Industry Act, 1947-48. The Commission consisted of six members comprising a Judge of the Arbitration Court or a Commonwealth Conciliation Commissioner as chairman, one representative of Australian and one of oversea shipowners, two representatives of the Waterside Workers' Federation of Australia, and, as a non-voting member, an officer of the Commonwealth. At the various ports, the powers of the Commission were delegated to waterside employment committees, comprising a chairman appointed by the Commission and either one or

two representatives of (a) employers and of (b) members of the Federation. In July, 1949 the Commission was replaced by a Stevedoring Industry Board comprising a chairman and two other members appointed by the Governor-General.

In the main, the Board has replaced the Arbitration Court in regard to conciliation and arbitration in the stevedoring industry. It maintains registers of employers and of waterside workers, determines the quota (i.e., the number of workers needed) at each port, and may suspend or cancel registration of employers or workers.

The Board also conducts employment bureaux, provides welfare services, and pays attendance money to registered employees offering for work but not engaged.

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# Commonwealth Shipping Act, 1949.

The Shipping Act was passed by the Commonwealth Parliament in March, 1949, to provide for the establishment of a Commonwealth Shipping Line, for the maintenance of the shipbuilding industry in Australia and for an adequate and efficient Australian mercantile marine.

The Act provides for the appointment of an Australian Shipping Board of five members, to operate Australian shipping services (both coastal and oversea), and to acquire and dispose of ships, wharves and other shipping facilities. Vessels acquired by the Commonwealth during and since the war are to be vested in the Board.

The construction of any merchant vessel of more than 200 tons gross is prohibited except under a license granted by the Minister for Shipping and Fuel. No vessel of more than 200 tons gross may engage in the Australian coastal trade without a license, unless it is not more than 24 years old and was built in Australia, or unless at any time prior to the commencement of the Act it was engaged exclusively in trade between Australian ports. Under the Act, the purchase of Australian-built vessels may be subsidised up to a maximum of 25 per cent.

#### STATISTICS OF SHIPPING.

The figures of shipping in Tables 495 to 502 exclude ships of war, cablelaying vessels, and yachts, which are not included in the official shipping records. In this chapter, the gross tonnage of a vessel means the internal cubical capacity expressed as tons (one hundred cubic feet equals one ton); the net tonnage is the gross tonnage less spaces which cannot be used for the . carriage of cargo or passengers, e.g., engines and crew's quarters. With respect to cargo, one ton measurement is equivalent to 40 cubic feet.

Because vessels engaged exclusively in the transport of troops, war equipment and supplies were excluded in the statistics for the war years, the figures for these years may not be compared with those for other periods without taking the altered basis into account.

Oversea and Interstate Shipping-Vessels Entered and Cleared.

In compiling the records of oversea and interstate shipping, a vessel is treated as an entry once and as a clearance once for each voyage to and from New South Wales, being entered at the first port of call, and cleared at the port from which it departs. The repeated voyages of every vessel are included.

The following statement shows the aggregate number and net tonnage of interstate and oversea vessels which arrived in and departed from ports of New South Wales in various years since 1928-29, with the average net tonnage per vessel. The volume of shipping entered and cleared in 1947-48 was 46 per cent. less than the volume in 1938-39, the decline being due to the diversion of shipping from normal services during the war and the post-war shortage of vessels.

Table	495.—Shipping	Entered	and	Cleared	(N.S.W.).*
	(Inters	tate and	Over	sea.)	

Year ended 30th June.	E	ntries.	Cl	Average Tonnage	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage,	per Vessel.
1929	2,865	8,516,413	2,847	8,532,023	2,985
1939	3,319	11,241,842	3,334	11,232,236	3,378
1943	1,783	4,461,578	1,863	4,789,604	2,537
1944	1,783	4,662,457	1,856	5,030,873	2,664
1945	1,800	5,078,645	1,796	5,138,538	2,841
1946	1,761	5,527,830	1,787	5,507,885	3,110
1947	1,821	6,058,108	1,885	6,064,236	3,271
1948	1,948	6,486,841	1,995	6,438,810	3,278

<sup>\*</sup> See comments on shipping statistics, page 547.

# DIRECTION OF SHIPPING TRADE.

The shipping records do not disclose the full extent of communication between New South Wales and other countries, as they relate only to terminal ports. They are exclusive of the trade with intermediate ports, some of which are visited regularly by many vessels on both inward and outward journeys. The following statement of the tonnage entered from and cleared for interstate ports and overseas countries, grouped according to geographical position, indicates, as far as practicable, the growth or decline of shipping along the main trade routes between 1938-39 and 1947-48:—

"Table 496.—Shipping Entered from and Cleared for Principal Countries.\*

(Interstate and Oversea.)

thousands of net tons.

G		Entr	ies.		Clearances.			
Country.	1938–39,	1945-46.	1946-47.	1947–48.	1938–39.	1945–46.	1946–47.	1947-48.
Australian States  New Zealand  U. Kingdom and Europe Africa  Asia and Pacific Islands  North and Central America South America  Unspecified	43 1,417	2,439 335 573 108 1,244 801 21 6	3,041 362 644 91 1,107 704 21 88	2,977 305 932 134 1,877 721 41	6,302 845 2,135 39 1,468 427 17	2,659 160 842 46 1,173 573 40 15	2,916 354 1,169 60 1,058 442 10 55	3,291 279 1,395 70 1,012 392 
Total	11,242	5,527	6,058	6,487	11,232	5,508	6,064	6,439

\* See comments on shipping statistics, page 547.

Of the total shipping entered in 1947-48, viz., 6,487,000 tons, 46 per cent. was from the Australian States, 14 per cent. from the United Kingdom and Europe, and 21 per cent. from Asia and the Pacific Islands; 11 per cent.

was entered from North and Central America and 5 per cent. from New Zealand. The proportions of shipping cleared for these groups of countries were broadly similar.

Since 1938-39, tonnages entered have declined in all cases except those from Africa and South America.

#### INTERSTATE AND OVERSEA CARGOES.

A comparative statement of the interstate and oversea cargoes discharged and shipped in New South Wales in 1937-38 and the last ten years is shown below.

Table 497.—Cargoes Discharged and Shipped.\*

thousand t	ons.
------------	------

		Cargo Discharged.					Cargo Shipped.					
Year ended 30th	Interstate.		Oversea.			Interstate.		Oversea.				
June.	Tons Weight.	Tons Measure- ment,	Tons Weight.	Tons Measure- ment,	Total.	Tons Weight.	Tons Measure- ment.	Tons Weight.	Tons Measure- ment.	Total.		
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	2,823 3,167 3,368 2,950 2,926 2,590 2,777 2,817 2,817 2,867 2,740	687 676 657 722 699 561 638 668 442 322 368	1,336 1,179 1,277 1,164 1,357 1,240 1,384 1,620 1,623 1,409 1,564	1,160 1,112 1,052 665 749 753 931 1,075 1,001 653 938	6,006 6,134 6,354 5,501 5,731 5,144 5,730 6,180 5,220 5,251 5,610	2,968 2,736 2,605 3,686 3,694 3,596 3,360 3,298 2,831 3,119 3,242	711 672 734 694 654 515 475 420 316 275 352	1,500 1,679 1,926 1,543 1,090 995 1,073 972 930 1,205 1,493	343 359 337 494 559 706 085 710 632 573 424	5,522 5,446 5,602 6,417 5,997 5,812 5,893 5,400 4,709 5,172 5,511		

Note.—One ton measurement = 40 cubic feet.

The tonnage of cargo discharged in New South Wales ports reached a peak of 6,354,000 tons in 1939-40, but it was only 5,610,000 tons in 1947-48, or 8 per cent. less than in 1938-39. Cargo shipped rose from 5,446,000 tons in 1938-39 to 6,417,000 tons in 1940-41, but thereafter declined to 4,709,000 tons in 1945-46 and was 5,511,000 tons in 1947-48. Tables 495 and 497 indicate that although the volume of shipping was approximately halved, approximately the same quantity of cargo was handled in 1947-48 as in 1938-39.

In 1947-48 interstate cargo represented 55.4 per cent. of the total discharged and 65.2 per cent. of the total shipped, as compared with 62.6 per cent. and 62.5 per cent. respectively in 1938-39. A higher proportion of oversea than of interstate cargo is recorded in tons measurement.

#### NATIONALITY OF VESSELS.

The majority of the vessels engaged in the trade of New South Wales are under the British flag, the oversea trade with the United Kingdom and other British countries being controlled chiefly by shipowners of the United Kingdom, and the interstate trade by Australian shipping companies. In the table below, British and foreign shipping are shown under distinctive headings.

<sup>\*</sup> See comments on shipping statistics, page 547.

Table 498.—Nationality of Shipping Entered (N.S.W.)—Summary.\*
(Interstate and Oversea.)

Year ended 30th June. Austrolia		Net Tonna	Percentage.				
	Australian.	Other British.	Foreign,	Total.	Aus- tralian,	Other British.	Foreign.
1921	2,364,935	3,364,250	1,394,146	7,123,331	33.2	47.2	19.6
1929	2,332,777	4,607,059	1,576,577	8,516,413	27.4	54.1	18.5
1931	2,321,347	3,945,587	1,671,230	7,938,164	29.2	49.7	21.1
1939	3,993,271	5,266,229	1,982,342	11,241,842	35.5	46.9	17.6
1943	1,652,373	1,270,520	1,538,685	4,461,578	37.0	28.5	34.5
1944	1,475,809	1,318,811	1,867,837	4,662,457	31.6	28.3	40.1
1945	1,392,393	1,747,359	1,938,893	5,078,645	27.4	34.4	38.2
1946	1,442,903	2,570,819	1,514,108	5,527,830	26.1	46.5	27.4
1947	1,589,921	3,455,862	1,012,325	6,058,108	26.2	57.1	16.7
1948	1,406,919	3,870,922	1,209,000	6,486,841	21.7	59.7	18.6

<sup>\*</sup> See comments on shipping statistics, page 547.

Except in the war years, there has been little variation from year to year in the proportions of British and foreign shipping entered. The proportion of shipping of Australian nationality has declined considerably since 1943. In 1947-48 Australian shipping represented 21.7 per cent. of the total, other British shipping 59.7 per cent. and foreign 18.6 per cent., as compared with 35.5, 46.9, and 17.6 per cent., respectively, in 1938-39.

Particulars relating to the nationality of vessels engaged in trade with New South Wales in 1938-39 and the last three years are shown in greater detail in the following statement:—

Table 499.—Nationality of Shipping Entered (N.S.W.).\*
(Interstate and Oversea.)

				Shipping	Entered.			
Nationality of Shipping,	1938-39.		194	1945–46.		6-47.	1947–48.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
British—								
Australia	1,783	3,993,271	787	1,442,903	793	1,589,921	746	1,406,919
New Zealand	189	525,342	84	97,594	75	91,515	83	100,365
United Kingdom		4,462,120	444	2,271,843	660	3,218,151	745	3,531,353
Other British	84	278,767	74	201,382	53	146,196	89	239,204
Total	2,848	9,259,500	1,389	4,013,722	1,581	5,045,783	1,663	5,277,841
Foreign—								
Denmark	10	38,024	3	13,452	5	16,666	ll 8	33,351
France	61	94,452	28	37,001	34	90,068	ll 34	75,535
Germany	60	263,378	ll	,		ļ ,. <u>.</u>	ll	
Italy	90	113,040	ll		1	4,879	1	4,549
Netherlands	72	332,358	13	55,757	27	122,872	29	138,456
Norway	. 66	262,969	67	186,646	41	164,770	45	172,699
Sweden		97,201	28	92,373	35	112,635	40	136,357
Japan	. 75	308,043	1	5,138				
United States of			l.					
America		359,287	146	810,273	75	407,180	91	472,519
Other Foreign	. 28	113,590	86	313,468.	22	93,255	37	175,534
Total	471	1,982,342	372	1,514,108	240	1,012,325	285	1,209,000
Grand Total	3,319	11,241,842	1,761	5,527,830	1,821	6,058,108	1,948	6,486,841

<sup>•</sup> See comments on shipping statistics, page 547.

The tonnage owned in the United Kingdom represented 54.4 per cent. of the total entered in 1947-48, and Australian-owned tonnage represented 21.7 per cent. Foreign tonnage was owned chiefly in the United States (7.3 per cent.), Norway (2.7 per cent.), Sweden (2.1 per cent.) and the Netherlands (2.2 per cent.).

During 1947-48 entries of Australian tonnage amounted to 1,321,251 tons in the interstate trade and 85,668 tons in the oversea trade. Of the other British tonnage, including ships owned in the United Kingdom and New Zealand, 1,407,985 tons were entered from interstate ports and 646,394 tons from the United Kingdom. The tonnage belonging to other nations was employed chiefly in the foreign trade.

# Cargoes—Nationality of Shipping.

During 1947-48 interstate cargoes discharged at ports in New South Wales amounted to 3,108,332 tons, and oversea cargoes to 2,501,535 tons; shipments to interstate ports represented 3,594,099 tons, and to oversea countries, 1,917,072 tons. Interstate trade is carried for the most part in Australian ships.

Particulars of oversea cargoes according to the nationality of the vessels which carried them are shown below in respect of 1938-39 and the last two years.

Table 500.—Oversea Cargoes (N.S.Wi)—Nationality of Shipping.\*

(Interstate and Oversea.)

			,0115,			
Nationality of Chinning	1938	3-39.	1946	47.	1947	′-48.
Nationality of Shipping.	Discharged.	Shipped.	Discharged.	Shipped.	Discharged.	Shipped.
Australia New Zealand United Kingdom Other British Total, British	91,839 41,187 1,466,462 108,874 1,708,362	108,222 320,762 932,768 139,882 1,501,634	81,010 35,469 1,230,184 79,552 1,426,215	147,238 75,763 1,096,605 111,565	67,675 24,738 1,656,846 79,263 1,828,522	146,038 61,780 967,083 174,562 1,349,463
Denmark France Germany Ttaly Japan Netherlands Norway Sweden United States of America	23,759 7,654 67,656 16,748 44,710 119,200 157,372 41,110 38,126 66,798	33,858 135,427 28,394 7,259 63,346 91,684 78,765 23,866 27,896 45,486	9,184 8,511  3,117  135,347 115,471 94,506 205,787 63,888	9,341 74,917  28,421 92,378 25,575 96,373 19,763	21,344 4,229  100,672 113,475 77,014 228,030 122,249	13,792 79,921  8,539  45,193 77,525 59,572 209,056 74,011
Total, Foreign	583,133	535,981	635,811	346,768	673,013	567,609
Total, Oversea	2,291,495	2,037,615	2,062,026	1,777,939	2,501,535	1,917,072

Note,—Cargo recorded by measurement is converted to tons weight on basis of 40 cubic feet = 1 ton, \* See comments on shipping statistics, page 547.

In 1947-48 British vessels carried 73.1 per cent. of the oversea cargo discharged at ports in New South Wales, and 70.4 per cent. of the cargo shipped abroad. In 1938-39, the proportions were 74.6 per cent. and 73.7 per cent., respectively.

Vessels owned in the United Kingdom carried 89.2 per cent. of the cargo discharged by British ships in 1947-48 and 71.1 per cent. of the cargo shipped.

# TRADE OF PRINCIPAL PORTS.

The interstate and oversea trade of New South Wales is confined practically to three centres, viz., Sydney, Newcastle and Port Kembla, and the distribution of the inward trade amongst the ports at intervals since 1920-21 is shown in the table below. On each voyage a vessel is counted as an entry only at the first port of call in New South Wales and intrastate trade is excluded; therefore the figures do not indicate the total tonnage entered at each port.

						<u></u>			
Year ended		ackson ney).		Port Hunter (Newcastle).		ort ibla.	Other Ports.		
30th	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	
1921	1,869	4,776,182	1,082	2,255,040	42	85,514	26	6,595	
1929	2,071	6,768,664	620	1,355,411	144	366,401	30	25,937	
1939	2,140	8,560,135	886	2,071,733	260	583,197	33	26,77 <b>7</b>	
1943	1,017	2,875,257	580	1,167,938	174	408,746	12	9,637	
1944	974	2,884,735	616	1,300,384	178	467,100	15	10,238	
1945	1,072	3,530,352	528	1,069,558	187	469,516	13	9,219	
1946	1,095	4,000,973	529	1,167,243	127	352,103	10	7,511	
1947	1,110	4,027,506	520	1,412,123	184	613,554	7	4,925	
1948	1,220	4,410,450	537	1,487,475	182	579,707	9	9,209	

Table 501.—Principal Ports (N.S.W.)—Shipping Entered.\*

(Interstate and Oversea.)

Vessels which discharge cargo at Sydney and then proceed to Newcastle for coal are counted as entries at Sydney only; the inward shipping of Newcastle therefore exceeds the tonnage stated in the table. Increases in the last three years did not nearly offset the heavy decline since 1938-39 in the volume of shipping entered at all ports except Port Kembla.

Particulars of the cargoes shipped and discharged at the principal ports in certain years between 1928-29 and 1947-48 are given in the next table. In recording cargoes, certain commodities are assessed at their dead weight in tons, e.g., coal, ores, wool, wheat and other grains, while others such as butter, hides, skins and drapery are recorded in tons measurement, 40 cubic feet being taken as the equivalent of one ton.

The greater part of the oversea trade is handled in the port of Sydney and the shipping concerned with coal and iron and steel industries is conducted for the most part at Newcastle and Port Kembla. The cargoes handled at the latter ports are mainly dead weight cargoes, but a large proportion of the cargoes shipped and discharged at Sydney is recorded in "tons measurement." On account of this difference in the nature of the products handled, the data contained in the statement show fluctuations in the annual trade of the individual ports rather than a comparison of the trade of one port with that of another.

<sup>\*</sup> See comments on shipping statistics, page 517.

Table 502.—Principal Ports (N.S.W.)—Cargoes Shipped and Discharged.\*

		Sydr	ney.		Newca	astle.	Port Ke	mbla.
Year ended 30th June.	Inters	tate.	Over	sea.	Interstate.	Oversea.	Interstate.	Oversea
oom ounc.	Tons Weight.	Tons Measure.	Tons Weight.	Tons Measure.	Tons Weight.	Tons Weight. †	Tons Weight.	Tons Weight.
_			CAR	GOES DISCHA	ARGED,			
1929	345,850	616,929	791,750	1,315,064	711,637	123,598	203,455	54,405
1939	514,815	654,585	937,513	1,083,432	1,744,625	205,770	928,397	64,780
1940	599,338	645,009	1,039,054	1,034,810	1,412,726	203,998	1,368,048	50,640
1941	587,876	713,280	992,251	660,395	1,354,553	126,050	1,015,956	50,247
1942	623,685	694,844	1,226,015	745,135	1,340,942	88,410	965,074	46,500
1943	574,710	560,160	1,100,760	752,096	1,145,015	94,808	871,463	44,750
1944	534,030	637,895	1,195,104	923,639	1,265,040	130,984	977,787	65,62
1945	764,828	667,845	1,449,310	1,071,341	1,134,683	114,012	917,134	60,32
1946	732,682	442,195	1,375,361	997,982	1,012,925	144,911	408,271	106,08
1947	693,743	321,809	1,137,711	648,429	1,323,368	171,933	850,333	103,95
1948	596,243	368,155	1,293,116	936,620	1,355,542	184,931	788,392	86,86
			c	ARGOES SHII	PED.			
1929	138,737	530,490	981,003	284,842	1,647,563	251,581	134,741	73,60
1939	212,389	658,008	1,022,668	322,941	2,255,620	482,113	269,258	180,77
1940	233,713	710,706	1,213,812	322,444	2,126,255	431,141	248,465	283,97
1941	254,616	677,353	1,038,044	482,626	3,067,132	318,049	367,445	194,32
1942	257,571	641,214	674,189	540,270	2,999,065	243,158	444,360	178,16
1943	204,000	510,900	562,802	677,157	3,037,868	277,079	354,270	164,24
1944	203,227	471,985	737,338	971,674	2,856,244	151,138	300,870	184,67
1945	197,833	418,561	586,303	702,837	2,771,548	168,772	328,835	216,96
1946	130,777	313,159	633,851	617,984	2,472,688	194,959	227,305	103,48
1947	236,761	273,456	893,580	559,567	2,546,340	216,461	335,744	102,58
1948	203,640	346,857	1,114,838	402,508	2,593,266	303,732	† 449,281	† 77,08

<sup>\*</sup> See comments on shipping statistics, page 547. † Includes a small number of tons measurement.

Oversea cargoes comprise the bulk of the trade handled at Sydney, but only a small proportion of the cargoes shipped and discharged at the other ports.

Interstate cargoes discharged and shipped at the port of Sydney in 1947-48 amounted to 1,514,895 tons, as compared with 2,039,797 tons in 1938-39. Aggregate oversea cargoes in 1947-48 and 1938-39 were 3,747,082 tons and 3,366,554 tons respectively, representing an increase of 380,528 tons or 11.3 per cent.

In Newcastle there has been a decline since 1938-39 in cargoes discharged, both interstate and oversea. The aggregate cargoes discharged in 1947-48 amounted to 1,540,473 tons as compared with 1,950,395 tons in 1938-39, a decrease of 409,922 tons or 21 per cent. Interstate shipments amounted to 2,593,266 tons in 1947-48, an increase, as compared with 1938-39, of 337,646 tons or 15 per cent. During the same period, oversea shipments decreased by 178,381 tons or 37 per cent.

Interstate cargoes discharged at Port Kembla in 1947-48, viz., 788,392 tons, were 140,005 tons or 15 per cent. less than in 1938-39; interstate shipments totalled 449,281 tons, or 67 per cent. more than in 1938-39. Aggregate oversea cargoes discharged and shipped at Port Kembla were only 163,953 tons in 1947-48, as compared with 245,555 tons in 1938-39.

# HARBOURS AND ANCHORAGES.

Along the coast of New South Wales there are numerous ports, estuaries, and roadsteads, which provide shelter to shipping and afford facilities for trade.

The shipping trade of the ports other than Sydney, Newcastle, and Port. Kembla is relatively small.

# Maritime Services Board.

The ports of New South Wales are administered by the Maritime Services. Board, which is a corporate body of five commissioners appointed by the Government of New South Wales. Two of the commissioners are parttime members representing shipping and commercial interests. An Advisory Committee assists the Board in respect of Newcastle.

The following table shows details of the gross revenue of the Maritime-Services Board in 1938-39 and the last five years:—

Destinulos	Year ended 30th June.								
Particulars,	1939.	1944.	1945.	1946.	1947.	1948.			
Sydney Harbour Services— Wharfage and Tonnage Rates Rents of Wharves, etc Bond Charges, etc	69 566	£ 864,391 296,713 154,344	£ 1,010,474 297,272 138,229	£ 970,500 314,090 135,597	£ 884,424 297,742 197,716	£ 926,419 294,074 226,286			
Total, Sydney Harbour  Harbour and Tonnage Rates (Outports) Pllotage  Harbour and Light Rates  Other Fees and Charges	237,378 74,606 50,381	1,315,448 196,342 56,271 24,111 17,970	1,445,975 189,404 60,774 29,505 17,584	1,420,187 195,716 61,151 48,176 18,126	1,379,882 247,141 57,583 51,554 15,218	1,446,779 251,520 63,263 54,431 16,359			

Table 503.-Maritime Services Board (N.S.W.)-Gross Revenue.

The revenue from Sydney Harbour services in 1947-48 amounted to £1,446,779 or 79 per cent. of the total.

#### Sydney Harbour—Shipping Facilities.

Port Jackson (Sydney Harbour) is the principal port of New South Wales. It has a safe entrance and affords effective protection to shipping under all weather conditions. The total area of the harbour is 13,600 acres or about 21 square miles, of which approximately half carries a depth 30 feet or more at low water ordinary spring tide. The maximum depth in any part is 160 feet and the mean range of tides is about 3 feet 61 inches. The foreshores, which have been somewhat reduced in length by reclamations, are irregular, extend over 152 miles, and afford facilities for extensive wharfage.

The functions of the Maritime Services Board in respect of the port of Sydney include provision of adequate wharfage, channels, lights and other port facilities, the control of shipping and pilotage, the imposition and collection of rates and charges on goods and vessels, the licensing of harbour craft and the general management and control of the port.

The wharves are situated in close proximity to the business centre of the city, about 4 or 5 miles from the Heads. Including private lighter and ferry berths, there are 78,031 feet of wharfage in Sydney Harbour. The principal wharves are leased to the various shipping companies whose vessels engage regularly in the trade of the port, and other wharves are reserved for vessels which visit the port occasionally. Details relating to the number and length of the berths are shown below:—

Table 504,-Port of Sydney-Wharves and Jetties at 30th June. 1948.

	Maritime Board South	of New	Priv What	rate rfage.	Total.	
Particulars.	No. of Berths.	Length.	No. of Berths.	Length.	No. of Berths.	Length.
Ship berths—		feet.		feet.		feet.
Oversea	67 24 39	34,772 9,355 11,223	14 3 8	3,819 516 1,202	81 27 47	38,591 9,871 12,425
berths Harbour trade berths Ferry berths	39 19 25	4,693 4,633 3,427	31 	4,391 	39 50 25	4,693 9,024 3,427
Total	213	68,103	56	9,928	269	78,031

The wharves are situated on the southern shore of the port. Special facilities for the storage and handling of staple products such as wool, etc., are provided on the waterside, and modern plant has been installed for replenishing ships' bunkers with oil or coal. Works have been constructed on a spit of land, known as Glebe Island, between Rozelle Bay and White Bay, to facilitate the shipment of wheat. Silos with a capacity of 7,500,000 bushels are available for the storage of wheat in bulk, and the grain may be delivered into the holds of the vessels at the rate of 1,400 tons per hour. Plant is also available for the mechanical loading and storage of bagged wheat.

Ferry steamers on which traffic is carried across the harbour are certificated as to seaworthiness and licensed by the Maritime Services Board.

An arch bridge spanning the harbour from Dawes' Point to Milson's Point was opened on 19th March, 1932. It provides for pedestrian, vehicular, railway and tramway traffic. A description of the bridge is published in the chapter "Roads and Bridges."

# Port of Sydney—Shipping Entered.

The number and tonnage of vessels which entered Sydney Harbour during the period 1937-38 to 1947-48, as recorded by the Maritime Services Board, are shown below. The figures differ from those in Table 501, because they include vessels engaged in the coastal trade of the State and vessels which do not report to the Customs authorities on return from a journey to Newcastle for bunker coal; they also include vessels engaged exclusively

in the transport of troops, war equipment and supplies during the war years, and in addition, there are minor differences in the classification of vessels.

		Number of	Vessels.		Net Tonnage.					
Year ended 30th June.	Coastal (State).	Interstate.	Oversea.	Total.	Coastal (State).	Interstate.	Oversea.	Total.		
<del></del>						thousand	tons.			
1938	4,974	1,321	1,460	7,755	1,700	2,754	7,199	11,659		
1939	4,568	1,321	1,495	7,384	1,537	2,774	7,339	11,650		
1940	4,029	1,177	1,324	6,530	1,396	2,153	6,355	9,904		
1941	3,822	1,127	1,031	5,980	1,527	1,802	4,956	8,288		
1942	3,171	921	982	5,074	1,401	1,337	4,229	6,967		
1943	2,177	643	953	3,773	1,070	963	3,511	5,544		
1944	1,945	666	1,084	3,695	988	840	4,125	5,953		
1945	1,911	679	1,215	3,805	967	795	4,717	6,479		
1946	2,045	564	1,062	3,671	980	708	4,598	6,286		
1947	2,220	494	914	3,628	1,000	836	4,001	5,837		
1948	2,249	491	1,010	3,750	1,005	807	4,413	6,22		

Table 505 .- Port of Sydney-Shipping Entered.\*

The aggregate tonnage which entered the port of Sydney in 1947-48, viz., 6,225,000 tons was 47 per cent. less than in 1938-39. Coastal shipping comprised 1,537,000 tons or 13 per cent. of the total in 1938-39, and 1,605,000 tons, or 16 per cent. in 1947-48.

The average tonuage per coastal vessel was 340 tons in 1938-39 and 450 tons in 1947-48, as compared with 2,100 tons and 1,640 tons, respectively, in the case of interstate vessels. The average tonuage per oversea vessel was 4,900 in 1938-39 and 4,370 in 1947-48.

# Port of Sydney Authority—Revenue and Expenditure.

As from 1st July, 1928, the accounts of the Harbour Trust (now the Maritime Services Board) were separated from the Consolidated Revenue Account, and a special fund was established for the receipts of the port authority. The Board is required to contribute to the National Debt sinking fund established under the financial agreement between the Commonwealth and the States in the same proportion as its debt bears to the total loan debt of the State. The net profits are payable into a reserve fund to meet losses and to provide for the reduction of rates and charges.

The revenue and expenditure by the port authority at Sydney during each of the last eleven years and the capital debt at the end of each year are shown in the following statement:—

Table	506.—Port	of Sydney	Authority—Revenue	and	Expenditure.

,				Expen	dlture.		
Year ended 30th June.	Capital Debt,	Income.	Administra- tive and Maintenance Expenses.	Interest and Sinking Fund.	Exchange, etc.	Total Expenditure.	Surplus.
1000	£	£	£	£	£	£	£
1938	11,325,087	1,186,279	344,799	482,392	59,592	886,783	299,496
1939	11,276,399	1,155,627	377,843	481,551	57,507	916,901	238,726
1940	11,275,655	1,203,227	356,999	485,264	59,766	902,029	301,198
1941	11,258,909	1,150,452	372,765	471,880	57,784	902,429	248,023
1942	11,201,402	1,192,628	390,763	490,426	59,356	940,545	<b>2</b> 52,083
1943	11,065,232	1,191,882	402,894	485,547	58,479	946,920	244,962
1944	11,149,419	1,315,448	450,262	490,388	58,298	998,948	316,500
1945	11,050,206	1,445,975	472,392	500,183	58,380	1,030,955	415,020
1946	11,048,584	1,420,187	639,145	496,807	55,708	1,191,660	228,527
1947	11,097,221	1,379,882	702,833	485,915	54,325	1,243,073	136,809
1948	11,242,140	1,446,779	793,320	482,581	47,577	1,323,478	123,301

<sup>\*</sup> See comment preceding Table 505.

The total income during 1947-48 was £1,446,779. After the deduction of administrative and maintenance expenses, £793,320, interest and sinking fund charges, £482,581, and exchange and loan management expenses, £47,577, there was a surplus of £123,301 on the year's transactions, the smallest since 1934-35. The sources of revenue were wharfage and tonnage rates £926,419, rents of wharves, etc., £294,074, and bond charges, etc., £226,286 (see Table 503).

Since 1938-39 the income of the Maritime Services Board in respect of the port of Sydney has increased by £291,152, or 25 per cent., and the administrative and maintenance expenses by £415,477, or 110 per cent. The ratio of administrative and maintenance charges to income was 54.8 per cent. in 1947-48, as compared with 33 per cent. in 1938-39.

# Newcastle Harbour.

Newcastle Harbour (Port Hunter) is the second port of New South Wales and the third port of Australia in regard to the volume of its shipping trade. The harbour lies in the course of the Hunter River, and its limits are not defined, but an area of about 990 acres is enclosed by about 8 miles of coastline, extending on the western side as far as Port Waratah, omitting Throsby Creek, and on the eastern side to a point due east of the southern end of Moscheto Island. The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. There are coal-loading wharves at Hexham, about ten miles from the sea.

The harbour is landlocked sufficiently to render it safe for vessels in all kinds of weather, and breakwaters have been erected to improve the entrance and to prevent the ingress of sand from the ocean beaches. The width at the entrance is 1,200 feet, and the navigable channel with a depth of 25 feet 6 inches at low water is 350 feet wide. Newcastle is primarily a coal-loading port, and the proximity of the coalfields has led to the establishment of important industries, including iron and steel works in the district. Facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber. A terminal elevator for the export of bulk wheat has been erected, and 535 feet of wharfage has been provided for wheat loading purposes.

At 30th June, 1948, wharfage accommodation was 19,756 feet, including wharves controlled by the Maritime Services Board, 6,211 feet; Railways Department, 7,719 feet; Public Works Department, 200 feet; private companies, 2,200 feet; and 3,426 feet of tie-up berths and ferry and depot wharves. The general cargo wharves are connected with the main railway system, and the railway extends along the coal wharves. There are eight sets of mooring dolphins and jetties for vessels awaiting cargo, and 102 dolphins for tic-up purposes.

Newcastle Harbour is administered by the Maritime Services Board and an advisory committee consisting of five members appointed by the Governor. The chairman of the committee is nominated by the Board and the other members are representative of interests concerned with the administration of the port. In 1947-48 the revenue of the Board in respect of the port of Newcastle was £197,751.

The number and tonnage of vessels which entered Newcastle Harbour during the period 1938-39 to 1947-48, as recorded by the Maritime Services Board, are shown below:—

Year ended		Number of	Vessels.		Net Tonnage.				
30th June.	Coastal (State).	Interstate.	Oversea.	Total.	Coastal (State).	Interstate.	Oversea.	Total.	
						thousand	tons.		
1939	2,440	1,293	540	4,273	1,054	2,086	1,959	5,099	
1940	2,199	1,202	428	3,829	997	1,907	1,456	4,360	
1941	2,328	1,216	328	3,872	1,112	1,892	937	3,941	
$1942 \\ 1943$	2,061	965 725	$\frac{356}{401}$	3,382 2,675	$1,208 \\ 841$	1,732 1,187	$1,166 \\ 1,128$	$\frac{4,106}{3,156}$	
1943	1,549 1,403	725	443	2,584	800	1,161	1,351	3,312	
1945	1,256	655	397	2,308	709	1,118	1,186	3,013	
1946	1,339	643	325	2,307	716	1,124	1,117	2,057	
1947	1,432	635	332	2,399	798	1,154	1,341	3,293	
1948	1,315	600	405	2,320	747	1,065	1,618	3,430	

Table 507.-Port of Newcastle, Shipping Entered.\*

#### Port Kembla.

Port Kembla, which is situated about forty miles south of Sydney, was controlled by the New South Wales Department of Public Works up to 1948, but is now regulated by the Maritime Services Board. The harbour, which is protected by constructed breakwaters, has an area of 330 acres, with depths of water ranging from 20 to 50 feet, and its well-equipped wharves accommodate large ocean-going vessels.

It is the port of the southern coalfields and for the expanding industrial area in and about Wollongong. From the port large quantities of coal, coke, iron and steel, and lead and zinc concentrates are shipped, and iron ore, pig iron, etc., and phosphate rock usually predominate in the tonnages discharged. Totals of cargoes shipped and discharged at the port are given in Table 502. In respect of tonnage of shipping entered, Port Kembla ranks seventh in the ports of Australia.

The number and tonnage of vessels which entered Port Kembla during the last ten years, as recorded by the Maritime Services Board, are shown below:—

Number of Vesse						Net Tor	mage.	
30th June.	Coastal (State).	Interstate.	Oversea.	Total.	Coastal (State).	Interstate.	Oversea.	Total.
						thousand	l tons.	
1039 1940 1941 1942 1943 1944 1946 1946 1947	241 297 257 188 145 151 103 63 52 87	422 498 402 268 186 151 186 117 157	187 166 165 160 145 166 158 119 152 125	850 961 824 616 476 468 447 299 861 351	60. 61 60 62 57 56 40 23 15	726 878 670 488 316 262 360 214 323 415	439 399 358 372 405 529 501 369 589 497	1,225 1,338 1,088 922 778 847 901 606 927 928

Table 508.—Port Kembla, Shipping Entered.\*

<sup>\*</sup> See comment preceding Table 505.

<sup>\*</sup> See comment preceding Table 505.

#### RIVER TRAFFIC.

New South Wales has few inland waterways, and although there is some river traffic, its extent is not recorded. The coastal rivers, especially in the northern districts, are navigable for some distance by sea-going vessels, and trade is carried further inland by means of small steamers and launches.

The use of the inland rivers for navigation depends mainly on seasonal conditions. Traffic on the Darling is intermittent. At certain times, in seasons when the rainfall is sufficient to maintain a fair volume of water, barges carry wool and other products a considerable distance.

Under an agreement between the Governments of the Commonwealth, New South Wales, Victoria, and South Australia, a comprehensive scheme of control works in the Murray River system was designed to provide for navigation by vessels drawing 5 feet of water, except in unusual drought. The scheme is administered by the River Murray Commission, which represents the various governments concerned.

The works completed on the Murray River comprise the Hume Reservoir (capacity 1½ million acre-feet), Yarrawonga Weir, Lake Victoria Storage, thirteen locks and weirs, and barrages across the five channels at the mouth of the Murray in South Australia. These works permit permanent navigation from the mouth to 40 miles above Mildura, a distance of approximately 600 miles. On the Murrumbidgee River, weirs have been constructed at Redbank and Maude.

During the year ended 30th June, 1948, one hundred and nineteen steamers and 34 barges and other vessels passed through Lock No. 10 at Wentworth carrying 3,339 passengers and 1,259 tons of cargo. In the six months ended 30th June, 1948, eighty-six steamers, carrying 5,599 passengers and 292 tons of cargo, passed through Lock No. 11 at Mildura.

The total expenditure for the construction of reservoirs, locks and other works at 30th June, 1948 amounted to £11,891,062, of which the New South Wales Constructing Authority expended £4,004,553. An amount of £2,990,995 was contributed by the Government of New South Wales.

# HARBOUR FERRY SERVICES.

Ferry services have been established by private companies to transport passengers, etc., in the ports of Sydney and Newcastle, on the Hawkesbury River and on various other waterways of New South Wales. These ferries are licensed by the Maritime Services Board and are distinct from those to which reference is made in the chapter "Roads and Bridges," which are maintained by the central Government or by municipalities or shires for the transport of traffic across rivers where bridges have not been erected.

The following statement shows particulars of the passenger ferry services operated in Sydney and Newcastle in 1928-29, 1938-39 and the last five years:—

Year ended 30th June.	Number of Vessels.	Passenger Accommo- dation.	Passenger Journeys.	Gross Revenue,
1929 1939 1944	65 54 45	46,631 38,971 28,809	49,500,000 27,864,000 34,588,000	£ 833,669 418,500 540,513

Table 509.—Passenger Ferry Services, Sydney and Newcastle.

36,673,000 35,737,000 31,558,000

# RATES OF FREIGHT.

Freight charges represent an important factor in the cost of marketing New South Wales products in oversea countries. Generally the rates charged by British lines of steamships are determined by organizations of shipowners.

The following statement shows the rates, expressed in sterling, for the carriage of various commodities by sea from New South Wales to the United Kingdom and Europe since 1939:—

Table 510.—Rates of Freight, New South Wales to United Kingdom and Europe.

		EX.	pressed in	oterning.			
At 30th June.	Butter.	Frozen Mutton.	Bulk Wheat.	Wheaten Flour.	Calf Hides.	Greasy Wool.	Lead.
1939 1940 1941 to 1944 1945 1946 1947 1948	per 56 lb.  s. d. 3 8·4 5 0 6 6·2 6 6·2 6 6·2 6 6 6 6	per lb.  d. 0.93 1.31 1.72 1.72 1.72 1.72	per ton.  s. d. 31 3 62 6 135 6 120 0 115 0 115 0 102 6	per ton.  s. d. 33 9 67 0 145 6 130 0 125 0 125 0 120 0	per lb.  d. 0.5 0.75 1.01 1.01 1.01 1.0 1.0	per lb.  d. 0.94 1.5 1.93 1.93 1.93 1.88 1.88	per ton.  s. d. 27 6 49 0 81 0 81 0 81 0 65 0 65 0

Expressed in Sterling.\*

#### PORT CHARGES.

The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Lighthouses Act and the Federal Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1st February, 1936, the State enactments have been administered by the Maritime Services Board. Only a brief reference to the rates collected by each authority is made in this volume.

Particulars of the port charges collected by the Maritime Services Board are given in Table 503.

# Charges levied on Ships.

The principal charges imposed under Federal legislation are light dues and fees for the survey of ships, the adjustment of compasses, etc.

The Commonwealth light dues must be paid in respect of every ship entering a port in Australia. The rate, payable quarterly, is 6d. per ton (net), and payment at one port covers all Australian ports which the vessel may enter during the ensuing period of three months. Vessels calling at only one port in Australia en route to an oversea destination are charged at the rate of 5d. per ton (net).

<sup>\*</sup> Equivalent rates in Australian currency are obtained by adding 25½ per cent, to all rates other than for refrigerated cargo in 1939, the addition for which is 18 per cent.

The light dues collected in Australia by the Commonwealth Government during the year ended 30th June, 1948, amounted to £154,341, and receipts under the Federal Navigation Act to £16,646.

Sea-going vessels must be surveyed as to seaworthiness, etc., at least once in every twelve months. The fees for a twelve-months' certificate in respect of steamers, motor ships, and sailing ships with auxiliary engines, range from £4 where the gross registered tonnage does not exceed 100 tons to £13 10s. if the gross tonnage is between 2,100 and 2,400 tons, plus the charge for each additional 300 tons of 30s. for passenger ships and £1 for cargo ships. The survey fees for dry docking certificates range from £1 to £4, and double rates are charged for vessels without certificates of survey. Additional charges are made for the survey of grain cargoes. The fees for the adjustment of a ship's compasses range from £2 2s. to £7 7s.

Certificates of survey in respect of ships trading exclusively within the limits of the State of New South Wales are issued by the Maritime Services Board of New South Wales. These certificates certify as to the vessel's seaworthiness and the suitability for the particular service for which it is designed. The fees payable for surveys in respect of a twelve months' certificate range from £2 to £8 where the tounage does not exceed 600 tons, with £2 for each additional 300 tons up to a maximum of £20.

Pilotage rates are charged by the Maritime Services Board of New South Wales in respect of ships entering or clearing a port in the State where there is a pilotage establishment. Vessels engaged in the whaling trade and vessels in the charge of a master possessing a pilotage certificate are exempt unless a pilot is actually employed. In April, 1949 the rate was 2½d, per ton (net) on arrival and on departure; the maximum charge was £25 and the minimum was £3 at Sydney or Newcastle, and £1 10s. at other ports. The rate of 1¼d, per ton was charged on ships in ballast or resorting to port for docking, repairs, stress of weather, etc., or for pleasure.

The harbour and light rate imposed by the State Government is payable half-yearly at the rate of 4d. per ton (gross).

The rate for harbour removal varies from £1 to £4 10s. according to the size of the vessel; half rates are charged after the third removal.

Except at certain wharves, tonnage rates are payable in respect of vessels of 240 tons and over while berthed at a wharf, the charge being  $\frac{3}{16}$  d. per ton (gross) for each period of six hours. Vessels under 240 tons are liable for berthing charges; the daily rate in Sydney Harbour ranges from 2s. 6d. to 10s. Berthing charges in other ports are calculated at the rate of 2s. 6d. for each period of six hours. Where wharves are leased to shipping companies in the port of Sydney, the tonnage rates and berthing charges in respect of their vessels are not charged as they accrue, but are commuted in the rent.

An annual license fee of £5 is charged for moorings owned and used by shipping companies in Sydney Harbour; and from 2s. 6d. to 10s. for those used in connection with docking premises or for small vessels. Mooring buoys owned by the Maritime Services Board are available at a charge of £1 10s. for the first twenty-four hours and thereafter 7s. 6d. per period of six hours or part thereof.

Tugs, ferry boats, hulks, and launches plying for hire in New South Wales waters must obtain a license, for which the charge is £1 per annum.

For water boats supplying water to shipping in Sydney Harbour the annual license fee is £5; for lighters, 1s. per ton; and for watermen 5s. In other ports the annual license fees for ballast lighters and for watermen are £1 and 10s. respectively. The charge for water supplied to a vessel by the Maritime Services Board at unleased wharves in Sydney Harbour is 2s. 10d. per 1,000 gallons if the water is taken through hoses supplied by the Board; in other cases the rate is 2s. 4d.

# Harbour and Wharfage Rates.

In addition to the foregoing charges levied on vessels and payable by their owners, harbour or wharfage rates payable by the owners of the goods are imposed on the cargoes landed or shipped in the ports. Goods transhipped are subject to transhipment rates and not to inward or outward wharfage or harbour rates. Passengers' luggage is exempt.

In Sydney Harbour, the inward rate is 4s. per ton assessed by weight or by measurement (40 cubic feet) at the option of the Board. The outward rate is 1s. 6d. and the transhipment rate is 6d., but there are numbers of special rates for important commodities; the outward rate for coal is 6d. per ton, for wheat and flour 9d. per ton, and for wool 9d. per bale.

In ports other than Sydney there is a schedule of inward rates for coast-wise and interstate goods, and a separate schedule for oversea goods. The inward general rate is 2s. per ton or 40 cubic feet for coastwise and interstate goods arriving at these ports and 4s. for oversea goods, and the outward rate on coastwise, interstate, and oversea goods is 1s. per ton or 40 cubic feet, unless otherwise specified.

# Storage Charges.

In order to avoid congestion on the wharves, storage and shed charges are imposed on goods placed on a wharf and not removed within a specified period.

Goods arriving at Sydney from any place beyond the Commonwealth and left on a wharf after final discharge of the vessel for a longer period than six days are charged at the rate per ton per day of 6d. for the first three days, 1s. for the second three days, 2s. for the next six days, and 3s. thereafter. The same rates are charged on goods discharged from interstate and intrastate vessels if left on any unleased wharf for a period exceeding three days. Goods left on an unleased wharf for more than two days after having been received for shipment are charged at the rate of 1d. per ton per day. These charges apply to the Port of Sydney only, and are payable by the owner of the goods.

At a wharf at Rozelle Bay assigned for the purpose, there is free storage of timber for the first forty-eight hours after commencement of discharge, after which the charge is 1d. per ton per day for the next four days and, thereafter, 3d. per ton per day; no storage fee is charged for Sundays and public holidays.

At ports other than Sydney, storage charges do not accrue on goods until forty-eight hours after the completion of the vessel's discharge. The general charge per ton per day is 2d. for the first week, 3d. for the second week,

4d, for the third week, and 6d, for the fourth and subsequent weeks. At Newcastle the charge on wool and wheat is 1d, per ton per day; the charge on timber is 1d, per ton per day for the first four days (after the free period), and thereafter 2d, per ton per day.

# SHIPPING REGISTERS.

Shipping in New South Wales is registered in accordance with the Merchant Shipping Act of the Imperial Parliament, under sections which apply to the United Kingdom and to all British dominions. The Act prescribes that all British vessels engaged in trade must be registered, except those under 15 tons burthen employed in the coastal trade of the part of the British Empire in which the owners reside. Ships not legally registered are not entitled to recognition as British ships and are not permitted to proceed to sea. Although the registration of vessels under 15 tons is not compulsory, many small vessels are registered at the request of the owners, as registration facilitates the transaction of business for the purpose of sale or mortgage. The flag for merchant ships registered in Australia and for ships owned in Australia is the red ensign usually flown by British merchant vessels, defaced with a white seven-pointed star indicating the six federated States of Australia and the territories of the Commonwealth, and the five smaller white stars representing the Southern Cross.

In New South Wales, shipping registers are kept at the ports of Sydney and Newcastle. The following statement shows particulars of the slipping on the registers in 1939 and the last three years:—

Table 511.—Shipping on Register (N.S.W.).

			Vessel	s on Reg	gister at 30	th June.		
Type of Vessel and Tonnage Class.	:	Number of	f Vessels.			Net Tor	inage.	
	1939.	1946.	1947.	1948.	1939.	1946.	1947.	1948.
Tons (net).								
Steam— 0 to 49	185	172	173	171	3.805	3,587	3,607	3,560
50- 499	137	100	101	102	22,202	17,480	16,737	16,664
500- 999	17	15	15	15	12,160	10,644	10,633	10,633
1,000-1,999	8	7	7	8 5	12,050	10,486	10,002	11,163
2,000 & over	5	6_	6		12,780	16,572	16,572	14,957
Total, Steam	352	300	302	301	62,997	58,769	57,551	56,977
Motor-			-			_		
0 to 49	296	287	327	352	3,568	3,459	4,355	4,766
50- 499	9	15	19	18	1,365	3,414	2,576	2,227
500- 999	$\frac{3}{2}$	2 2	$\frac{2}{2}$	$\begin{bmatrix} 3 \\ 2 \end{bmatrix}$	$1,674 \\ 2,996$	1,158 2,996	1,158 2,996	1,839 2,996
1,000 1,999 2,000 & over	2	2	2	2	6,068	9,511	9,511	9,388
Total, Motor	312	303	352	377	15,671	20,538	20,596	21,216
	012					-20,556	20,590	
Sailing 0 to 49	184	157	164	156	2,045	2,156	2,389	2,143
50- 499	61	55	67	61	9.176	7,198	9,412	9,036
500- 999	3	3	3	3	2,537	2,245	2,245	2,245
1,000-1,999	3	2	2	2	3,727	2,584	2,584	2,584
Total, Sailing	251	217	236	222	17,485	14,188	16,630	16,008
11 Vessels-						-		
0 to 49	665	616	664	679	9,418	9,202	10,351	10,469
50- 499	207	170	187	181	32,743	28,092	28,725	27,927
500- 999	23	20	20	21	16,371	14,047	14,036	14,717
1,000-1,999	13 7	11 8	1 <b>1</b> 8	12	18,773	16,066	15,582	16,748 24,345
2,000 & over	<del></del>				18,848	26,083	26,083	24,040
Total, All Vessels	915	825,	890.	900	96,153	93,490	94,777	201,

Since 1938-39 there has been a decline in the number of steam and sailing vessels on the register, but the number of motor-driven vessels has increased by 65, or by 21 per cent.

Sixty-two vessels with an aggregate tonnage of 5,632 tons (net) were sold during 1947-48. The sales were to British subjects and the transactions did not necessarily involve removal from the registers.

#### CERTIFICATES OF SEAWORTHINESS.

Certificates of survey, certifying as to seaworthiness, etc., are issued by the Maritime Services Board in respect of ships trading exclusively within the limits of New South Wales and by the Commonwealth Marine Branch in respect of other vessels. The following table shows particulars of the certificates issued by both authorities in 1938-39 and the last two years:—

Table	512.—Shipping	(N.S.W.).—Certificates	of	Seaworthiness	Issued.

		1938–39.			1946-47.			1947-48.		
Type of Vessel.	No.	Gross Tonnage,	Passenger Capacity.	No.	Gross Tonnage.	Passenger Capacity.	No.	Gross Tonnage.	Passenger Capacity.	
Sea-going Vessels— Sydney—Cargo Passenger	98 28	213,207 184,645	7,579	184	268,097 59,253	80 2,198	164 11	270,595 61,884	84 2,074	
Total	126	397,852	7,579	193	327,350	2,278	175	332,479	2,158	
Harbour and River Vessels— Sydney Other Ports Total	50 15 65	12,071 1,586 13,657	40,542 2,526 43,068	43 28 71	8,682 2,219 10,901	27,218 1,277 28,495	50 30 80	9,199 2,276 11,475	26,884 1,945 28,829	
Motor Boats	177		7,355	305		5,265	535		7,266	
Grand Total	368	411,509	58,002	569	338,251	36,038	790	343,954	38,253	

Certificates issued by the Commonwealth Authority in 1947-48 included 78 for cargo vessels with an aggregate gross tonnage of 263,728, and 11 for passenger vessels with an aggregate gross tonnage of 61,884 and an aggregate capacity of 2,074 passengers.

# SHIPBUILDING AND REPAIRING.

Facilities for building, fitting and repairing ships have been provided by governmental and private enterprise at Sydney and Newcastle and at six other ports in New South Wales.

In Sydney Harbour there are five large graving docks, four floating docks and eight patent slips. Two graving docks, the Fitzroy and the Sutherland, situated on Cockatoo Island, were leased in 1933 by the Commonwealth Government to a private company for a term of 21 years. Two graving docks are owned by a private company, Mort's Dock and Engineering Company Limited.

During the war, the Captain Cook Graving Dock was constructed primarily for naval purposes in Sydney Harbour between Potts Point and Garden Island. Certain sections of the work were carried out for the

Commonwealth Government by New South Wales Government authorities. The dock, opened in March, 1945, is capable of accommodating the largest vessel afloat, and in peace-time is available for the service of civilian vessels. Its breadth is 147 feet  $7\frac{1}{2}$  inches, and the length from the outer caisson is 1,139 feet 5 inches. The draught of vessel that may be taken is 40 feet 6 inches. Total net expenditure on the dock to 30th June, 1948, was £10,303,382.

At Newcastle a floating dock is attached to the State Government Dockyard at Walsh Island, and two slips are privately owned.

Graving docks under the control of the State Government are maintained at some minor ports to meet the needs of vessels engaged in the coastal trade.

# SEAMEN.

Matters relating to the employment of seamen are subject to control by the Commonwealth Government in terms of the Federal Navigation Act. Provision is made for the regulation of the methods of engagement and discharge, the form of agreement, rating, the ship's complement, discipline, hygiene, and accommodation. Mercantile marine offices were established in March, 1922, to undertake functions previously performed by State shipping offices at Sydney, Newcastle and Port Kembla, where engagements and discharges are registered. The following statement shows the number of transactions in 1938-39 and each year from 1942-43:—

Year ended	Engagements Registered.			Discha	rges Regi	Licenses to Ship.		
30th June.	Sydney.	New- castle.	Port Kembla.	Sydney.	New- castle.	Port Kembla,	Sydney.	New- castle.
1939 1943 1944 1945 1946 1947 1948	20,856 13,010 12,080 10,606 10,588 10,100 11,233	3,723 3,921 4,135 3,071 3,909 4,799 5,385	285 432 439 493 503 500 844	21,231 13,518 11,938 11,208 11,253 10,848 10,776	3,699 3,909 4,252 3,064 3,762 4,637 5,258	230 449 370 511 462 496 836	450 397 232 230 342 369 328	66 104 90 72 63 98 156

Table 513.—Transactions at Mercantile Marine Offices.

In 1947-48 the number of engagements and discharges registered at Sydney was only about half the number in 1938-39, but the number of transactions at Newcastle and Port Kembla was considerably larger than in the pre-war year.

The rates of wages for crews which work on vessels engaged in the interstate and coastal trade of Australia have been fixed by awards and agreements under the Commonwealth Conciliation and Arbitration Act.

#### Maritime Industry Commission.

The Maritime Industry Commission was constituted under National Security Regulations in January, 1942, to secure adequate and efficient manning of Australian merchant ships and the improvement and safeguarding of conditions of employment therein. The Commission may make

orders regarding such matters as discipline, hours of work, accommodation, preference of employment, etc. Orders of the Commission prevail over State and Federal laws or industrial awards and agreements. Under the Defence (Transitional Provisions) Act, 1948, the Maritime Industry Commission will continue to function until 31st December, 1949.

# Compensation to Seamen.

Compensation to seamen is provided by a Commonwealth law, the Seamen's Compensation Act, 1911-1949, which applies to ships trading with Australia, or engaged in any occupation in Australian waters, or in trade and commerce with other countries or among the States.

Seamen employed on New South Wales ships, i.e., ships registered in New South Wales, or owned or chartered by the Government or by a person or body corporate whose place of business is in the State, may claim compensation under the Workers' Compensation Act of New South Wales, if they agree not to proceed under the Commonwealth law, provided such ships are engaged solely in the intrastate trade of New South Wales.

# Merchant Seamen-War Service Benefits.

National Security (Medical Benefits for Seamen) Regulations made in August, 1942, provided for payments for medical, surgical and hospital treatment to be made to seamen who suffered war injury; continuance of these provisions until 31st December, 1949, was covered by the Defence (Transitional Provisions) Act, 1948.

Provision was made in terms of a Commonwealth Act passed in August, 1940, and National Security Regulations issued in August, 1942, for the payment of war pensions in respect of Australian seamen who, in the course of their employment, sustained war injury which resulted in death or incapacity; also for allowances in respect of those who were captured or detained by the enemy. Benefits are provided for dependants, and compensation may be granted to seamen whose effects were lost or damaged by enemy action. These regulations lapsed at 31st December, 1946, but their effect was preserved by an amendment of the Seamen's War Pensions and Allowances Act effected by the Defence (Transitional Provisions) Act, 1946.

In 1941 the benefits of the War Service Homes Act were extended to seamen domiciled in Australia and employed during the recent war on ships trading overseas.

#### SAFETY OF LIFE AT SEA.

The navigation laws contain stringent provisions designed to prevent unseaworthy ships from proceeding to sea, and to ensure that all vessels are manned by competent crews, that life-saving appliances are carried, and that special arrangements are made to safeguard dangerous cargoes. Regulations have been framed for the prevention of collisions and there are rules regarding the lights and signals to be used.

Owing to the regularity of the coast of New South Wales and the comparative absence of islands, hazards to navigation in the coastal waters are few. There are 20 lighthouses (controlled by the Commonwealth) along the 700 miles of coastline. In addition, the Maritime Services Board provides lighted beacons, leading lights and other guides in the principal ports.

Pilotage is a State service under the provisions of the Navigation Act of New South Wales. A pilot must be engaged for every vessel entering or leaving a port of New South Wales at which there is a pilotage establishment, unless the master holds a certificate of exemption. Such certificates may be granted to British subjects only, for use in respect of British ships registered in Australia or New Zealand and employed in trade between ports in Australasia and the South Sea Islands or engaged in whaling. The pilotage rates are shown on page 561.

Wrecks and shipping casualties which occur to British merchant shipping on or near the coast of New South Wales are investigated by Courts of Marine Inquiry. The majority of wrecks reported are of small coasters under 200 tons.

Rescue work is undertaken by the pilot vessels. There are also rocket brigade stations at various points on the coast, and at the Clarence River there is a steam tug which is subsidised for assisting vessels in distress.

The Royal Shipwreck Relief and Humane Society of New South Wales affords relief to distressed seamen and their dependants, and to the crews and passengers of vessels wrecked in New South Wales waters.

# CIVIL AVIATION

#### CONTROL OF CIVIL AVIATION.

Civil aviation in Australia is subject to the Commonwealth Air Navigation Act, 1920-1947. Regulations have been made under the Act to give effect to the Chicago Convention on Civil Aviation, to which Australia is a party, and to provide for the control of air navigation in relation to trade and commerce with other countries and among the States, and within any Territory of the Commonwealth. Prior to 4th April, 1947, when the Chicago Convention was ratified by Australia and twenty-five other countries, air navigation was regulated in accordance with the principles of the convention for the Regulation of Aerial Navigation, signed in Paris on 13th October, 1919. Between April and August, 1947, Australia was a party to both conventions, but the Paris Convention was renounced on 10th August, 1947, when Air Navigation Regulations, based on the Chicago Convention, came into operation.

The (Commonwealth) Carriage by Air Act, 1935, gave effect to the Convention of Warsaw of 12th October, 1929, covering unified rules for the international carriage of persons and goods by air, and defining the rights of passengers, consignors and consignees and the rights and responsibilities of air carriers.

The powers of the Commonwealth in regard to air transport are limited, but the system of control is uniform throughout Australia because the New South Wales Air Navigation Act, 1938-1947, and enactments of the other States apply the Commonwealth Air Navigation Regulations within each State. The provisions of the (N.S.W.) State Transport (Co-ordination) Act, 1931, with regard to the licensing and control of commercial motor vehicles (see page 634) also apply to commercial aircraft, but this power has not been used except in respect of the licensing of commercial aircraft by the State Authority.

In 1943 the Parliament of each State, except Victoria and Tasmania, passed an Act conferring full power over air transport on the Commonwealth until five years after the cessation of hostilities. Proposals for alteration of the Constitution to confer full power over air transport on the Commonwealth (a) without limit as to period, and (b) for a period ending five years after the cessation of hostilities, were refused by the electors at referendums in March, 1937, and August, 1944, respectively.

#### AIR NAVIGATION REGULATIONS.

The (Commonwealth) Air Navigation Regulations are administered by the Director-General of the Department of Civil Aviation, subject to the direction of the Minister.

# Registration and Licensing of Aircraft.

The Director-General is required to keep a register of Australian aircraft, and registered aircraft must show nationality and registration marks, the

nationality mark for Australian aircraft being the letters VH. He may also issue certificates approving the design of any aircraft or component proposed to be manufactured in Australia.

An aircraft must be licensed if engaged in any of the following activities:

(a) aerial work, which includes aerial surveys, pest control, seed sowing, advertising, flying training and ambulance work; (b) charter service, which means the carriage of passengers or cargo for hire or reward on demand, but not operating in a regular service; and (c) regular public transport service operating according to fixed timetables and to and from fixed terminals. Subject to the aircraft complying with safety provisions, the Director-General may not refuse a license for interstate service, whether aerial work, charter or regular public transport; in other cases, he may refuse a license or may impose such conditions as he thinks fit.

## Licensing of Pilots, Navigators, etc.

Members of aircraft operating crews must be licensed in the following categories, the minimum (and where applicable, the maximum) age being shown in brackets:—

- (a) Student pilots (16 years).
- (b) Private pilots (17 years).
- (c) Commercial pilots (19 to 45 years).
- (d) Senior commercial pilots (21 to 45 years).
- (e) Airline pilots (19 to 45 years).
- (f) Navigators (19 to 50 years).
- (g) Flight radio operators (19 years).
- (h) Engineers (21 years).

A commercial pilot's license authorises the holder to pilot an aircraft in commercial service other than regular public transport; a senior commercial pilot has the same authority and, in addition, may pilot aircraft of more than 12,500 lb. gross weight on international operations. A licensed airline pilot may operate aircraft in regular public transport service. Airline pilots' licenses are issued in three grades, viz., first, second and third class.

A pilot's license may be endorsed with a flight instructor rating, which authorises the pilot to give practical instruction in flying, or an instrument rating, which permits the pilot to operate an aircraft under instrument flight conditions. A pilot may fly only the types of aircraft specified in his license.

Applicants for the issue or renewal of aircrew licenses must pass a medical examination.

Licenses are also issued in respect of aircraft maintenance engineers and ground instructors.

## Licensing of Aerodromes, etc.

The Minister may establish and operate aerodromes and other airway facilities. Privately-owned aerodromes and flying schools must be licensed by the Director-General.

#### Certificates and Licenses-Fees and Duration.

Certificates and licenses issued under the Air Navigation Regulations are subject to the payment of fees fixed by the Director-General. Their duration varies but in no case exceeds twelve months. The licenses of commercial and airline pilots, and of private pilots over the age of 50 years, must be renewed every six months; in the case of all other aircrew licenses, the period of duration is one year.

## Air Safety and Traffic Control.

Every aircraft must be overhauled periodically and certified as airworthy by the Director-General. In addition, every aircraft must be inspected and certified as safe prior to a flight. Aircraft used on regular public transport services must be equipped with radio apparatus unless specially exempted.

A member of an operating crew must not fly more than eight hours in any period of twenty-four consecutive hours (unless there is provision for rest during flight), nor more than 1,000 hours in any period of twelve consecutive months.

The Air Navigation Regulations fix the rules of the air and prohibit negligent and reckless flying. The Department of Civil Aviation provides an Air Traffic Control Service, meteorological services and an air search and rescue service.

## International Flights and Air Services.

An aircraft arriving in or departing from any part of Australian territory must comply with the Air Navigation Regulations and with all other laws in force in that part. No aircraft may depart from Australia for an oversea destination without the permission of the Director-General.

An international air service conducted by an airline of a country other than Australia must not be operated over or into Australian territory, except under an international airline license issued in accordance with an international agreement. The aircraft of countries which adopt the Chicago Convention have certain rights covering flight across and landing in Australian territory. Foreign aircraft of countries which are not parties to the Convention must not fly within Australian territory without the approval of the Minister.

## LICENSING OF AIRCRAFT BY THE STATE.

Licenses are issued by the Commissioner for Road Transport and Tramways in respect of commercial aircraft (interstate and intrastate), including airliners, operating over New South Wales territory. The fee payable is 5s. a year.

#### INTERNATIONAL AVIATION ORGANIZATIONS AND AGREEMENTS.

A Civil Aviation Conference held at Chicago in December, 1944, drew up a Convention on International Civil Aviation (see page 568) and established the International Civil Aviation Organization, with permanent headquarters in Montreal. The functions of this organization, which is affiliated with the United Nations Organization, are to investigate the problems of international air traffic and to determine standards and procedures in regard to air navigation. Australia has a seat on the Council of the Organization and maintains a permanent representative in Montreal. The International Commission for Air Navigation, which was set up by the Paris Convention of 1919, was dissolved in 1946.

The British Commonwealth Air Transport Council, inaugurated in 1945, comprises representatives of the United Kingdom, Australia, Canada and other members of the British Commonwealth. The Council was set up to review air communications within the British Commonwealth and to advise the respective governments on civil aviation matters. The South Pacific Air Transport Council, with similar functions in respect of the South Pacific region, comprises representatives of the United Kingdom, Australia, New Zealand and the Fiji and Western Pacific High Commission.

The International Air Transport Association was formed at a conference of air transport operators held at Havana in April, 1945. Membership is confined to air transport undertakings operating regular services between two or more countries, Australia being represented by Qantas Empire Airways. The functions of the Association are to develop air transport and to foster co-operation among international air transport operators. Regional traffic conferences are held by the Association for the purpose of fixing fares and freight rates (subject to approval by the respective governments).

International air services have been established between Australia and other countries under bi-lateral agreements. An agreement for the operation of air services between Australia and Cauada was signed at Ottawa in June, 1946. An agreement between Australia and the United States for trans-Pacific air services, signed in December, 1946, accords mutual rights to pick up and set down passengers, cargo and mails on the route from Sydney to Vancouver, via Fiji, Canton Island, Honolulu and San Francisco.

#### Australian National Airlines Commission.

The Australian National Airlines Commission, a Commonwealth body, was set up under the Australian National Airlines Act, 1945-1947, with power to establish and operate air services between the States and within and to the Commonwealth Territories. Subject to the approval of the Minister, the Commission may establish international airline services and, with the permission of the Premier of the State concerned, it may provide intrastate air services. Under certain conditions the Commission may assist private undertakings to provide air services.

Services inaugurated by the Commission, trading under the name "Trans-Australia Airlines," link Sydney with all the capitals and with important provincial centres in the other States.

#### REGULAR AIR SERVICES.

The particulars of air service frequencies, etc., given under the following sub-headings relate to May, 1949.

\* 10819---3

#### OVERSEA SERVICES.

Qantas Empire Airways Limited, which is owned by the Commonwealth Government, operates a number of oversea air services from Sydney. The oversea terminals, with the frequency of service shown in brackets, are as follows: London (four services per week); Suva (fortnightly); Rabaul (weekly); and Norfolk Island (fortnightly). A parallel service between Sydney and London via Singapore and Karachi is operated by the British Overseas Airways Corporation, a British Government undertaking.

A daily flying-boat service is operated between Sydney and Auckland by Tasman Empire Airways Limited, which is owned by the New Zealand, Australian and British Governments in the proportions 50, 30 and 20 per cent., respectively. The undertaking also provides a charter (or hire) service between Sydney and Auckland five or six times per month.

There is an air service between Sydney and Vancouver (Canada) via Fiji, Canton Island, Honolulu and San Francisco, three times in every fortnight. This service is operated by British Commonwealth Pacific Airlines Limited, which is owned by the Australian, New Zealand and British Governments in the proportions 50, 30 and 20 per cent. respectively. A parallel service between Sydney and San Francisco is conducted twice weekly by Pan-American Airways Incorporated, a United States undertaking.

The air route mileages between Sydney and the principal oversea terminals are as follows: London, 12,061; Singapore, 4,476; Karachi, 7,227; Vancouver, 8,383; Rabaul, 2,509; Norfolk Island, 1,048.

## INTERSTATE AND INTRASTATE SERVICES.

Throughout Australia there is a network of regular air services carrying passengers, freight and mail between the capital cities and important towns in each State. Interstate air services, connecting with intrastate services, permit air travel from Sydney to most parts of the Commonwealth.

There are direct interstate services from Sydney to Melbourne, Brisbane and Adelaide respectively. These connect with other services from Melbourne to Hobart, Adelaide and Perth, and from Adelaide to Darwin. There is a daily average of eighteen return flights to Melbourne, twelve to Brisbane and three to Adelaide (direct).

Other services directly connecting towns in New South Wales with towns in other States are Sydney to Charleville (Queensland) via Bourke (twice weekly), Broken Hill to Melbourne (daily) and Adelaide (three per week), Deniliquin to Melbourne (daily), and Griffith to Melbourne (daily). Intrastate services from Sydney to Tamworth and to Coff's Harbour connect with interstate services between these towns and Brisbane. There are eight services daily between Sydney and Canberra, which is an intermediate stop on the Sydney-Melbourne and Sydney-Adelaide routes.

Since the war (1939-45) there has been a considerable expansion of regular intrastate air services. The number of New South Wales towns connected with Sydney by air service was two in 1945, twelve in 1947 and twenty-four in 1949. Intrastate services extend from Sydney to Bega in the south, to Parkes, Dubbo and Bourke in the west, and to Tamworth, Casino and Evans Head in the north; the shortest service from Sydney is to Wollongong (approximately 50 miles). The frequency of service varies from one to ten return trips per week. A proportion of intrastate passenger and

freight traffic is carried on interstate airlines; for instance, Wagga Wagga is an intermediate stop on one Sydney-Melbourne service.

The passenger capacity of the aircraft used on the interstate services ranges from 24 to 44. The bulk of the intrastate traffic is carried by 'planes with a passenger capacity of twenty-four, a small proportion being handled by 'planes carrying up to seven passengers.

## FARES AND FREIGHT RATES.

The following table shows particulars of the principal adult passenger fares in operation at the end of May, 1949 on regular air services with terminals in New South Wales:—

Table 514.—Regular Air Services (N.S.W.)—Passenger Fares at 31st May, 1949.

C1	Passen	ger Fare.	Sanda en ta	Passeng	er Fare.
Sydney to—	Single.	Return.	Sydney to— Single. R		Return.
Oversea Terminals—  Rabaul	£ s. d.  51 0 0 22 0 0 325 0 0 135 0 0 55 0 0 55 0 0 167 0 0 200 0 0 6 10 0 6 10 0 6 10 12 0 11 10 0 30 10 0 12 10 0	£ s. d.  91 16 0 39 12 0 585 0 0 398 5 0 243 0 0 99 0 0 162 0 0 360 0 0  13 0 0 13 15 0 20 3 0 23 0 0 61 0 0 25 0 0	Intrastate Terminals— Bathurst Bega Bourke Brewarrina Canberra (A.C.T.) Casino Coonamble Coff's Harbour Dubbo Evans Head Jervis Bay Kempsey Moruya Nabiae Narrabri Nyngan Tamworth Tooraweenah Walgett	£ s. d.  1 10 0  3 6 0  6 10 0  6 10 0  6 10 0  6 5 0  4 7 0  3 1 0  5 14 0  2 16 0  3 10 0  2 16 0  3 17 6  4 10 0  3 17 6  5 9 0	£ 8. d.  2 16 0 6 6 0 12 7 0 12 7 0 12 10 0 8 5 0 6 8 10 0 5 16 0 10 17 0 6 4 0 6 4 0 6 2 0 9 14 0 7 5 0 6 17 0 10 7 6

The fare for children is one-half the adult rate. Passengers' luggage is carried free up to a prescribed maximum weight, which varies for different aircraft.

Air freight rates vary according to distance; within Australia they range from 3d. per lb. from Sydney to Bathurst, Canberra or Nabiac, to 1s. 11d. per lb. from Sydney to Perth.

## AIR TRAFFIC STATISTICS.

The statistics given in the following table were compiled by the Department of Civil Aviation and relate to regular air services (excluding one oversea service) with terminal in New South Wales. Where a journey extends over more than one of these services, particulars of passengers, freight and mail carried are duplicated in the statistics. The figures for interstate services include a proportion of intrastate traffic, since, in most cases, the intrastate business handled by interstate airlines is not recorded separately. Particulars of traffic between Sydney and Canberra are included in the statistics of intrastate services.

Table 515.-Regular Air Services, New South Wales.

		361		D	Fre	ight.	Ма	i1.	
Year ended 30th June.	Hours Flown.	Miles Flown.	Passengers.	Passenger Miles.	Tons (Gross).	Ton Miles.	Tons (Gross).	Ton Miles.	
<u> </u>		thous.		thous.		thous.		thous.	
			OVERSE	A SERVICES.	•				
1945 1946 1947 1948	3,786 22,645 32,633 38,354	605 4,265 5,921 7,200	6,489 16,551 32,057 42,248	8,673 34,305 77,029 122,783	32 152 349 623	43 406 978 2,238	108 564 465 584	178 2,033 2,112 3,093	
Interstate Services.*									
1945 1946 1947 1948	33,490 42,601 56,872 79,180	4,680 6,160 8,986 12,783	133,982 198,113 397,795 570,004	59,821 84,752 171,231 241,845	1,196 2,238 5,664 10,655	547 988 2,507 4,833	1,911 961 492 489	967 441 221 220	
			Intrasta	TE SERVICE	S.				
1945 1946 1947 1948	1,817 2,558 7,086 13,061	154 244 886 1,672	4,019 7,602 54,046 95,599	860 1,307 10,176 18,933	4 24 351 465	1 5 75 98	1 1 7 7	 1 1	
			Тотац—А	All Service	es.				
1945 1946 1947 1948	39,093 67,804 96,591 130,595	5,439 10,669 15,794 21,655	144,490 222,266 483,898 707,851	69,354 120,364 258,436 383,561	1,232 2,414 6,364 11,743	591 1,399 3,560 7,168	2,020 1,526 964 1,080	1,145 2,474 2,384 3,314	

<sup>\*</sup> Includes some intrastate traffic.

Since the war there has been a significant expansion in air traffic which has been very marked in the case of intrastate services. In 1947-48, passengers carried on oversea, interstate and intrastate services were about seven, four and twenty-four times, respectively, the number in 1944-45.

Interstate passengers comprised 81 per cent. of all passengers carried in 1947-48, as compared with 93 per cent. in 1944-45, and the proportion of intrastate passengers increased from 3 per cent. to 13 per cent. of the total over the same period. Freight carried on interstate services in 1947-48 was 10,655 tons, or 91 per cent. of the total carried on all services.

## CIVIL AVIATION ACCIDENTS (AUSTRALIA).

Accidents involving Australian aircraft or international aircraft in Australian territory must be reported to the Department of Civil Aviation. From these reports the Department compiles statistics of accidents. An aircraft accident is defined as any occurrence which results in the death or injury of any person or in substantial damage to the aircraft, and which takes place after any person has boarded the aircraft and before all persons have disembarked.

The following table shows particulars of persons killed and injured in civil aviation accidents in Australia in each year ended 30th June since 1938-39:—

				4 4007					
1938- 39.	1939- 40.	1940- 41,	1941– 42.	1942– 43.	1943- 44.	1944– 45.	1945— 46.	1946– 47.	1947 <del>-</del> 48.
								<u>'</u>	
38	8	2	18	4	1	26	44	15	13
15	1	1	3	3	1	10	1	17	27
53	9	3	21	7	2.	36	45 <sup>-</sup>	32	40
	38 15	38 8 15 1	38 8 2 15 1 1	38 8 2 18 15 1 1 3	38     8     2     18     4       15     1     1     3     3	38     8     2     18     4     1       15     1     1     3     3     1	39.     40.     41.     42.     43.     44.     45.       38     8     2     18     4     1     26       15     1     1     3     3     1     10	38     8     2     18     4     1     26     44       15     1     1     3     3     1     10     1	38     8     2     18     4     1     26     44     15       15     1     1     3     3     1     10     1     17

Table 516.—Civil Aviation Accidents, Australia.

In 1945-46 two fatal accidents involving aircraft in regular services caused the death of twenty-one passengers and five aircrew; this represented less than one passenger fatality per 10,000,000 miles flown.

There were no fatal accidents involving aircraft in regular services in 1946-47. Of the 56 aircraft accidents in Australia in that year, three in charter (or hire) and aerial work operations caused fatalities, a total of 7 persons being killed; private flying resulted in 6 fatal accidents (7 persons killed), and instructional flying caused 1 fatality.

AIRCRAFT REGISTRATIONS, PILOT LICENSES, Etc. (Australia).

The following table shows particulars (compiled by the Commonwealth Statistician) of licensed pilots and registered aircraft and aircraft owners in Australia in each year since 1939:—

30th Jun	ne.	Registered Aircraft.	Registered Aircraft Owners,	Licensed Pilots.†	At 30th June		Registered Aircraft.	Registered Aircraft Owners.	Licensed Pilots:†
1939	•••	296	149	1,432	1944	<b></b> .	185	116	464
1940	•••	288	137	1,549	1945		206	125	6 <b>43</b> :
1941		202	120	689	1946	•••	349	182	1,339
1942		192	119	421	1947		643	823.:	1,710
1943	•••	187	119	404	1948	•••	670	334	1,837‡

Table 517.—Registered Aircraft and Licensed Pilots, Australia.\*

Between 1939 and 1948 the number of registered aircraft and owners more than doubled, and the number of licensed pilots increased by 405, or 28 per cent. The number of civil aircraft on the Australian register in June, 1948, viz., 670, was a record.

<sup>•</sup> Includes oversea services of Qantas Empire Airways up to 1946. † Excludes student pilots.

‡ At 1st April.

The following statement shows a classification of licensed civil aviation personnel in Australia at 1st April, 1948. Particulars of the various licenses are given on page 569.

Table 518.—Civil Aviation, Australia—Classification of Licensed Personnel at 1st April, 1948.

Par	rticulars		Number.	Particular	Particulars.					
Pilots— Student Private Commer	  cial	 	939 600 499	Navigators Radio Operators Flight Engineers			82 836 8			
Airline	 Total	 •••	2,776	Ground Engineers	•••	•••	1,660			

At 30th June, 1947, there were 162 licensed flight instructors in Australia.

#### AERODROMES, AIRPORTS, ETC.

The Commonwealth Government owns and operates numerous aerodromes, landing grounds, flying boat bases and other civilian aviation facilities throughout Australia. In addition, there are many airfields owned by private persons or undertakings, or by local government authorities, which are licensed by the Department of Civil Aviation. The Department makes grants for maintenance purposes to the proprietors of licensed airports which are stopping places on regular air service routes. An "aerodrome" is defined as an area used for the taking-off and landing of aircraft, and an "airport" is an aerodrome which provides facilities for the shelter or repair of aircraft and for handling passenger or cargo traffic.

In New South Wales there are civil airports at various towns throughout the State, the most important being the Kingsford Smith Airport at Mascot. This is the major Australian international terminal and the airport of Sydney, and is situated about 5 miles south of the city. It is undergoing extensive alterations, the first stage of which will involve an estimated expenditure of £5,000,000.

At 30th June, 1948, there were 27 Commonwealth-owned aerodromes and 3 emergency landing grounds in New South Wales, as well as a Commonwealth-owned flying boat base at Rose Bay in Sydney Harbour. In addition there were 48 licensed aerodromes and 3 emergency alighting areas.

Particulars of the civilian airfields in operation at 30th June in each year since 1940 are given in the next table. The decrease in numbers in the war years was due to the taking-over of ground facilities by the Royal Australian Air Force.

Table 519.—Government and Licensed Civil Aerodromes\* in New South Wales.

	Gover	rnment	Licensed	Total of		Gover	nment	Licensed	Total of	
At 30th June.	Aero- dromes.	Emerg- ency Grounds.	Aero- dromes.	Fore- going.	At 30th June.	Aero- dromes.	Emerg- ency Grounds.	Aero- dromes.	Fore- going.	
1940	10	37	50	97	1945	9	11	47	67	
1941	9	19	50	78	1946	13	8	47	68	
1942	7	17	48	72	1947	23	7	50	80	
1943	8	12	45	65	1948	27	3	48	78	
1944	8	7	44	59						

<sup>\*</sup> Including Airports.

#### Aero Clubs.

Aero clubs are assisted by the Commonwealth Government by grants and, where practicable, by the free use of langar accommodation. In 1946-47, grants to the clubs were made on the following bases: (a) for maintenance of club aircraft, £25 per annum for each 50 hours flown by any one aircraft, up to a maximum of £100; (b) for each member who was trained by the club and qualified for a private pilot's license, £50 if trained at the club's major centre and £60 if trained elsewhere; and (c) £10 for each member who qualified at the club's major centre for renewal of his pilot's license, and £12 10s. 0d. for a member who qualified elsewhere.

The clubs assisted in New South Wales in 1948 were the Royal Aero Club of New South Wales and the Newcastle and Broken Hill Aero Clubs. Commonwealth grants to these clubs in 1946-47 amounted to £10,011.

## AIR AMBULANCE AND "FLYING DOCTOR" SERVICES.

An air ambulance service for the conveyance of a medical practitioner to urgent cases and for the transport of patients to hospital from isolated areas is operated from Broken Hill. Weekly visits to certain districts in central New South Wales where no doctor is in residence are made by a "flying doctor" and air ambulance service operated by a doctor resident in Forbes. The miles flown by these services in 1946-47 were 33,951 from Broken Hill and 29,440 from Forbes. The services are subsidised by the Commonwealth Government.

### RATIONING OF AVIATION PETROL.

During the war (1939-45), restrictions were imposed on the consumption of aviation petrol by civil aircraft. The restrictions applied to all civil aircraft except those used for regular public transport services, approved charter flights, essential test flying, or ambulance services.

The ration for private and commercial aircraft was increased by 25 per cent. in September, 1945, and by the same amount in October, 1945, by 50 per cent. in February, 1946, and by 33½ per cent. in July, 1946. In April, 1947, the restrictions were again relaxed to permit flying time to be increased from 6 to 8 hours per month in the case of private aircraft, and from 20 to 50 hours per month in the case of commercial aircraft.

On 1st October, 1948, the aviation petrol ration was reduced, mainly for the purpose of conserving dollar exchange. For regular internal (interstate and intrastate) services the allowance was limited to the amount of fuel represented by the timetables in force at 1st July, 1948, subject to a reduction of 5 per cent. in the case of certain airlines operating in competition between capital cities; and for all other aircraft it was 90 per cent. of the rate of consumption as at 1st July, 1948.

Rationing of aviation petrol ceased on 6th June, 1949, when the High Court declared the National Security Regulations controlling it to be invalid.

# POSTS, TELEGRAPHS AND WIRELESS

The postal, telegraph, and telephone services of New South Wales have been controlled by the Commonwealth Government since 1st March, 1901. The services are administered by a Minister of the Crown, with a permanent salaried officer in charge of the central executive office, and a deputy in each State. The rates and charges for the postal and other services are uniform in all the States of the Commonwealth.

All cable and wireless communication between Australia and oversea countries has been controlled by the Overseas Telecommunications Commission (Aust.) since 1st July, 1947.

The wireless services come under the jurisdiction of the Postmaster-General, from whom licenses must be obtained for all classes of stations. Since 15th March, 1949, all broadcasting stations have been supervised by the Australian Broadcasting Control Board.

POSTMASTER-GENERAL'S DEPARTMENT; FINANCES AND STAFF.

Particulars of the financial results of operations in the various branches of the Postmaster-General's Department in New South Wales during the year ended 30th June, 1947, are as follows:—

Table 520.—Postmaster-General's Department, Finances of each Branch in New South Wales.

	Branch.			Earnings.	Working Expenses.	Surplus.	Interest on Capital and Exchange Charges.	Net Profit.
Postal	•••		•	€ 5 <b>,04</b> 7,342	£ 3,874,718	£ 1,172,624	£ 45,873	£ 1,126,751
Telegraph	•••			1,231,686	1,153,501	78,185	29,579	48,606
Telephone				5,617,268	3,936,377	1,680,891	521,560	1,159,331
Wireless		•••		283,874	407,348	() 123,474	3,797	() 127,271
Total, All I	Branch	ıes		12,180,170	9,371,944	2,808,226	600,809	2,207,417

(---) Denotes loss.

The total net profit amounted to £2,207,417 in 1946-47, as compared with £1,621,934 in 1938-39. Increases in the various branches between 1938-39 and 1946-47 were: postal £247,714, telegraph £48,606, and telephone £474,154. There was a net profit of £54,023 in the wireless branch in 1938-39, and a loss of £127,271 in 1946-47.

A comparative statement of finances for 1938-39 and the last six years is shown below:—

Table	521.—Postmaster-General's	Department,	Finances	in	New	South
	W	/ales.				

Year ended 30th June.	Earnings.	Working Expenses.	Surplus.	Interest on Capital and Exchange Charges.	Net Profit
	£	£	£	£	£
1939	7,168,409	4,871,910	2,296,499	674,565	1,621,934
1942	8,884,043	5,769,583	3,114,460	757,644	2,356,816
1943	9,782,945	6,619,996	3,162,949	739,403	2,423,546
1944	10,407,780	7,118,012	3,289,768	717,306	2,572,462
1945	10,855,431	7,416,362	3,439,069	701,287	2,737,782
1946	11,404,043	8,156,801	3,247,242	614,436	2,632,806
1947	12,180,170	9,371,944	2,803,226	600,809	2,207,417

The staff of the Postmaster-General's Department in New South Wales expanded by 44 per cent. between June, 1939 and 1947, reflecting the marked increase in business. Particulars of persons employed annually since 1939, according to classification of employee, are shown in the following table:—

Table 522.—Postmaster-General's Department, Employees in New South Wales.

At 30th June.	Permanent Staff.	Semi-Official and Non-Official Post- masters,	Employees	Telephone Office Keepers.	Mail Contractors (including Drivers).	Temporary and Other Exempt Employees.	Total Employees.
1939	9,709	2,103	282	579	2,651	3,608	18,932
1940	10,111	2,098	289	571	2,577	4,212	19,858
1941	10,464	2,099	286	564	2,590	4,708	20,711
1942	10,852	2,067	284	571	2,375	6,021	22,170
1943	10,903	2,048	237	561	2,411	7,793	23,953
1944	11,196	2,058	260	595	2,537	8,062	24,708
1945	11,317	2,038	259	594	2,498	8,655	25,361
1946	11,005	2,037	263	555	2,511	9,623	25,999
1947	10,806	2,047	465	566	2,618	10,666	27,168

## POSTAL SERVICES.

Post offices have been established throughout New South Wales, even in localities where there are few residents. The scope and nature of the services provided depend upon the local conditions. There were 2,495 post offices in the State at 30th June, 1947, of which 448 were official (i.e., conducted exclusively by full-time departmental officials), 9 semi-official, and 2,038 non-official. The number at 30th June, 1946, was 2,490. The transport of mails in outlying districts has been expedited considerably in recent years by greater use of motor vehicles and aerial services. The number of inland and coastwise mail services in operation in New South Wales in 1946-47 was 2,111. The cost of road and coastwise services amounted to £361,658, and of railway services to £203,636. In 1945-46 the number of services was 2,046, and the cost of road and coastwise services was £343,080, and railway services £270,560.

The transportation of mail by air services within and beyond Australia is being expanded continuously both as to range and the frequency of

services. The air mails are carried by commercial airlines under contracts to the Department, generally at a predetermined rate per weight of mail carried, though in some cases a subsidy on a flight-mileage basis is paid.

Because of the geographical nature of the services, the cost cannot be compiled on a State basis; for the Commonwealth as a whole, £1,158,729 (including £604,186 for oversea mail) was expended for the carriage of mails by air in 1946-47.

The following table shows particulars of articles posted in New South Wales for delivery within the Commonwealth and of articles despatched to and received from places beyond the Commonwealth for each year since 1942-43. Particulars of postal matter received from other Australian States are not available.

Table 523.—Letters, etc., Posted and Received in New South Wales.\* thousands.

		Year e	ended 30tl	ı June.	
Particulars.	1943.	1944.	1945.	1946.	1947.
Letters, Post Cards, Letter Cards, and articles in envelopes—					
Posted for delivery within the Commonwealth	333,184	334,289	342,236	338,521	368,054
Despatched to and received from places beyond the Commonwealth	15,234	22,083	23,837	34,061	28,919
Total	348,448	356,372	366,073	372,582	396,973
Registered Articles (except Parcels)—					
Posted for delivery within the Commonwealth Despatched to and received from	5 <b>,6</b> 84	7,191	7,765	7,555	8,040
places beyond the Commonwealth	148	173	288	599	777
Total	5,832	7,364	8,053	8,154	8,817
Newspapers and Packets—					
Posted for delivery within the Commonwealth	66,951	67,170	72,898	71,315	83,893
Despatched to and received from places beyond the Commonwealth	7,340	8,234	9,011	11,421	14,945
Total	74,291	75,404	81,909	82,736	98,838
Parcels (including those Registered)—					
Posted for delivery within the Commonwealth	5,061	6,990	6,742	6,132	6,173
Despatched to and received from places beyond the Commonwealth		364	360	1,325	1,527
Total	5,618	7,354	7,102	7,457	7,700

<sup>\*</sup> Including Australian Capital Territory.

The Dead Letter Office in New South Wales handled 844,430 letters and post cards and 192,258 packets and circulars during 1946-47. Of these 858,301 were returned direct to the writers or delivered, 136,156 were destroyed, and 42,241 were returned as unclaimed to other States and countries. Money and valuables amounting to £117,644 were contained in postal articles sent to the Dead Letter Office. In 1945-46 the Dead Letter Office handled 1,062,859 postal articles and the money and valuables contained therein amounted to £100,889.

The postage rate (July, 1949) for letters to places within the British Empire is  $2\frac{1}{2}d$ , for the first ounce, and 2d, for each additional ounce. For registration the charge is 6d, per letter or article.

The rates of postage by air mail are as follows: to places within the Commonwealth and Commonwealth Territories, 3d. per half ounce in addition to ordinary postage; New Zealand, post cards 3½d. and letters, etc., 5½d. per half ounce; Europe, Canada and U.S.A., post cards 9d. and letters, etc., 1s. 6d. per half ounce; charges to other countries for letters, etc. vary from 9d. to 2s. 3d. per half ounce.

A cheap air-letter service is in operation to all oversea countries. Special lightweight air-letter forms are supplied at 7d. each, the charge covering both postage and air mail fees.

A system of cash on delivery post—chiefly for the convenience of people who reside at a distance from trading centres—is in operation in the Commonwealth, Commonwealth Territories, Lord Howe Island and Fiji. On delivery of an article, the Post Office collects from the addressee a sum of money specified by the sender and transmits it to him. During the year ended 30th June, 1947, the number of such articles posted in New South Wales was 483,300. The value collected was £950,395, and the revenue, that is, postage and commission, £68,886. In 1945-46 the number of articles was 401,900, value collected £691,019 and revenue £54,220.

Amongst other postal facilities provided are: express collection and delivery of postal articles at post offices where messengers are employed; a business reply service for advertisers, etc., enabling them to pay postage on replies actually received; a permit mail system under which sealed printed circular letters are posted at printed matter rates; private mail boxes continuously accessible at post offices to holders; private mail bags in country areas; and the use, under license, of stamp franking machines. There were 26,370 private mail boxes and 6,249 private mail bags in New South Wales at 30th June, 1947.

The postal branch of the Department transacts money order and postal note business. Money orders are issued and redeemed within Australia, and are issued upon and paid to the order of other countries by international arrangement. A poundage charge is made on the issue of money orders and postal notes. The latter are payable only within the Commonwealth and the maximum amount of a postal note is £1. Particulars of transactions in money orders and postal notes are given in the chapter "Private Finance."

#### TELEPHONES.

The telephone system, established in Sydney in 1880, has been extended throughout the State. Trunk lines serve practically all settled areas in

Australia. The first line between Sydney and Melbourne was brought into use in 1907, and between Sydney and Brisbane in 1923. The services were extended to Northern Queensland in 1930, to Western Australia in 1931 and to Tasmania in 1936. The "carrier wave" system of operating long-distance telephone traffic is used so that a number of conversations may be conducted simultaneously over one pair of wires.

The following table shows the growth of the telephone service in New South Wales (including the Australian Capital Territory) since 1921:—

At 30th June.	Exchanges.	Number of Lines Connected.	Public Telephones.	Telephone Instruments Connected.	No. of Instruments per 1,000 of Population.
1921	921* 1,946 2,010 2,025 2,014 2,019 2,027 2,034 2,036	74,490	1,693	96,710	45-9
1931		141,445	2,944	188,345	73-5
1939		189,915	4,223	257,246	93-2
1942		206,103	4,653	285,243	100-8
1943		210,112	4,885	295,266	103-4
1944		217,345	4,986	308,016	106-7
1945		225,832	5,032	320,198	109-9
1946		236,943	5,043	332,463	112-3
1947		253,215	5,023	353,283	117-7

Table 524.-Telephones, New South Wales.

At 30th June, 1947, there were in New South Wales 2,036 telephone exchanges with which 253,215 lines were connected. The number of instruments in use was 353,283, including 344,630 subscribers' instruments, 5,023 public telephones, and 3,630 connected with other exchange services. The ratio of instruments to population increased steadily between 1939 and 1947; numerous applicants for telephones cannot be connected because of a shortage of equipment. Revenue derived from the telephone services in New South Wales during 1946-47 amounted to £5,617,268.

The annual ground rent (July, 1949) for an exclusive telephone service ranges from £3 10s. in respect of country exchanges where the number of subscribers' lines in the local call area does not exceed 300, to £6 5s. for a residence service and £7 10s. for a business service in the metropolitan area. The charge for each effective outward (local) call is 1½d. from exchanges where the number of lines in the area does not exceed 300, and 1¾d. in larger country areas. In the metropolitan areas the charge is 2d. per call.

## TELEGRAPHIC AND WIRELESS COMMUNICATION.

The telegraph system of Australia embraces the whole Commonwealth. It has been extended steadily since January, 1858, when the system was opened to the public in New South Wales, and modern equipment has been installed in the chief centres to expedite the transmission of messages.

In June, 1940, uniform rates were introduced for the transmission of telegrams within the Commonwealth irrespective of State boundaries. Since July, 1949, the charge for the transmission of an ordinary telegram of fourteen words is 1s. 3d. between offices up to 15 miles apart and 1s. 6d.

<sup>\*</sup> Offices with only one line connected are not included.

between offices more than 15 miles apart. An additional charge of 1d. is made for each word in excess of fourteen. Double rates are charged for urgent telegrams.

With certain exceptions, the charge for an ordinary rate telegraphic message from Australia to another part of the British Empire is 1s. 3d. per word and for a deferred message half the ordinary rate, with a minimum charge for five words in plain language. Daily letter telegrams with normal delivery on the morning of the second day after the date of lodgment are accepted for transmission to certain places beyond Australia at one-third of the ordinary rate, with a minimum charge as for twenty-five words. With certain exceptions, social letter-telegrams for transmission within the Empire are charged at the rate of 5d. per word, with a minimum charge of 5s. Press telegrams are handled by telegraph or cable at cheap rates under special conditions.

## Telegraphic Business.

The following table shows the number of telegrams despatched in New South Wales for delivery within the Commonwealth including messages to Tasmania, and the number of telegrams despatched to and received from countries outside Australia, in various years since 1921. The total number of telegrams handled in New South Wales cannot be stated, as full particulars are not available regarding messages received from other States. Telegrams in transit through the State are not included.

Table 525.-Telegrams, New South Wales.

Year	Telegraph	Telegrams despatched	Internationa	l Telegrams.	Revenue	
ended <b>3</b> 0th June.	Stations.	for delivery in Australia.	Despatched.	Received.	Received.	
1921	2,252	5,906,243	249,705	263,482	£ 489,805	
1929	3,069	5,972,606	415,813	388,093	526,508	
1931	3,055	4,609,851	326,857	282,253	384,452	
1939	3,061	6,242,494	375,198	391,250	471,710	
1942	3,085	8,213,968	557,055	574,535	659,558:	
1943	3,128	9,967,562	553,186	613,531	794,325,	
1944	3,071	11,078,595	507,518	665,648	847,754	
1945	3,079	12,060,011	479,348	572,688	906,677	
1946	3,054	12,856,149	561,234	571,607	1,043,592	
1947	3,047	12,031,367	514,902	512,995	995,806	

The revenue from telegraph business in New South Wales in 1945-46 was a record; revenue in 1946-47 declined by 5 per cent.

The foregoing statement includes only messages transmitted by land line or submarine cable. Particulars of business transacted by radio-

telegraph, distinguishing that with oversea countries and that with neighbouring islands, vessels, etc., within range of coastal stations are given in the next table. It shows radio traffic in New South Wales annually since 1936-37:—

	Coas	tal.	Beam Wireless.						
Year ended 30th June.	Maggagaga		Originat New Sout		Terminating in New South Wales.				
•	Messages.	Words.	Messages.	Words.	Messages.	Words.			
1937 1938 1939 1940 1941 1942 1943 1944 1945	110,917 112,751 117,980 78,764 91,477 68,967 46,768 90,071 37,333 93,030	1,998,878 1,782,459 1,862,339 1,777,451 2,239,665 2,681,636 1,351,971 4,795,223 4,037,573 3,042,707 3,302,433	158,179 221,012 146,538 140,492 136,022 168,364 198,803 199,912 142,838 165,355	3,541,542 3,536,206 3,216,674 3,982,406 4,269,365 5,338,765 5,725,792 6,262,508 5,849,955 6,071,897 6,038,512	134,925 191,831 139,432 149,180 171,953 210,203 286,973 445,003 372,914 334,362 258,011	4,247,742 4,603,933 4,430,537 6,574,070 7,709,102 11,818,293 14,765,251 16,966,858 20,857,006 21,523,369 15,080,925			

Table 526 .- Radio Traffic, New South Wales.

The services under the Beam system were commenced with the United Kingdom on 8th April, 1927, and with Canada on 16th June, 1928. A Beam wireless picturegram service between Australia and the United Kingdom and North America was inaugurated on 1st October, 1934; in 1947-48, 685 pictures were received in Australia from oversea countries and twenty-six pictures were transmitted to oversea countries.

#### Overseas Telecommunications Commission (Australia).

The Overseas Telecommunications Commission (Australia) was formed as an outcome of a decision of the Commonwealth Communications Council (comprising members of the British Commonwealth) that Empire communications, both cable and wireless, should be nationally owned and operated. In Australia, this Commission of five members was constituted on 23rd August, 1946 under the Overseas Telecommunications Act, 1946 to acquire and operate the existing cable and wireless installations. A detailed account of its formation and functions is given on page 172 of Official Year Book, No. 50.

The Commission has operated Australia's external radiocommunication services since 1st February, 1947, and the cable services since 1st July, 1947. Cable and radiocommunication services are being co-ordinated by the Commission; where the channel is not stipulated by the sender, the message is forwarded by either channel according to convenience and traffic conditions. Rates of either channel to any destination are now the same; where the rates varied previously, the lower rate has been accepted as the current rate.

In 1947-48, the first full year of operation of the Commission, cable and wireless traffic between Australia and oversea countries amounted to 69,392,383 words, viz., 30,816,507 words outward and 38,575,876 words in.

ward. Thirty-eight per cent. of outward traffic was transmitted to the United Kingdom, 13 per cent. to the United States of America, and 18 per cent. to New Zealand and Pacific Islands. Forty-seven per cent. of inward traffic was received from the United Kingdom, 10 per cent. from the United States of America, and 11 per cent. from New Zealand and Pacific Islands. Calls on the radio-telephone service between Australia and oversea countries numbered 23,282 in 1947-48, occupying 132,337 paid minutes.

Uniformity of policy and co-operation within the British Commonwealth is provided under an "Overall Agreement" signed by the partner Governments in London in May, 1948; at 30th June, 1948, pending full operation of the Agreement, the Commonwealth Communications Council was co-ordinating the activities of the national telecommunication bodies. When the Agreement is operative, the Commonwealth Telecommunications Board will be established as the central co-ordinating authority.

The International Telecommunication Union (now a specialized agency of the United Nations) adopted a revised International Telecommunication Convention at a Plenipotentiary Conference held in Atlantic City, U.S.A., in 1947, replacing the convention adopted in Madrid in 1932. Australia ratified the Convention, which came into force on 1st January, 1949. The Convention established agencies to regulate international telecommunications.

#### Radiocommunication Stations.

Particulars of the number and type of radiocommunication stations authorised in New South Wales (excluding the Australian Capital Territory) and in Australia, Papua and the Territory of New Guinea at 30th June, 1947 and 1948, are shown in the following table. Figures on this basis, relating to radiocommunication (radio-telegraph and radio-telephone) stations only, are not available prior to 30th June, 1947; particulars of broadcasting stations and broadcasting licenses are shown in the next section, "Wireless Broadcasting."

Table 527.—Radiocommunication Stations Authorised in New South Wales and Australia and Territories.

			ting and	d Receiving.		Receiv	ing Only.	Total			
30tl				Land.	Mobile (General). §	Miscel- laneous.	Land.	Mobile (General). §	of Fore- going,	Air- craft,	Ship.
					NEW 8	SOUTH WA	ALES.		_		
1947	•••	8	1	143	452	14	87	36	741	7	₹
1948	•	8	1	176	499	33	72	36.	825	¶	•
				A	USTRALIA	AND TER	RITORIES	s.			
1947		59	20	788	827	26	326	233	2,279	87	219
1948		59	24	1,009	1,208	68	331	259	2,958	168	345

<sup>•</sup> Ground stations (aeradio stations) for communication with alreraft stations, † Ground stations for communication with ship stations, ‡ Stations established at fixed locations on land for the conduct of point to point services and for communication with mobile stations. § Stations installed in motor vehicles and small harbour vessels not falling within the definition of ship stations or alreraft stations; and stations comprising small portable apparatus used for various purposes. The variable is the stations of the variable in the stations of alreraft stations; and stations comprising small portable apparatus used for various purposes.

#### WIRELESS BROADCASTING.

Broadcasting of all types is administered by the Postmaster-General, who issues licenses to broadcasting stations and to listeners. Broadcasting stations are divided into two classes: Commercial, operated under license from the Postmaster-General; and National, owned by the Commonwealth Government. The Australian Broadcasting Control Board has supervised all broadcasting stations since 15th March, 1949.

## Australian Broadcasting Control Board.

An Australian Broadcasting Control Board of three full-time members was constituted on 15th March, 1949, under the Australian Broadcasting Act, 1948. The Board, with the approval of the Minister, has authority to supervise and control both classes of broadcasting stations, television stations, facsimile stations and services of a like kind. If fixes standards and practices for technical equipment, frequencies of operating power and the hours of transmission; it also controls the formation of networks of broadcasting stations. Programmes of stations are regulated by the Board, which has to ensure that comprehensive programmes are provided for The Australian Broadcasting Act, 1948, stipulates that programmes should contain reasonable variety, adequate religious broadcasts, an equitable basis for political and controversial matter and, in respect of commercial stations, a proportion of advertising that is not excessive; broadcasting a dramatization of any political matter occurring less than five years previously is prohibited. The Board, with the approval of the Postmaster-General and the Treasurer, may grant financial or other assistance to commercial broadcasting stations to enable programmes of adequate standard to be provided in their areas.

Broadcasting Advisory Committees appointed by the Postmaster-General in each State, advise the Board on matters relating to programmes and may report on objectionable items broadcast.

Licensees of commercial broadcasting stations are compelled by statute to disclose any particulars relating to broadcasting activities on request by the Board.

## National Broadcasting Service.

The National Broadcasting Service consists of stations owned by the Commonwealth Government. Programmes are provided by the Australian Broadcasting Commission and technical services by the Postmaster-General's Department. The Service was inaugurated in July, 1929, by the purchase of two commercial stations in New South Wales. Programmes were provided by private enterprise until 1st July, 1932, when the Australian Broadcasting Commission was established.

The Commission, which was increased from five to seven part-time members in March, 1949, is appointed by the Commonwealth Government. Staff and artists are engaged by the Commission, including permanent orchestras and news-gathering personnel. It is responsible for the provision of studios and offices and for rates of remuneration and conditions of employment. Prior to March, 1949, the revenue of the Commission was received from a proportion of the fees paid for broadcast listeners' licenses, supplemented, when necessary, by Government grants. Since March, 1949 estimates of receipts and expenditure have been submitted to the Postmaster-General and funds have been appropriated by Parliament.

At 30th June, 1948, there were seven national broadcasting stations in New South Wales and one in the Australian Capital Territory.

#### Commercial Broadcasting Stations.

Licenses for commercial broadcasting stations are issued by the Postmaster-General's Department. The fee is £25 per annum, plus, for the second and following years (where a profit was made by the station), one half of one per cent. of the gross earnings for the year from the operation of the station. Commercial stations, operated usually by private organizations, derive their income from advertising and other broadcast publicity. Stations are subject to supervision by the Australian Broadcasting Control Board (see above). Commercial stations in New South Wales increased from 2 in 1924 to 16 in 1934, and 35 in 1939; at 30th June, 1948, there were 35 commercial stations in New South Wales (including 6 in Sydney) and one station in the Australian Capital Territory.

## Broadcast Listeners' Licenses.

A broadcast listeners' license must be held in respect of every radio receiving set or appliance in use, or which is capable of being used, for the reception of broadcast programmes. For the first set the fee is £1 per annum, except in locations distant more than 250 miles from a national broadcasting station, where the fee is 14s. For each receiver in excess of one the fees are 10s. and 7s. respectively. Pensioners complying with certain conditions are charged one half of these license fees. Licenses are granted free to blind persons and to all schools; public hospitals and charitable institutions are not charged fees on receivers in excess of one.

Broadcast listeners' licenses in force in New South Wales and the Australian Capital Territory increased from approximately 4,000 in 1924 to 100,798 at 30th June, 1929, and to 226,831 at 30th June, 1934. Annual particulars since 1938 are shown in the following table:—

Table 528.—Broadcast Listeners' Licenses in New South Wales.\*

		Broado	east Listeners'	Licenses in	Force—	Fees Received
At 30th June.		For First Receiver. For each Additional Receiver.		Total Licenses.	Licenses per Thousand of Population.	during Year ended 30th June.
						£
1938		403	3,978	403,978	148	423,356
1939		433	3,029	433,029	157	453,766
1940		458	3,155	458,155	164	480,078
1941		494	1,884	494,884	176	499,726
$1942 \dots$		500	),451	500,451	176	499,426
$1943 \dots$		533,621	18,423	552,044	192	539,748
1944		538,151	21,881	560,032	193	544,921
$1945 \dots$		548,074	24,623	572,697	195	555,622
1946		550,068	25,796	575,864	194	556,906
1947		643,818	35,687	679,505	226	652,433
1948		650,498	48,761	699,259	230	ء 663,38

<sup>\*</sup> Including the Australian Capital Territory.

# LAND TRANSPORT

The initial problem of establishing an efficient system of transport in New South Wales was rendered difficult by several causes, viz., the existence of a belt of rugged highlands comparatively near the coast readily passable at only a few points; the consequent difficulty in connecting the coast with the interior; the absence of navigable rivers and waterways; and the scattered nature of the settlement.

The early policy of the government made Sydney the commercial as well as the political centre of the whole settlement. Advantageously situated on an unrivalled natural harbour, it became from the earliest times the point from which the roads radiated, and to which trade and commerce were drawn, despite the relative infertility of the neighbourhood and the difficulty of access to the fertile interior.

The interior of New South Wales is connected with the sea by rail at various points, and parts of the southern Riverina are served by border railways of the Victorian Government system giving access to ports on the southern coast of Australia.

A network of main and secondary roads permits motor transport to all inhabited parts of the State.

#### LAND TRANSPORT SERVICES.

State ownership of land transport services in New South Wales embraces practically all the railways and tramways, and a major share of the motor omnibus services in Sydney and Newcastle. The land transport services conducted by private enterprise are subject to a measure of State supervision.

An outline of the system of administration of these services prior to 1932 was given in the 50th and earlier issues of this Year Book. Since 1932 the Ministry of Transport has been divided into three departments, each under the control of a Commissioner, viz., (1) railways, (2) road transport and tramways, (3) main roads. An assistant commissioner may be appointed in each department. In July, 1944, by amendment of the Transport (Division of Functions) Act, 1932, the Departments of Main Roads and Road Transport and Tramways were made subject to the direction of the Minister for Transport.

There is an Australian Transport Advisory Council, consisting of Commonwealth and State Ministers for Transport, with the function of developing a common national policy on transport matters.

## WAR-TIME CONTROL OF LAND TRANSPORT.

An outline of the system of war-time control of land transport by the Commonwealth was given in the 50th and earlier issues of this Year Book. By January, 1949, the only control still in force was petrol rationing.

Further details of these controls are contained in the chapter "Motor and Other Licensed Vehicles".

# ROADS AND BRIDGES

#### LENGTH OF ROADS.

The total length of the roads in the State was estimated at 124,443 miles in 1946. The nature of the roads and their distribution in municipalities and shires are shown in the following table:—

Table 529.—Length of Roads, 1946.

	M	unicipalitie	s.				
Nature of Road, Street or Lane.	Metro- politan.	Metro- New- Other		Shires.	Western Division.	Total, N.S.W.	
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
Cement Concrete	247	17	22	90	1	377	
Asphaltic Concrete	173	14	4	21		212	
Tar or Bituminous Macadam	1,640	94	873	1,182	2	3,791	
Surfaced Waterbound Macadam	233	73	.624	2,825	3	3,758	
Waterbound Macadam	257		219	2,213	12	2,701	
Gravel or Crushed Rock	331	99	1;806	27,536	544	30,316	
Formed only	223	16	1,096	22,401	2,378	26,114	
Cleared only	51	10	742	20,596	1,088	22,487	
'Natural Surface	206	5	713	29,971	3,792	34,687	
Total	3,361	328	6,099	106,835	7,820	124,443	

The density of roads varies greatly in the different divisions. Within the populous Sydney and Newcastle districts there were in 1946, on the average, approximately 13 miles of road to every square mile. In the other municipalities, which include the larger country towns outside Sydney and

Newcastle, the average was 3.5 miles, of which 2.6 miles were formed roads (i.e., excluding cleared only and natural surface). In the shires, which consist for the most part of agricultural and pastoral lands, the averages per square mile were much lower; viz., all roads 0.6 miles and formed roads 0.31 miles. There has been little road development in the unincorporated Western Division, as this vast area of about 125,000 square miles is devoted almost exclusively to sheep-raising on large holdings. The length of roads in the Western Division was 7,820 miles in 1946.

Particulars of the principal roads were published in the 1938-39 issue of the Year Book on page 362.

#### MAIN ROADS ADMINISTRATION.

An outline of the systems of road administration in New South Wales up to 1925 was given on page 533 of the 1926-27 issue of the Year Book.

The Main Roads Act, 1924, was brought into operation by proclamation as from 1st January, 1925. The first Main Roads Board was appointed in the following month and commenced operations on 12th March, 1925. The functions of the Board were transferred in 1932 to the control of a Board of Transport Commissioners to be administered in co-ordination with the railways and tramways and other transport services. Subsequently the mains roads administration was reorganised as a separate department in the Ministry of Transport under the control of a commissioner who, with an assistant commissioner, is appointed for a term of seven years.

The Main Roads Department exercises control over governmental activities in connection with road works. These activities embrace works on main and developmental roads throughout the State, all roads in the unincorporated portion of the Western Division and proclaimed national works, principally bridges and ferries, which were constructed from Government funds.

The Department co-operates with the municipal and shire councils in the work of constructing and maintaining a well-organised system of main highways, with the primary object of developing the lands in the State, feeding the railways with traffic, giving the primary producers access to markets, and providing facilities for motor traffic.

Public roads, except those within the City of Sydney, may be proclaimed as main roads upon the recommendation of the Commissioner. The most important classes of main roads are (1) the State highways, which form the principal avenues of road communication between the coast and the interior or throughout the State and connect with similar avenues in other States; (2) trunk roads, which, with the State highways, form the framework of a general system of inter-communication throughout the State; (3) ordinary main roads, which are those not classified as highways or trunk roads. From 1945, main roads to serve through motor traffic, to be known as motorways, may be provided. Access to these from abutting lands and side roads will be restricted.

Any road, not being a main road, may be proclaimed as a developmental road if it will help to develop a district, and a short section of roadway may be proclaimed a developmental work. The whole or part of the cost of construction of developmental roads and works may be provided from a fund formed in the Main Roads Department for the purpose.

## Classification of Proclaimed Roads.

The following table shows a classification of the proclaimed roads in the Eastern and Central Divisions of the State at intervals since 1929:—

Table 530.—Length of Proclaimed Roads, Eastern and Central Divisions, N.S.W.

		Main	Roads.	Secondary Roads	Develop-	Total	
At 30th June.	State Highways.	Trunk Roads.	Ordinary Main Roads.	Total.	(Metro- politan Area).	mental Roads.	Proclaimed Roads.
	-						
	miles.	miles.	miles.	miles.	miles.	miles.	miles,
1929	3,548	2,342	7,664	13,554	43	2,328	[15,925]
1931	3,652	2,321	7,849	13,822	86	2,450	16,358
1936	3,846	2,424	8,984	15,254	100	2,379	17,733
1939	5,183	2,371	9,039	16,593	93	2,469	19,155
1946	5,147	2,367	9,611	17,125	78	2,749	19,952
1947	5,162	2,378	9,644	17,184	81	2;805	20,070
1948	5,161	2,388	9,746	17,295	56	2,801	20,152

In the Eastern and Central Divisions between 1929 and 1948, State Highways increased by 1,613 miles or by 45.5 per cent., ordinary main roads by 2,082 miles or 27.1 per cent., and all proclaimed roads by 4,227 miles or 26.5 per cent.

A classification of the proclaimed roads in all parts of the State at 30th June, 1948, is shown below:—-

Table 531.-Length of Proclaimed Roads, N.S.W., 30th June, 1948.

Class of Road.	County of Cumberland.	Balance of Eastern and Central Divisions.	Western Division.	Total.
Main Roads— State Highways	miles.	miles.	miles.	miles. 6,490
Trunk Roads Ordinary Main Roads	691	2,388 9,115	1,353 2,889	3,741 12,635
Total Secondary Roads Developmental Roads	. 56	16,471  2,801	5,571 	22,866 56 2,801
Grand Total	. 880	19,272	5,571	25,723

#### Main Roads Finances.

The terms of the Main Roads Act require that the moneys of the Main Roads Department be kept in separate funds: (1) the County of Cumberland Main Roads Fund for metropolitan main roads, i.e., those in the County of Cumberland which, for the purposes of the Act, is deemed to include the city of the Blue Mountains, and small sections of the Colo and Blaxland shires and the city of Wollongong; (2) the Country Main Roads Fund; (3) the Developmental Roads Fund. Another fund—the

Federal Aid Roads Fund—was kept for moneys to be applied to road works in terms of an agreement between the States and Commonwealth, as described on page 184 of Year Book No. 50; it was closed at 30th June, 1934.

The income of the two Main Roads Funds is derived chiefly from (a) the proceeds of taxes on motor vehicles; (b) grants from the Commonwealth Government; (c) contributions by municipal and shire councils; and (d) loan moneys appropriated for the main roads. In the initial stages of the Department's activities substantial grants were paid to the funds from the State revenues, and in 1930-31 and the two years ended 30th June, 1942, payments were made from unemployment relief funds.

Prior to 1946-47, the resources of the Developmental Roads Fund were derived mainly from State loan appropriations. In 1947-48 the Fund received moneys provided by the Commonwealth under the Aid Roads and Works Act, 1947-48, for roads in sparsely settled areas, in addition to a State loan vote. For particulars of earlier appropriations to the Developmental Roads Fund, see Official Year Book No. 50, page 182.

The proceeds of the motor tax, with the exception of a small proportion paid into the Public Vehicles Fund (see page 643), are distributed amongst the Cumberland and Country Main Roads Funds. The tax on vehicles owned by residents of the metropolitan district is apportioned in equal shares between these two funds, and the Country Main Roads Fund receives the tax on motor vehicles registered in the country.

The councils in the metropolitan road district, except the City of Sydney, may be required to contribute to the County of Cumberland Main Roads Fund at a rate not exceeding ½d. in the £, on the unimproved capital value of ratable property. The maximum rate was fixed at ½d. in the £, for the years 1925 to 1932 inclusive, and then reduced to  $\frac{7}{16}$ d. The rate payable in respect of land used for agricultural and pastoral purposes is one-half the rate levied on other lands in the district. The rate in the City of Sydney was also one-half the ordinary rate until this area was exempted as from 1st January, 1938.

Contributions by country councils to the Country Main Roads Fund depend upon the amount expended on the main roads, the maximum in any year being the sum equal to a rate of ½d. in the £ on the unimproved capital value of ratable property. Usually, contributions by country councils are not paid to the Department's funds as in the case of metropolitan councils, but are applied directly in meeting the councils' share of the cost of works.

The Main Roads Funds are expended on the construction and maintenance of main roads in the respective districts, and on administrative expenses and loan charges, including interest, exchange, sinking fund and management.

In the metropolitan district, where the levy on councils is compulsory, the whole cost of construction and maintenance of main roads is paid from the funds of the Main Roads Department, but the actual work may be done by the councils.

In the country districts assistance in respect of road works may be granted by the Department to the council of any area through which a main road passes, and the council may be required to contribute part of the cost of the work as prescribed by the Act. The councils may pay a greater proportion of the cost than is prescribed, or in special circumstances, the whole cost of any particular work may be paid from the Roads Funds, or the cost may be advanced to be repaid by the councils.

The proportion of the cost of works on country roads borne by the Department of Main Roads varies with the class of roads. Since 1st July, 1936, the Department has paid the whole cost of works on State highways in the country, at least three-quarters of the expenditure on trunk roads, and two-thirds the cost of ordinary main roads. In addition, since 1st November, 1932, the Department has paid the whole cost of bridges over 20 feet span on trunk roads and three-fourths of the cost of bridges on ordinary main roads.

The cost of constructing developmental roads and works is borne in full by the Main Roads Department, but local councils are required to maintain them in satisfactory condition. Since 30th June, 1942, the charges on all loans expended on developmental roads and works have been paid from the Consolidated Revenue Fund.

## Commonwealth Grants for Main Roads.

Since 1923-24, funds have been provided by the Commonwealth from petrol tax to assist the States in the construction and upkeep of roads. Up to 30th June, 1926, payments to the States were made from a trust fund as expenditure approved by the Commonwealth was incurred. Subsequently, up to 30th June, 1947, annual grants were made in terms of agreements under the Federal Aid Roads Act. Particulars of the agreements covering periods up to 30th June, 1947, were published in previous issues of the Year Book.

The Commonwealth Aid Roads and Works Act, 1947-48, provides for the following sums to be paid into the Aid Roads and Works Trust Account during the three years commencing 1st July, 1947, to be spent on the purposes specified and in accordance with a policy approved by the Commonwealth Minister for Transport:—

- (i) The equivalent of 3d. per gallon of customs duties on petrol and 2d. per gallon of excise duties on locally refined petrol and certain petrol substitutes (excluding any duties on aviation fuel), to be distributed annually among the States, for the construction and maintenance of roads. Of the total amount distributed each year, Tasmania is to receive 5 per cent. and the balance is to be allocated to the other States on the basis of three-fifths population and two-fifths area. Of each State's grant, up to one-sixth may be spent on works connected with transport other than roads;
- (ii) Amounts of £1,000,000 in 1947-48, £2,000,000 in 1948-49 and £3,000,000 in 1949-50 to be distributed among the States in the same proportions, for roads in sparsely settled areas, or for the purchase of road-making plant beyond the resources of local authorities;
- (iii) £500,000 per annum to be applied by the Commonwealth to strategic roads and roads of access to Commonwealth property;
- (iv) £100,000 for the promotion of road safety throughout the Commonwealth.

The amounts payable to New South Wales in respect of 1947-48 were £1,336,000 under clause (i) above and £282,000 under clause (ii).

Since June, 1931, the Commonwealth grants for road construction received by New South Wales have been apportioned between the County of Cumberland and Country Main Roads Funds in the same ratio as the receipts from State motor taxation.

## Main Roads Funds-Receipts and Payments.

The accounts of the Main Roads Department were presented on an "income and expenditure" basis to 1940-41 and on a "receipts and payments" basis thereafter, and they include particulars of the extensive defence works constructed by the Department in New South Wales and elsewhere, mainly from Commonwealth funds. The accounts of the last six years are summarised below.

Table 532 .- Main Roads Department-Aggregate Receipts and Payments.

Particulars.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Receipts.	£	£	£	£	£	£
Motor Taxes, Fees, etc Contributions by Councils Grants by State Govern-	$\substack{1,644,126\\242,052}$	1,758,057 237,972	$\substack{1,845,377\\242,021}$	2,024,947 222,097	2,081,870 244,043	2,266,351 249,674
ment and Authorities State Loans Commonwealth	8,539 50,000	4,127 	(-) 4,830 	13,398 300,000	4,235 400,000	53,095 300,000
Appropriations— Petrol Tax Defence Works * Other	440,031 3,776,425	143,958 2,033,340	536,509 633,312	873,425 77,337	1,310,459 26,127	1,730,467† 38,633 120,857
Miscellaneous	183,821	209,403	210,349	128,691	141,104	291,142
Total £	6,344,994	4,386,862	3,462,738	3,639,895	4,207,838	5,050,219
Payments.						
Roads in New South Wales—				'		
Construction Maintenance Defence Works (New South	596,302 $1,121,456$	$\substack{465,097\\1,552,390}$	444,164 1,609,678	561,185 1,811,500	1,082,087 2,222,637	1,402,546 2,483,366
Wales and elsewhere) Loans— Repayments and	3,717,719	1,343,043	989,603	186,327	81,271	16,940
Sinking Fund Interest Exchange and	129,735 156,698	$150,234 \\ 144,650$	101,940 142,422	97,495 133,351	99,967 143,147	776,444 122,166
Management Administrative Expenses Miscellaneous	21,801 115,818 118,858	$20,022 \\ 114,846 \\ 62,360$	21,234 119,241 92,986	18,778 138,199 399,019	18,647 170,990 252,896	15,958 185,179 148,147
Total £	5,978,387	3,852,642	3,521,268	3,345,854	4,071,642	5,150,746

\* For roads in sparsely populated areas (see page 595), † Includes £398,830 in respect of previous years (see below).

The chief sources of funds have been motor taxation and grants from petrol tax, and the largest receipts in any year from these items were motor taxes £2,266,351 and petrol tax £1,730,467 in 1947-48. The increase in the last two years was mainly due to the post-war expansion of motor traffic.

Petrol tax receivable from the Commonwealth in the months November, 1943, to July, 1944, was remitted by the State to assist the Commonwealth war finances, hence the receipts in 1943-44 were applicable to only four months and those in 1944-45 to eleven months. The amount foregone, viz., £398,830, was paid to the State in 1947-48.

In 1947-48 an amount of £120,857 was received by the Department from the Commonwealth under the Aid Roads and Works Act, 1947-48, for roads in sparsely settled areas (see page 595).

Total receipts of the Main Roads Department in the twenty-three years since its inception to 30th June, 1948, were approximately £77,400,000, excluding £8,260,000 provided by the Commonwealth Government for defence works. Motor taxes, £38,364,000, represented 50 per cent. of the net total; petrol tax was £17,147,000 or 22 per cent., contributions by councils £6,396,000 or 8 per cent., and State appropriations £12,698,000 or 16 per

cent. The aggregate cost of works on roads and bridges in New South Wales was £64,101,000, comprising construction £33,620,000 and maintenance £30,481,000; administrative expenses totalled £2,212,000, interest and exchange on debt £3,680,000, and debt repayment £4,124,000.

The main items of receipts and payments of each of the Roads Funds during the last five years are shown in the following statement:—

Table 533.—Main Roads Department—Principal Receipts and Payments,

Various Funds.

			Var	ious run	us.			
		Recei	pts.			Paym	ents.	
Year ended Oth June.	State	Common- wealth	Councils'	State	Roads in	N.S.W.	Debt Ci	arges.
от в иде,	Motor Taxation,	Aid : Petrol Tax.	Contribu- tion.	Loan Vote.	Con- struction.	Mainteu- ance.	Interest, Exchange.	Repay- ment.
		Cou	NTY OF CU	MBERLAND A	fain Roads	FUND.		
1944 1945 1946 1947 1948	£ 412,299 416,439 454,380 498,502 540,569	£ 33,830 126,080 205,255 307,958 406,660	£ 232,933 235,723 216,884 236,998 243,639	£  	£ 114,189 118,002 195,491 374,345 473,063	£ 270,913 253,314 298,699 361,061 413,139	£ 37,472 35,881 32,749 29,709 7,091	£ 67,698 37,849 34,376 35,622 701,135
			COUNTRY	Main Roa	DS FUND.			
1944 1945 1946 1947 1948	£ 1,345,758 1,428,938 1,570,567 1,583,368 1,725,782	£ 110,128 410,429 668,170 1,002,501 1,323,807†	£ 5,039 5,798 5,213 7,045 6,035	£  250,000 300,000 250,000	£ 341,410 312,602 335,417 668,329 828,446	£ 1,281,477 1,356,364 1,512,801 1,861,576 2,070,227	£ 127,200 127,775 119,380 132,085 131,033	£ 82,586 64,091 63,119 64,345 75,309
			DEVELOP	MENTAL ROA	.ds Fund.*			
1944 1945 1946 1947 1948	£	£	£ 500	£  50,000 100,000 50,000	£ 9,498 13,560 30,277 39,413 101,037	£	£	£
			To	fal, All Fu	JNDS,			
1944 1945 1946 1947 1948	£ 1,758,057 1,845,377 2,024,947 2,081,870 2,266,351	£ 143,958 536,509 873,425 1,310,459 1,730,467†	£ 237,972 242,021 222,097 244,043 249,674	£  300,000 400,000 300,000	£ 465,097 444,164 561,185 1,082,087 1,402,546	£ 1,552,390 1,609,678 1,811,500 2,222,637 2,483,366	£ 164,672 163,656 152,129 161,794 138,124	£ 150,234 101,940 97,495 99,967 776,444

<sup>\*</sup> Receipts in 1947-48 included £120,857 from the Commonwealth.

† Includes receipts in respect of previous years (see page 596).

Of the motor taxes, fees, etc., paid to the Main Roads Department, the County of Cumberland Main Roads Fund received 24.0 per cent. in 1946-47 and 23.9 per cent. in 1947-48; the proportions received by the Country Main Roads Fund were 76.0 per cent. and 76.1 per cent., respectively. In recent years the Cumberland Fund has received 23.5 per cent. of the Commonwealth grant from petrol tax, and the Country Fund 76.5 per cent.

Expenditure from the various funds of the Main Roads Department on construction and maintenance of roads and bridges in New South Wales to 30th June, 1948, is shown in the following statement; expenditure of Commonwealth Aid Roads moneys between July, 1927, and June, 1934, has

been allocated in the table to existing funds, according to the class of roads on which the moneys were expended.

Table 534.—Main Roads Department—Expenditure on Construction and Maintenance of Roads in N.S.W. to 30th June, 1948.

Year ended	Cumberland Main Roads.		Country M	ain Roads.	Develop- mental	Total, A	Total, All Funds.	
30th June.	Con- struction.	Main- tenance.	Con- struction.	Main- tenance.	mental Roads—Con-struction. Construction. Construction. Construction. Market Construction. Construct	Main- tenance.		
1926 to 1930 1931 to 1935 1936 to 1940 1941 1942 1943 1944 1946 1946 1947	£ 3,473,200 1,271,263 2,299,045 902,312 654,381 156,867 114,189 118,002 195,491 374,345 473,063	£ 1,038,656 1,192,364 1,395,133 261,888 218,235 195,958 270,913 253,314 298,699 361,031 413,139	£ 5,952,137 3,202,695 5,676,446 1,836,296 1,071,365 422,542 341,410 312,602 335,417 608,332 828,446	£ 3,044,333 4,172,724 6,087,268 1,192,358 1,075,216 925,498 1,281,477 1,356,364 1,512,801 1,861,576 2,070,227	697,901 606,591 171,390 85,332 16,893 9,498	5,170,491 8,581,896 2,909,998 1,811,078 596,302 465,097 444,164	£' 4,082,989 5,366;456 7,482,587 1,454,246 1,293,451 1,121,456 1,552,390 1,609,678 1,811,500 2,222,637 2,483,366	
Total to 30-6-48	10,032,158	5,899,360	20,647,685	24,579,842	2,941,889	33,620,178	30,480,756	

#### BRIDGES AND FERRIES.

Nearly all the large bridges of recent date have been constructed of iron and steel and reinforced concrete, and some of them have been erected under difficult engineering conditions, owing to the peculiarity of the river flow in certain parts of the country. The municipal and shire councils are empowered to control the bridges, with the exception of those under the control of the Main Roads Department. The most notable bridge-building project is the Sydney Harbour Bridge described on the next page.

Tolls are charged on the George's River bridge, built by the Sutherland Shire Council, the Parramatta River bridge, built by the Ryde Municipal Council, and the Peat's Ferry bridge, built by the Main Roads Department. The last-named carries the Pacific Highway across the Hawkesbury River, replacing the ferry service formerly operated at the site.

The tolls collected in respect of these bridges in each year since 1939 are shown in the following statement:—

Table 535.—Tolls Collected on Certain Bridges.

	Tolls Collect			Tolls Collected.				
Year.	George's River Bridge.	Parramatta River Bridge:	Year.	George's River Bridge.	Parramatta River Bridge.	Peats Ferry Bridge.*		
1939 1940 1941 1942 1943	£ 40,353 37,815 27,611 15,540 14,953	£ 16,948 12,489 10,531 6,685 6,237	1944 1945 1946 1947 1948	£ 16,667 22,020 39,513 46,559 48,547	£ 6,783 9,221 16,408 21,203 22,178	£ 2,258 21,997 40,470 41,104		

<sup>•</sup> Year ended 30th June.

Where local conditions and limited traffic have not favoured the erection of a bridge, a punt or ferry has been installed. The principal ferries, which are worked otherwise than by hand, are operated free of charge to the public, but the Government makes a small grant annually to compensate municipal and shire councils for revenue lost by the abolition of tolls in 1908. The Stockton Ferry, operated across the Hunter River at Newcastle by the Main Roads Department, is an exception. The tolls collected were £3,824 in 1946-47 and £3,975 in 1947-48. Tolls collected by the Department for the Peat's Ferry service (discontinued upon opening of the bridge) were £7,624 in 1943-44 and £7,475 in 1944-45 (to 4th May).

## Sydney Harbour Bridge.

The Sydney Harbour Bridge, crossing between Dawes Point on the southern and Milson's Point on the northern side, is the largest arch bridge in the world. Its total length, with railway and roadway approaches, is 2\frac{3}{2}\text{miles.} The railway across the bridge connects the City Railway at Wynward Station and the northern suburban line at Waverton Station. The bridge was opened for traffic on 19th March, 1932. Its administration is vested in the Department of Main Roads.

The main bridge consists of a steel arch span of 1,650 feet, with a rise of 350 feet at the centre of the lower chord at crown, and the highest point of the top chord is 440 feet above mean sea level. It is flanked on either side by granite-faced concrete abutment towers and pylons and by five steel approach spans. The clearance for shipping is 170 feet from high-water level. The width of the deck overall is 160 feet; it carries a roadway 57 feet wide in the centre, with a pair of railway tracks on each side, and a footway 10 feet wide on each extreme outside. The main arch is composed of silicon steel and the deck of carbon steel. The weight of steelwork in the bridge is 51,990 tons, of which 36,860 tons are in the main span.

The total capital cost of the bridge to 30th June, 1948, was £9,746,329, of which £8,066,454 was expended from loan funds, but the final cost will probably approximate £9,600,000 upon realisation of surplus resumed lands.

Tolls are charged for traffic other than pedestrian, and the railway, tramway and omnibus authorities pay prescribed amounts in respect of paying passengers carried across the bridge. Part of the cost of the bridge was met by a special levy on land in adjacent local areas; the levy was abolished at the end of 1937.

The charges payable in respect of vehicular traffic across the bridge (other than railway and tramway traffic) are shown below.

			8.	d.
Motor cars and motor cycles with side cars		each	0	6
Bicycles, tricycles, motor cycles without side cars, light propelled by hand or horse-drawn		,,	0	3
Vans, lorries, drays, or other vehicles of which the tar does not exceed 2 tons	e weight	,,	0.	9.
Vans, lorries, drays, or other vehicles of which the tar exceeds 2 tons, but does not exceed 3 tons		,,	1	6:
Vehicles over 3 tons tare weight		<b>3</b> .	2	<b>0</b>
Persons aged 14 years and over, riding in vehicles (of the driver)	her than	97	0	3

One pair of railway tracks is used for trams. The tram fare for the Bridge section was reduced from 4d. to 3d. per adult passenger on 1st October,

1932, and to 2d. on 1st January, 1939; on 1st July, 1947, the fare was increased to 3d. where the journey did not extend beyond the Bridge, and on 29th November, 1948, it was raised to 4d. on Saturdays and Sundays and on Mondays to Fridays between 8 p.m. and 4.30 a.m.; the tram fare for children was 2d. until 1st January, 1939, and 1d. thereafter. Motor omnibus services were extended across the Bridge on 1st August, 1937; the fares are the same as for tram passengers.

Road tolls and contributions for railway and tramway passengers and by councils are paid into the Bridge Account. The income and expenditure in 1938-39 and in each of the last six years are shown below:—

Table	536.—Sydney	Harbour	Bridge—Income	and	Expenditure.
-------	-------------	---------	---------------	-----	--------------

Particulars.	1938–39.	1942-43.	1943-44.	1944–45.	1945-46.	1946–47.	1947–48
Income	£	£	£	£	£	£	£
Road Tolls	278,297	126,411	131,156	150,370	225,554	321,496	352,487
Railway Tolls	103,697	111,336	116,184	119,253	134,005	130,561	130,460
Tramway Tolls	33,991	17,822	18,971	19,165	18,955	18,163	16,670
Omnibus Tolls	4,746	6,582	5,914	6,236	6,592	8,444	9,710
Other	8,367	8,810	9,010	7,518	8,621	9,225	9,802
Total Income	429,098	270,961	281,235	302,542	393,727	487,889	519,129
Expenditure— Maintenance	36,739	25,485	24,135	24,889	32,013	53,186	56,218
Collection of Road Tolls Loan Charges—	10,520	9,400	9,553	9,931	11,411	14,023	20,778
Interest	294,748	279,452	274,466	275,487	271,430	266,260	256,512
Exchange	38,454	38,418	38,409	38,436	36,787	35,648	30,701
Management	1,596	1,554	788	1,377	1,070	1,473	1,144
Sinking Fund	40,563	52,279	55,096	65,465	66,608	65,531	66,272
Other	1,674	17,132	10,321	4,291	1,888	1,667	2,207
Total Expenditure	424,294	423,720	412,768	419,876	421,207	437,788	433,832
Surplus	4,804	152,759*	 <sub> </sub> 131,533*	117,334*	27,480*	50,101	85,297

<sup>\*</sup> Deficiency.

The Bridge Account had a credit balance of £94,059 at 30th June, 1939, but, owing to war-time restrictions on motor traffic, deficiencies in each year 1939-40 to 1945-46 aggregated £639,300, and at 30th June, 1946, the net accumulated deficiency was £545,241. As a result of the post-war increase in motor traffic, there were surpluses of £50,101 and £85,297 in 1946-47, and 1947-48 respectively, which reduced the accumulated deficiency to £409,843 at 30th June, 1948. Total income in 1947-48 was £90,031 (or 21 per cent.) more than in 1938-39.

The number of road vehicles which crossed the Bridge was 7,911,000 in 1946-47 and 8,741,073 in 1947-48; in the latter year passengers, including drivers, numbered 15,217,000. Railway passengers numbered 23,577,000 and tram and omnibus passengers 24,206,000 in 1946-47, as compared with 23,548,000 and 24,815,000, respectively, in 1947-48.

## EXPENDITURE ON ROADS, BRIDGES, ETC.

Moneys expended on roads in New South Wales are disbursed for the most part by the Department of Main Roads and the councils of municipalities and shires, but some road works have been constructed by other governmental departments and bodies—especially for the relief of unemployment.

It is difficult to determine the annual aggregate expenditure on roads and bridges and that of each authority without duplication or omission. This is so because various authorities frequently undertake road works in association with or as agent for others and expend moneys provided as grants or loans by other authorities. Furthermore, expenditure on road works has not been distinguished clearly in some cases when these works were subsidiary to the designated purpose for which funds were voted and expended. This was especially the case in regard to the large sums expended annually on unemployment relief works between 1930-31 and 1941-42.

The particulars given in the following table, therefore, are to be regarded as approximate, especially the amounts classified as "other" expenditure by the State Government. The expenditure on construction, maintenance and direct administration from revenue and loans is included, but not debt charges (interest or repayment) on loans. Where the State Government or Departments have paid for works constructed by councils, the expenditure is classified under the heading "State Government," and the expenditure classified as "Local Government" represents the approximate expenditure from revenue and loans raised by the councils.

Table 537.—Total Expenditure on Roads, Streets and Bridges in New South Wales.

	State Gove	ernment.*	Local Government	Total.	
Period.	Main Roads Department.	Other,	(Municipalities and Shires.)†		
	£	£	£	£	
1932–33 to 1936–37	12,558,850	7,747,067	10,112,159	30,418,076	
193738	3,281,898	1,457,751	3,397,590	8,137,239	
1938-39	3,358,324	2,019,138	3,516,637	8,894,099	
1939-40	4,346,905	1,352,047	2,831,486	8,530,438	
1940-41	4,471,422	544,549	2,650,543	7,666,514	
1941-42	3,212,542	256,67 <b>9</b>	2,375,275	5,844,496	
1942-43	1,833,576	319,824	1,461,102	3,614,502	
1943-44	2,132,333	337,380	1,781,593	4,251,306	
1944-45	2,173,083	303,314	2,129,792	4,606,189	
1945-46	2,510,884	372,897	2,367,857	5,251,638	
1946-47	3,475,714	425,094	3,300,593	7,201,401	
1947-48	4,024,179	707,365	4,202,859	8,934,403	

Includes Commonwealth funds disbursed through State agencies.
 † Calendar year ended six months earlier.

Expenditure on the Sydney Harbour Bridge is not included in the table.

# RAILWAYS, TRAMWAYS AND OMNIBUSES

The total length of railways open for traffic in New South Wales at 30th June, 1948, was 6,456 miles, including 6,128 miles of line vested in the Railways Commissioner of New South Wales; a line 2 miles long from Liverpool to Holdsworthy owned by the Federal Government; 241 miles of border railways in the Riverina district owned by the State of Victoria; and 85 miles of private railways available for general traffic. The length of State railways laid with one or more tracks is shown in Table 539.

#### STATE RAILWAYS.

Administrative authority for the control of the State railways is vested in a Commissioner for Railways, appointed for seven years, and there is an Assistant Commissioner who exercises such powers as the Commissioner may determine.

The railway property is vested in the Railways Commissioner as a body corporate to conduct the services on existing lines and to construct the new lines authorised by the Legislature. By-laws for the regulation of the services, including those by which rates of freight and fares are fixed, must be approved by the Government before they become operative.

The Government Tourist Bureau and tourist resorts were administered by the Commissioner for Railways from 1st January, 1938, to 9th May, 1946, when they were transferred to the control of the Minister for Tourist Activities and Immigration. The finances of these undertakings were not included in the railway accounts.

The receipts from the railway services are paid into the Government Railways Fund, and expenditure from the Fund for operation of the services is subject to Parliamentary appropriation. Loan funds for construction, improvements, etc., are provided by Parliament from the General Loan Account of the State.

Within the Government Railways Fund a special reserve was established as at 1st July, 1945, with a balance of £9,860,730, comprising the residue of sums set aside between 1940-41 and 1944-45 for deferred maintenance, holiday commitments and other purposes. Parliament may appropriate further sums from the Government Railways Fund to the Special Reserve Account, and with its approval the Reserve may be used for maintenance deferred in previous years, for renewals, reconstruction, conversion of assets, special works of maintenance, and for other special expenditure not chargeable to working expenses.

Interest, sinking fund and exchange on the railways loan debt is a charge on the Government Railways Fund; the annual sum payable is that part of the debt charges of the State which corresponds to the ratio between the railways loan debt and the total public debt of New South Wales.

The charge for exchange was imposed for the first time in 1930-31, following depreciation of the Australian currency. A contribution for sinking fund was not charged until 1st October, 1937.

Provision was made in 1928 for annual contribution from State revenues to make good two-thirds of the loss incurred on country developmental railways, the amount of contribution not to exceed £800,000 in any year. The maximum amount of £800,000 was paid in 1928-29 and each succeeding year.

The construction of new railways is authorised by Parliament, and the order of construction and rate of progress are determined by the Commissioner. Interest on lines under construction may be added to the capital cost.

Particulars regarding the finances of the railways and tramways in relation to the finances of the State are published in the chapter "Public-Finance."

An outline of the Commonwealth system of control of the State railways during the war (1939-45) was given on page 192 of Official Year Book. No. 50.

#### LENGTH OF STATE RAILWAYS.

The statistics of State railways shown in this chapter refer to the lines vested in the Railways Commissioner of New South Wales.

The first railway line, 14 miles in length, was opened for traffic between Sydney and Parramatta on 26th September, 1855, and communication was established between Newcastle and East Maitland on 30th March, 1857.

The total route length of the lines open at 30th June, 1948 was 6,128 miles, distributed as follows:—Southern system, 2,188 miles; Western, 2,194 miles; and Northern, 1,746 miles. In addition there were 1,438 miles of sidings and crossovers. At 30th June, 1948, there were 8,396 miles of single-track, including sidings and crossovers.

The growth of the State railway system is illustrated in the following table:—

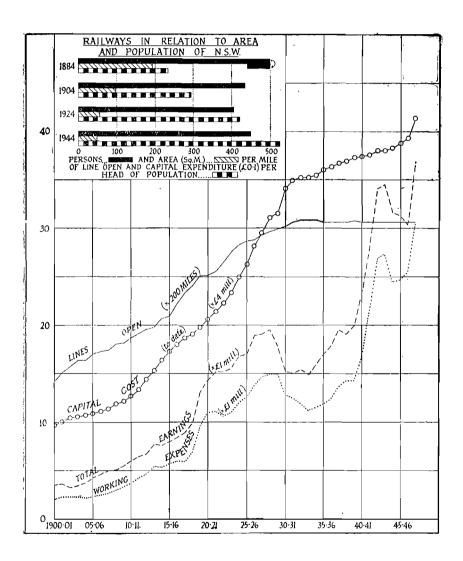
Table 538.-Railways-Lines Open and Capital Cost.

Period.*	Lines opened for traffic during the period.	Lines open for traffic at end of period.			Capital expenditure on lines open for traffic—		
		Total length.	Population per mile.	Area per mile.	Increase during period.	Total at end of period.	
	Miles.	Miles.	No.	Sq. Miles.	£	£	
1855-64	143	143	2,789	2,170	2,631,790	2,631,790	
1865-74	260	403	1,427	770	4,212,756	6,844,546	
1875-84	1,215	1,618	559	192	13,235,592	20,080,138	
1885-94	883	2,501	490	124	15,775,133	35,855,271	
1895-1904	780	3,281	435	95	6,433,246	42,288,517	
1905-14	686	3,9 <b>67</b>	472	78	18,976,352	61,264,869	
1915-24	1,556	5,523	406	56	32,090,298	93,355,167	
1925-34	641	6,164	425	50	47,578,154	140,933,321	
1935-44	(-) 36	6,128	<b>44</b> 9	50	11,211,347	152,144,668	
1945		6,128	476	50	955,152	153,099,820	
1946		6,128	480	50	1,876,195	154,976,015	
1947		6,128	487	50	2,254,669	157,230,684	
1948		6,128	494	50	8,608,330	165,839,014	

<sup>\*</sup> Calendar years to end of 1887, later years ended 30th June. (-) Lines dismantled.
† Includes expenditure on workshops, rolling stock, etc.

<sup>\*10819-4¶</sup> 

## GOVERNMENT RAILWAYS, NEW SOUTH WALES.



Rail transport facilities have been extended not only by the construction of new railways, but also by the laying of additional tracks on existing lines, and by facilities for speedier transport such as electrification, to which much of the capital expenditure in the period 1925 to 1934 was applied. Of the total increase in capital expenditure in 1947-48, £5,975,418, or nearly 70 per cent., was in respect of rolling stock.

Work is proceeding on a line from Maryvale to Sandy Hollow (150 miles). This line has special strategic importance as it will provide the only direct route, alternative to that through Sydney, between the southern States and Queensland. It will link the north-western portion of the State directly by rail with the port of Newcastle. Expenditure on the line to 30th June, 1948, was £1,985,853.

During 1947-48 surveys were made in connection with a proposed new line from Inverell to Iluka, at the mouth of the Clarence River.

The following statement shows the length of lines laid with one or more tracks at intervals since 30th June, 1901:—

	JJJ " INGII	ways Ach	gen and C	iassincation	or rrack	
At 30th June.	Single.	Double.	Triple.	Quadruple.	Sextuple.	Total.
1901 1911 1921 1931 1941 1943 1948	miles. 2,678 3,476 4,428 5,381 5,458 5,426 5,422	miles.  158½ 276 572 612 617 650 650	miles $7\frac{1}{2}$ 8 7 7	miles. $8\frac{1}{2}$ $8\frac{3}{4}$ $34\frac{1}{2}$ $35$ $37$ $41$	miles 1* 8† 8† 8† 8†	miles. 2,845 3,761 5,043 6,044 6,127 6,128 6,128

Table 539.—Railways—Length and Classification of Tracks.

There are duplicate lines on the main western line as far as Kelso and on two other sections between Kelso and Orange; the southern line is duplicated as far as Junee, the northern line as far as Branxton, and the south coast line to Port Kembla North, except certain tunnels and bridges. Quadruplication of the main western line between Lidcombe and Penrith is in progress. Duplication of the suburban line from Kingsgrove to Herne Bay was partially completed in 1947-48.

# Hawkesbury River Railway Bridge.

A new railway bridge, designed and built by the Department of Railways, spans the Hawkesbury River and was opened on 1st July, 1946. Its construction began in July, 1939, and continued throughout the war years. The new bridge carries double tracks and has eight spans, two of 445 feet 8 inches, four of 347 feet 6 inches and two of 147 feet. It has five deep piers founded in sand in depths ranging from 178 feet to 183 feet 7 inches, and its overall length is 2,764 feet. There are 7,900 tons of steel in the superstructure. Up to 30th June, 1946, the expenditure on the bridge was £2,103,904. The old bridge is being gradually dismantled.

# City and Suburban Electric Railways.

The city electric railway, when complete, will form a two-track loop nailway around the city, running, for the most part underground, along the eastern side of the city to Circular Quay and returning along the western

<sup>\*</sup>Five tracks. | †Includes 47 chains with eight tracks.

side to the Central Station. The scheme includes the construction of branches from the city railway to the eastern, south-eastern and southern suburbs. An Act authorising the construction of these branches was assented to on 27th March, 1947, and extensive surveys were made during 1947-48.

The eastern section of the city railway was completed as far as St. James Station, about a mile from Central Station, in December, 1926, and the western section was opened for traffic between Central and Wynyard Stations—approximately 1½ miles—in February, 1932. Suburban services along the main western, southern and northern lines were connected with the North Sydney line by the opening of the Sydney Harbour Bridge in March, 1932. Work is proceeding on the connecting link between St. James and Wynyard.

The suburban railways are for the most part operated by electricity; the total length of the lines under the electric system at 30th June, 1948 was 110 miles 32 chains as shown below. Nearly all these lines are laid with at least two tracks, 24 miles being laid with three tracks or more.

Line.		gth of oute.	Line.	Length of Route.		
City Railway Illawarra— Sydney to National Park Sydenham to Bankstown Tempe to East Hills Sutherland to Cronulla Western— Sydney to Parramatta Clyde-Rosehill Racecourse Northern— Strathfield to Hornsby	8 10 6	ehns. 45 57 33 38 25 60 16	Southern— Lidcombe to Cabramatta Granville to Liverpool * Warwick Farm Racecourse Regents Park to Bankstown Sefton Park East to North Junction North Shore Line	$egin{array}{c} 1 \\ 2 \end{array}$	ehns	

Table 540.—Electric Railways-Length, 30th June, 1948.

# COST OF STATE RAILWAYS.

The total capital expenditure on lines open for traffic as at 30th June, 1948, amounted to £165,839,014, excluding the cost of the line, 2½ miles in length, from Wynyard across the Sydney Harbour Bridge to Waverton. The cost of construction was £108,763,040, and the expenditure on rolling stock and other equipment £57,075,974, viz.: rolling stock, £35,018,709; electric power stations, substations and plant, £12,715,532; machinery, £3,611,445; workshops, £3,311,188; reconditioning of track, £544,100; other items, £1,875,000.

The average cost of the railways per mile open for traffic at 30th June, 1948, was £27,072 for construction, rolling stock and other equipment, including £17,755 for construction. The cost of construction varies greatly according to the class of traffic for which the lines are constructed, the number of tracks laid, and the physical characteristics of the territory through which they run.

Of £165,839,014 expended to 30th June, 1948, an amount of £666,864 was provided from consolidated revenue, and £544,100 represented the unrepaid

<sup>\*</sup> Privately owned.

balance of an interest-free advance of £3,300,000 made by the Treasury in 1934-38 for reconditioning railway tracks and rolling stock, repayable in annual instalments of £165,000 over a period of twenty years, ending in 1954-55. Repayments during the war years exceeded requirements by £1,155,000 but no repayment has been made since 1944-45.

#### FINANCES OF STATE RAILWAYS.

The State railways are regarded as a developmental agency in the settlement of the country rather than as a revenue-producing enterprise, and services on a number of lines are conducted at a loss. In addition, railway finances bear the burden of substantial concessions made for the direct benefit of primary and secondary industries. These include rebates from ordinary charges for the transport of livestock and fodder, and concessions in respect of the carriage of raw materials and the products of certain manufacturing industries which are assisted for national reasons.

The value of concessions borne by the railways in the carriage of livestock and goods amounted to £491,010 in 1946-47 and £594,024 in 1947-48. Further concessions, amounting to £224,359 in 1946-47 and £192,278 in 1947-48, were borne by State revenues.

The capital cost of railways open for traffic, capital debt charges and final net results of operations in various years since 1920-21 are shown in the following table. The charge for sinking fund is the full amount of the contribution payable in each year to the State Treasury. In editions of the Year Book prior to No. 50 (as in the department's accounts) part of the charge for sinking fund was included in working expenses for the retirement of assets.

Year	Capital Expended	Net Earn- ings and		Capital C	harges.		
ended 30th June.	on Lines open to end of year.	Annual State Contribution.	Interest.	Exchange and Loan Management.	Sinking Fund. ‡	Total.	Surplus.
1921 1929 1981 1938 1949 1940 1941 1942 1943 1944 1945 1946 1947	£ thous. 82,304 124,329 132,565 146,808 147,618 149,576 150,061 151,850 152,145 153,100 154,976. 157,231	\$,284,528 5,487,566 5,163,408 6,685,781 5,654,276 6,424,250 7,273,596 7,294,251 7,870,165 7,925,585 7,833,511 7,426,262 5,775,599 7,257,535	£ 3,811,560 6,150,000 6,790,082 5,340,000 5,350,000 5,350,000 5,389,116 5,350,000 5,328,400 5,328,400 5,328,400 5,125,966 5,145,000	£ 794,946 764,312 718,798 718,083 776,385 764,517 779,628 755,131 786,608 741,674 727,661 670,950	\$30,000 747,000 800,000 871,850 936,719 975,000 1,088,060 1,152,000 1,295,000 1,480,295 1,380,000	£ 3,811,560 6,150,000 7,585,028 6,684,312 6,825,798 7,087,645 7,090,352 7,104,623 7,171,531 7,288,608 7,276,674 7,333,042 7,145,950	£ (-) 577,082 (-) 712,484 (-) 4,421,620 (-) 1,171,522 (-) 448,833 235,951 203,899 774,542 754,054 (-) 1,657,943 (-) 1,557,943 (-) 1,557,943 (-) 1,557,943 (11),585

Table 541.—Railways—Capital Charges and Net Earnings.

Railway finances were recovering from the adverse effects of the depression when rising costs and an unfavourable season caused a temporary set-back in 1938-39. Fares and freights were raised in March, 1939, and thereafter results improved steadily until 1942-43, when there was a record surplus of £774,542, after all capital charges had been met and £5,214,000 had been provided for special charges (see Table 542). Although working expenses increased considerably during this period, revenue increased more than proportionately. In 1944-45 and the two following years, gross

<sup>\*</sup> Includes capital expenditure on workshops, rolling stock, etc. † Includes annual contribution of £800,000 from Treasury since 1928–29. (–) Deficit. ‡ See explanation in text preceding table.

earnings declined owing to the gradual cessation of war traffic and increased competition from road and air transport, while working expenses continued to increase steadily. Consequently, in 1945-46 the net surplus declined to £149,588, and in 1946-47 there was a deficit of £1,557,943 after all charges had been met. The raising of fares and freights in August, 1947 (for the first time since 1939) resulted in a surplus of £111,585 in 1947-48.

In 1947-48 capital charges, comprising interest, exchange, loan management and sinking fund, absorbed 18.1 per cent. of gross earnings (excluding the Treasury contribution of £800,000). The proportion in 1946-47 was 24.1 per cent.

Since 1937-38 the working expenses have included repayments of the interest-free loan from the Treasury (referred to on page 606), and from 1940-41, reserves for deferred maintenance, etc. (see page 609). A statement of earnings and working expenses at intervals since 1920-21 appears hereunder:—

	Gross	Worki	ng Expenses a	and Special C	charges.	Net
Year ended 30th June.	Earnings (excluding State Con- tribution).	Working Expenses.	Repayments of Loan for Recondition- ing Track.	Reserve Provisions.	Total.	Earnings before meet- ing Capital Charges.
	£	£	£	£	£	£
<b>1</b> 921	14,267,205	11,032,677			11,032,677	3,234,528
1929	19,615,616	14,978,050			14,978,050	4,637,566
1931	15,205,741	12,842,333		•••	12,842,333	2,363,408
1938	19,486,116	13,463,235	137,100	•••	13,600,335	5,885,781
1939	19,146.441	14,127,165	165,000	•••	14,292,165	4,854,276
1940	19,954,851	14,165,601	165,000	•••	14,330,601	5,624,250
1941	23,215,610	15,527,014	495,000	720,000	16,742,014	6,473,596
1942	27,686,332	18,421,081	495,000	2,276,000	21,192,081	6,494,251
1943	34,071,958	21,778,793	330,000	4,884,000	26,992,793	7,079,165
1944	34,501,192	23,860,607	495,000	3,020,000	27,375,607	7,125,585
1945	31,577,137	23,543,626	330,000	670,000	24,543,626	7,033,511
1946	31,313,410	24,687,148			24,687,148	6,626,262
1947	30,352,710	25,376,711		•••	25,376,711	4,975,999
1948	36,905,862	30,448,327		•••	30,448,327	6,457,535

Table 542.—Railways—Gross Earnings and Working Expenses.

Gross earnings increased by 93 per cent. between 1938-39 and 1947-48, when a record level was reached. This was due to higher fares and freight rates from March, 1939, and August, 1947, and the additional traffic which resulted from war-time and post-war industrial activity. The increase in working expenses (exclusive of special charges) since 1938-39 was mainly due to the higher cost of materials and wages and the greater volume of traffic handled. In 1947-48 gross earnings were greater by £6,553,152, or 22 per cent., and working expenses by £5,071,616, or 20 per cent., as compared with 1946-47.

The proportion of working expenses to gross earnings, as shown in Table 542, and the percentage of net earnings on capital at intervals since 1920-21 are shown in the following table; the proportions given here differ from those published in the Commissioner's report because the figures on which these ratios are based do not include as working expenses certain sinking fund payments so charged in the departmental accounts.

Table 543.—Railways—Ratio of Working Expenses to Gross Earnings, and Return on Capital.\*

	Proportion of Expenses to		Proportion of Net		Proportion Expenses to		Proportion of Net
Year.	Excluding Special Charges,	Including Special Charges.	Earnings to Capital Cost.†	Year.	Excluding Special Charges.	Including Special Charges,	Earnings to Capital Cost.†
1920-21 1928-29 1930-31 1937-38 1938-39 1939-40 1940-41	per cent. 77.3 76.4 84.5 69.1 73.8 71.0 66.9	per cent. 77·3 76·4 84·5 70·0 74·6 71·8 72·1	per cent, 3.93 3.82 1.80 4.09 3.29 3.77 4.33	1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-48	per cent. 66·5 63·9 69·1 74·5 78·8 83·6 82·5	per cent. 76.6 79.2 79.4 77.7 78.8 83.6 82.5	per cent. 4·31 4·66 4·68 4·60 4·28 3·16 3·89

<sup>\*</sup> See comment preceding table.

The high ratio of working expenses to earnings since 1944-45 reflects, the increased costs of operation. The reserves for deferred maintenance, etc., and excess repayments of Treasury advance, which were charged to working expenses in the railway accounts, were equivalent to 10.1 per cent. of gross earnings in 1941-42, 15.3 per cent. in 1942-43, 10.3 per cent. in 1943-44, and 3.2 per cent. in 1944-45.

# Government Railways Fund-Special Reserve Account.

In the years 1940-41 to 1944-45, large sums were transferred from revenue to the credit of reserve accounts and drawn upon for certain expenditures. These transactions were of doubtful legality and the Government Railways Act was amended in 1946 to validate them and, as at 1st July, 1945, to establish a Special Reserve Account, comprising the unexpended balances of the earlier reserves. Provisions governing the operation of the Special Reserve Account are described briefly on page 602.

The transfers from revenue, as shown in Table 542, included £190,000 for adjustment of stock values, and the remainder, totalling £11,380,000, comprised reserve provisions for accruing maintenance, £7,400,000, new rolling stock and equipment, £2,670,000, holiday pay, £1,200,000, and refreshment rooms, £110,000.

The following table shows particulars of expenditure from the Specials Reserve Account and the balance remaining at the end of each year.

Table 544.—Railways—Special Reserve Account.

Particulars.	1944-45.	1945–46.	1946–47.	1947-48.
Balance of Account brought forward Expenditure during year—	£ 11,380,000	£ 9,860,729	£ 8,397,948	£ 4,485,837
Redemption of Treasury Bills Accrued Maintenance New Rolling Stock and Equipment		38,921 1,423,860	1,580,236 1,618,505	1,256,322 370,903
Improvements			96,557 584,813 32,000	155,344 435,069 78,000
Total Expenditure	1 510 971	1,462,781	3,912,111	2,295,638
Balance at 30th June	9,860,729	8,397,948	4,485,837	2,190,199

<sup>†</sup> As at 30th June.

STATE RAILWAYS-DISTRIBUTION OF EARNINGS AND EXPENSES.

A statement of the various items of earnings and working expenses of all lines in 1938-39 and the last five years is shown below. Against the respective items of working expenses in this dissection are included the special charges shown in Table 542, and debits for the retirement of assets which, in preceding tables, have been treated as part of the sinking fund contribution under capital charges.

Table 545.—Railways—Classification of Earnings and Expenses.

Particulars.	1938-39.	1943-44.	1944-45,	1945-46.	1946–47.	1947-48.
Gross Earnings.	£	ŧ	£	£	£	£
Coaching Goods Refreshment-rooms Sale of electricity Miscellaneous	$\substack{6,877,146\\10,356,048\\649,419\\955,629\\308,199}$	$\substack{12,866,613\\18,407,761\\1,237,766\\1,575,237\\413,815}$	$\substack{12,304,975\\16,138,184\\1,183,884\\1,620,295\\329,799}$	$13,362,632 \\ 14,738,913 \\ 1,182,077 \\ 1,674,532 \\ 355,256$	11,584,035 15,326,034 1,065,232 1,984,680 392,729	13,009,256 19,804,068 1,114,707 2,532,057 445,774
Total Earnings	19,146,441	34,501,192	31,577,137	31,313,410	30,352,710	36,905,862
Working Expenses.*						
Maintenance of way and works Rolling stock—	<b>2,</b> 971,814	5,948,028	4,696,631	4,731,450	4,398,497	5,227,383
Maintenance Motive power—	3,001,134	6,778,547	5,504,515	4,696,204	4,767,738	5,560,195
Coal, etc.,. Other Other rolling	721,289 1,705,414	1,594,460 2,860,937	$1,487,816 \ 2,810,558$	$1,497,924 \\ 2,999,116$	1,724,521 3,059,843	1,930,01 <b>2</b> 3,897,575
stock	194,113	259,310	256,439	285,379	309,615	346,551
Transportation and traffic	3,501,654 934,398	5,598,451 1,618,207	5,439,972 1,662,908	5,926,074 1,857,107	6,276,358 <b>2,</b> 140,439	7,619,798 <b>2,74</b> 6,586
General charges and stores branch Refreshment-rooms Contribution to Superannuation	559,374 646,290	771,211 1,189,385	821,348 1,149,256	842,490 1,140,998	949,129 1,086,786	1,269,662 1,134,694
Fund Pay roll tax War damage liabil-	307,500 	377,000 405,258	466,000 377,649	554,000 402,932	767,500 405,151	775,000 507,211
ity		134,549	117			•••
Less Assets retired	14,542,980 250,815	27,535,343 159,736	24,673,209 129,583	24,933,674 246,526	25,885,577 508,866	31,014,667 566,340
Total Net, Working Expenses	14,292,165	27,375,607	24,543,626	24,687,148	25,376,711	30,448,327
Net Earnings	4,854,276	7,125,585	7,033,511	6,626,262	4,975,999	6 <b>,4</b> 5 <b>7,</b> 5 <b>3</b> 5

Inclusive of Special Reserve provisions (see Table 542), and also of Sinking Fund contribution, not distributable to items in detail.

During 1947-48, the earnings derived from the carriage of passengers, mails and parcels represented 35.2 per cent. of the total; goods, 53.8 per cent.; refreshment rooms, 3.0 per cent.; sales of electricity to tramways, etc., 6.9 per cent.; and miscellaneous items, 1.1 per cent.

STATE RAILWAYS-COACHING AND GOODS TRAFFIO.

Statistics of train mileage, tonnage of livestock, and the various classes of freight have not been compiled by the Department of Railways since

1940-41. Particulars of passenger and goods traffic in various years from 1920-21 to 1940-41 are summarised in Table 159 of the 50th edition of the Year Book.

Between 1938-39 and 1947-48 the number of passenger journeys increased from 186,719,964 to 263,046,815, or by 40.9 per cent.; in the same period, revenue from passengers, mails, etc., increased from £6,877,146 to £13,009,256, or by 89.2 per cent. Goods (excluding livestock) carried in 1947-48 totalled 17,407,149 tons as compared with 14,678,911 tons in 1938-39, representing an increase of 18.6 per cent.; the revenue from goods traffic in 1947-48 was £18,182,087 or 96.9 per cent. more than in 1938-39. Earnings from livestock traffic in 1947-48, viz., £1,621,981, were £500,025 or 44.6 per cent. greater than in 1938-39. Details of the passenger and goods traffic (as far as available since 1940-41) are shown in the following statement:—

	Coaching	g Traffic.	Goods	Livestock Traffic.	
Year ended 30th June.	Number of Journeys.	Gross Earnings— Passengers, Mails, etc.	Goods Tonnage. (Excluding Livestock).	Gross Earnings. (Excluding Livestock,)	Gross Earnings.
		£		£	£
1939	186,719,964	6,877,146	14,678,911	9,234,092	1,121,950
1940	179,066,305	7,174,555	13,812,162	9,430,477	1,420,910
1941	194,145,738	8,499,073	17,265,122	11,124,415	1,290,54
1942	218,846,454	10,638,485	17,854,519	13,019,027	1,367,44
1943	237,441,277	12,766,227	18,845,956	16,781,446	1,458,79
1944	250,565,758	12,866,613	18,602,711	16,867,444	1,504,31
1945	254,099,105	12,304,975	17,792,891	14,587,606	1,550,57
1946	267,423,100	13,362,632	15,872,431	13,198,372	1,540,54
1947	261,644,206	11,584,035	16,539,080	13,730,690	1,595,34
1948	263,046,815	13,009,256	17,407,149	18,182,087	1,621,98

Table 546.—Railways—Passenger and Goods Traffic.

Since 1944-45, railway services have been restricted owing to coal short-ages due mainly to growth in the demand for coal and to industrial disputes in the collieries. In spite of the reduced services, the number of passenger journeys in 1945-46, viz., 267,423,100, and the revenue derived therefrom (£13,362,632) were the highest on record; the corresponding figures for 1947-48 were only slightly less.

During the war years, the goods tonnage carried by the railways increased rapidly to a record of 18,845,956 tons in 1942-43, but the cessation of war traffic caused a decline to 15,872,431 tons in 1945-46. There was a considerable improvement in the next two years, the tonnage in 1947-48, viz., 17,407,149, being 9.7 per cent, higher than in 1945-46.

A statement showing the tonnage of different classes of goods carried on the railways in various years up to 1940-41 was given in Table 161 of Official Year Book No. 50.

Details of the tonnages of the various classes of goods carried by the railways have not been available since 1940-41, but the following table shows the number of truckloads of the main types of goods carried in the four years 1944-45 to 1947-48.

Table 547.—Railways—Goods Carried—Classification of Truck Loads.

					Number of Truckloads.							
Par	rticul	ars.			1944-45.	1945–46.	1946–47.	1947–48.				
Goods				•								
Intrastate—												
$\operatorname{Coal} \dots$					301,397	276,610	307,928	342,489				
Coke					15,731	13,623	16,247	23,387				
Ores and Con	centi	ates			77,533	48,826	50,502	51 <b>,734</b>				
Wheat $\dots$					55,671	46,642	46,306	71,800				
Flour		•••			31,240	29,308	30,384	26,834				
Wool					21,696	20,549	15,353	20,651				
${f Timber}$		•••	• • •		39,146	34,305	37,468	43,325				
Steel $\dots$				• • •	41,458	27,343	23,925	27,491				
Perishables					49,389	47,879	45,289	45,961				
$\mathbf{Fodder}$		•••			37,386	30,231	36,578	17,865				
Sand, Gravel,	, Cen	ent, etc.		•••	51,513	49,947	36,399	27,596				
Ashes $\dots$		•••	• • •	• • •	29,655	35,025	33,836	33,903				
Military Equi	pmer	nt and Ar	ոmս	nition	106,896	42,604	4,511	1,563				
Other Goods		•••			259,693	283,748	277,885	303,078				
Interstate	•••	•••	•••	• • •	47,424	60,942	53,403	53,361				
Total, G	oods				1,165,828	1,047,582	1,016,014	1,091,038				
Livestock					185,251	192,310	187,731	154,236				

Coal truckloads comprised 31.4 per cent. of the total truckloads of goods in 1947-48, as compared with 25.9 per cent. in 1944-45. In 1947-48 the railways carried 55,920,241 bushels of wheat and 1,006,593 bales of wool, as compared with 39,223,617 bushels and 827,623 bales in the previous year.

# STATE RAILWAYS—LOCOMOTIVE MILEAGE.

Statistics of train mileage have not been available since 1940-41, but the following statement shows details of locomotive mileage run in 1938-39 and the last six years.

Table 548.—Railways—Locomotive Mileage Run.

	1	Miles Run by—										
Year ended 30th June.	Steam Loco-motives.    Steam Loco-motives.   Electric Loco-motives.     28,435,645   7,260,059   38,416,444   8,263,832   36,804,881   8,175,662   33,512,326   8,33,715   33,522,678   7,919,325   33,576,693   8,582,725		Rall Motors.	Diesel Loco- motives.	LOCO- Electric							
1939	28,435,645	7,260,059	1,523,234	273,258		37,492,196						
1943			1,040,770	207,297	,	47,928,343						
1944			1,057,848	214,828	13 896	46,267,115						
1945			1,133,401	281,106	106,128	43,066,676						
1946			1,117,775	209,286	101,542	43,269,608						
1947			1,231,095	195,064	105,322	42,973,484						
1948	00 576 000	ວະດດ້າດເ	1,207,246	194,268	92,569	43,653,501						

<sup>\*</sup> Shunting engines.

The increased locomotive mileage since 1938-39 reflects the growth in traffic, particularly during the war years. Although the mileage of steam locomotives has declined since 1942-43, the demand for railway service during the last three years could not be met with current supplies of coal and existing rolling stock.

# STATE RAILWAYS-PASSENGER FARES.

Passenger traffic is greatest on the suburban lines, viz., those within a 34 miles radius of Sydney or Newcastle, and fares on these lines are lower than those for equal distances elsewhere. Since November, 1933, concession fares have been charged for suburban travel during the week-end period. Return tickets for travel outside the Sydney or Newcastle suburban areas are issued at single fare plus one-third. Week-end excursion tickets at single fare for the return journey are issued to tourist and holiday resorts within a radius of approximately 200 miles of Sydney; the limits for excursion tickets on the main lines are Nowra in the south, Canberra in the south-west, Orange in the west, and Dungog in the north. These arrangements were still in operation in June, 1949.

The following table indicates the changes between June, 1921, and June, 1949, in the ordinary fares for single journeys from Sydney or Newcastle:—

_	Table 549.—Railway Fares for Single Tickets.													
Date.	5 mls.	10 mls.	20 mls.	34 mls.	50 mls.	100 mls.	200 mls.	300 mls.						
	d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.						
	First Class.*													
1921, June 1924, June 1927, Dec. 1933, Nov. 1939, Mar. 1947, Aug.†	8 8 8 8 7 7 8 10	1 3 1 2 1 3 1 0 1 1 1 4	$\begin{bmatrix} 2 & 5 \\ 2 & 0 \\ 2 & 1 \\ 1 & 11 \\ 2 & 1 \\ 2 & 6 \end{bmatrix}$	4 1 3 2 3 4 3 0 3 4 4 0	7 7 6 8 6 10 6 0 6 9 8 1	18 7 17 7 17 9 15 5 17 4 18 10	40 7 37 7 37 9 33 1 36 5 37 11	62 2 56 5 56 7 49 2 54 7 56 1						
			Seco	OND CLAS	s.									
1921, June 1924, June 1927, Dec. 1933, Nov. 1939, Mar. 1947, Aug.†	6 6 6 <sup>1</sup> / <sub>2</sub> 5 6 7	$\begin{array}{c} 0 & 10\frac{1}{2} \\ 0 & 10\frac{1}{2} \\ 0 & 11 \\ 0 & 9 \\ 0 & 10 \\ 1 & 0 \end{array}$	1 6 1 6 1 7 1 5 1 7 1 11	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 0 4 9 4 11 4 4 4 10 5 10	12 2 12 1 12 2 10 10 12 2 13 2	25 7 25 4 25 6 22 11 25 4 26 4	38 3 37 11 38 1 34 2 37 10 38 10						

<sup>\*</sup> First-class travel was abolished in Newcastle and Sydney suburban areas in 1939 and 1940 respectively. † Current in June, 1949.

In November, 1933, a reduction of approximately 10 per cent. was made in second-class fares and a slightly greater reduction in first-class fares. The next change was an increase of 10 per cent. from 1st March, 1939. In August, 1947, a further increase of 20 per cent. was imposed on all adult fares, subject to a maximum increase, in the case of country journeys, of 1s. 6d. on first-class single tickets and 1s. on second-class single tickets; children's and students' fares were not altered. In the suburban services first-class accommodation has not been provided in the Newcastle district since 1st February, 1939, nor in the Metropolitan district since 1st January, 1940.

Particulars of changes in the cost of monthly periodical tickets are shown in the following table:—

Table 550.-Railway Fares-Monthly Periodical Tickets.

Date.	5 mile	s.	10 mi	les.	20 m	iles.	34 n	iles	50	m	iles.	100   mile		20 mile		30 mile	
	s,	d.	s.	d.	s.	d.	s.	d.		8.	d.	s.	d.	s.	d.	s.	d.
						Fir	st Ci	ASS	*								
1921, June	30	9	44	0	58	0	69	3	1 7	79	9	112	6	156	3	181	9
1922, June.	30	9	43	3	59	3	68	9	1 7	77	0	100	3	138	9	168	0
1924, June	27	4	38	3	52	3	59	9	7	77	0	100	3	138	9	168	0
1928, Jan.	29	<b>4</b>	41	0	55	11	64	0	8	31	6	106	6	147	0	178	0
1933, Nov.	25	9	36	9	50	3	57	6	(	39	9	92	6	128	6	155	9
1939, Mar.	28	6	40	3	53	9	62	3	1 7	76	6	103	9	142	0	171	0
1947, Aug.†	34	3	48	3	64	6_	74	9	8	34	3	_114.	3	156	3	188	_0
						SEC	OND	CLA	ss.								
1921, June	20 -	6	29	0	39	3	46	0	{	51	0 1	66	9	92	6	112	6
1922, June	20%	6	28	9	39	6	45	9	{	51	3	66	9	92	6	112	6
1924, June	20 1	6	28	8	39	2	44	10	8	51	á	66	9	92	6	112	6
1928, Jan.	22 🖁	0	30	9	42	0	48	0	Į į	54	3	70	9	98	0	118	9
1933, Nov.	19 🕏	6	27	6	37	9	43	3	4	48	3	63	9	88	9	107	6
1939, Mar.	21		30	3	40	3	46	9	1	52	9	71	6	98	0	118	0
1947, Aug.†	25	9	36	3	48	3	56	0	l t	58	0	78	9	107	9	129	9

<sup>\*</sup> First-class travel was abolished in Newcastle and Sydney suburban areas in 1939 and 1940 respectively. † Current in June, 1949.

The fares quoted represent the maximum charges, but liberal concessions are made to women, students, and youths in business. At the beginning of January, 1928, fares were raised by about 6 or 7 per cent., and in November, 1933, a reduction of 10 per cent. was made. An average increase of 10 per cent. was made on 1st March, 1939. In August, 1947, the charge for suburban periodical tickets was increased by 20 per cent. and for country tickets by 10 per cent.

Workmen's weekly tickets are issued at special fares for the Metropolitan and Newcastle suburban lines, the Helensburgh-Port Kembla-Kiama section of the Illawarra line, and the Katoomba-Cooerwull section of the western line. The tickets are available for one journey each way per day, excluding Sunday; the forward journey is restricted to trains which reach the passenger's destination within specified hours, with due regard to the hours of shift workers. Substantial reductions were made as from 1st January, 1939, in the charges for workmen's weekly tickets for distances exceeding 10 miles, and a fixed charge of 5s. was introduced for distances exceeding 16 miles. The fares were raised by 10 per cent. as from 1st March, 1939, and by a further 20 per cent, from August, 1947.

Table 551.—Railway Fares for Workmen's Weekly Tickets.

Workmen's Weekly Tickets—Second Class.									
June, 1921,	Dec., 1927.	Oct., 1932.	Jan., 1939.	Mar., 1939,	Aug., 1947.*				
8. d. 1 8 2 11 4 1 5 5 6 11	8. d. 1. 8 3.11 5. 6 7. 4	8. d. 1 5 3 4 4 8 6 4 7 10	s. d. 1 5 3 4 4 8	s. d. 1 6 3 8 5 2 5 6	s. d. 1 10 4 5 6 2 6 7				
	June, 1921, 8. d. 1 8	B. d.     B. d.       1 8 2 11     1 8 3 11	S. d.         8. d.         8. d.         1 8 1. 8 1. 5           2 11         5 6         4 8. d.           5 5         7 4 6 4         6 4           6 11         9 0         7 10	S. d.     S. d.     S. d.     S. d.     S. d.       1 8 2 11     3 11     3 4     3 4       4 1 5 5     7 4     6 4     4 8       6 11     9 0     7 10     5 0	Fune, 1921,         Dec., 1927.         Oct., 1932.         Jan., 1939.         Mar., 1939.           8. d.         8. d.				

<sup>\*</sup> Current, June, 1949.

# STATE RAILWAYS—FREIGHT CHARGES.

The system adopted in fixing freights on merchandise and livestock is to charge the lowest scale of freight on commodities of low value and on those which are used to assist production. The charge per ton mile decreases as the distance hauled increases.

The highest class freight includes expensive, bulky, or fragile articles, such as boots, drapery, drugs, groceries, furniture, liquors, glassware, cutlery, ironmongery, confectionery, and carpets; the lowest class applies to manures.

The rates for nearly all classes of freight were increased by about 10 per cent. on 1st March, 1939; exceptions included wool, agricultural produce and crude ores. In August, 1947, there were further increases, viz., 40 per cent. on the lower classes of freight and 15 per cent. on the higher classes; and on 1st February, 1949, substantial increases were imposed on parcels previously carried at concession rates.

The trend of rates for various classes of freight carried for 100 miles and 500 miles is shown below. The rates quoted for livestock are per four-wheeled truck; other rates are per ton.

Table 552.-Railway Freight Charges.

_	Table 5	52.—Rail	lway Frei	ght Cha	rges.	_	
Date.	Ordinar Highest Class Freight.	y Goods.  Lowest Class Freight.	Agri- oultural Pro- duce.	Butter.	Frozen Beef and Mutton.	Wool.	Live- stock.
		100	Miles.		I		<u> </u>
1921, June 1922, June 1925, June 1926, December 1932, December 1933, July 1937, October 1939, March 1944, January 1947, August*	s. d. 75 0 76 8 76 8 76 8 76 8 76 8 76 8 84 4 84 4 97 0	s. d. 6 6 9 6 9 6 9 6 9 6 9 7 5 5 11 8 3	s. d. 11 5 11 6 11 5 12 0 12 0 12 0 12 0 12 0 12 0 12 0	s. d. 31 7 35 5 24 10 27 4 27 4 27 4 27 4 27 4 27 1 31 2	s. d. 14 7 18 11 18 11 18 11 18 11 18 11 18 11 20 10 20 10 29 2	s. d. 37 11 41 8 41 8 41 8 37 6 33 9 37 6 37 6 37 6 52 6	s. d. 110 5 109 9 109 9 120 9 108 8 97 10 108 8 120 9 120 9 169 1
;		500	MILES.				
1921, June 1922, June 1925, June 1925, December 1932, December 1933, July 1937, October 1939, March 1944, January 1947, August*	8. d., 193 3 197 6 197 6 197 6 197 6 197 6 197 6 217 3 217 3	s. d. 15 0 12 4 12 4 12 4 12 4 12 4 12 4 13 7 10 10 15 2	s <sub>i</sub> d <sub>i</sub> 18 2 19 0 19 0 19 11 19 11 19 11 19 11 19 11 19 11 19 17 19 17	s, d. 94 0 82 4 57 7 63 4 63 4 63 4 69 8 62 8 72 1	s. d. 72 11 43 11 43 11 43 11 43 11 43 11 43 14 48 4 467 8	s, d. 104 4 109 5 109 5 109 5 98 5 88 8 98 6 98 6 98 6 137 11	8. d. 303 4 299 9 299 9 329 8 296 8 267 0 296 8 329 8 329 8 329 8

<sup>\*</sup> Current, June, 1949.

# STATE RAILWAYS-GRADIENTS.

The railways of New South Wales pass through mountainous country over the Great Dividing Range, which separates the narrow coastal plain from the interior. Consequently, there are steep gradients and sharp curves in many sections, including parts of the trunk lines. Where practicable, deviations have been made from time to time to improve the tracks in these respects; in 1948 about 93 per cent. of the lines had gradients less steep than 1 in 50 and 69 per cent. less than 1 in 100.

The following statement shows the miles on different gradients in June, 1948:—

Gradients.	Southern System.	Western System.	Northern System.	Total.	Gradients.	Southern System.	Western System,	Northern System.	Total.
1 in 18 to 30 31 , 40 41 , 50 51 , 60 61 , 70 71 , 80 81 , 90	miles. 16½ 75½ 74¼ 72½ 68½ 188¾ 49¾	miles, $\frac{4\frac{1}{2}}{61}$ $52$ $77\frac{3}{68\frac{1}{2}}$ $138\frac{3}{4}$ $58$	miles. 31 551 88 661 421 1811 521	miles.  241 1921 2141 217 1791 509 160	251 ,, 300	miles. 120½ 261 141½ 72½ 102½ 945¾	miles. 1773 2844 1223 773 1104 9593 2,193	miles.  98 177½ 98½ 50¾ 72½ 758½	miles. 3962 7224 3623 201 2864 2,664

Table 553.—Railway Gradients, June, 1948.

# STATE RAILWAYS—SIGNALLING AND SAFETY APPLIANCES.

In the matter of signalling and safety appliances the railways of New South Wales have progressed with modern invention. The points are interlocked on all the lines with the exception of a few in remote country districts where the traffic is light. The automatic signalling system is in operation on all the suburban lines under the electrical system.

# STATE RAILWAYS-ROLLING STOCK.

The following table shows particulars of the rolling stock of the State railways each year from 1939 to 1948:—

At 30th June.	Loco- motives.	Coaching Stock.	Goods Waggons, etc.	Service Stock.	At 30th June,	Loco- motives.	Coaching Stock.	Goods Waggons, etc.	Service Stock.
1939	1,284	2,808	22,833	1,424	1944	1,147	2,822	24,368	1,298
1940	1,254	2,836	22,831	1,334	1945	1,148	2,827	24,183	1,300
1941	1,224	2,850	22,801	1,278	1946	1,151	2,816	24,444	1,271
1942	1,149	2,859	23,273	1,292	1947	1,156	2,809	24,282	1,283
1943	1,151	2,839	23,970	1,310	1948	1,164	2,806	24,188	1,234

Table 554.—Railways—Rolling Stock.

Since the end of the war (1945), there has been a serious shortage of rolling stock, particularly of freight vehicles; production in the railway workshops and under contract has not been sufficient to replace old vehicles withdrawn from service.

A detailed classification of the rolling stock, showing number and capacity, is shown in the statement below:—

Table 555.—Railways-Rolling Stock, Number and Capacity.

			At 30	th June.		
Classification.	1929.		1	939.	1948.	
	No.	Capacity.	No.	Capacity.	No.	Capacity
Locomotive—Steam Diesel Power Vans	1,425	Tractive power, thous, lb. 36,363	1,279	Tractive power. thous. lb. 35,490 50	1,159 5	Tractive power. thous. lb. 32,938
Coaching— Passenger Motor Passenger Sleeping Horse Boxes, Brake Vans, etc	2,208 32 124 413	pas'gers. 138,599 1,664 2,771	2,254 57 127 370	pas'gers. 139,029 2,840 2,629 577	2,350 49 127 280	pas'gers, 141,327 2,432 2,557
Total	2,777	143,403	2,808	145,075	2,806	146,49
Goods—  Open Waggons Livestock Waggons Louvred Vans Refrigerator Vans Brake Vans Other	17,564 3,104 1,023 237 711 70	tons. 298,812 19,652 16,292 3,432 815	17,614 3,013 1,174 302 662 68	tons. 285,120 19,100 18,658 4,724 900	18,811 2,915 1,161 340 688 273	tons. 329,721 18,332 20,342 5,774 3,082
Total	22,709	339,003	22,833	328,502	24,188	377,251
Service Stock	1,578		1,424		1,234	

Rail motors have been provided in a number of country districts where the population does not warrant the provision of ordinary services. Diesel train services are operated between Parkes and Broken Hill, a distance of 422 miles. In April, 1948, the first of four new air-conditioned trains for the Sydney-Newcastle service was placed in operation.

# VICTORIAN GOVERNMENT RAILWAYS IN NEW SOUTH WALES.

In the southern portion of New South Wales the Government of Victoria has acquired certain railway interests by the purchase from a private company of a line between Deniliquin and Moama, and the construction and maintenance of five border railways by agreement with the Government of New South Wales.

The agreement provides for railways of 5ft. 3in. gauge, but the works within New South Wales are constructed suitably for conversion to the standard gauge, viz., 4ft. 8½in. The lines are operated by the Victorian Railway Commissioners.

Three of the lines authorised under the agreement were opened for traffic and the length of these, with the Deniliquin-Moama line, was 241 miles 11 chains; since 1943-44 the Murrabit-Stony Crossing line (38 miles 47 chains) has been closed to traffic. Particulars of the capital cost, revenue, etc., of these lines are given in the following table:—

Table 556.—Victorian Government Railways in New South Wales—Capital Cost, Revenue, etc.

Year	Carital		E	Expenditure	·.			
ended 28th Feb.	Capital Cost at 28th Feb.	Revenue.	Working Expenses.	Interest.	Total.	Passengers Carried.	Goods Carried.	
	£	£	£	£	£	No.	tons.	
1939	1,209,605	45,744	53,394	50,136	103,530	16,414	118,422	
1943	1,458,712	63,385	63,991	54,269	118,260	36,581	134,181	
1944`	1,455,626	77,002	69,185	52,436	121,621	39,152	115,006	
1945	1,450,505	59,061	64,256	51,678	115,934	33,280	120,383	
1946	1,445,384	48,937	62,116	51,377	11 <b>3,4</b> 93	27,188	101,711	
1947	1,460,210	67,471	75,191	50,714	125,905	22,193	115,109	
1948	1,451,872	59,552	68,135	48,084	116,219	15,956	94,162	

<sup>\*</sup> Includes current depreciation.

The number of train miles run by the Victorian border railways in 1947-48 was 64,878. Employees at 28th February, 1948, numbered 77.

#### PRIVATE RAILWAY LINES.

The established policy in New South Wales has been to keep the railways under State control, and with the exception of short lines connecting coal and other mines with the main railways, there are only 85 miles of private lines open for general traffic.

During the year 1888 a line of 3 ft. 6 in. gauge was laid down from Broken Hill to the South Australian border, a distance of 37 miles. A short line, privately owned, but operated by the Department of Railways, connects the Warwick Farm Racecourse with the Government railway at Liverpool.

The Seaham Coal Company's line connects the West Wallsend and Seaham Collieries with Cockle Creek. The South Maitland system serves the mining districts of East Greta and Cessnock, and another line runs between the collieries in Hexham and Minmi. The New Red Head line connects Belmont and Adamstown. Particulars of these railways were published on page 372 of the 1939-40 issue of the Year Book.

#### RAILWAY GAUGES OF AUSTRALIA.

Particulars of the gauges of the railways in each State as at 30th June, 1948, are shown below. The figures relate to Government lines and to

private railways open for general traffic, classified according to the States in which they are located. Particulars of private lines used exclusively for special traffic are not included in the figures:—

State.	Rou	te Miles of e	ach Gauge	open for T	raffic.	Total Miles.
Since,	2 ft.	2 ft. 6 in.	3ft. 6 in.	4 ft. 8½ in.	5 ft. 3 in.	
New South Wales	~	·	37	6,178	243	6,458
Victoria	•••	114			4,383	4,497
Queensland	116	<b></b>	6,510	69	i	6,698
South Australia and			-			
Northern Territory			2,206	654	1,480	4,340
Western Australia	•••		4,625	454		5,079
Tasmania	7		724	•••	•••	73:
Australian Capital						
Territory	•••		•••	5		{
Total	123	114	14,102	7,360	6,106	27,80

The distances by rail between Sydney and the other capital cities are as follows:—Brisbane via North Coast line 613 miles, Brisbane via Wallangarra 715 miles, Melbourne 590 miles, Adelaide via Melbourne, 1,073 miles, and Perth via Melbourne 2,695 miles. The journey from Sydney to Broken Hill via Melbourne and Adelaide is 1,409 miles, but a line across New South Wales opened for traffic in November, 1927, affords direct communication over a distance of 699 miles.

Railway works undertaken for the purpose of facilitating interstate communication have been described in previous issues of the Year Book.

#### STANDARDISATION OF AUSTRALIAN RAILWAY GAUGES.

In 1921 a Royal Commission reported on the diversity of railway gauges in Australia, and on its recommendations the Premiers' Conference of that year resolved that a uniform gauge (4 ft. 8½ in.) was essential to the development and defence of the Commonwealth. Subsequently, interstate routes were shortened and breaks of gauge eliminated between certain points, but other steps to unify gauges were not taken.

Rail transport difficulties of the war years (1939-45) prompted the Commonwealth Government to instruct the Director-General of Land Transport (Sir Harold Clapp) to report on the standardisation of Australian railway gauges. His report was presented in March, 1945, and the recommendations were summarised on page 206 of the 50th edition of the Official Year Book.

The recommendations were accepted in principle at the Premiers' Conference in August, 1945, and the proposals (with some modifications) were adopted in detail at a later Conference in January, 1946. Subsequently, Queensland and Western Australia raised objections in respect of their parts, but the Commonwealth and the three south-eastern States agreed to carry out the works recommended (except the Dajarra-Birdum line); New South Wales also agreed to extend its line from Bourke to Barringun on the

Queensland border, and the Commonwealth undertook to convert the Port Augusta-Alice Springs line (not covered by the original plan) and to extend it to Birdum.

For the Commonwealth the agreement was ratified by the Commonwealth Railway Standardisation Agreement Act, 1946. The provisions of this Act relating to the financing of the scheme and the allocation of costs between the Commonwealth and the States were outlined in the Year Book No. 50 on page 207.

The Act also provided for a Railways Council, consisting of Commonwealth and State Ministers, to make decisions in matters arising in implementing the agreement, and a Railways Standardisation Board, comprising a Director-General and four other persons qualified in railway engineering or administration, to co-ordinate the works to be carried out by the several constructing authorities.

An enabling Act was passed by the South Australian Parliament in December, 1946, but up to May, 1949, the agreement had not been ratified by New South Wales or Victoria.

# STATE TRAMWAY AND OMNIBUS SERVICES.

#### Administration.

The State Government conducts trainway and omnibus services in the Metropolitan and Newcastle districts. All the trainways are the property of the Government, but there are numerous privately owned omnibus services in these districts and in other parts of the State. The first Government omnibus service in Newcastle was commenced on 22nd September, 1932, and in the Metropolis on 25th December, 1932.

The Government tramway and omnibus services are administered by the Commissioner for Road Transport and Tramways, who also exercises special powers for the regulation of the private omnibus services, as described on page 634. The tramways were administered by the Railway Commissioners until August, 1930; and after a number of changes had been made in the administration of the State transport services, they were vested in the Commissioner for Road Transport in December, 1932.

# Tramways and Omnibuses—Reports on Administration.

The rapid deterioration in the finances of the State tramways and omnibuses after the war (1939-45) induced the Government to obtain independent reports on the administration of the services. In August, 1947, the Tasmanian Commissioner for Transport made a report recommending certain financial adjustments (including relief of capital indebtedness), improved methods of fare collection, etc.

A further report was submitted in May, 1949, by a committee of three representatives of the London Passenger Transport Board, who recommended the establishment of a Transport Commission to co-ordinate all transport services throughout New South Wales. The Commission would comprise a Director of Transport and Highways as chairman, the Commissioner for Railways, the Commissioner for Road Transport and Transways, the Commissioner for Main Roads and the President of the Maritime Services Board. The committee also made a number of recommendations regarding administrative policy, including a proposal for the gradual substitution of buses for trams.

## LENGTH OF STATE TRAMWAYS.

The length of the State tramways is 171 miles, viz., 142 miles of tramways and 9 miles of trolley-bus routes in the Metropolitan district, and 20 miles of tramways in Newcastle. In 1926, there were 228½ miles of tramways, consisting of 180 miles in the Metropolis, 35 miles in Newcastle, 4 miles in Maitland and 10 miles in Broken Hill. The tramways in Maitland and Broken Hill were closed in 1927, and some services in other districts have been replaced by railway or omnibus services. The tram services were extended across Sydney Harbour Bridge in March, 1932, and the omnibus services in August, 1937.

The gauge of the tramways is 4 feet 8½ inches, and all the services are operated by electric power.

The route and track mileage of the tramways at 30th June, 1948, is shown below, the figures being exclusive of 43 miles 59 chains of sidings, loops and crossovers.

Line,			Route ileage		Track Mileage.	
Metropolitan— City and Main Suburban Lines North Sydney † Ashfield to Mortlake and Cabarita Rockdale to Brighton-le-Sands Kogarah-Rockdale-Sans Souci	 	(a) (b)	mls. 113 21 8 1 6	ch. 11 30 33 50 32	mls. 214 41 15 1	ch. 62 20 5 50 56
Total, Metropolitan	 	(c)	150	76	283	33
Newcastle City and Suburban	 		20	31	36	61
Total Tramways, June, 1948	 	(c)	171	27	320	14

Table 558.—State Tramways-Length of Lines, June, 1948.

#### FINANCES OF THE STATE TRAMWAY AND OMNIBUS SERVICES.

Prior to the year 1938-39, the State tramway and motor omnibus services were administered as separate undertakings and separate financial accounts were published. As the omnibus services were extended into areas previously served by trams, the two undertakings were merged into a joint enterprise, and the manner of presenting the annual accounts was altered in 1938-39. Since then, separate details regarding the financial results have not been available.

# State Tramways and Omnibuses-Capital Funds.

The capital of the State tramways and omnibuses has been obtained mainly from the General Loan Account of the State and is interest-bearing excepting a small advance from the Consolidated Revenue Fund, and capital reserves. The latter consist of profits from the sale of assets, and receipts from the Public Vehicles Fund comprising half the service license fees on motor omnibus services in the Metropolitan and Newcastle Transport Districts.

<sup>\*</sup> Includes trolley-bus routes (a) 2 mls. 18 chns.; (b) 6 mls. 32 chns.; (c) 8 mls. 50 chns. † Bus service substituted in July, 1948.

At 30th June, 1948, the capital debt of the tramways, as represented by repayable advances, amounted to £7,536,671, consisting of £7,496,150 owing to the General Loan Account and £40,521 to the Consolidated Revenue Fund; capital reserves amounted to £171,227, viz., profits from the sale of assets £57,714, and receipts from the Public Vehicles Fund, £113,513. The capital debt of the motor omnibus services, amounting to £1,894,624, is owing to the General Loan Account.

State Tramways and Omnibuses—Capital Cost of Assets.

The capital cost of the tramway and omnibus assets at 30th June, 1938, and later years is shown in the following table. The total capital cost of the services exceeds the amount of capital funds stated above by reason of the purchase of new assets and the repayment of capital indebtedness from revenue reserved for depreciation.

Table 559.—State Tramways and Omnibuses—Capital Cost.

	Metrop	oolitan.	Newc	astle.		Total.	
At 30th June.	Tramways.	Omni- buses.	Tram- ways.	Omni- buses.	Tramways.	Omni- buses.	Tramways and Omnibuses.
	£	£	£	£	£	£	£
1938	8,308,605	688,100	830,300	17,037	9,138,905	705,137	9,844 <b>,042</b>
1939	8,306,480	799,998	832,880	89,134	9,139,360	889,132	10,028,492°
1940	8,283,992	948,162	832,849	96,933	9,116,841	1,045,095	10,161,936
1941	8,079,887	1,007,089	830,036	109,923	8,909,923	1,117,012	10,026,935
1942	7,943,095	984,607	815,978	131,535	8,759,073	1,116,142	9,875,215
1943	7,922,562	954,616	793,969	147,506	8,716,531	1,102,122	9,818,653
1944	7,918,147	985,980	793,348	158,093	8,711,495	1,144,073	9,855,568
1945	7,922,434	1,015,079	792,401	163,275	8,714,835	1,178,354	9,893,189 <sup>,</sup>
1946	7,934,314	1,030,213	792,401	163,275	8,726,715	1,193,488	9,920,20 <b>3</b>
1947	7,943,188	1,449,333	792,401	178,736	8,735,589	1,628,069	10,363,658
1948	7,954,622	2,405,662	799,866	<b>22</b> 5,281	8,754,488	2,630,943	11,385, <b>431</b>

The capital cost of the tramways at 30th June, 1948, comprised cost of land and building £1,466,186, permanent way £2,906,444, substations and electric distribution system £1,090,378, rolling stock £2,852,027, plant and machinery £289,453, and stores £150,000. The capital cost of the omnibuses consisted of land and buildings £221,349, omnibuses £2,353,857, and plant and machinery £55,737.

Particulars of the accumulated depreciation and sinking fund reserves of the State tramways and omnibuses are shown in the following statement:—

Table 560.—State: Tramways and Omnibuses—Depreciation and Sinking Fund Reserves.

At 30th	Depreciation Reserve.		Sinking Fu	nd Reserve.	Total.		
June,	Tramways.	Omnibuses.	Tramways.	Omnibuses.	Tramways.	Omnibuses	
	£	£	£	£	£	£	
1938	572,710	302,112	316,658	2,487	889,368	304,599	
1939	687,285	407,920	342,939	2,469	1,030,224	410,389	
.1940	797,066	548,993	331,656	3,539	1,128,722	552,532	
1941	904,995	685,304	376,619	5,098	1,281,614	690,402	
1942	1,016,976	793,400	422,337	6,559	1,439,313	799,959	
1943	1,122,404	855,059	477,965	8,077	1,600,369	863,136	
1944	1,239,422	928,846	522,827	9,668	1,762,249	938,514	
1945	1,339,622	973,434	579,547	11,452	1,919,169	984,886	
1946	1,440,947	1,003,356	635,783	13,287	2,076,730	1,016,643	
1947	1,541,814	1,016,702	693,040	16,042	2,234,854	1,032,744	
1948	1,638,604	1,164,324	750,842	19,441	2,389,446	1,183,765	

State Tramways and Omnibuses-Revenue and Expenditure.

Particulars of the annual revenue of the State tramways and omnibuses and the working expenses of both services combined are as follows:—

Table 561.—State Tramways and Omnibuses—Gross Earnings and Working Expenses.

Year ended 30th June.	Gı	ross Earnin	ıgs.	Work	ses.			
	Tramways.	Omni- buses.	Total.	Adminis- tration and Operation.	Current Deprecia- tion.	Total.	Net Earn- ings.	
	£	£	j £	£	£	£	£	
1938	3,529,368	765,356	4,294,724	3,559,056	258,139	3,817,195	477,529	
1939	3,448,792	925,542	4,374,334	3,707,139	242,523	3,949,662	424,672	
1940	3,330,593	1,137,316	4,467,909	3,767,833	265,103	4,032,936	434,973	
1941	3,436,195	1,353,891	4,790,086	3,931,943	257,208	4,189,151	600,935	
1942	3,802,494	1,626,918	5,429,412	4,646,224	222,043	4,868,267	561,145	
1943	4,114,175	1,467,670	5,581,845	4,946,017	191,173	5,137,190	444,655	
1944	4,301,530	1,398,790	5,700,320	5,145,515	190,900	5,336,415	363,905	
1945	4,319,891	1,469,891	5,789,782	5.347,615	166,294	5,513,909	275,873	
1946	4,370,196	1,565,477	5,935,673	5,826,293	152,539	5.978,832	(-) 43,159	
1947	4,359,640	1,746,145	6,105,785	6,227,588	145,748	6,373,336		
1948		2,544,584	7,854,362	7,895,436	254,657		(–)295 <b>,731</b>	

(-) Deficiency.

The rapid increase in gross earnings in the war years, and the larger share of the tramways in that increase, reflected the effects of severe petrol rationing on private motor traffic, and curtailment of the previously expanding omnibus services after 1940-41 because of reduced supplies of fuel oil and other requisites. The restricted omnibus services were gradually

restored during the three years ended 30th June, 1948. Of gross earnings, which increased by £3,480,028 or 79.6 per cent. between 1938-39 and 1947-48, omnibuses earned 21.2 per cent. in 1938-39 and 32.4 per cent. in 1947-48.

The excess of earnings over working expenses was greater in 1940-41 than for several years, but thereafter operating costs increased rapidly (and faster than earnings) because of higher salaries and wages, rising prices of materials and the heavy cost of maintaining the ageing, and often overloaded, trams and omnibuses. Working expenses absorbed 90.3 per cent. of gross earnings in 1938-39, and 95.2 per cent. in 1944-45, but exceeded them by £43,159, or 0.7 per cent., in 1945-46, and by £267,551 or 4.4 per cent., in 1946-47. As the result of an increase of 1d. per journey in adult fares from 1st July, 1947, gross earnings in 1947-48 increased by £1,748,578 or 28.6 per cent., but working expenses rose almost proportionately and exceeded earnings by £295,731 or 3.8 per cent.

Loan charges required 9.2 per cent. of gross earnings in 1938-39 but only 4.8 per cent. of them in 1947-48; over the period they were lightened because of repayments to the Treasury and reductions in the rate of interest payable on the public debt of the State.

In every year from 1933-34 to 1943-44, earnings of these services more than covered all working and capital charges, but there were losses in each of the four years 1944-45 to 1947-48, the deficit of £675,890 in 1947-48 being the highest on record. Between 1943-44 and 1947-48, working expenses increased by £2,813,678, earnings by £2,154,042, and capital charges by £24,378.

The net financial results of the tramways and omnibuses, after the payment of capital debt charges, are shown below:—

			- 110- 1100			
Year			Capital	Charges.		
ended 30th June.	Net Earnings,	Interest.	Exchange on Interest.	Sinking Fund,	Total Capital Charges.	Current Surplus. †
	£	£	£	£	£	£
1938	477,529	336,872	42,573	38,349	417,794	59,735
1939	424,672	$320,\!154$	42,271	41,537	403,962	20,710
1940	434,973	316,949	44,542	44,592	406,083	28,890
1941	600,935	313,918	44,216	46,522	404,656	196,279
1942	561,145	294,777	41,465	47,179	383,421	177,724
1943	444,655	280,737	40,016	57,145	377,898	66,757
1944	363,905	271,246	38,082	46,453	355,781	8,124
1945	275,873	273,098	39,298	58,504	370,900	(-) 95,027
1946	(-) 43,159	244,287	33,589	58,071	335,947	(-) 379,100
1947	(-)267,551	240,318	32,931	60,013	333,262	(-)600,813
1948	(-)295.731	282,859	36,100	61,200	380,159	(-)675,890

Table 562.—State Tramways and Omnibuses—Capital Charges and Net Results.

Since the inception of the Government omnibuses in 1932, annual provision has been made for accruing depreciation of omnibus assets. This system was adopted in regard to tramways in 1933-34; previously tramway assets had been written off only when abandoned or scrapped.

<sup>\*</sup> Includes Loan Management Expenses. (-) Deficiency.

<sup>†</sup> Subject to further appropriations for arrears of depreciation in 1942-43 and earlier years—see below.

The charges for depreciation in the years reviewed are represented by the total of current depreciation in Table 561 and Sinking Fund in Table 562. In addition to charges applicable to the year of operation, large appropriations were made between 1933-34 and 1942-43 in respect of accumulated arrears of depreciation. These further appropriations and the balance of surplus then remaining in each year 1937-38 to 1942-43 were as follows:—

		1937-38.	1938-39.	1939-40.	1940-41.	1941-42,	1942-43.
Arrears of							
Depreciation	£	31,634	6,205	17,385	181,713	150,884	32,809
Final Surplus	£	28,101	14,505	11,505	14,566	26,840	33,948

In 1947-48, current depreciation charges amounted to £254,657, or 3.2 per cent. of gross earnings.

In 1947-48 the total earnings of the State tramways and omnibuses amounted to £7,854,362, of which £7,110,905, or 90.5 per cent., was obtained from services in the Metropolitan district, and £743,457, or 9.5 per cent., from the Newcastle services.

Details of the financial results of the Metropolitan services are as follows:—

Table 303.—Sta	te Trainways an	id Ollinbases—ivien	opontan bervices.
D		77 12	

	Reve	enue.		Expen	liture.		
Year ended 30th June.	Tramways.	Omni- buses.	Adminis- tration, Operating Expenses.	Current Deprecia- tion.	Capital Debt Charges.	Total Expendi- ture,	Current Surplus.
	£	£	£	£	£	£	£
1938	3,304,526	708,898	3,324,023	239,742	372,505	3,936,270	77,154
1939	3,244,278	838,007	3,459,958	224,466	356,518	4,040,942	41,343
1940	3,145,741	1,021,895	3,516,210	243,949	363,132	4,123,291	44,345
1941	3,241,529	1,209,946	3,662,884	237,741	355,435	4,256,060	195,415
1942	3,575,724	1,411,155	4,298,910	204,097	334,592	4,837,599	149,280
1943	3,841,406	1,238,066	4,530,722	172,908	330,470	5,034,100	45,372
1944	4,004,484	1,164,968	4,682,422	174,014	307,368	5,163,804	5,648
1945	4,013,027	1,222,672	4,858,289	151,188	323,121	5,332,598	(-) 96,899
1946	4,070,752	1,301,545	5,285,884	140,579	292,127	5,718,590	(-)346,293
1947	4,079,672	1,432,608	5,624,641	134,520	289,211	6,048,372	(-)536,092
1948	4,983,623	2,127,282	7,151,064	224,602	336,896	7,712,562	(-)601,657
					· ·		

<sup>•</sup> Subject to further appropriations for arrears of depreclation in 1942-43 and earlier years.

(-) Deficiency.

Tramway earnings represented 70.1 per cent., and omnibus earnings 29.9 per cent. of the total Metropolitan earnings in 1947-48.

The further appropriations from surpluses as shown for arrears of depreciation of tramway assets were £16,920, £6,205, £17,385, £179,963, £129,868 and £12,187, respectively, in the years 1937-38 to 1942-43. The deficiency, £96,899, in 1944-45 was the first of the Metropolitan services since the adoption in 1933-34 of the practice of including in the accounts

a charge for current depreciation. In 1947-48 working expenses, including depreciation, exceeded earnings by £264,761, and after adding debt charges, the deficiency amounted to £601,657.

As the next statement shows, omnibuses provide a larger proportion of the services in Newcastle than in the Metropolitan district; in 1947-48 the proportions of earnings in Newcastle were 56.1 per cent. from omnibuses and 43.9 per cent. from tramways.

Table 564.—State Tramways and Omnibuses—Newcastle Service	Table	564.—State	Tramways	and	Omnibuses-	-Newcastle	Services.
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	Rever	nue.		Exper	nditure.		ı
Year ended 30th June.	Tramways.	Omni- buses.	Administration, Operating Expenses.	Current Depreciation.	Capital Debt Charges.	Total Expendi- ture.	Current Deficit. *
	£	£	£	£	£	£	£
1938	224,842	56,458	235,033	18,397	45,289	298,719	17,419
1939	204,514	87,535	247,181	18,057	47,444	312,682	20,633
1940	184,852	115,421	251,623	21,154	42,951	315,728	15,455
1941	194,636	143,945	269,059	19,467	49,221	337,747	†864
1942	226,770	215,762	347,314	17,946	48,828	414,088	†28,444
1943	272,769	229,604	415,295	18,265	47,428	480,988	†21,385
1944	297,046	233,822	463,093	16,886	48,413	528,392	†2,476
1945	306,834	247,219	489,326	15,106	47,779	552,211	†1,872
1946	299,444	263,932	540,409	11,960	43,820	596,189	32,813
1947	279,968	313,537	602,947	11,228	44,051	658,226	64,721
1948	326,155	417,302	744,372	30,055	43,263	817,690	74,233

<sup>\*</sup> Subject to further appropriations for arrears of depreciation in 1942-43 and earlier years. † Surplus.

Additional appropriations in respect of arrears of depreciation of tramway assets in Newcastle amounted to £14,714 in 1937-38, £1,750 in 1940-41, £21,016 in 1941-42 and £20,622 in 1942-43.

Except for the five years 1940-41 to 1944-45, the Newcastle services have not shown a profit since 1933-34.

# STATE TRAMWAY AND OMNIBUS TRAFFIC.

The following statement contains particulars of the passenger traffic in the Metropolitan and Newcastle districts in various years:—

Table 565.—State Tramways and Omnibuses—Passenger Traffic.
thousands.

Year	Tramw	ays.	Omnib	uses.	Tramways and Omnibuses.			
ended 30th.June.	Metro- politan.*	New- castle.	Metro- politan.*	New- castle.	Metro- politan.*	New- castle.	Total.	
${1929}$	315,668	17,808			315,668	17,808	333,476	
1931	253,243	13,104			253,243	13,104	266,347	
1938	297,400	20,671	50,096	2,557	347,496	23,228	370,724	
1939	292,118	18,666	59,146	5,269	351,264	23,935	375,199	
1940	281,717	16,999	71,942	7,683	353,659	24,682	378,341	
1941	293,746	17,782	85,752	9,609	379,498	27,391	406,889	
1942	339,648	20,905	102,334	13,750	441,982	34,655	476,637	
1943	362,224	24,913	98,751	15,064	460,975	39,977	500,952	
1944	390,684	28,063	100,412	15,363	491,096	43,426	534,522	
1945	394,509	29,716	105,103	16,581	499,612	46,297	545,909	
1946	389,300	28,044	108,043	17,117	497,343	45,161	542,504	
1947	377,530	25,640	112,562	18,230	490,092	43,870	533,962	
1948	344,710	23,029	124,253	20,400	468,963	43,429	512,392	

<sup>\*</sup> Excluding passengers across the Sydney Harbour Bridge whose journeys did not extend beyond the Bridge section—see next table.

The chief factors responsible for the rapid growth of passenger traffic during the war years were the high levels of employment and earnings and the decline in private motor traffic caused by petrol rationing. Between 1938-39 and 1944-45, the total number of passengers increased by 170,710,000 or 45.5 per cent., but since 1944-45 there has been a decline of 32,517,000 or 6 per cent.

During the war years, many former city-suburban omnibus services in Sydney and Newcastle were run only as feeder services to the tramway systems in order to economise in manpower, fuel and equipment. While this system operated, separate tickets were issued for the tram and omnibus portions of each through journey; consequently passenger figures for the war years are slightly inflated. The decline in tram passenger journeys in the last three years was partly due to the restoration of through omnibus services and partly to the increase in fares from July, 1947. Since 1944-45, omnibus passengers have increased by 22,966,000 on 18.8 per cent., largely owing to the removal of war-time restrictions.

Statistics of passenger traffic are obtained from records of tickets issued and, as a general rule, each ticket represents a passenger journey. For omnibus journeys over the Sydney Harbour Bridge section, however, a special ticket is issued to each passenger and a second ticket if the journey extends over any other section. The total number of passengers carried by trams and omnibuses across the bridge since 1937-38 is stated below; those whose journey extended beyond the Bridge section are also included in Table 565.

Table 566.—Sydney Harbour Bridge—Tramway and Omnibus Passenger Traffic.

thousands.

				_	
	Total	Year. ended 30th June.	Tram- ways.	Omni- buses.	Total.
0,396	962 11,358	1944	17,302	5,394	22,696
1,453	328   13,081	1945	17,478	5,687	23,165
2,823 3,8	16,670	1946	17,275	6,007	23,282
3,323 5,4	192 18,815	1947	16,595	7,611	24,206
5,089 6,3	304 21,393	1948	16,203	8,612	24,815
6,254 6,0	003 22,257				
	ays. buse  0,396  1,453  1,6 2,823  3,323  5,4 5,089  6,5	ays. buses. 10tal.  0,396 962 11,358 1,453 1,628 13,081 2,823 3,847 16,670 3,323 5,492 18,815 5,089 6,304 21,393	ram- ays.         Omni- buses.         Total.         ended 30th June.           0,396         962         11,358         1944           1,453         1,628         13,081         1945           2,823         3,847         16,670         1946           3,323         5,492         18,815         1947           5,089         6,304         21,393         1948	ram- ays.         Omni- buses.         Total.         ended 30th June.         Tram- ways.           0,396         962         11,358         1944         17,302           1,453         1,628         13,081         1945         17,478           2,823         3,847         16,670         1946         17,275           3,323         5,492         18,815         1947         16,595           5,089         6,304         21,393         1948         16,203	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Statistics of tram car mileage have not been available since 1939-40. In 1946-47 the mileage of omnibuses was 16,065,000 miles in the Metropolitan district and 3,936,000 in Newcastle, and the mileages in 1947-48 were 18,851,000 and 4,307,000, respectively. Average gross earnings per omnibus mile in the Metropolitan district were 21.4d. in 1946-47 and 27.1d. in 1947-48. In Newcastle the average was 19.1d. in 1946-47 and 23.3d. in 1947-48.

# TRAM AND OMNIBUS FARES.

The tramways are divided into sections of an average length of approximately 2 miles in the Metropolitan district and  $1\frac{1}{2}$  miles in Newcastle.

The fares charged on trams since 1st November, 1920, and subsequent dates, when alterations were made, are shown below:—

	•	Date of	Alteration.		November, 1948.		
Sections.	Nov. 1920.	Dec. 1927.	Oct. 1932.	July, 1947.	Mon. to Fri., 4·30 a.m. to 8 p.m.	All other times.	
One Two Three Four Five and six Harbour Bridge *	d. 2 3 4 5 6	d. 2 4 5 6 6	d. 2 3 4 5 6 3*	d. 3 4 5 6 7 2*	d. 3 5 6 7 8 2*	d. 4 6 7 8 9 2*	

Table 567.-State Tramways-Scale of Fares, to 30th June, 1949.

The tram fares on Sundays were higher by 1d. per journey between 1st November, 1920, and 11th February, 1923, when this extra charge was abolished. In December, 1930, a maximum fare of 4d. was fixed for tram travel between 10 a.m. and 4 p.m. on Mondays to Fridays, and on 2nd February, 1931, this concession became general on the Newcastle tramways irrespective of the day or hour of the journey. From 1st July, 1947, the concession was withdrawn from the Metropolitan services, and at Newcastle the maximum fare was increased to 5d.; in addition, all fares (except for the Bridge section only) were increased by 1d. per journey. The fares were increased again on 29th November, 1948, by 1d. for all journeys of more than one section between 4.30 a.m. and 8 p.m. on Mondays to Fridays; in addition, a surcharge of 1d. per journey was imposed on all journeys (including those of one section only) on Saturdays and Sundays and on Mondays to Fridays between 8 p.m. and 4.30 a.m. Concession fares to pensioners and others were increased proportionately.

Children are carried at lower rates than adults. The fare for children under 12 years of age was 1d. for one, two or three sections, and 2d. for longer journeys, until 1st August, 1934, when the fare was reduced to 1d. per journey for children under 14 years. The Harbour Bridge fare for children was reduced from 2d. to 1d. on 1st January, 1939. The maximum age for children's fares was increased to 15 years on 1st January, 1943, to conform with the change in the school leaving age. School pupils up to 18 years of age travel at children's rates on journeys to and from school.

The average length of fare sections on the Government motor omnibus services is approximately 1½ miles. Up to 30th June, 1947, the fare was 2d. for the first section and, in most cases, 1d. for each additional section. On 1st July, 1947, the fare for the first section was increased to 3d. Omnibus fares were increased on the same basis as tram fares on 29th November, 1948, with additional increases in respect of journeys of six sections or longer. The children's fare is 1d. for each 9d. or part thereof of the corresponding adult fare.

Weekly omnibus tickets are issued on the Wynyard-Epping and Wynyard-Palm Beach routes in the Metropolitan district and on various routes in the Newcastle district.

<sup>\*</sup> Dates of change were:—March, 1932, 4d.; October, 1932, 3d.; January, 1939, 2d. From November, 1948, passengers across the Bridge section only were charged ordinary one section fares.

# STATE TRANSPORT SERVICES-WORKSHOPS, EMPLOYMENT, ETC.

STATE RAILWAYS AND TRAMWAYS—WORKSHOPS.

Workshops have been established to meet the requirements of the various branches of the State railways and tramways. The principal railway shops are situated at Eveleigh, close to the Central Railway Station, and at Chullora, 11 miles distant. There are large workshops at Newcastle, Goulburn, and Bathurst to supply the needs of the permanent-way branch by the preparation of structural steelwork, fish-plates, tools, implements and other articles. Engine repairs are undertaken at a number of smaller workshops in country localities.

The principal tramway workshops are situated at Randwick, in Sydney, and there is a smaller establishment at Newcastle.

Particulars regarding the factories for railway and tramway rolling stock are published in the chapter "Factories."

STATE RAILWAYS AND TRAMWAYS—ELECTRICITY SUPPLY.

For the supply and distribution of electric current to the State railways and tramways there are three main generating stations under the control of the Commissioner for Railways, viz., Ultimo and White Bay in Sydney, and one in Newcastle. A smaller station was opened in January, 1928, at Lithgow, near the State coal mine. A number of substations are in operation throughout the suburban areas.

Particulars of the electrical energy generated at each power station and the purposes for which it was used are shown below:—

Table 568.—Electricity Generated and Used for State Railways and Tramways.

million kilowatt hours.

No. attendance	Year ended 30th June.									
Particulars.	1939.	1940.	1941.	1942.	1943,	1944.	1945.	1946.	1947.	1948,
Units Generated— White Bay Ultimo Newcastle Lithgow Units Purchased	290 184 132 25 	306 184 145 26	321 218 170 25	355 245 195 27 6	344 268 224 29 26	296 272 265 34 39	315 291 267 34 26	333 289 263 33 31	380 300 323 39 40	424 302 366 44 47
Total	631	661	734	828	891	906	933	949	1,082	1,183
Purpose of Supply— Railways Tramways Outside Bodies, etc.	274 149 208	282 143 236	312 139 283	338 151 339	359 153 379	369 156 381	377 157 399	380 158 411	396 159 527	429 155 599
Total	631	661	734	828	891	906	933	949	1,082	1,183

Since 1938-39, electricity units generated in railway power stations have increased by 80 per cent. Increases in electrical energy distributed by the Department of Railways since 1938-39 were: railways 56.5 per cent., tramways 4.5 per cent., and other bodies 187.3 per cent.

1948

1,365,449

## STATE RAILWAYS AND TRAMWAYS-COAL SUPPLIES.

There has been a marked increase in supplies of coal to the State railways and tramways in recent years, but even so, requirements have not been met. The coal used and the principal uses to which it was applied were as follows:—

	Coal used in Connection with Railways and Tramways.									
Year ended 30th June.	Locomotive Purposes,	Electric Power Stations.	Gas Making.	Other Purposes.	Total.					
	tóns.	tons.	tons.	tons.	tons.					
1929	1,212,272	391,904	7,038	45,719	1,656,933					
1932	896,147	332,497	5,744	28,657	1,263,045					
1938:	1,041,106	434,266	5,565	23,304	1,504,241					
1939	994,371	453,300	5,663	24,449	1,477,783					
1943	1,447,122	649,180	6,073	27,416	2,129,791					
1944	1,462,085	644,341	6,137	27,354	2,139,917					
1945	1,329,000	688,728	5,737	22,329	2,045,794					
1946	1,321,606	689,685	5,120	25,362	2,041,773					
1947	1,348,298	785,661	6,719	27,603	2,168,281					
			-	·						

Table 569.—State Railways and Tramways—Coal Used.

Coal consumption in 1947-48, a record year, was 781,869 tons or 53 per cent. greater than in 1938-39. In 1947-48 coal used for locomotive purposes and electric power stations comprised 60.4 per cent. and 38 per cent., respectively, of the total consumed by the railways.

6,073

24,576

2,259,652

863,554

#### STATE LAND TRANSPORT SERVICES—EMPLOYMENT AND WAGES.

Particulars of the number of persons employed in the land transport services of the Government of New South Wales and the amount of salaries and wages paid to them are shown in the following statement. The figures are exclusive of employment on the construction of railways and roads and on the maintenance of roads. The information under the heading Road Transport Department for 1931-32 and earlier years relates to the tramways only, but that for 1937-38 and later years includes the staff engaged in registering motor vehicles, licensing drivers, etc., as well as employees of the Department's omnibus services. Employees serving with the defence forces are excluded in 1938-39 and later years, but the statement of salaries and wages paid includes departmental payments to these whilst on active service.

Table 570.—State Land Transport Services—Employees and Wages.

Year	Num	nber of Employe	ees.*	Salarie	es and Wages P	aid.†
ended 30th June.	Railways— Annual Average.	Annual port Dept.		Railways.	Road Transport Dept.	Total.
	1	i I		<u>&amp;</u>	£	£
1921	37,558	9 018	46,576	9,153,089	2,278,998	11,432,087
1929	43,972	11,121	55,093	12,422,298	3,121,457	15,543,755
1931	40,620	8,388	49,008	10,167,293	2,119,794	12,287,087
1932	40,329	8,356	48,685	9,637,122	2,015,941	11,653,063
1938	41,128	10,530	51,658	10,668,200	2,608,887	13,277,087
1939	41,474	10,503	51,977	11,099,966	2,736,755	13,836,721
1940	39,955	9,984	49,939	10,919,175	2,769,108	13,688,283
1941	42,001	10,550	52,551	12,213,188	2,932,731	15,145,919
1942	45,291	10,674	55,965	14,637,323	3,463,950	18,101,273
1943	47,258	11,057	58,315	17,035,415	3,802,574	20,837,989
1944	48,019	11,140	59,159	18,101,252	3,922,124	22,023,376
1945	49,242	11,405	60,647	17,563,245	3,921,800	21,485,045
1946	53,252	12,682	65,934	18,824,637	4,194,124	23,018,761
1947	56,887	12,755	69,642	21,162,591	4,629,308	25,791,899
1948	57,673	13,632	71,305	25,495,354	5,983,944	31,479,298

<sup>•</sup> Excludes employees in defence services in war years. † Includes payments made to staff in defence services in war years. ‡ Since 1937-38 includes staff engaged in registering motor vehicles, etc. (see next chapter).

#### ACCIDENTS IN STATE TRANSPORT SERVICES.

All accidents are recorded which occur in the working of the State railways, tramways and omnibuses, or on service premises, to persons other than the employees, however slight the injuries may be. In the case of employees, all accidents must be reported, but only those are recorded for statistical purposes which cause the employee to be absent from his ordinary work for any period following the day on which the accident occurred.

Particulars of accidents during the last five years (except railway accidents in 1943-44, for which information is not available) are shown in the following table:—

Table 571.—State Railways, Tramways and Omnibuses—Accident Casualties.

Year ended	Passengers.		Emp	loyees.	Other :	Persons.	Total 1	Persons.
30th June.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
	-		Railu	ay Accide	nts.			
1945	*	*	22	11,757	126*	797*	148	12,554
1946	*	*	25	11.841	81*	721*	106	12,562
1947	*	*	35	12,153	88*	831*	123	12,984
1948	*	*	16	10,118	52*	501*	68	10,619
			Tramv	vay Accide	ents.			
1944	1 37	599	4	3,237	19	1 236	60	1 4,072
1945	10	562	3	3,385	20	206	33	4,153
1946	16	716	6	3,487	23	223	45	4,426
1947	16	568	3	3,893	30	310	49	4,771
1948	20	562	1	3,267	23	127	44	3,956
			Motor On	nnibus Acc	cidents.			
1944	l 4	I 127 I		1,044	l 7	21	11	1,192
1945	$egin{array}{cccc} 4 & 5 \end{array}$	482		1,179	2	45	7	1,706
1946	3	243		1,085	12	40	15	1,368
1947	9	185	1	1,080	6	34	16	1,299
1948	7	217	1	970	8	18	16	1,205
_				i	1			l

Passenger accidents are not recorded separately but included in "Other Persons."

Nearly all the deaths and most of the injuries are due to accidents caused by the movement of vehicles. In the last four years all the deaths in tramway and omnibus accidents, except one in 1945-46 and another in 1947-48, were due to this cause. The persons injured in tramway accidents of this kind numbered 3,478 in 1945-46, 3,485 in 1946-47, and 2,781 in 1947-48; in omnibus accidents the numbers were 989, 872 and 860 in the respective years.

The amount of compensation paid in respect of injuries to passengers and loss of or damage to goods in 1938-39 and the last four years was as follows:—

Table 572.---State Railways, Tramways and Omnibuses---Compensation for Accidents.\*

Accidents.		1938–39.	1944-45.	1945-46.	1946-47.	1947-48.
Railway Passengers Goods Tramway Omnibus		£ 8,972 20,882 27,940 4,130	£ 11,677 146,168 21,822 4,004	£ 10,537 154,450 26,682 7,939	£ 5,705 217,472 23,164 11,880	£ 6,150 190,326 35,612 12,562
Total		61,924	183,671	199,608	258,221	244,650

<sup>\*</sup> Excludes compensation to employees.

The amount of compensation paid by the railways in respect of lost or damaged goods was nine times greater in 1947-48 than in 1938-39, the major portion being for goods and luggage stolen in transit.

# MOTOR AND OTHER LICENSED VEHICLES

Special laws govern the use of motor and other road vehicles. They have been framed with a view to minimising the risk of accident and facilitating the flow of traffic, to promote economy in the organisation of State-owned and commercial transport services, and to procure funds for roads and for administration.

The police exercise general authority to take action against dangerous and disorderly traffic and they regulate the street traffic, vehicular and pedestrian, in the Metropolitan and Newcastle districts. Outside these areas, municipal and shire councils may enact by-laws for the regulation of street traffic, other than motor traffic.

The speed at which motor vehicles may be driven upon public streets has been limited since December, 1937, to 30 miles per hour within built-up areas, and, unless it be proved that a greater speed was not excessive, to 50 miles per hour elsewhere. Built-up areas are defined generally as those in which provision has been made for street lighting, but streets may be excluded from or included in the definition by direction of the Minister for Transport.

In September, 1948, special speed limits were imposed on heavy vehicles. The maximum speed in miles per hour ranges from 30 in built-up areas and 40 elsewhere for vehicles weighing between 3 and 6 tons, to 15 and 25 respectively for vehicles weighing more than 11 tons.

Motor vehicles must be registered if driven upon public streets and horse-drawn vehicles if they ply or stand in a public street for hire. Before registration or renewal of registration, motor vehicles are inspected to ensure that they comply with the requisite standard of fitness. Number plates must be displayed on all registered vehicles, and motor vehicles must also display registration labels.

The normal term of registrations and licenses and renewals thereof is a year, but since 1st December, 1932, quarterly registrations of motor vehicles have been permitted, at the option of the owners.

In terms of the Motor Vehicles (Third Party Insurance) Act, 1942, owners and drivers of motor vehicles have been required since 1st February, 1943, to be insured against liability in respect of injury to persons arising out of the use of the vehicles. Particulars are shown in the chapter "Private Finance."

Under reciprocal arrangements between the States, a private motor vehicle registered in any State may travel freely throughout the Commonwealth, but vehicles entering New South Wales must be insured against third-party risks. In addition, visiting commercial vehicles are subject to the controls normally applied to commercial vehicles in the State visited.

Drivers of motor vehicles are required to be licensed and must pass an eyesight test, a practical driving test, and an oral test in knowledge of the traffic regulations. A license may be refused, suspended or revoked on grounds of physical disability or failure to observe the regulations. In Sydney and Newcastle, drivers of public motor vehicles are subjected to tests more severe than those for other drivers.

The minimum ages of licensees are: public vehicle drivers (Sydney and Newcastle), 21 years; van drivers (Sydney and Newcastle), 18 years; motor cycle riders, 16 years; and all other motor vehicle drivers, 17 years.

Conductors of motor omnibuses in the Metropolitan and Newcastle Districts must be licensed, the minimum age being 18 years.

The registration of vehicles, licensing of drivers and collection of various taxes, fees and charges are functions of the Commissioner for Road Transport and Tramways. The police test applicants for drivers' licenses and, by arrangement with the Commissioner for Road Transport and Tramways, they effect the registrations and collect the taxes and fees in certain areas.

Motor vehicles licensed to carry passengers or goods are subject to special supervision by the Commissioner for Road Transport and Tramways. A service license must be obtained for each privately owned motor omnibus service within the Metropolitan and Newcastle Transport Districts. The registration of the vehicles is conditional on compliance with regulations as to design, construction and provision for the safety and comfort of passengers. The service license specifies the route to be traversed, the time-table to be observed and the fares to be charged. Where a service enters into competition with railway or other transport services, conditions may be imposed to prevent undue competition and overlapping. An annual fee for each service license is fixed in relation to the extent of the benefit conferred on the holder, the nature of the route traversed and the effect of the service on State-owned transport services; the maximum annual rate is £4 for each passenger each omnibus is authorised to carry. The fee for experimental, developmental or unprofitable services may be fixed at a nominal sum.

For all motor vehicles used in the State for the conveyance of passengers or goods for hire or in the course of any trade or business a license under the State Transport (Co-ordination) Act may be required in addition to any other license or registration, including the omnibus service license described above. The licensee may be required to pay charges in respect of passengers and goods carried, the maximum charges being 1d. per passenger for each mile or section (whichever is the shorter) or part thereof, or for goods 3d. per ton of the aggregate weight of the vehicle unladen plus its carrying capacity for each mile or part thereof. Vehicles engaged in the carriage of goods to the nearest railway station are not subject to the charge and other exemptions may be granted. Charges are not imposed in respect of journeys not exceeding 50 miles (except in the case of motor omnibuses running in competition with the railways or tramways), nor for the transport of perishable goods to market irrespective of distance.

Taxicabs and hire cars throughout the State are controlled to ensure the safety and comfort of passengers.

# WAR-TIME AND POST-WAR CONTROL OF PETROL SALES, NEW MOTOR VEHICLES, ETC.

During the war years, various forms of control over motor transport were set up under National Security Regulations. Most of these controls lapsed shortly after the war and by June, 1949, the remainder had been removed. Petrol rationing and the control of new motor vehicles are described on the next two pages, and details of the war-time controls were published on page 219 et seq. of Official Year Book, No. 50.

# Petrol Rationing.

Supplies of petrol and other liquid fuel for motor vehicles were rationed in terms of National Security Regulations from 1st October, 1940 to 6th June, 1949, when the High Court declared the regulations to be invalid. The scheme was administered by the Commonwealth Liquid Fuel Controller and a Liquid Fuel Control Board in each State. In New South Wales the Commissioner for Road Transport and Tramways was chairman of the State Board.

The ration scales were related to the horse-power of cars and the unladen weight of lorries, as well as the purpose for which the vehicle was used. For business users, the ration was determined according to the needs of the individual as assessed by the State Liquid Fuel Control Board. Consumers were required to obtain a license from the Board and, in the case of petrol, ration tickets corresponding to the quantity of motor spirit authorised by a license were issued monthly to licensees. Fuels other than motor spirit required for the running of motor vehicles were controlled by license only; ration tickets were not required.

The petrol ration for private motor cars remained at its lowest level for three and a half years from 1st February, 1942, until 27th August, 1945. Subsequent increases brought the ration as from 2nd December, 1946, close to that of the first six months of rationing. Allowances were reduced thereafter on three occasions, in order to limit the purchase of petrol from dollar areas and to conserve stocks for defence purposes. A factor in these reductions was the additional consumption due to the post-war increase in motor vehicle registrations.

Variations in the allowances for private motor cars from the inception of rationing were as follows:—

·			Monthly A	Allowance	per Car.		r
Date of Variation.	Up to 8 H.P.	Over 8 to 10 H.P.	Over 10 to 12 H.P.	Over 12 to 14 H.P.	Over 14 to 20 H.P.	Over 20 to 30 H.P.	Over 30 H.P.
1940—October 1941—April June July 1942—February 1945—August Sept. 1946—January July Dec. 1947—October 1948—January October	$\begin{array}{c} \text{gal.} \\ 8 \\ 7 \\ 5 \\ 2 \\ 1\frac{1}{2} \\ 2 \\ 3 \\ 5 \\ 7 \\ 8 \\ 6 \\ 5\frac{1}{2} \\ 4\frac{1}{2} \\ \end{array}$	$\begin{array}{c} \text{gal.} \\ 11 \\ 8 \\ 5 \\ 2 \\ 2 \\ \frac{11}{2} \\ 4 \\ 6 \\ 8 \\ 9 \\ 7 \\ 6 \\ \frac{11}{2} \\ 5 \\ \frac{11}{2} \\ \end{array}$	$\begin{array}{c} \text{gal.} \\ 13 \\ 10 \\ 6 \\ 3 \\ 2\frac{1}{2} \\ 3 \\ 5 \\ 8 \\ 11 \\ 12 \\ 9 \\ 8 \\ 6\frac{1}{2} \end{array}$	$\begin{array}{c} \text{gal.} \\ 14 \\ 11 \\ 7 \\ 3 \\ 2\frac{1}{2} \\ 3 \\ 5 \\ 8 \\ 11 \\ 12 \\ 9 \\ 8\frac{1}{2} \\ 7 \\ \end{array}$	gal. 16 12 8 4 3 4 6 9 12 14 11 10 8	$\begin{array}{c} \text{gal.} \\ 19 \\ 14 \\ 9 \\ 5 \\ 4 \\ 5 \\ 7 \\ 11 \\ 15 \\ 17 \\ 13 \\ 11\frac{1}{2} \\ 9\frac{1}{2} \end{array}$	$\begin{array}{c} \text{gal.} \\ 23 \\ 17 \\ 11 \\ 6 \\ 4\frac{1}{3} \\ 5\frac{1}{2} \\ 8 \\ 12 \\ 16 \\ 18 \\ 14 \\ 13 \\ 10\frac{1}{2} \end{array}$

Table 573.-Petrol Rationing-Private Motor Cars.

The reductions imposed in October, 1948 in the rations for private motorists represented an average of 20 per cent.; allowances to other users were reduced by 10 per cent. Particulars of the rationing of aviation spirit are given in the chapter "Civil Aviation."

# Control of New Motor Vehicles.

An Order of 19th October, 1942, under National Security Regulations made the acquisition of new motor lorries and omnibuses subject to permit from the Commissioner for Road Transport and Tramways as Director of Emergency Road Transport in New South Wales. The control was applied to new motor cars and ex-service cars and lorries as from 8th June, 1943. New omnibuses and lorries of more than 1 ton carrying capacity were removed from control on 5th August, 1946, and ex-service vehicles on 1st April, 1947, but permits were still required to buy new motor cars and utility vehicles.

On 1st February, 1948, control was transferred to the New Motor Vehicles Committee, representing the Commonwealth and State Governments and the motor trade. During 1947-48, permits were issued in New South Wales for 16,213 cars and 4,776 utility lorries.

Motor vehicles of 12 horse-power or less were removed from control on 17th September, 1948, and as from 2nd December, 1948, the only vehicles remaining under control were those of more than 12 horse-power imported from the United States or Canada. All controls over the purchase and sale of new motor vehicles ceased on 31st December, 1948.

# MOTOR VEHICLES—IMPORTS, EXPORTS AND PRODUCTION.

Motor vehicles and their equipment are important items in the oversear trade and factory production of New South Wales.

In 1937-38 there were 30,916 unassembled motor chassis imported, and the total value of imports of motor vehicles, tractors and parts was £4,747,696. There was a decrease of more than £1 million in 1938-39, and a further steep decline in the following two years owing to war-time-restrictions on the import and production of motor vehicles for civilian use; the increase in values thereafter until 1945-46 was due to the import of war equipment. The inflated value of the imports in post-war years was mainly due to high prices; although the value of equipment imported in 1947-48, viz., £10,491,373, was more than twice the value in 1937-38, the chassis imported numbered only 23,147 in 1947-48, as compared with 31,489 in the pre-war year.

The following table shows particulars of oversea imports of motor vehicles, tractors and parts in each year since 1937-38:—

Table 574.—Imports Oversea of Motor Vehicles, Tractors and Parts, N.S.W.

Year		of Chassis orted.	Valu	e of Motor Vo	ehicles and P	arts.	Value of
ended 30th June.	Un- assembled.	Assembled,	Chassis Un- assembled,	Chassis Assembled.	Other.*	Total.	Tractors and Parts.
	No.	 No.	£A., f.o.b.	£A., f.o.b,	£A., f.o.b.	£A., f.o.b.	£A., f.o.b.
1938	30,916	573	2,947,890	126.188	838,697	3,912,775	834.921
1939	25,949	349	2.578.113	69,581	690.146	3,337,840	354.108
1940	20,096	253	1,933,066	47,837	443,581	2,424,484	280,708
1941	7,652	154	821 383	19,016	315,856	1,156,255	216,864
1942	9,107	213	1,261,628	56,769	619,956	1,938,353	193,671
1943	2,618	31	755,111	6,936	2,453,478	3,215,525	502,313
1944	4,107	7	1,469,394	1,426	5,073,714	6,544,534	1,215,210
1945	4,246	398	2,085,491	246,817	1,729,706	4,062,014	3,200,773
1946	4,014	188	829,121	52,227	2,705,184	3,586,532	1,668,825
1947	20,025	285	3,669,917	75,620	1,444,624	5,190,161	664,163
1948	19,228	3,919	4,800,055	1,017,448	3,418,831	9,236,334	1,255,039

Includes motor bodies, parts and accessories, tyres and tubes, etc.

Particulars of motor vehicle equipment exported from New South Wales are shown below. There was considerable fluctuation in the value of Australian produce exported during the war years 1939-40 to 1945-46, but the value in 1947-48, viz., £293,073, was about seven times the value in 1938-39. Exports of Australian produce in 1947-48 included cars and lorries £24,175, tractors and parts £73,384, tyres and tubes £88,547 and batteries £28,637. In normal years, most of the equipment exported goes to New Zealand, Pacific islands and the countries north of Australia.

Table 575.—Exports Oversea of Motor Vehicles, Tractors and Parts, N.S.W.

Year	Motor Vehi	icles, Tractor	s and Parts.	Year	Motor Vehicles, Tractors and Parts.			
ended 30th June.	Australian Produce.	Other.	Total.	ended 30th June.	Australian Produce.	Other.	Total.	
1938 1939 1940 1941 1942 1943	£A f.o.b. 43,714 40,909 111,353 860,570 1,198,914 316,976	£A f.o.b. 118,181 99,054 47,695 80,796 35,970 69,588	£A f.o.b. 161,895 139,963 159,048 941,366 1,234,884 386,564	1944 1945 1946 1947 1948	£A f.o.b. 337,144 316,980 542,419 747,901 293,073	£A f.o.b. 72,640 33,998 47,190 111,646 94,833	£A f.o.b. 409,784 350,978 589,609 859,547 387,906	

Factory production of motor vehicle equipment in New South Wales comprises mainly the assembly of chassis, construction of motor bodies and repair work. The number of factories in the motor vehicle and cycle industry in 1947-48, viz., 1,795, was 47 per cent. greater than in 1937-38, and the number of employees, viz., 17,778, was 72 per cent. greater. The value of salaries and wages paid, production, and output have more than doubled since 1937-38.

The following table shows particulars of production in the motor vehicle and cycle industry in New South Wales in each year since 1937-38. The figures exclude factories manufacturing tractors, tyres and tubes, and certain parts and accessories, but they include establishments manufacturing or repairing pedal cycles. Factories using only manual power or having less than four employees are excluded. The value of production is the value added to the raw material by the process of manufacture, and the value of output is the wholesale selling value of the goods at the factory. Full definitions of the terms "Value of Production" and "Value of Output," and of the principles observed in compiling factory statistics, are given in the chapter "Factories."

Table 576.—Motor Vehicle and Cycle Factories, N.S.W.—Employment,
Production, etc.

Year	Factories		}		Value of		
ended 30th June,	at 30th June.	at Persons		Salaries and Wages Paid.†	Materials, Fuel, etc., Used.	Production.	Output.
	No.	No.		;	£ thousand.		
1938	1,222	10,655	3,784	1,891	1,990	3,100	5,090
1939	1,295	11,186	4,297	2,052	1,956	3,319	5,275
1940	1,307	10,330	4,377	1,931	2,087	3,208	5,295
1941	1,315	9,345	4,424	1,780	2,178	2,820	4,998
1942	1,217	8,682	3,900	1,949	3,245	3,184	6,429
1943	1,128	8,923	3,632	2,195	3,763	3,499	7,262
1944	1,189	11,098	3,748	2,514	3,312	4,014	7,326
1945	1,237	11,043	3,879	2,450	3,009	3,916	6,925
1946	1,369	11,414	4,688	2,772	3,816	4,285	8,101
1947	1,580	15,097	5,694	4,117	3,517	7,274	10,791
1948	1,795	17,778	7,657	5,751	5,724	9,677	15,400

<sup>\*</sup> Average during whole year; includes working proprietors.

† Excludes drawings of working proprietors.

The share of the value of production contributed by each branch of the motor vehicle and cycle industry in 1947-48 was Construction and Assembly £1,788,932, Motor Body Building £871,995, Motor Accessories £1,123,251, Repairs £5,682,724, and Cycles and Accessories £209,951. The number of employees in each of these groups, with the average per factory in brackets, were Construction and Assembly, 1,695 (94); Motor Body Building, 1,671 (13); Motor Accessories, 1,820 (43); Repairs, 12,157 (8); and Cycles and Accessories, 435 (16). The factories engaged in repairs consist mainly of small motor garages and engineering establishments. There were 16,462 males and 1,316 females employed in motor vehicle and cycle factories in New South Wales in 1947-48.

Factories in New South Wales accounted for 38 per cent. of the total: value of production of the motor vehicle and cycle industry in Australia. in 1946-47 (£21,502,000), and 34 per cent. of the total output (£35,449,000).

Particulars of the principal articles produced by the motor vehicle and cycle industry are given in the chapter "Factories."

#### Motor Vehicles—Registrations.

Provisions of the law relating to the registration of motor vehicles are indicated on page 633.

As from 1st October, 1939, the renewal of registration, and (since February, 1940) the re-registration, after lapse, of every motor vehicle have been effected only upon production of a certificate of inspection as to road-worthiness. Suitable service stations and similar establishments throughout the State are licensed as inspection stations and a number of mechanics employed thereat are licensed as examiners. At 30th June, 1948, there were 1,933 inspection stations and 3,482 licensed examiners. The inspection fee is 2s. 6d. for motor cycles and 5s. for other vehicles.

The number of vehicles on the register at intervals since 1911 is shown in the following statement. Government motor vehicles were included in the records for the first time in July, 1933. In the tables published in previous issues of the Year Book, public passenger vehicles, other than omnibuses and taxicabs in the Metropolitan and Newcastle Districts, were included in cars; in the following table they are shown separately:—

				Registrati	ions in Fo	rce.			
At 30th June.	Cars.	Public Passenger	Lorries, Utilities	Tractors.	Trailers.	Motor	Cycles.	Traders'	All Motor
	*	Vehicles.	and Vans.	‡	Traners.	Solo.	Sidecar.	Plates.	Vehicles.
1911§	3,975	179			••••		2,788		6,945
19218	28,665	587					,291	413	44,856
$1929\S \\ 1932$	170,039 143,970	$1,976 \\ 1,432$	•••••		•••••		),655	2,022	249,560
1938	201,574	4,940	72.857	38,618   851	5,286	17.125	2,741 ı 6.907	417 1,118	207,178 310,608
1939	213,331	4,807	76,726	1,035	6,414	17,120	6,971	1,164	327,628
1940	206,845	4,843	75,590	1,209	7,129	15,283	6,269	1,066	318,234
1941	200,014	4,826	75,262	1,264	7,857	14,757	6,002	900	310,882
1942	167,395	4,763	71,248	1,366	6,965	10,538	4,785	708	267,768
1943	170,836	4,614	72,159	1,382	6,873	9,641	4,523	610	270,638
1944	178,550	4,714	78,023	1,517	7,621	11,162	3,735	624	285,946
1945	182,972	4,853	82,957	1,746	9,065	12,048	4,025	651	298,312
$1946 \\ 1947$	188,191 195,857	5,213	97,176	2,056	11,067	15,546	4,946	848	325,043
1948		5,631 6,262	113,544	2,374	14,712	19,316	5,856	1,160	358,450
1948	210,506	6,262	127,413	3,308	18,317	23,501	6,575	1,438	397,41

Table 577.—Motor Vehicles on Register.

<sup>\*</sup> Includes public passenger vehicles in country districts prior to 1938. † For details, see Table 584. ‡ Tractors used solely on farms are not registered. 
\$ At 31st December.

Details of the public passenger vehicles are given on page 646. At 30th June, 1948, the number of cars, exclusive of car-type vehicles registered for public passenger-carrying purposes, was 2,825 less than at 30th June, 1939; in the same period lorries, utilities and vans increased by 50,687 or 66 per cent., and tractors and trailers almost trebled.

The total number of vehicles on the register reached the pre-war peak of 329,219 in August, 1939, but by October, 1942, largely owing to petrol rationing, it had decreased by 62,005 to 267,070, the lowest figure since July, 1936. The number then increased, at first slowly, to 298,312 in June, 1945, and then more rapidly, to 397,410 in June, 1948, as the petrol ration became more liberal and conditions generally moved toward a peace-time basis. Of the total increase of 99,098 between June, 1945, and June, 1948, lorries, utilities and vans comprised 44.8 per cent., cars 27.7 per cent. and motor cycles 14.1 per cent.

The proportion of vehicles registered for quarterly periods was 14 per cent. in 1933, 30 per cent. in 1940 and 41 per cent. in 1943. Owners registering quarterly were asked to convert to an annual basis in 1944, and the proportion of quarterly registrations decreased to 15 per cent. at 30th June, 1945, and to 8 per cent. at 30th June, 1948.

The number of tractors on the register in June, 1948, viz., 3,398, was 1,024, or 30 per cent., greater than in June, 1947. Tractors used solely on farms are not required to be registered; particulars of these, numbering 20,258 in March, 1948, are shown in the chapter "Agriculture."

At 30th June, 1948, there were 6.9 cars and 13.1 motor vehicles of all types per hundred of population, compared with 6.5 and 12.0 per hundred, respectively, a year before, and 7.8 and 11.9 per hundred, respectively, before the war in June, 1939.

# New Motor Vehicles Registered.

The number of new motor vehicles registered in various years since 1929 is shown in the following statement:—

Year ended 30th Ju e.	Cars.	Lorries, Utilities and Vans.	Tractors.	Trailers.	Omnibuses.	Taxicabs,	Motor Cycles (Solo and Sidecar).	Total.
1929 1932 1938 1939 1940 1941 1942 1943 1944 1945 1946 1948	30,182 2,788 23,024 19,924 13,842 5,968 1,340 632 173 267 526 7,998 16,659	10,170 7,712 6,026 2,976 1,716 688 3,805 2,455 3,234 5,487 9,079	8,046 805 200 209 201 109 85 44 151 280 318 254 551	1,232 1,505 1,404 1,208 722 574 847 1,098 1,613 2,950 2,970	83 6 188 130 91 46 31 17 63 63 54 116	198 1 609 569 413 281 92 12 15  7 133	\$ 2,748 2,196 1,385 939 352 165 187 105 681 2,850 4,451	\$ 38,171 32,245 23,362 11,527 4,338 2,132 5,191 4,268 6,426 19,662 34,172

Table 578.—Motor Registrations—New Vehicles Registered.

<sup>\*</sup> Includes hire cars and public passenger vehicles in country districts.

<sup>†</sup> Tractors used solely on farms are not registered.

<sup>‡</sup> Metropolitan and Newcastle Districts only; similar vehicles in other districts are included as cars.

<sup>§</sup> Not available.

New motor vehicles registered reached a peak of more than 38,500 in 1928-29, but were less than one-tenth of that number in the depression year, 1931-32. After a rise to 38,171 in 1937-38, the outbreak of war in September, 1939, and restrictions on the importation of new vehicles caused a steep decline to 2,132 in 1942-43. The number remained relatively small until after the end of the war, when registrations of new vehicles increased fairly rapidly to 19,662 in 1946-47 and 34,172 in 1947-48, the latter being greater by 1,927 than the total registered in 1938-39.

Registrations of new cars reached their lowest point, viz., 173, in 1943-44; in 1947-48 they totalled 16,659, or 16.4 per cent. less than in 1938-39. There were 3,805 new lorries, utilities and vans registered in 1943-44, or 49.4 per cent. of the 1938-39 figure, and 9,079 in 1947-48, or 17.7 per cent. more than in 1938-39. The number of new motor cycles registered in 1947-48 was more than double the number in 1938-39.

# Re-registration of Old Motor Vehicles.

The following table shows particulars of old vehicles re-registered (after lapse of registration) and registrations cancelled (by surrender of number plates). The figures include ex-service vehicles released for civilian use, but renewals of registrations are excluded:—

Table 579.—Motor Registrations—Old Vehicles Re-registered and Registrations Cancelled.

Yea <b>r</b> ended 30th June.	Cars.	Lorries, Utilities and Vans.	Tractors.	Trailers.	Omnibuses. ‡	Taxicabs.	Motor Cycles (Solo and Sidecar).	Total.
	Or	D VEHICLES	Re-registi	ERED (AFTER	LAPSE OF	REGISTRATIO	ON).	
1929 1932 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	13,558 19,611 19,174 19,194 17,691 21,790 15,481 19,782 18,718 14,560 15,237 10,142 7,594	12,468 12,206 11,508 10,767 7,970 7,970 7,971 8,049 16,650 17,839 11,812	4,768 8,171 81 98 127 148 113 144 153 177 365 685	894 861 945 1,125 939 1,007 1,216 1,383 1,775 2,485 2,505	70 43 70 68 55 58 57 42 39 38 47 62 28	237 59 102 122 173 238 250 369 321 289 246 379 554	\$ 4,997 4,811 4,688 5,281 3,243 3,255 3,537 6,587 5,731 4,768	\$ 37,786 37,360 35,187 39,407 27,863 32,569 31,955 28,225 40,719 37,003 27,946
			REGISTR	ATIONS CANO	CELLED.			
1942 1943 1944 1945 1946 1947 1948	49,490 17,269 11,714 10,316 10,236 10,229 9,442	13,474 8,101 5,832 5,613 5.665 6,958 7,022	110 173 163 204 185 301 212	2,553 1,705 997 1,037 1,386 1,790 1,870	67 34 55 53 55 79 89	349 384 336 287 240 312 486	9,034 4,587 3,010 2,687 2,844 3,901 4,315	75,077 32,258 22,107 20,197 20,611 23,570 23,436

<sup>\*</sup> Includes hire cars and public passenger vehicles in country districts.

Transfers of existing motor registrations to new owners numbered 101,505 in 1946-47 and 96,256 in 1947-48.

<sup>†</sup> Tractors used solely on farms are not registered.

<sup>‡</sup> Metropolitan and Newcastle Districts only; similar vehicles in other districts are included as cars.

<sup>§</sup> Not available.

## MOTOR DRIVERS' LICENSES.

A classification of annual licenses to drive motor vehicles issued during various years since 1921 is shown in the following statement:—

T-11-	ESO Mai	Law Duistana'		Omnibua	Conductors'	I :
l able	58U.—IVIO	tor Drivers	and	Omnibus	Conductors	Licenses.

77	(Me		Vehicles * and Newca	G 77			
Year ended 30th June.	Omnibus,		Taxi-	Hire Car	Car, Van and Lorry Drivers.	Total Drivers.	Cycle Riders.
boun bune.	Con- ductors.	Drivers.	eab Drivers.	Drivers.	Directs.		
1921†	200	441	627		53,061	54,129	16,115
1931	913	1,977	1,744		294,009	297,730	31,946
1938	784	2,182	3,976		393,474	399,632	30,477
1939	767	2,488	4,570		422,390	429,448	30,923
1940	855	2,544	4,835	•••	434,726	442,105	30,490
• 1941	1,032	2,696	4,528		430,923	438,153	30,152
1942	875	1,911	3,893	•••	396,500	402,304	25,606
1943	1,161	3,063	3,344	•••	384,822	391,229	23,743
1944	1,336	2,723	1,888	626	393,911	399,148	24,304
1945	1,118	2,549	1,888	833	415,073	420,343	25,963
1946	1,220	3,917	3,417	1,149	477,994	486,477	32,167
1947	1,324	$3,\!483$	3,742	971	522,467	530,663	38,286
1948	1,397	4,306	4,306	941	546,626	556,179	43,334

<sup>\*</sup> Newcastle District included in 1931 and later years.

The Road Transport Department estimated that of the 477,994 car and lorry drivers in 1946, approximately 71,000 or 15 per cent. were women.

The following table shows the estimated proportion of drivers of public and private motor vehicles in various age groups in 1946:—

Table 581.-Motor Vehicle Drivers in Age Groups, 1946.

Driver Licensed	16 to 20 yrs.	21 to 30 yrs.	31 to 40 yrs.	41 to   50 yrs.	51 to 60 yrs.	61 to 70 yrs.	Over 70 yrs.			
to Drive—	Proportion per cent. in Age Group.									
Omnibus, Taxieab, Hire Car	•••	23.7	44.7	20.8	8.8	1.9	0.1			
Car and Lorry	3.3	22.0	29.7	23.4	15.4	5.4	0.8			

## MOTOR TAXES, FEES, CHARGES, ETC.

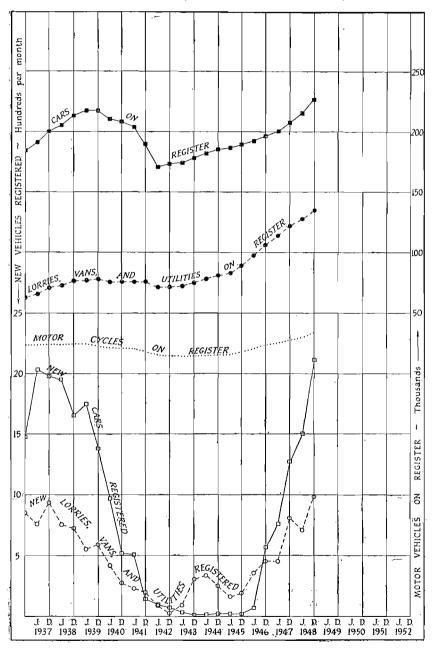
Proceeds of taxes and fees relating to road transport are distributed amongst special funds, viz., the Road Transport and Traffic Fund, Public Vehicles Fund, and State Transport (Co-ordination) Fund, which are under the control of the Commissioner for Road Transport and Tramways, and the funds of the Department of Main Roads. The allocation is as follows:—

The Road Transport and Traffic Fund receives fees from the registration of vehicles and licensing of drivers.

t Calendar year.

<sup>‡</sup> Prior to July, 1943, included with car drivers.

MOTOR VEHICLES ON REGISTER AND NEW MOTOR VEHICLES REGISTERED, NEW SOUTH WALES.



Vehicles on Register are the number at the end of each half year. New Vehicles registered are average number per month in the half years ended 30th June and 31st December.

The Public Vehicles Fund receives annual service license fees payable on motor omnibuses, and taxes on public motor vehicles which ply in the Metropolitan and Newcastle Transport Districts.

The State Transport (Co-ordination) Fund receives all collections under the State Transport (Co-ordination) Act, including license fees and charges for the carriage of passengers and goods.

The funds of the Main Roads Department receive the taxes on motor vehicles other than those paid to the Public Vehicles Fund.

Motor Taxes.—The tax levied on a motor vehicle is paid when the certificate of registration is issued or renewed. The rates of tax vary according to the type of vehicle, and are based upon the weight of the vehicle and the type of tyre used, except in the case of motor cycles. When registration is effected quarterly, the tax is charged at 27½ per cent. of the annual tax.

The rates of tax were increased by 12½ per cent. as from 1st December, 1939, and reduced by approximately 20 per cent. as from 15th May, 1942. The rates, current in June, 1949, except on vehicles of British manufacture (which are taxed at these rates (less 6d. per ½ cwt.), were as follows:—

							matic yres.		olid res.
						s.	$\mathbf{d}$ .	s.	d.
Motor-cycl	le—sol	0			$\mathbf{each}$	20	3		
-	wi	tlı side	car or	$\mathbf{box}$	,,	36	0		
Car					er 🖁 cwt	. 2	6	2	11
Omnibus					-,,	3	10	5	0
Lorry, tra	ctor* (	or othe:	r vehicl	е	,,	$^{2}$	6	3	2
•	* Ma	vimum :	tax on a	tracto	r is £13 1	Ωq			

Tractors and motor lorries owned by farmers and used solely for carting the produce of their farms are taxable at half-rates. Vehicles used by traders for trial purposes are exempt from tax. Other exemptions are ambulances, road-making equipment, sanitary and cleansing equipment of local councils, and farmers' or timber cutters' trailers used solely in carting farm produce or timber from forest to mill. Government motor vehicles, other than omnibuses, are exempt from tax and fees but are required to be registered and issued with number plates.

The motor taxes collected during 1946-47 amounted to £2,138,095, of which £72,342 was credited to the Public Vehicles Fund and £2,065,753 to the funds of the Main Roads Department. In 1947-48 the collections amounted to £2,363,720, of which £81,464 was paid to the Public Vehicles Fund and £2,282,256 to the Department of Main Roads.

Particulars of motor registration fees, etc., current in June, 1949, are shown below:—

Registration Fees.—Fees for the registration of motor vehicles are payable when the certificate of registration is issued or renewed. The fees for annual registration are as follows:—Motor cycle, 2s. 6d.; motor omnibus in the Metropolitan and Newcastle Transport Districts, £2; and other motor vehicles, £1. The annual fees for trader's registration, previously £2 for motor cycles and £8 for other vehicles, were reduced to £1 15s. and £7 respectively as from 15th May, 1942. For quarterly registration the annual fee is payable in respect of the first quarter, and one-fourth of the annual fee for each subsequent quarter while registration is continuous. The annual fee for horse-drawn vehicles plying for hire within the Metropolitan and Newcastle Transport Districts is £1.

Registration fees amounting to £352,435 in 1946-47, and £386,926 in 1947-48 were paid to the Road Transport and Traffic Fund.

Drivers' Licenses.—The annual fee is 10s. for a license to drive a motor vehicle, and 5s. for a license to ride a motor cycle. For learners' permits, current for two months since 1947-48, the fee is 5s. Within the Transport Districts, conductors of motor omnibuses and drivers of registered horse-drawn vehicles must be licensed, the annual fees being 10s. and 5s. respectively. Drivers' license fees, etc., collected and paid to the Road Transport and Traffic Fund amounted to £293,946 in 1946-47 and to £311,626 in 1947-48.

Miscellaneous Fees and Charges.—Small fees are charged in respect of the transfer and concellation of registration, replacement of lost and damaged number plates, certificates, etc. These fees are paid to the Road Transport and Traffic Fund, and amounted to £21,970 in 1946-47 and £17,562 in 1947-48.

Service License Fees are chargeable under the Transport Act, 1930, in respect of motor omnibuses operating in the Transport Districts, as described on page 634. Collections are paid to the Public Vehicles Fund, and amounted to £11,897 in 1946-47 and £14,244 in 1947-48.

Fees and Charges under State Transport (Co-ordination) Act.—Provisions of this Act governing the licensing of vehicles engaged in the carriage of passengers and goods are outlined briefly on page 634. All collections are paid to the State Transport (Co-ordination) Fund. The license fees vary from 2s. 6d. to 5s. in respect of vehicles, and agents of persons operating road transport services are charged an annual license fee of £1. The license fees amounted to £33,348 in 1946-47 and £37,165 in 1947-48.

Charges imposed in respect of passengers and goods, for which the maximum rates are stated on page 634, amounted to £82,232 in 1946-47 and £332,022 in 1947-48. Of these sums, £29,934 and £56,831 were charged for passengers in the respective years, and £52,298 and £275,191 for goods. Other receipts amounted to £3,670 in 1946-47 and £3,748 in 1947-48.

The total receipts from taxes, fees and charges in each year since 1937-38 are summarised in the following table:—

		Fees for Registra-		l Fees, etc., in ercial Motor V		Miscellan-	
Year ended 30th June.	Motor Tax.	tion of Vehicles and Licensing of Drlvers.	License Fees.	Charges for Pas- sengers and Goods,	Other.	eous Collections- Exchange, Search Fees, etc.	Total Collections.
	£	£	£	£	£	£	£
	æ	"	æ	₽.	<b>E</b>	, ,	"
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	1,925,774 2,063,150 2,165,147 2,241,030 1,912,927 1,674,813 1,747,223 1,773,136 1,927,326 2,138,095 2,363,720	572,988 607,281 600,415 587,404 515,233 506,291 521,224 537,650 608,500 668,351 718,104	36,071 37,904 38,391 43,617 42,202 40,344 37,100 37,839 41,705 45,245 51,409	50,555 52,789 54,930 52,013 33,166 22,014 20,263 21,287 39,493 82,232 332,022	1,575 1,555 1,860 1,244 568 345 376 530 1,316 3,670 3,748	3,951 4,436 6,567 5,407 4,665 4,567 8,748 10,822 12,559 15,851 20,492	2,590,914 2,767,115 2,867,310 2,930,715 2,508,761 2,248,374 2,334,934 2,381,264 2,630,890 2,953,444 3,489,495

Table 582 .- Motor Taxes, Fees, etc. - Receipts.

The total receipts from motor taxes, etc., in 1947-48, as shown in Table 582, exclude £16,800 received from the Commonwealth for road safety purposes and paid to the Road Traffic Fund.

The growth in charges for passengers and goods from £39,493 in 1945-46 to £332,022 in 1947-48 reflects the post-war increase in the use of motor vehicles for long-distance hauls in competition with the railways.

# DISBURSEMENT OF MOTOR TAXES, FEES, ETC.

Since the commencement of the Transport Act, 1930, motor revenue has been allocated to special funds as described on pages 641 to 644 inclusive, and the manner in which these funds may be utilised to meet costs of administration and for other purposes relating to transport, was described on page 393 of the Official Year Book for 1939-40.

Motor taxes and other funds at the disposal of the Department of Main Roads may be expended as described on page 594 of this volume.

The following summary shows the distribution of the revenue derived from road transport vehicles during the past eleven years:—

Year ended 30th June.	Paid to Road-making Authorities.	Provision of Traffic Facilities.	Administration of Traffic and Road Transport.*	Paid to Railway and Tramway Funds.	Total.
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948	£ 1,923,034 2,048,833 2,156,116 2,232,013 1,907,686 1,677,576 1,794,792 1,888,742 2,068,813 2,140,035 2,363,561	£ 21,954 19,982 18,720 38,800 29,400 10,282 9,142 11,512 12,935 21,140 19,958	£ 569,272 621,259 602,106 591,192 523,362 511,792 474,726 419,827 465,034 665,748 741,576	£ 52,132 106,105 66,785 67,236 7,970 44,024 33,661 36,077 39,959 60,296 414,080	£ 2,566,392 2,796,179 2,843,727 2,929,241 2,468,418 2,243,674 2,312,321 2,356,158 2,586,741 2,887,219 3,539,175

Table 583.—Expenditure from Motor Taxes, Fees, etc.

In 1947-48, £406,318 was paid to the Commissioner for Railways from the State Transport (Co-ordination) Fund, to offset losses due to competition from road transport.

At 30th June, 1948, a credit balance of £392,542 was held in the Public Vehicles Fund and £25,250 in the State Transport (Co-ordination) Fund, as compared with £368,886 and £98,587, respectively, in 1946-47. These amounts represent revenue collections not yet expended.

The value of services rendered by the police in registering vehicles, licensing drivers, etc., is recouped annually to the Cousolidated Revenue Fund; in 1947-48 the amount paid for this purpose from the Road Transport and Traffic Fund was £382,279, and from the State Transport (Co-ordination) Fund £6,000, as compared with £334,280 and £2,000, respectively, in 1946-47.

<sup>\*</sup> Includes regulation by police.

### PUBLIC MOTOR VEHICLES.

Public motor vehicles throughout New South Wales are subject to the provisions of the State Transport (Co-ordination) Act, 1931, and those in the Metropolitan and Newcastle Transport Districts are also controlled in terms of the Transport Act, 1930 (see page 634). The Commissioner for Road Transport and Tramways licenses services and vehicles, fixes fares, determines conditions and standards of service, and imposes charges and fees.

Public motor vehicles subject to control include the following:—

Motor omnibuses, which operate on fixed routes and charge a fixed fare per passenger per section.

Taxicabs, which ply for public hire, the fare being recorded by a taximeter attached to the vehicle. In the Metropolitan and Newcastle districts the general rate (as fixed by the Commissioner for Road Transport) is 1s. flag fall and 9d. per mile; elsewhere the rate is determined by the local government authorities, subject to the approval of the Commissioner.

Hire cars, which are subject to private hire (vehicle and driver) at contract rates of fare, and may not use taximeters or operate from public stands.

Tourist vehicles, which are specially licensed for tourist traffic and, in general, may not pick up or set down passengers en route.

Motor vans, which are licensed (in the Metropolitan and Newcastle districts only) to carry furniture and luggage and to ply for public hire.

Motor cars and lorries licensed to operate in services (outside the Metropolitan and Newcastle districts) for the carriage of goods (mostly mail) and limited numbers of passengers.

In addition to the public vehicles described above, there are three "taxibuses" operating in two services in the Metropolitan district. On these services, the first of which commenced in January, 1948, there is a limited number of stopping places and a flat rate of fare.

The number of public motor vehicles on the register in each year since 1938 is shown in the following table:—

_			Public	Passenger				
At 30th June,	Metropol	itan and Ne	wcastle.	Oti	her District	s.	Tourist Vehicles—	Motor Vans (Metrop. and
	Omni- buses.	Taxi- cabs.	Hire Cars.*	Omni- buses.	Taxi- cabs.	Hire Cars.	All Districts.	Newcastle),
1938 1939 1940 1941 1942 1943 1944§ 1945 1946 1947	712 777 823 880 890 913 977 1,023 1,069 1,168	1,214 1,311 1,355 1,359 1,352 -1,349 1,351 1,357 1,431 1,632	575 558 548 552 541 528 529 531 480 491	650‡ 653 656 680 687 735 783 868 960 1,032	491 554 627 675 652 619 612 630 765 874	1,145 855 729 638 633 470 464 450 511 534 491	153 99 105 47 8   71 101	1,848 1,748 1,710 1,578 1,402 1,118 1,091 1,317 1,419 1,467

Table 584.—Public Motor Vehicles on the Register.

<sup>\*</sup>Includes a number (46 at 30th June, 1948) operating in regular services.

<sup>†</sup>Included in lorries in Table 577.

The figures in the foregoing table exclude cars and lorries licensed to operate in services; there were 194 cars and 412 lorries so licensed at 30th June, 1948. Tourist vehicles were severely restricted in the early war years and were suspended from operation from 1943 to 1945.

At 30th June, 1948, there were 2,594 omnibuses, 2,558 taxicabs and 987 hire cars on the register in New South Wales; of these 1,274, 1,566 and 474, respectively, were licensed to operate in the Metropolitan district. Tourist vehicles and motor vans in the Metropolitan district numbered 54 and 1,353, respectively.

PRIVATE MOTOR OMNIBUS SERVICES—METROPOLITAN AND NEWCASTLE.

Motor omnibus services were the province of private operators until the inauguration of the first Government service in 1932. The rapid growth of this form of transport in unregulated competition with State-owned tramways and railways led to a revision of the transport laws in 1930 and 1931, and the private omnibus traffic was considerably curtailed by the elimination of overlapping services.

Particulars of motor omnibus traffic were collected for the first time in the Metropolitan district in 1928-29 and in the Newcastle district in 1930-31. Statistics of the privately owned services are shown in Table 585, and information relating to the Government services which are operated in conjunction with the tramways, on pages 620 to 628 inclusive. Details of omnibus traffic in areas outside the Metropolitan and Newcastle districts are not collected.

Table 585.—Private Motor Omnibus Services, Metropolitan and Newcastle.

					, wetropon		ow cacare,
Year ended 30th June.	Services.	Omni- buses in Service.	Bus Miles Run.	Passengers Carried.	Book Value of Plant.	Revenue.	Expendi- ture.
		METROI	OLITAN TI	MANSPORT ]	District.		
	No.	No.	Thou	sands.	£	£	£
1931	219	483	19,548	92,125	486,797	1,357,505	1,352,649
1939	135	275	7,463	27,754	167,396	363,776	338,314
1940	132	272	7,525	28,845	169,633	371,795	356,243
1941	131	288	8,003	32,278	176,613	421,195	384,055
1942	131	299	8,123	40,447	195,104	496,279	435,023
1943	√131	315	8,309	46,940	224,260	640,463	509,168
1944	131	348	8,404	49,918	283,940	658,034	578,206
1945	134	358	9,234	54,866	311,715	717,094	641,813
1946	142	393	10,500	61,349	391,747	809,613	726,691
1947	158	433	12,362	67,728	489,480	928,477	857,969
		Newc	ASTLE TRA	NSPORT DI	STRICT.		
	No.	No.	Thous	ands.	ı £ ı	£	£
1931	64	83	3,113	8,248	76,448	140,110	139,914
1939	21	42	964	1,940	26,637	42,018	35,862
1940	21	40	1,048	1,971	29,770	46,212	44,711
1941	24	37	1,152	2,441	40,807	61,409	54,970
1942	24	47	1,931	3,458	53,381	88,763	75,671
1943	24	49	1,640	4,195	61,033	100,291	96,507
1944	24	54	1,689	4,201	66,558	102,871	97,472
1945	24	55	1,639	4,608	81,249	119,165	114,015
1946	26	63	1,545	4,810	75,009	135,412	128,640
1947	26	66	1,950	5,976	79,886	136,129	138,867

<sup>\*</sup> As at 30th June.

The number of employees in private motor omnibus services was 932 in the Metropolitan district and 153 in Newcastle at 30th June, 1947, as compared with 847 and 149, respectively, at 30th June, 1946.

Since the end of the war, there has been a considerable expansion in private motor omnibus services. Between 1939 and 1947 the number of Metropolitan services increased from 135 to 158; in the same period, passengers carried increased by 39,974,000, or 144 per cent., and revenue by £564,701 or 155 per cent.

## ROAD ACCIDENTS AND ROAD SAFETY.

#### ROAD ACCIDENTS.

In New South Wales, road accidents resulting in personal injury or death, or damage to property exceeding £5, must be reported to the police within twenty-four hours. All accidents reported to the police, except non-casualty accidents not involving breach of the law or damage to property other than vehicles, are analysed by the Commissioner for Road Transport and Tramways. The information shown in the following tables is obtained from this analysis.

The number of road accidents reported in the last eleven years, and the casualties resulting therefrom, are shown below:—

Table 586 .- Road Accidents and Casualties.

		Casualties.								
Year ended 30th June.	All Accidents Report- ed.*	County of Cumberland.		Newcastle Transport District.			lance State.	Total, N.S.W.		
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
1938	12,575	324	6,080	29	382	259	2,153	612	8,615	
1939	11,906	275	5,759	35	439	242	2,190	552	8,388	
1940	11,202	298	5,624	21	407	228	2,367	547	8,398	
1941	10,548	258	5,286	24	281	189	1,904	471	7,471	
1942	7,775	273	3,991	27	257	180	1,300	480	5,548	
1943	7,085	257	3,717	20	204	152	1,175	429	5,096	
1944	6,955	233	3,534	15	138	124	1,047	372	4,719	
1945	7,889	222	3,911	15	146	133	1,294	370	5,351	
1946	10,565	261	5,223	26	213	201	1,906	488	7,342	
1947	12,996	261	5,970	22	225	225	2,557	508	8,752	
1948	13,669	259	5,667	19	299	230	2,591	508	8,55 <b>7</b>	

<sup>\*</sup> Includes accidents without casualties.

Road accidents reached their greatest pre-war severity in 1937-38, causing 612 deaths and injury to 8,615 persons. The number of accidents and casualties declined slightly in 1938-39, and steeply during the war years, as the number of registrations and the use of motor vehicles decreased because of severe petrol rationing. The lowest point was reached in 1943-44, when there were 6,955 accidents which caused 372 deaths and injury to 4,719 persons. The subsequent increase in road traffic, as petrol allowances were made more liberal, was accompanied by a disproportionate increase in accidents. Whereas the average number of vehicles on the road increased by 91,906 or 32 per cent. between 1943-44 and 1947-48, the number of accidents almost doubled and the total number of casualties increased by 3,974 or 78 per cent.

Particulars of the number of persons killed and injured in relation to the number of vehicles registered (disregarding the mileage travelled) and the population are shown in the following table:—

Table 587.-Road Casualties-Ratio to Vehicles Registered and to Population.

	Per 1,000	Vehicles Regis	stered.	Per 10	,000 Populatio	on.
Year ended 30th June.	Killed.	Injured.	Total Killed and Injured.	Killed.	Injured.	Total Killed and Injured.
1938	2.08	29.29	31.37	2.21	31.80	34.01
1939	1.74	25.60	27.34	2.02	30.66	32.68
1940	1.67	25.62	27.29	1.98	30.38	32.36
1941	1.50	23.80	25.30	1.69	26.78	28.47
1942	1.66	19.21	20.87	1.71	19.72	21.43
1943	1.60	18-97	20.57	1.51	17.91	19.42
1944	1.33	16.95	18.28	1.30	16.43	17.73
1945	1.26	18.24	19.50	1.28	18.44	19.72
1946	1.55	23.59	25.14	1.66	25.04	26.70
1947	1.48	25.44	26.92	1.71	29.54	31.25
1948	1.34	22.54	23.88	1.69	28.46	30.15
						<u> </u>

### Road Accidents—Vehicles Involved.

An analysis of accidents according to the type of vehicle involved in them shows that in 1947-48 collisions of motor vehicles and motor cycles with other vehicles, persons or objects were responsible for 86.6 per cent. of the accidents with casualties, 81.1 per cent. of the deaths and 89.1 per cent. of the persons injured. Details are given in the statement hereunder:—

Table 588.—Road Accidents—Type of Vehicle Involved, 1947-48.

			•			
		Acciden	ts with Ca	sualties.		
Type of Acciden	at.	Accidents.	Number of Persons.		Accidents without Casualties.	Total Accidents.
			Killed.	Injured.		
Motor vehicle with-	-		_			
Motor vehicle  Motor cycle  Pedal cycle  Tramcar		1,034 880 803 122	55 41 40 1	1,632 1,052 791 170	4,546 310 93 753	5,580 1,190 896 875
Trolley bus Train Pedestrian Horse-drawn vehicle		$egin{array}{c} 1 \\ 14 \\ 1,696 \\ 50 \\ \end{array}$	 4 119 3	4 15 1,668 65	5 11 6 61	6 25 1,702 111
Horse (ridden) Any other object		23 824	2 89	$\frac{21}{1,407}$	$\begin{array}{c} 4 \\ 764 \end{array}$	27 1,588
Total	•••	5,447	354	6,825	6,553	12,000
Motor cycle with—						
Motor cycle Pedal cycle Tramcar Pedestrian		47 73 11 210	2 1  15	84 106 12 245	3 3 7 	50 76 18 210
Horse-drawn vehicle Horse (ridden) Any other object		15 2 307	2  38	17 3 330	1 23	16 2 330
Total		665	58	797	37	702
Tram with other vehicle (except motor vehicle cycle) Pedal cycle with other vehicle (except motor vehicle)	e or motor  ehicle, etc.	199	27	229	13	212
cycle or tram) All other road accidents		187 557	1 <u>.</u> 6 53	197 509	<b>2</b> 9	189 56 <b>6</b>
Grand Tot	tal	7,055	508	8,557	6,614	13,669

<sup>\*</sup> As recorded; many minor accidents are not reported.

# Road Accidents-Causes.

Most accidents for which drivers are responsible are due to negligence, excessive speed, or failure to observe the traffic regulations. Accidents due to excessive speed or intoxication of the driver are usually more serious than those caused by inattentive driving. In 1947-48 inattentive driving caused 1,283 accidents and 27 deaths, whereas excessive speed resulted in 838 accidents and 86 deaths, and intoxication of driver in 578 accidents and 21 deaths. Most accidents caused by pedestrians are due to carelessness.

The following statement shows the principal causes of road accidents in 1946-47 and 1947-48.

Table 589 .- Road Accidents-Principal Causes.

		1946-47.	!		1947-48.	
Cause.	All Accidents Reported.	Persons Killed.	Persons Injured.	All Accidents Reported.	Persons Killed.	Persons Injured.
Drivers or riders— Inattentive driving	1,121 785 1,382 858 504 892 484 477	36 74 8 16 23 11 7	608 839 629 464 293 350 235 211	1,283 838 1,680 819 578 404 482 402	27 86 8 10 21 12 4	678- 827- 750- 428- 292- 255- 230- 205
Other causes	2,813	268	1,541 5,170	9,524	81 251	1,448 5,108
Vehicles— Defective mechanism, tyres or lights Other causes	795 81	41	666	832 79	52	691 12
Total	876	41	676	911	55	703
Pedestrians— Pedestrian or passenger intoxicated Crossing roadway carelessly Children playing in roadway Passing behind or in front of vehicle Boarding or alighting from vehicle in motion Other causes	358 319 249 293 189 891	18 25 19 14 8 73	350 304 233 296 180 866	377 309 245 287 163 827	20 26 20 23 19 67	376 296 232 274 144 786
Total	2,299	157	2,229	2,208	175	2,108
Person falling from moving vehicle Road faults, shying horses and other causes	70 935	10 32	63 614	51 975	1 26	50 588
Grand Total	12,996	508	8,752	13,669	508	8,557

Road Accidents—Classes of Persons Killed and Injured.

Occupants of vehicles comprise more than half the persons killed and injured in road accidents, and pedestrians constitute about one-third of the fatal cases and one-quarter of the injured. A classification of persons killed and injured in road accidents during the last eleven years is given in the following table:—

Table 590.—Road Accidents—Classes of Persons Killed and Injured.

Year ended 30th June.		ers and sengers.	Pedal (	Cyclists.	Pedes	trians.	Proportion of Pedestrians to Total.		
30th June.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed. per cent.		
1938	335	4,998	74	1,292	191	2,325	31.8	26.9	
1939	308	5,046	80	1,297	164	2,045	29.9	24.4	
1940	312	5,166	67	1,305	168	1,927	30.7	22.9	
1941	253	4,366	51	1,180	167	1,925	35.5	25.8	
1942	230	2,947	57	823	193	1,778	40.2	$32 \cdot 1$	
1943	215	2,961	35	538	179	1,597	41.7	31.3	
1944	199	2,668	44	546	129	1,505	34.8	31.9	
1945	188	3,120	44	638	138	1,593	37.3	29.8	
1946	263	4,669	48	7.62	177	1,911	36.3	26.0	
1947	314	5,747	41	894	153	2,111	30.1	24.1	
1948	296	5,494	52	963	160	2,100	31.5	24.5	

The proportion of deaths in each of these classes to total deaths in the road accidents during the past ten years was as follows:—Drivers and passengers 54.5 per cent.; pedestrians 34.5 per cent.; pedal cyclists 11.0 per cent. Of the persons injured, the proportions in these groups were 60.6 per cent., 26.6 per cent., and 12.8 per cent., respectively.

The following table shows particulars of the age and sex of persons killed and injured in road accidents in 1946-47 and 1947-48.

		1946	J-47.		1947-48.				
Age in Years.	K	lilled.	In	ured.	K	filled.	Injured.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
5 and under 11 16 , , , 20 20 , , , 25 25 , , , 30 30 , , , 60	13 19 11 41 73 33 91 43	3 12 3 9 4 3 26 11 22	156 363 395 661 1,187 816 1,826 521 591	98 127 138 241 252 193 663 234 290	15 22 11 43 67 35 92 41 114	2 9 3 5 4 4 8 8 25	165 397 387 781 1,198 727 1,749 570 517	107 165 71 231 273 199 530 231 309	
Total	415	93	6,516	2,236	440	68	6,441	2,116	

Table 591.—Road Accidents—Age and Sex of Persons Killed and Injured.

In 1947-48, males comprised 82 per cent. of all persons killed and 85 per cent. of those injured. Children under 16 years of age comprised 12 per cent. of the killed and 17 per cent. of the injured, as compared with 27 per cent. and 11 per cent., respectively, in the case of persons aged 60 years and over.

# Road Accidents-Time and Place.

Road accidents tend to be more numerous and severe at particular times and places. In 1947-48 there were 4,374 accidents (32.0 per cent. of the total) during the afternoon peak period, *i.e.*, between 4 p.m. and 7 p.m.; these resulted in 202 persons being killed (39.8 per cent. of the total) and 2,800 injured (32.7 per cent. of the total). In the same year, 4,741 accidents occurred during the hours of darkness, causing 233 persons to be killed and 3,261 injured.

Approximately half the accidents and casualties occur on straight roads where the view is open. In 1947-48, there were 297 persons killed (58.5 per cent. of the total) and 4,294 injured (50.2 per cent. of the total) at such locations, as compared with 106 killed and 3,173 injured at intersections.

## Road Accidents—Report of Select Committee.

In a report presented in November, 1948, a Select Committee of the Legislative Assembly on Road Accidents and Casualties expressed the opinion that enforcement of the existing law was the best means of reducing road accidents. Specific recommendations of the Committee included severer penalties for drunken driving, restrictions on the loading of heavy vehicles, and legislation to prohibit any person from driving a commercial vehicle for long periods without adequate rest breaks.

#### ROAD SAFETY.

A Road Safety Council of New South Wales was established in September, 1937, with the object of interesting all sections of the community in the prevention of road accidents. The Minister for Transport is President of the Council and funds are provided by the State and Commonwealth Governments. The Council undertakes road safety activities, including publicity campaigns and the issue of propaganda. The amount spent by the Council was £12,301 in 1946-47 and £23,208 in 1947-48.

An Australian Road Safety Council was formed in July, 1947, to promote road safety and to secure the adoption throughout Australia of uniform standards for traffic lights and signs, road accident statistics, etc. The Council comprises representatives of the Commonwealth and State Ministers of Transport, the State police and transport authorities, and various bodies interested in road safety. Funds are provided by the Commonwealth under the Aid Roads and Works Act, 1947; in 1947-48 expenditure by the Council was £60,000, including a grant of £16,800 to the Road Safety Council of New South Wales.

A comprehensive system of road signs and traffic lines on major highways, maintained by the Departments of Main Roads and Road Transport and Tramways, contributes materially to the safe use of the roads. Traffic control signals are provided by the Department of Road Transport at some city intersections.

# TRAFFIC OFFENCES.

During the war years, there was a steep decline in convictions for offences against the Traffic and Transport Acts, mainly owing to the effect of petrol rationing and the reduction in the number of motor vehicles on the register. Convictions fell from 48,028 in 1940 to 20,955 in 1944, but thereafter gradually rose to 45,309 in 1948, as motor registrations increased and petrol rationing became more liberal. The majority are for minor offences, such as infringement of parking regulations.

Particulars of the traffic offences in each year since 1938 are given in the following table:—

			Convictions.								
Year.	Total Offences Charged.	Offences Charged. Discharged.	Drunken Driving,	Dangerous Driving,	Other Breaches of Traffic and Transport Acts.	Total.	Per 100 Motor Vehicles Registered.				
1938	23.347	1.277	501	373	21,196	22,070	7.1				
1939			702	560	42,181	43,443	$13\tilde{.3}$				
1940		1,754	673	354	47,001	48,028	14.9				
1941			482	304	39,453	40,239	13.2				
1942			410	449	35,998	36,857	13.1				
1943			402	. 141	25,369	25,912	9.4				
1944			487	143	20,325	20,955	7.3				
1945			658	142	22,542	23,342	7.7				
1946			1,394	190	29,200	$30,784 \\ 37,661$	9·4 10·4				
$1947 \\ 1948$	46,248	939	1,358 $1,886$	$\frac{175}{218}$	36,128 43,205	45,309	11.3				

Table 592.—Traffic Offences—Charges and Convictions.

The majority of persons convicted of traffic offences are penalised by fines; of the 45,309 convicted in 1948, twelve were imprisoned (for drunken driving) 43,640 were fined and 1,657 were otherwise dealt with. In the same year, persons charged included 1,980 arrested for drunken driving, 378 for dangerous driving and 1,895 for other offences. Only 620 of the persons charged were women.

Since the end of the war there has been a disproportionate increase in convictions for drunken driving as compared with other traffic offences; between 1945 and 1948 the number of convictions rose from 658 to 1,886 or by 187 per cent. Drunken driving is a serious cause of road accidents (see Table 589).

Conviction of certain offences against the Motor Traffic Act, 1909-1945, automatically disqualifies a person from holding a driver's license for at least one year. In the year ended 30th June, 1948, there were 1,063 persons so disqualified, of whom 946 were convicted of drunken driving, 97 of dangerous driving, and 20 of failing to stop after an accident. In the same year, 2,972 persons were convicted of exceeding the speed limit and 1,272 of negligent driving. In 1947-48 excessive speed and negligent driving caused 17 per cent. and 4 per cent. respectively of the 508 fatalities in road accidents (see page 651).

Drivers' licenses suspended or cancelled by the Commissioner for Road Transport during 1946-47 numbered 125 and applications refused 339. Of the total, viz., 464, the grounds were drinking habits in 76 cases, criminal convictions in 117, physical disabilities in 138, and other reasons, mainly traffic convictions, in 133 cases.

# FOOD AND PRICES

## FOOD SUPPLY AND DISTRIBUTION.

The principal food commodities consumed in New South Wales are beef, mutton and lamb, bread, processed cereals, milk, butter, eggs, sugar, jam, potatoes, tomatoes and a wide variety of other vegetables and fruit. Supplies of nearly all these commodities are produced within the State, but those of potatoes and some fruits are drawn in part from other Australian States. Tea is the popular household beverage, and is wholly imported. The consumption of poultry, pork, bacon, ham, fish, cheese, and coffee is comparatively small.

Standards for the composition, purity, and quality of foods are prescribed by regulations under the Pure Foods Act. The Commonwealth Department of Trade and Customs exercises supervision in regard to the composition and labelling of oversea imports of food and drugs. The administration of the food laws in incorporated towns and the supervision of conditions under which food is produced and distributed are duties of the Board of Health and the municipal and shire councils.

Standard weights and measures are prescribed in terms of the Weights and Measures Act of the State and the Commonwealth Weights and Measures (National Standards) Act, 1948, which came into operation on 22nd July, 1948. Generally the standards are those of the United Kingdom. The States enforce observance of the legal standards as established under the Federal law. Contracts are required to be made in terms of the legal units, and traders' weighing and measuring appliances must be kept to a specified degree of accuracy. The weight of bread is regulated under the provisions of the Bread Act of 1901, the standard weights for loaves being 1 lb., 2 lb., and 4 lb.

The councils of municipalities and shires may establish public markets and regulate hawking and peddling of food commodities within the incorporated areas. Outside the City of Sydney, however, there are few markets except saleyards for livestock.

A description of the arrangements for the marketing of vegetables, fruit, farm produce, fish, and poultry in New South Wales is given on pages 384, 493 and 480 of this volume. The markets established by the Municipal Council of Sydney in the city, which incorporate cold storage works, the Alexandria Goods Yards, and the Darling Harbour wharves and adjacent produce stores are the principal marketing centres. The business conducted at the municipal markets consists for the most part of sales by producers or their agents to retail traders.

Agents who sell farm produce on commission, such as vegetables, fruit, eggs, and poultry, must be licensed and operate in accordance with the Farm Produce Agents Act, 1926-1932, further particulars regarding which are given on page 385 cf this Year Book. Fish marketing has been controlled by the State Fisheries Department since 17th September, 1945 (see page 660).

The Marketing of Primary Products Act, 1927-1938 authorises the formation of marketing boards in respect of primary products upon the request of the producers. To constitute a board for any product, a poll must be taken of the producers of the product who are enrolled on the Parliamentary electoral rolls, votes must be given by at least three-fifths of those entitled to vote, and more than half the votes must favour its

constitution. The Director of Marketing administers the Act, and the State Marketing Bureau, under his supervision, affords assistance to producers in regard to the marketing of their products, and collects and publishes information relating to market conditions. Marketing boards are in operation for rice, eggs, wine grapes, and navy beans.

### WAR-TIME CONTROL OF SUPPLIES OF COMMODITIES.

General authority was vested in Ministers of the Commonwealth by the National Security Act, 1939 and amendments, to regulate production, storage, distribution, use, and consumption of essential articles when necessary in the interests of the defence of the Commonwealth or the efficient prosecution of the war. Certain of these powers were retained under Defence (Transitional Provisions) Act 1946-48 to ensure an orderly return to peace-time conditions. A brief review of the scope and nature of these war-time controls is given on page 710 of the Official Year Book No. 50. Relaxation of the war-time controls began in the later phases of the war, and relatively few of them remained operative at the close of 1947.

## RATIONING OF FOOD AND OTHER COMMODITIES.

From 1942 onward, the rationing to civilians of certain foodstuffs, of clothing, and of a number of other commodities became necessary. Foodstuffs were rationed to ensure maximum supplies for the Services, the United Kingdom, and for Allied needs (tea, fairly to distribute the reduced supplies available); clothing was rationed because of a sharp fall in imports of textiles and the diversion of supplies and productive resources to meet war contracts; and certain other commodities in restricted supply, to apportion them equitably amongst civilian consumers.

Of these commodities, only butter, tea, and liquid fuel remain (March, 1949) under official rationing, but tobacco manufacturers and distributors voluntarily continue to distribute them in the same manner as under the official scheme. Particulars regarding the rationing of liquid fuel are given in the chapter "Motor Vehicles" of this volume.

Subject to the control of the Minister for Trade and Customs, the Rationing Commission, of three members, formulated rationing policy in regard to foodstuffs and clothing. The rationing scheme is administered by the Director of Rationing, who has the assistance of Deputy Directors with staff in each capital city.

During the war years the establishment of new businesses dealing in rationed goods was restricted, but since the war ended the opening of those which involve merely the supply of goods against coupons has been permitted. Except that special consideration is given to ex-service personnel seeking to resume their normal classes of business, restrictions still apply to the establishment of businesses such as cafes, etc., in which coupon-free-consumption or the use of rationed goods is involved.

The electoral organisation and an adaptation of election procedure has been used for the distribution of food and clothing coupons to consumers. Special coupons have been issued through the Services, schools, etc., and from the Commission's offices upon individual application. Coupon issues were made in June of each year, 1942 to 1945, and in December of 1946 and 1947, and of food coupons only, in November, 1948. Coupons may be used for purchase of rationed goods from any supplier, and

trafficking in coupons is illegal. Traders pass on the coupons to ware-housemen or manufacturers to replenish their stocks, and these, in turn, surrender them to the Commission with a monthly return of coupon goods supplied.

# Rationing of Food.

Details relating to the system for the rationing of food and of variations in the ration allowances are given on page 711 et seq. of the 50th edition of the Year Book. Butter and tea are the only food commodities which continue to be rationed; the former to enable the greatest possible amount to be supplied to the United Kingdom, and the latter, because a heavy subsidy is paid by the Commonwealth Government to keep down prices to consumers.

The ration of butter has been 6 oz. per person per week since 5th June, 1944, and that of tea, 8 oz. per person per four weeks since 19th Ooctober, 1942. Children under the age of 6 years are not eligible for tea. Additional butter is allowed expectant mothers and certain classes of invalids. Food permits are given cafes, restaurants, and other establishments supplying casual meals not requiring the surrender of coupons.

# Rationing of Clothing and Piece Goods.

Rationing of clothing and piece goods by coupons was applied in Australia as from 15th June, 1942, and of household drapery and furnishings as from June, 1943, and terminated on 21st June, 1948. The scheme under which rationing was applied and the steps by which rationing was relaxed are outlined on page 713 of the Official Year Book, No. 50.

# BLACK MARKETING ACT, 1942.

The Black Marketing Act, 1942 may remain operative for up to six months after the ending of the state of war. Under it severe penalties may be imposed on persons or corporations convicted of offences in contravention of the National Security Regulations, such as illegally selling or purchasing goods or services at prices or charges greater than the maximum fixed prices; illegally selling, supplying, acquiring, or accepting rationed goods or services or those subject to prohibition or restriction, or producing or manufacturing goods otherwise than in accordance with the Regulations; illegally selling or acquiring goods vested in the Commonwealth, illegally using or dealing with licences, ration tickets or coupons, or making or uttering counterfeit or forged licences, ration tickets, coupons, etc.

## RETAIL DELIVERY SERVICES.

Retail delivery services were curtailed drastically during the war years under National Security Regulations. The nature of the restrictions and their field of application were described on page 522 of the 1941-42 and 1942-43 edition of the Year Book. The restrictions were removed as from 12th November, 1946. Although the war-time block delivery systems for milk, bread, and ice also have ceased to have legal force, general competitive trading in these commodities has not been resumed.

The Factories and Shops (Home Deliveries) Amendment Act, 1948, which came into operation on 1st June, 1948, provides for enforcement of the home delivery of groceries, fruit, vegetables, meat, and any other goods proclaimed as "home delivery commodities".

Every shopkeeper selling such goods for whom it is reasonably practicable must deliver them to any person at any place (subject to payment of the lawful retail price on demand upon delivery) within a specified area. The areas specified are those within the distance by the nearest practicable route of one mile for shops within the radius of 5 miles from the General Post Office, Sydney and 3 miles from the principal post Office, Newcastle; of 2 miles from shops elsewhere in the Counties of Cumberland and Northumberland; and of 3 miles from shops elsewhere in the State.

All shopkeepers dealing in, or proposing to deal in, home delivery commodities are required to supply the Under Secretary of the Department of Labour and Industry and Social Welfare with particulars to enable a decision as to whether home deliveries should be required of them. Notice in writing requiring deliveries to be made may be served by the Under Secretary, who is empowered to refuse to register or to renew registration and to cancel registration in respect of the shop of any shopkeeper by whom deliveries are so required and who fails to give or to fulfill an undertaking in that respect. Refusal or cancellation of registration on these grounds is subject to appeal to the District Court. Penalties prescribed under the Act are up to £50 for a first and up to £100 for a second or subsequent offence, and of up to £100 or imprisonment for a term not exceeding six months on summary conviction for the making of wilfully false statements in any related matter.

#### FOOD COMMODITIES.

## ESTIMATED CONSUMPTION.

Lack of the necessary data regarding interstate trade and of stockscarried over from one period to another render it impracticable to compile satisfactory estimates of the consumption of food in New South Wales.

The Commonwealth Statistician prepares reports published annually on "Food Production and the Consumption of Foodstuffs and Nutrients in Australia". These reports, the first of which related to the year ended 30th June, 1947, give a statistical survey of foodstuffs produced and exported overseas and the quantities put to industrial and non-food uses, enabling estimates to be made, after allowing for changes in stocks and imports, of the quantities available for human consumption in Australia. A section of the report deals with the level of nutrient intake. In this latter regard, the analysis for 1947-48 showed that the average daily per capita quantity of food moving into civilian consumption in Australia amplied a satisfactory level of nutrients (slightly superior to that of 1946-47) with the possible exception of calcium.

The consumption of food of the different kinds varies considerably as between different parts of the Commonwealth and it is unlikely that the average per capita consumption in New South Wales is the same in kind and quantity as that shown for Australia in the table which follows. The differences, however, are not likely to be very great in the cases of most commodities, and it is probable that the changes during the war and early post-war years revealed in the table were experienced in New South Wales in common with the Commonwealth as a whole.

Table 593.—Per Capita Consumption of Food, Australia.

Quantity in lb. except for milk, beer, and wine (gal.) and eggs (number).

	Consumpt	ion per annum. *		1	Consumption per Head per annum;			
Commodity.	Av. 3 yrs. ended	Year ended June. 1947, 1948.		Commodity.	Av. 3 yrs.	Year, ended June.		
	1938-39.				1938–39.	1947.	11948	
Milk, Fluid, whole	23.4	29.5	30.6	Potatoes, whitesweet	108·8 2·4	133·1 1·7	132:	
Butter	32.9	25.3	24.7	Tomatoes	15.7	80.6	. 231	
Cheese	4.4	6.1	5.4	Citrus fruits	31.9	33.5	38:	
Beef and veal, bone int	144.1	96.5	111.7	Non-citrus fruits		92:0	106	
Mutton and lamb, bone				Jam Dried fruit	11·4 8·1	12:1	14: 9.	
in†		67.8	69.1	Canned fruit		8,4	10:	
Other meatt	34.3	37.4	34.7	Flour§	187.1	202.5	199	
Poultry and rabbits	9.7	16.1	16.1	Breakfast foods¶		10.2	9.	
Fish, fresh and canued	11.2	8.9	10.1	Riee, milled Tea	4·0 6·9	$\begin{array}{ c c c c } & 1.0 \\ & 6.7 \end{array}$	1.6	
Eggs, all forms		267	252	Coffee		1.1	1.	
Margarine and Lard		6.2	6.7	Beer	11.3	15.9	15	
Refined sugart		115.9	126.1	Wine		1.1	1.1	
Tremmen suRutt	100.9	110.9	120.1	Vegetables	128.0	137.4.	125	

<sup>\*</sup> Estimates for 1936-37 to 1938-39 amended slightly, and for 1946-47, appreciably, since last issue. † Carcass weight; other meat includes pork, offal, canned meat and bacon and ham. † Tucluding sugar in manufactured foodstuffs, but not syrups, honey, and glucose. § Including flour used in bread. ¶ Oaten and wheaten only.

### MEAT.

In Australia, meat for local consumption as well as for export has been subject to Commonwealth control since October, 1942, and from January, 1944 until June, 1948, household supplies were rationed by coupons. An outline of the provisions governing the production and disposal of meat is given on page 534 et seq. of volume No. 50.

In the county of Cumberland, which embraces the metropolitan area, the slaughter of stock and the sale of meat are under the control of the Metropolitan Meat Industry Commissioner, appointed by the Governor. The State Abattoir at Homebush Bay, controlled by the Commissioner, is near the stock saleyards. The carcase butchers purchase stock on the hoof, and deliver them at the Abattoir where they are slaughtered and treated by the staff of the Abattoir, and the chilled carcases are delivered to the owners early on the following morning.

The Council of the City of Greater Newcastle controls slaughtering and inspection within a radius of fourteen miles of the Newcastle Post Office, and operates the Newcastle District Abattoir; there are livestock saleyards

at Waratah. Outside the county of Cumberland and the Newcastle district, slaughtering is done at private abattoirs, which are subject to inspection by officers appointed by the local authorities and by the Board of Health. A large quantity of meat for consumption in the Metropolitan area is obtained from country abattoirs.

The average retail prices of meat are shown in Tables 601 and 602, and further particulars relating to the meat supply are published in the chapter of this volume entitled "Pastoral Industry".

#### Fish.

The supply of fresh fish is obtained in the river estuaries and coastal lakes and inlets, and by deep-sea trawling. The catch of New South Wales fisheries in 1947-48 (32,813,243 lb., including 15,179,836 lb. obtained by trawlers) was slightly smaller than in 1946-47, when the quantities were 34,156,860 lb. and 16,022,480 lb., respectively. Preserved fish is supplied almost entirely by importation, and between 1942 and 1946 was not available for civilians.

In the metropolitan district, the wholesale marketing of fresh fish is centralised in Sydney in the Municipal Market. Sales in the market were conducted by licensed agents until 17th September, 1945, when the agents' licences were cancelled and control of the wholesale distribution of fish was vested in the Chief Secretary of New South Wales, pending reorganisation of the industry on a co-operative basis (see page ).

## FLOUR AND BREAD.

The average consumption of bread in New South Wales is estimated at about 100 loaves (2 lb.) per head per annum.

The quantity of flour consumed each year is estimated to be in the vicinity of 300,000 tons, including approximately 214,000 tons used for bread, making the per capita consumption approximately 200 lb. per aunum, including about 150 lb. used for bread. Biscuit factories make biscuits for export as well as for local consumption, and used 28,239 tons of flour in 1934-44, 18,295 tons in 1944-45, 15,113 tons in 1945-46, 16,420 tons in 1946-47, and 15,477 tons in 1947-48.

A Bread Research Institute was established in May, 1947 by the Bread Manufacturers of New South Wales to engage in research and to afford technical advice to bakers. A building to house the institute was in course of construction at North Syduey in March, 1949.

The bread supply of the metropolitan area is made in approved and closely supervised bakehouses, and is distributed by the bakers by retail delivery to the consumers' homes and by delivery at wholesale rates to retail shops where it is sold "over the counter"; only a small quantity is sold to consumers at the bakeries. Bread is required to be kept adequately covered until handed to the consumer.

The bread industry in the county of Cumberland was controlled under National Security Regulations from 20th August, 1942 to 25th February, 1946 (see page 717 of Official Year Book No. 50). The regulations gave legal force to block or zone systems of household delivery in Sydney, Newcastle, and other towns which confined bread deliveries in each zone

to a single distributor. The zoning system has continued practically unchanged. Beginning in August, 1948, the Department of Labour and Industry and Social Welfare applied a trial scheme for nine weeks which was designed to give consumers a limited choice of bakers. The bakeries of the St. George district were grouped with two or three in each group, their bread was labelled distinctively and was delivered according to each consumers' choice by the one bread carter serving the particular locality prior to the commencement of the trial scheme. A negligible proportion of the consumers sought a change, and the question of the de-zoning of bread deliveries has not been resolved.

# Bread Industry (County of Cumberland) Inquiry.

In September, 1943, the Industrial Commission was required to inquire into the bread industry in the County of Cumberland, and the inquiry was undertaken by Mr. Justice Kinsella, a member of the Commission.

The findings of the Commission (reviewed more fully on page 718 of the 50th edition of the Year Book) were that there were no occupational diseases or particular health hazards in the industry; better lighting and ventilation of bakeries was needed; and bread generally was not of satisfactory quality, mainly because flour of adequate protein content was not available, and in some cases because of deficiencies in knowledge and skill of bakers, and in premises and equipment in bakeries. Costs of producing and distributing bread in the years 1939 to 1943 were examined (see Year Book No. 50 for details) but no reduction in bread prices was deemed to be warranted.

Important among the recommendations were the establishment of a flour research institute, the growing of wheat which would produce good bakers' flour, compulsory specification by millers of the protein content of flour supplied to bakers, better facilities for the training of operatives, establishment of a standard of bread, and the appointment of a nutritional committee.

An Advisory Committee consisting of representatives of organisations of bread manufacturers and employees in the industry reviewed the Commission's report. The Committee recommended that a central authority be constituted to control the manufacture and distribution of bread and to provide technical advice; the institution of a system of delivery which, while avoiding wasteful duplication of services, would provide the consumers with a choice of bakers; a change in hours for bakers to eliminate night baking; standards for ingredients and for bread; and the control of prices of bread.

The Committee set up in connection with the choice of baker trial in the St. George district undertook a review of the report of the Advisory Committee in 1948 at the instance of the Department of Labour and Industry and Social Welfare,

# Bread Industry Act, 1946.

The hours of baking recommended by the Advisory Committee were introduced as from 1st July, 1946 in the Counties of Cumberland and Northumberland in terms of the Bread Industry Act, 1946, and the Act is now operative in nearly all the cities and larger towns, making the day baking of bread statutory over the greater part of the State, although night baking (commencing at 10 p.m. or midnight) on certain days

preceding holidays is authorised. Delivery of bread is prohibited after 1T a.m. on Saturdays or 7 p.m. on a Saturday which is a "treble delivery day", except "over the counter" at bakehouses or shops.

# Prices of Flour and Bread.

An outline of the systems under which the prices of flour and of bread were fixed by associations of millers and bakers, respectively, before these commodities were proclaimed as commodities under the National Security (Prices) Regulations of the Commonwealth in September, 1939 is given on page 524 of the 1940-41 edition of the Year Book. Details of prices of bread as fixed by the Prices Commissioner from 13th October, 1941 and 18th May, 1942 are also given.

The following statement shows the "official prices" of bread in Sydney recommended to members by the Master Bakers' Association or fixed by the Prices Commissioner at each date of change since 1920 in comparison with the price of flour (including tax when payable) on these dates; flour ceased to be taxed as from 22nd December, 1947:—

Date of		f Bread b, loaf,	Price of	Date of		f Bread b. loaf.	Price of
change in price of Bread.	Cash over counter,	Cash delivered.	Flour per ton.	change in price of Bread.	Cash over counter.		Flour per ton.
1920	d.	d,	£ s. d.	1932—	d.	d.	£ s. d.
Jan. 1	41/2	42 52	12 15 0	Jan. 1	41/2	51	10 0 0‡
Feb. 1 Feb. 9.† Déc. 13 †	5½ 6 6½	52 61 61	16 7 6 19 2 6 19 7 6	1933— Dec. 4	5	6	11 15 0‡
1921	_	_		June 1	41 41	5½ 5½	7 5 0
Sep. 26 † Dec. 10 †	61 41	63 5	$\begin{bmatrix} 20 & 17 & 6 \\ 12 & 0 & 0 \end{bmatrix}$	Aug. 13	4 ½	51/2	9 15 0
1924— July 21	5	5}	14 10 0	Mar. 25 Oct. 21	43-5 § 5-51	5½-5¾	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Oct. 20 1925—	5 <u>}</u>	5 <del>1</del>	15 5 0	1936 — Feb. 25	41	5	9 10 0
Jan. 5 1926—	51	5₹	15 15 0	Aug. 17 1937—	5	51	12 0 0
May 10	5 <del>3</del> 6∤	6,	15 0 0	Jan. 25	51	53	12 15 0
July 12 Dec. 6 1927-	64	61 61	15 15 0 13 10 0	April 19 Sep. 6 1938	5 <u>‡</u> 5 <u>‡</u> 5 <u>‡</u>	6 5 <u>3</u>	$\begin{array}{cccc} 13 & 7 & 6 \\ 12 & 5 & 0 \end{array}$
Jan. 31 Sep. 19	5 <del>1</del> 6	6 6 <u>1</u>	$\begin{array}{cccc} 12 & 10 & 0 \\ 13 & 15 & 0 \end{array}$	July 10 Dec. 16	5 5½ ¶	5 <del>1</del> 6	$\begin{array}{cccc} 9 & 0 & 0 \\ 12 & 10 & 0 \end{array}$
1928— Feb. 13 1929—	5≩	6	12 15 0	1941— Oct. 13 1942—	5₹ ¶	6 <u>‡</u> ¶	12 13 0‡
Feb. 4 1930—	5 <u>‡</u>	53	11 0 0	May 18	5½ ¶	6 ¶	12 13 0‡
June 30	5	5 <u>1</u> 5 <u>1</u>	10 5 0	Nov. 8	5∄ ¶	6 <del>1</del> ¶	13 10 6‡
Sep. 1 Oct. 20 1931—	43 41 41	5 <u>4</u> 5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Jan. 23 Dec. 7	61 ¶^ 71 ¶	7 ¶ 71 ¶	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Mar. 29	5	5 <del>1</del>	10 0 0‡	200,		'* "	10 10 0

Table 594.—Bread and Flour Prices in Sydney.

The price of bread delivered by bakers to shops in the period covered by the table was ½d. per loaf less than the cash over counter price, except between March and October, 1935, when the wholesale price was 4s. 4½d. per dozen loaves. Under the State Prices Order of 7th December, 1948, the maximum price for bread delivered to a customer taking 24 or more

<sup>\*</sup>Cash daily or weekly\* † Prices fixed by Profiteering Prevention Court. ‡ Including tax, § 4\frac{3}{4}\text{d. per loaf}(2 or more loaves); 5d. per single loaf. The prices at this date were those recommended by Royal Commission. ¶ Proclaimed price for outer area—\frac{1}{4}\text{d. less in inner industrial suburbs and \frac{1}{4}\text{d. more in extreme area, except since 23rd January, 1943, when prices over counter in outer area and the extreme area were the same.

2 lb. loaves a week was ½d. a loaf less in the inner and outer areas and ¾d. a loaf less in the extreme area than the maximum retail price.

### BUTTER AND CHEESE.

Butter is in general consumption throughout Australia. The local product is choice in quality and exceeds local requirements. Annual consumption in New South Wales exceeded 34 lb. per head prior to June, 1943 when rationing began. Arrangements for supervision of the manufacture of butter and other dairy products, the system of marketing and of wartime control, and of subsidies provided by the Government are described in the chapter "Dairying Industry" of this Year Book. As a result of marketing organisation, seasonal fluctuations in the prices of factory butter had been eliminated before war-time control of prices was introduced. Between May, 1934 and December, 1947, there were four changes only in the wholesale price of butter in Sydney, viz., an increase from 140s. per cwt. to 149s. 4d. in June, 1937, to 158s. 8d. in June, 1938, to 166s. 10d. in March, 1942, and to 192s. 6d. from 1st December, 1947. Butter is marketed in 56 lb. cases and an additional charge of 2s. 6d. per cwt. is made for the cases. The retail price of butter was increased from 1s. 5d. per lb. to 1s. 6d. in June, 1937, to 1s. 7d. in June, 1938, to 1s. 8d. in March, 1942, to 1s. 11½d. in December, 1947, and to 2s. 2d. in June, 1948.

Comparatively little cheese is consumed in New South Wales. The estimated consumption per head in pre-war years was about 4 lb. but coupon rationing of butter has resulted in a somewhat greater use of cheese.

## FRESH MILK.

The milk supply of Sydney is derived partly from dairies within the metropolitan area but mainly from country districts, viz., the South Coast district between Wollongong and Nowra, the districts traversed by the main southern railway between Liverpool and Moss Vale, the Penrith, Windsor, and Richmond districts, the districts around Singleton, Branxton, and Maitland on the northern railway line, and those in the neighbourhood of Dungog and Gloucester on the North Coast line.

The supply and distribution of country milk in the metropolitan and Newcastle districts are supervised by the Milk Board, appointed by the Governor, and comprised of a chairman, a representative of dairymen, and a representative of the milk consumers. The Milk Board has power to fix prices and to regulate methods and conditions of supply and treatment of milk in producing districts and of distribution in distributing districts. The milk supplied for consumption or use in distributing districts (except milk produced and retailed directly by a dairyman on his own behalf) is vested in the Board, and its supply, except to the Board, is prohibited. Milk and cream sold or to be sold for use in the manufacture of commodities within a distributing or producing district may, by proclamation, be vested in the Milk Board.

By arrangement, distributing companies organised for handling milk on a large scale act as agents for the Board in receiving the milk at country factories and transporting it to Sydney or Newcastle, where they purchase their supplies from the Board. The Board determines the quantity of milk to be supplied by the various producing areas and pays the producers at the minimum fixed prices.

The zoning system for retail delivery of milk introduced in Sydney in May, 1942 permitted one vendor only to deliver to households in each defined district, and continues in operation.

Urban development has forced out many suburban dairies, and milk production in the metropolis has been decreasing progressively. The greater part of the milk consumed in and around Newcastle is supplied by dairies outside the district.

The following statement shows a more than two-fold increase in the quantity of country milk distributed in the Metropolitan and Newcastle districts since 1936-37:—

Year.	Metropolitan District,	Newcastle District.	Year.	Metropolitan District,	Newcastle District.
	gallons.	gallons.		gallons.	gallons.
1936-37	21,249,500	1,616,300	1942-43	30,838,700	2,309,300
1937–38	22,694,800	1,747,300	1943-44	32,952,700	2,499,200
1938-39	24,666,700	1,790,500	1944-45	34,606,400	2,670,900
1939-40	24,648,100	1,784,700	1945-46	42,489,200	3,431,800
1940–41	25,824,700	1,870,600	1946-47	46,393,400	3,913,600
1941-42	28,011,000	2,168,000	1947-48	49,186,000	4,187,300

Table 595.--Country Milk distributed in Sydney and Newcastle.

At various times during the years 1942 to 1948, milk for civilian requirements was distributed to households, hotels, retail vendors, etc. on a quota basis, varied at frequent intervals according to the quantity available for distribution. The supply of cream for civilian consumption was controlled under National Security Regulations, in the first instance from 10th May, 1943 until 11th November, 1946, and again from 1st September, 1947, and is not available for general consumption.

The Milk Board has fixed the minimum prices to be paid to dairymen for milk delivered to certain country factories, and the maximum wholesale and retail prices for milk for and in the metropolitan district since March, 1932, and the Newcastle district since 6th January, 1933, except that between April, 1945 and October, 1947, the wholesale and retail prices were determined by the Commonwealth Prices Commissioner.

In March, 1932 in the metropolitan supply area and in January, 1933 in the Newcastle supply area, the minimum prices to dairymen for milk at country factories were 10½d. to 11½d. and 11d. to 11¼d., respectively. Subsequent to March, 1938, a uniform price was fixed throughout these districts and was varied on dates as shown below:—

	1938	1942	1947	1948	1948	1949
	March.	Jan., 1.	Oct., 31.	May, 14.	Sept., 10.	March 18.
Per Gallon	 12d.	16d.	$17\frac{1}{2}$ d.	$21\frac{1}{2}d.$	20d.	26d.

The course of the maximum wholesale and retail prices in these districts since March, 1938 is indicated in the following table; for milk produced and retailed in the metropolis by the producer, the maximum retail price was that shown in the table, except from March, 1932 to May, 1942, when it was 1d. per quart higher.

		Metropolitan.							Newcastle.					
Date of Change in Price.	Wholesale at Depot to Vendor.		Wholesale to Shop Vendor's Premises.		Retail Delivered to Customer.		Wholesale at Depot to Vendor.		Wholesale to Shop Vendor's Premises.		Retail Delivered to Customer.			
	Bulk.	Bot- tled.*	Bulk,	Bot-	Loose,	Bot- tled.	Bulk.	Bot- tled.*	Bulk.	Bot- tled.*	Loose.	Bot-		
	р	епсе ре	er gallo		d. per	quart.	pence per gall			n. d. per q		quart.		
1938 March 1942 January 1942 May 1945 April 1947 Oct. 31 1948 May 14 Sept. 10 1949 Mar. 18	17½ 21½ 21½ 20½ 20½ 22½ 27 26 32½	21\frac{1}{25\frac{1}{4}} 25\frac{1}{4} 25\frac{1}{4} 26\frac{1}{4} 32 31 37\frac{1}{4}	22 26 24 25 27 27 29 28 28	26 30 283 291 311 342 331 40	7 8 71 71 8 9 9	8 9 8½ 8½ 9 10½ 10½ 12	17 20 20 18½ 22½ 26½ 24¾ 31	20 24 24 22½ 26½ 31½ 29¾ 36	21 24 23 23 23 27 27 29 28 28 23	24 28 27 271 311 342 331 40	63 71 7 7 7 8 9 101	71 81 8 8 8 9 101 12 12		

Table 596.-Milk Prices, Sydney and Newcastle.

The maximum retail price per quart of special pasteurised milk (bottled) was increased from 9d. in April, 1945 to 9½d. on 31st October, 1947, 11d. on 14th May, 1948, and 12½d. (6½d. per pint) on 18th March, 1949, when it was 3s. 3¼d. per gallon to vendors at distributor's depot and 3s. 6¾d. to shop vendors in lots up to 10 gallous in 1 pint containers.

Since April, 1944, suppliers in the Milk Board area have received subsidies at varying rates for milk supplied during winter months and during periods of severely adverse seasonal conditions. Particulars regarding the subsidisation of whole milk for human consumption in various parts of New South Wales, and the maximum prices fixed by the Prices Commissioner in areas outside the Milk Board's producing and distributing districts are given in the chapter of "Dairying Industry" on page 454 et seq. of this volume.

# SUGAR AND JAM.

The quantity of refined sugar consumed annually in New South Wales, including sugar used in the local manufacture of jam, biscuits, and other food products, is estimated at rather more than 100 lb. per head. Sugar for household consumption was rationed from 31st August, 1942 until 30th June, 1947. The ration was 1 lb. per person per week, with occasional issues of extra sugar for jam making and fruit preserving.

The sugar consumed in Australia is produced in New South Wales and Queensland. In terms of an agreement (more fully described on page 367 of this volume) between the Governments of the Commonwealth and Queensland, the Queensland Government acquires the raw sugar manufactured from sugar-cane grown in Queensland and purchases the New South Wales production. The Queensland Sugar Board makes arrangements for the refining and distribution of sugar for use in Australia at prices fixed by the agreement and for the exportation of the surplus. The importation

<sup>\*</sup> In 1 pint containers.

of foreign sugar is not permitted. The retail price of sugar in Sydney was 4d. per lb. from 31st January, 1933 until increased to 4½d. per lb. on 17th October, 1947.

The quantity of refined sugar used in food and drink factories in New South Wales in 1938-39 and certain later years is shown below:—

Table 597 .- Sugar Used in Food and Drink Factories.

			Tons.					
Factories.	1938–39,	1941–42.	1942–43,	1943-44.	1944-45.	1945–46.	1946–47.	1947–48.
Confectionery	13,004	15,041	15,845	18,533	18,788	19,816	26,156	22,179
Pickles and Sauces Aerated Waters, Cordials	7,959 5.369	$12,014 \\ 8,643$	$16,122 \\ 8,357$	16,011 9,040	$14,464 \\ 11.723$	15,125 12,065	17,794 12,554	20,518 12,808
Breweries Condiments	0,507	8,770 3,313	8,050 4,396	8,411 4,938	8,486 4,779	8,428 5,035	11,162 4,587	9,537 7,262
Biscuits	3,526 4,314	4,433 5,225	5,009 5,745	5,028 6,418	4,420 6,777	4,076 6 784	4,221 7,837	4,154 8,676
Other Food Factories	2,318	3,140	2,689	3,598	3,040	3,289	3,003	4,040
Total	45,949	60,579	66,213	71,977	72,477	74,618	87,314	89,174

There are insufficient data for estimation of the annual per capita consumption of jam in New South Wales, but it probably differed little from that of about 11½ lb. before the war and about 14 lb. in 1947-48 as shown for Australia in Table 593.

## TEA AND COFFEE.

Tea is very widely consumed throughout Australia; the average annual consumption has decreased as the result of rationing from about 7 lb. to about 6½ lb. per head. Coffee consumption per head has increased from less than one-half pound before the war to approximately 1 lb.

Tea is not produced in Australia. Before the war about two-thirds of the supply same from the Netherlands East Indies and about one-fourth from Ceylon, but Ceylon and India have become major sources, accounting, respectively, for about 61 and 39 per cent. of the imports from 1942-43 to 1944-45, for about 72 and 28 per cent. in 1946-47, and for about 70 and 30 per cent. in 1947-48. A Board has controlled supplies of tea under National Security Regulations since March, 1942. A Commonwealth subsidy has been paid to wholesale tea merchants since February, 1942 to avoid passing on to consumers the higher imported cost of tea. The subsidy was increased from July, 1943, under a general price stabilisation scheme, and then varied from time to time to keep the price of tea at approximately pre-war level until March, 1947, when the price was raised from 2s. 3d. to 2s. 9d. per lb.

The Netherlands East Indies supplied over 40 per cent. of Australia's coffee imports in the years 1936-37 to 1938-39. This source of supply fell into enemy hands and since 1942-43 supplies have been drawn mainly from East Africa, whence came 86½ and 90 per cent. of the coffee imported in 1946-47 and 1947-48, respectively.

## VEGETABLES AND FRUIT.

The potato is the chief vegetable in the Australian diet but the quantity consumed varies greatly from time to time because of wide fluctuations in supplies and prices. Production in New South Wales is supplemented by imports from Tasmania and Victoria.

Onions are imported in large quantities from Victoria. Other vegetables are obtained chiefly from local sources and some by importation from other States. The Sydney supplies are marketed mainly at the City Council's market, where the growers sell their produce by private treaty or through agents.

During the war years, control of the production and distribution of potatoes was exercised under National Security Regulations by a Committee, with the Potato Controller as its executive member, as described on page 382 of this volume. Growers were encouraged to increase production by contracts and guaranteed prices. The Commonwealth subsidised the retail price of potatoes from 24th July, 1943 to keep it steady at the much reduced price in the capital cities of Australia of 6d. for 5 lb. As from 1st October, 1948, control was assumed by the Potato Marketing Board of New South Wales and potato prices have been fixed under State Prices Regulation Orders since September, 1948.

The fruit supply is derived mainly from local orchards, and from Victoria, Tasmania, and Queensland. The Tweed River and Coffs Harbour districts of New South Wales and the State of Queensland are the chief sources of the supply of bananas. Pineapples are brought from Queensland.

The fruits most generally consumed in New South Wales are apples, oranges, lemons, pears, peaches, apricots, plums, bananas, pineapples, grapes, and passionfruit. Throughout the war period, the greater proportion of dried and canned fruits was reserved for the Services or for export to Allied countries; that allocated for civilians in Australia was very restricted.

## GAS AND ELECTRICITY.

Particulars of gas and electricity works and of the production of gas and electricity are given on pages 121 and 122 of this volume. An index of the quantity of gas and electricity consumed in the metropolitan area (excluding electricity used for railways and tramways), with the average annual consumption during the three years 1929 to 1931 as base equal to 100, is shown below:—

Year.	Index Number.	Year.	Index. Number.	Year.	Index Number.	Year.	Index. Number.
1929	105	1934	102	1939	131	1944	170
1930	99	1935	108	1940	135	1945	172
1931	96	1936	112	1941	148	1946	191
1932	96	1937	119	1942	154	1947	204
1933	98	1938	123	1943	167	1948	213

Table 598.—Gas and Electricity: Index of Consumption-Sydney.

The consumption both of gas and electricity in Sydney has increased in each year since 1932 due to growth of population, extension of services, greater use of electrical equipment and appliances, and the growing demands of industrial and commercial users. The index of consumption of gas and electricity was about 57 per cent. higher in 1948 than in 1939 although the production of energy has been affected intermittently since 1945 by industrial disputes and by deficiencies in the quantity and the quality of coal available.

The supply of gas and electricity for cooking, heating and lighting is regulated under the Gas and Electricity Act, 1935. Gas and electricity charges were controlled under Commonwealth Prices Regulations, but

gas and electricity supplied by governmental, semi-governmental, and local government authorities were excluded from control by a declaration of 20th September, 1948 under the State Prices Regulation Act, 1948. All gas services were decontrolled on 22nd March, 1949.

Standards are prescribed in respect of power, purity, and pressure of gas, and there are standard prices for gas supplied to private consumers by meter. Standard maximum rates are fixed for dividends payable by the gas companies, viz., 6 per cent. on ordinary share capital, and 5½ per cent. on preference shares. The standard prices may be varied after inquiry as to what price would enable the company concerned to pay the standard rates of divided. Such inquiries are conducted by boards which may be appointed from time to time, each consisting of a member nominated by the Minister for Local Government, one nominated by the company concerned, and a chairman chosen by agreement between the Minister and the company.

The supply of electricity in New South Wales is undertaken by the State Government, the Sydney County Council, local councils, and a number of private companies. A Committee was appointed in 1935 to advise the Government on matters relating to the supply. On its recommendation the Electricity Authority of New South Wales was constituted in 1946 in terms of the Electricity Development Act to co-ordinate and control supply systems and to encourage the development of electricity services throughout the State, particularly in rural areas.

The Authority does not generate or distribute electricity, but is empowered to regulate the extension and inter-connection of supply systems and the interchange of electricity between power stations. Subject to Ministerial approval, the Authority may grant subsidies or loans to assist councils or other electricity supply bodies to meet the cost of electricity works, and may fix maximum prices for electricity supplied in bulk by way of interchange. The principal electricity supply bodies contribute towards expenses of administration, subsidies, etc.; the bodies concerned and the maximum annual charge which may be imposed on each are listed in the Act.

The price of gas for domestic consumption in the greater part of the metropolitan area is charged under schedules of block rates in which the price decreases gradually as consumption increases, except to a few large consumers to whom monthly accounts are rendered. Under the schedules operative from February, 1948, when there was an increase averaging approximately 11½ per cent., the rates applicable to all but a small proportion of the consumers (quarterly accounts) ranged from the highest of .478d. per gas unit (equivalent to 5s. 11.7d. per 1,000 cubic feet) for the first 3,000 gas units (approximately 20,000 cubic feet) consumed in the three months down to the lowest rate of .033d. per gas unit (about 4s. 1.5d. per 1,000 cubic feet) for the consumption in excess of 144,600 gas units (964,000 cubic feet). A gas unit means 3,412 British thermal units gross, and a British thermal unit is the quantity of heat required to raise 1 lb. of water 1 degree Fahrenheit. To meet mounting costs, a further increase in price was sought. The application was referred to a Board of Inquiry and later to a Royal Commission set up in June, 1948 (following upon un industrial dispute) to investigate certain aspects of the major company's operations, but had not been dealt with up to June, 1949.

The Sydney County Council supplies electricity in the greater part of the metropolitan area. Electricity for private dwellings is charged under a "single meter" system. The charges, as raised by 7 per cent. in February, 1948, were: a rate of 5\(^1\_4\text{d}\), per unit for primary units (either lighting or power) for 2\(^1\_2\) units per quarter per 100 square feet enclosed by the outer walls of the residence, and 1.2d. per unit for secondary units in excess of this limit; where an electric range is used for cooking, the rate for secondary units is .85d. per unit.

A further increase in charges equal to 15 per cent. operated as from 1st January, 1949. The number of primary units was increased to 3 per quarter per 100 square feet and primary units were charged at 5d. and secondary units at 1½d. per unit. For secondary units for residence cooking, the rate is 1.1d. per unit. For commercial users there is a schedule of rates applicable to varying uses and periods of use.

## THE CONTROL OF PRICES.

Prices in Australia were brought under Government control upon the outbreak of war in September, 1939, and they continued to be controlled throughout the war and until 20th September, 1948 by Commonwealth authorities under powers taken under the National Security Act. In the preceding volume (No. 50) of the Year Book, on page 726 et seq., a brief account is given of the administrative arrangements for and the principles adopted in the control of prices, and the supplementary measures taken to keep prices stable during the war years. There also are indicated the developments which caused an upward trend in prices in the early post-war period.

The National Security (Prices) Regulations made under defence powers were continued in operation by Defence (Transitional Provisions) Acts of the Commonwealth and corresponding enactments of State Governments of 1946 and 1947. Following upon the rejection at referendum on 29th May, 1948 (see page 49) of proposals to bring the control of prices and rents (including charges) permanently within the constitutional powers of the Commonwealth, it was aunounced that Commonwealth control of prices would cease on 20th September, 1948.

A conference of State Premiers at Canberra on 22nd and 23rd June, 1948 resolved that, to maintain economic stability, it was vital effectively to control prices on general principles observed as uniformly as possible throughout Australia, and that in the detailed implementation of price control there should be the closest collaboration between the States. To that end it was resolved that the six State Ministers concerned should constitute an advisory co-ordinating authority; the New South Wales representative to convene meetings of the Committee when required.

The States agreed that each would appoint Ministers to administer prices (and rents and land sales) control, would not vary price levels without prior consultation, and would give reciprocity in the exchange of goods so that no State would make excess profits from the needs of another. They asked that the Commonwealth Government maintain a consultative authority in Canberra to supply data as needed by any State from records of the existing price control administration. It was arranged also that the Prices Commissioners of the several States would meet at regular intervals and that a small secretariat would be maintained by the States in Sydney to act as a clearing-house of information between them. The Commonwealth has undertaken to reimburse the States in respect of expenditure incurred in the administration of these controls.

Although the Commonwealth Government has withdrawn from the field of direct control over prices, its responsibility for national economic policy leaves with it spheres of control through which trends in general price levels may be influenced greatly. Important amongst these are control over monetary policy, including credit, the note issue, and oversea exchange, its control over oversea trade, of income taxation, of social services disbursements, and of public investment, and the subsidisation of production or of commodity prices directly.

The New South Wales Government enacted the Prices Regulation Act, 1948 to institute State control of prices. It operated initially for one year from the proclaimed date of operation (20th September, 1948) and requires that it "be administered with a view to (a) the prevention of undue increases in prices and rates for goods and services; (b) the regulation, so far as is necessary, of prices and rates for goods and services which are essential to the life of the community and of goods and services in general use which are in short supply; and (c), the progressive removal of the control of prices and rates at the earliest possible date consistent with the welfare of the community". Price-fixing powers under other State statutes in respect of milk, gas, electricty, and coal, and the general price-fixing powers of the Industrial Commission exercisable in special circumstances are not restricted or abrogated by the Prices Regulation Act.

A Prices Commissioner appointed under the Public Service Act is the principal executive and administrative officer. He has the assistance of Assistant Prices Commissioners to whom he may delegate his general powers, and he may appoint Advisers who have no executive authority. All members of his staff must make declarations of secrecy. The Commissioner may summon witnesses, take evidence, require production of documents, balance-sheets and accounts, require information and returns to be furnished, enter and inspect books and goods, and take samples of goods.

All determinations, orders, etc. under the National Security (Prices) Regulations in force at 20th September, 1948 were continued in force, unless inconsistent with the Act, until repealed, amended, or revoked under its provisions. By notice in the Gazette, the Minister may declare goods to be declared goods (i.e., subject to price control) and amend, revoke or vary any declaration, and in this way may de-control goods and services under control on passage of the Act or made so by subsequent declaration. He also may re-declare any de-controlled commodity.

The Commissioner is empowered, in his absolute discretion, to fix and declare the maximum prices at which declared goods and services may be sold or supplied, generally, in any part of the State, or in a proclaimed area by order published in the Gazette, or by any person or body or association or member thereof, by notice in writing to that person, body, or association. The Minister may request the Commissioner to reconsider and supply him with a report on any order or part thereof and may suspend its operation for not more than 28 days, and within that time the Commissioner must report to the Minister and confirm, amend, vary, or revoke the suspended order or part order.

Power is given the Commissioner to prohibit transactions which depart from a vendor's normal course of trading in declared goods and services which would not have occurred but for the provisions of the Act or an order, or which have the effect of increasing the real cost to the purchaser above the maximum fixed prices or rates. He may prohibit the sale or supply of declared goods or services until maximum prices or rates are fixed. Declared goods may not be offered for sale at a price greater than the fixed maximum price, even though subject to refund of the excess if the price or rate named is not approved subsequently by the Commissioner, or subject to a condition requiring the buying of other goods or services.

It is an offence to pay or offer to pay or to negotiate a sale at a price above the maximum fixed price of declared goods (whether by way of premium or otherwise), to supply or to offer to accept goods in lesser quantity or in inferior quality to that agreed to be sold without prior approval of the Commissioner, to refuse to sell goods or to supply services at fixed prices in reasonable quantity, to change the size of containers, quantity, or ingredients of declared goods, or to offer for sale as declared goods, goods which are adulterated or which are falsely described, packed, or enclosed for sale or labelled as declared goods. The Act proscribes speculating and attempting to corner or restrain trade in or the circulation of goods of any kind.

Every producer, manufacturer, and trader in goods and supplier of services must keep and preserve proper books and accounts, etc., and also stock and costing records where applicable. Traders may be required to deliver invoices or dockets with declared goods supplied, to exhibit lists of maximum prices, to affix price tickets to declared goods offered for sale, and to include in advertisements relating to declared goods such particulars (including maximum prices) as the Commissioner may specify by order.

Prosecutions under the Act require the written consent of the Minister and all proceedings for offences are dealt with summarily by Stipendiary Magistrates sitting in a Court of Petty Sessions. A person found guilty of an offence is liable to a penalty of £500, to imprisonment for a term of not more than twelve months, or to both pecuniary penalty and imprisonment. If the proved offender is a body corporate, the maximum penalty is £1,000, and in addition each director and officer of the corporation is liable to the same penalty and imprisonment as a person other than a corporation unless it be proved that the offence was committed without the knowledge of that person and that due diligence to circumvent the offence had been observed.

Upon assuming authority over prices, the State Minister issued declarations on 20th September, 1948 de-controlling many commodities and certain services and declaring as controlled a large number of other commodities and services. Between that date and the end of March, 1949, declarations were made exempting further services, and notifying gluten, dyestuffs, dyeing and dry cleaning, transport of coal by road or water, certain crockery, china and glass goods, and meals and light refreshments as declared goods and services. In that period specific orders numbering 37 were made by the Prices Commissioner, two calling for returns, and the remainder relating to maximum prices, including those of meat and smallgoods, bread, groceries, eggs, milk outside the Milk Board's area, potatoes, lead, zinc, copper, and also a wide range of clothing, piece goods, and furniture. In the case of the last-mentioned group, the regulation of prices was by the prescription of maximum margins over cost into store in respect of sales by importers, wholesalers, semi-wholesalers and retailers.

## WHOLESALE PRICES.

Index numbers of the wholesale prices in Sydney which were published in issues of the Year Book up to 1940-41 have been discontinued pending the compilation of a new series to illustrate the trend of a wider range of goods.

Average wholesale prices of various primary products, groceries, building materials, etc. for the years 1939 and 1943 to 1948 are shown in the following statement. The quotations represent the mean of the monthly prices in Sydney and are stated in Australian currency.

Table 599.—Wholesale Prices (Sydney).

_			•			
Commodity.	1939.	1943.	1945.	1946.	1947.	1948. *
Wheat, milling bush.  Flour (including tax) ton Chaff, wheaten ," Potatoes (local) ," Sugar 1A ," Tobacco, dark plug bush. Tea, packets ," Soap, household 44 lb. Jam 181b. Kerosene, case 8½ gal. Kerosene, drum 4 gal. Wool, greasy \$ lb. Leather, sole ," Woolpacks, 11½b each Iron—Pig, f.o.r., f.a.s., Newcastle of the complete of the comp	82 0 277 4 664 0 12 1-8 22 1 10 5 13 0 0 10-3 2 0-4 3 10-8 85 0 421 3 570 0 1 3-2 27 6 40 0 44 0 37 5	S. d. 3 11 3 248 0 0 155 6 201 0 664 0 18 10 2 5 9 13 2 5 5 1 3 1 1 2 3 8 6 1 3 1 1 2 3 8 6 6 7 8 110 0 483 9 707 5 1 8 9 64 8 9 4 6 89 4 6 89 4 6 89 4 6 0 3 8 ¶ 0 7 3 ¶ 0 5 5 5 ¶ 0 7 4 2 0 7 4 1 5 5 9	S. d. 3 11·3 248 0 202 8 157 6† 664 0 18 10 1 11·3 23 9 13 6	S. d. 3 11-3 248 6 176 9 1157 6† 664 0 18 11 1 11-3 23 8 13 6	S. d.   3   11-6   258   5   203   7-5   670   10   19   7   2   4   9   11-3   11-3   2   3-8   9   7-2   128   3   498   6   713   8   1   9-2   51   10   47   9   68   10   108   6   100   9     0   6-4   6-5   0   10-6   1   6-1	8. d. 6 2.5 321 8 211 2 242 1† 746 8 19 10 5 2 5 3 29 11 15 6

<sup>\*</sup> Subject to revision. § Season ended 30th June of year shown.

The average price of wheat shown in the table is that fixed by the Australian Wheat Board for wheat for flour for local consumption; the price was constant at 3s. 114d. per bushel from August, 1940 until late in December, 1947. This, however, was not the effective price paid for wheat used in flour by Australian consumers, because, as part of the scheme to stabilise the price of wheat, a tax was levied on flour during that period, making the price of wheat used for flour in these years equivalent to approximately 4s. 11d. per bushel. The prices shown in Table 599 for flour are inclusive of flour tax whilst payable.

The wholesale price of sugar is fixed by the Sugar Agreement (see page 367). Wholesale prices of tea and potatoes were reduced in July, 1943 under the Commonwealth price stabilisation plan. Kerosene was distributed by the Pool consisting of companies distributing petroleum products (formed in August, 1942 and ended in March, 1947) under National Security Regulations; the varying kinds of containers used in the period precluded strictly comparable quotations.

In the years 1940 to 1946, the average prices of wool as stated are the agreed prices at which the Australian clip was acquired by the United King-

dom Government (in 1945-46, on behalf of Joint Organisation); in other years they are those realised at auction. Prices stated for butter refer to the supply for local consumption which, until 1946-47, were usually higher than for butter for export overseas. The basis of quotations for beef was changed in June, 1943.

There has been a marked upward trend in wholesale prices since 1946, and because the prices shown are the averages over the calendar year the table does not display the full advance in prices. This is illustrated by comparison with the following average wholesale prices in Sydney in March, 1949 for certain of the commodities given in Table 599:—

Potat	oes.	1	ea.	Soa	ıp.	Jaı	Jam. Leather.		We pa	ool- cks.	wood. Oregon.		Bricks.		
s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	s.	8.	d.
452	6	2	5.3	31	5	16	8	2	9.3	14	3.4	65	101	120	9

Index Numbers of Wholesale Prices—Australia and Other Countries.

Under normal conditions it is difficult to make valid international comparisons as to price levels and changes in price levels. Under the conditions prevailing during and since the war, marked in various countries by price, commodity, currency, and exchange control in varying degree, bases of comparison became most uncertain. The following statement shows index numbers of wholesale prices as compiled officially in the respective countries for the years 1937-38 to 1947-48. The index numbers for Australia, complied by the Commonwealth Statistician, relate to basic materials and foodstuffs, weighted on average annual consumption during the years 1928-29 to 1934-35.

Table 600.—Wholesale Price Indices: Australia and Other Countries.

Base: Average 3 years ended June 1939 = 1,000.

Year ended	Australia,*	New Zealand.	Canada.	United Kingdom.	United States.	
June.	C'wealth Bureau of Census and Statistics.	Census and Statistics Office.	Dominion Bureau of Statistics.	Board of Trade.	Bureau of Labour Statistics.	
1938	1,005	1,019	1,051	1,044	1,013	
1939	1,011	1,021	935	958	948	
1940	1,047	1,102	1,007	1,171	961	
1941	1,140	1,240	1,072	1,436	993	
1942	1,242	1,334	1,184	1,531	1,163	
1943	1,373	1,448	1,228	1,576	1,247	
1944	1,396	1,517	1,286	1,603	1,271	
1945	1,405	1,540	1,294	1,638	1,289	
19 <b>4</b> 6	1,412	1,567	1,321	1,673	1,325	
1947	1,429	1,564	1,462	1,776	1,710	
1948	1,587	1,738	1,796	2,032	1,970	

<sup>\*</sup> See text above table.

#### RETAIL PRICES OF FOOD.

The average retail prices in Sydney of various commodities, as shown in this chapter, are based on the prices quoted by retail shops in the metropolitan district in returns collected by the Commonwealth Statistician.

The following statement shows annual average prices in the years 1914, 1918, 1939, and 1943 to 1948, inclusive; the figures represent the means of the monthly prices during each year:—

Table 601.—Retail Prices of Food, Sydney.

Prices of bread and flour had been kept virtually stable from 1939 to 1947 due to wheat price stabilisation, but rose in 1948 with an increase in the home consumption price of wheat, and on the average were 15 to 20 per cent., respectively, higher in 1948 than in 1939. There were sharp increases in the price of tea in 1941 and 1942, but these were offset wholly or in part by subsidy from 1943, and in 1948 tea was 6d. per lb. dearer than in 1939. An increase of ½d. per lb. in the price of sugar on 17th October, 1947 was the only change between 1939 and 1948, but during that period tinned jam became progressively dearer and (for plum jam) the average price was about 85 per cent. higher in 1948 than before the war.

Potatoes were very dear (more than 2½d. per lb.) in 1939, much cheaper in 1940 and 1941, and nearly as dear in 1942 as in 1939. By Commonwealth subsidy, potatoes were kept at the low prices of 6d. for 5 lb. from 1943 to July, 1947 and of 10½d. for 7 lb. from August, 1947 to October, 1948, but by December, 1948 the price had risen to 3d. per lb.

After increases of about ½d. per quart and about 1d. per lb. in 1942, milk and butter were practically unchanged in price for about five years, but between September, 1947 and March, 1948, milk became 3½d. per quart (50 per cent.) dearer, and the price of butter was raised 3½d. and 2½d. per lb. in December, 1947 and June, 1948, respectively. Cheese and eggs became progressively dearer and the prices (average for year) were about 4d. per lb. and 1s. 3½d. per dozen higher in 1948 than in 1939.

Meat prices rose steadily throughout the war years. Very little pork was available to civilians in those years. On the average meat was about 28½ per cent. dearer in 1946 than in 1939 and there were again fairly pronounced rises in meat prices in 1947 and 1948. These increases were in part the aftermath of severe drought, livestock being in short supply owing to re-stocking.

<sup>\*</sup> Middle cut in 1914 and 1918.

Details regarding variations in average retail prices of bread, milk, and butter are given on pages 662, 665, and 663 of this volume. Changes in recent years in the prices of bread, flour, sugar, tea, butter and milk are traced in the preceding pages of this chapter.

The monthly average prices of certain foods in Sydney in each month of the years 1939 (pre-war), 1943 (first price stabilisation year), and in 1947 and 1948 are shown in the following table:—

Table 602.—Average Retail Prices, Sydney: Certain Foods-Monthly.

						-						_
Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Cheese, Mild. Pence per lb.												
1939 1943 1947 1948	14·0 17·4 17·5 18·2	14·4 17·4 17·5 18·2	14·4 17·4 17·5 18·2	14·4 17·4 17·5 18·2	14.6 17.4 17.5 18.2	14·7 17·4 17·6 18·1	14·6 17·4 17·5 19·2	14.6 17.5 17.5 19.2	14·6 17·2 17·5 19·2	14·8 16·7 17·5 19·4	14·6 16·8 17·5 19·2	14·6 17·1 18·2 19·4
	l 1			ım, Plur	1	ce per	24-0Z, 1	in.	I I			
1939 1943 1947 1948	$egin{array}{c} 9.0 \ 12.2 \ 14.4 \ 15.2 \ \end{array}$	$9.2 \\ 12.4 \\ 14.4 \\ 17.4$	9·6 12·4 14·4 18·0	$9.6 \\ 12.6 \\ 14.5 \\ 18.0$	9·6 12·6 14·9 18·0	9·6 12·6 15·2 18·1	$9.6 \\ 12.6 \\ 15.2 \\ 18.1$	$9.6 \\ 12.6 \\ 15.2 \\ 18.0$	9·8 12·6 15·2 18·0	$9.8 \\ 12.6 \\ 15.2 \\ 18.0$	9·8 12·6 15·2 18·0	9.9 13.3 15.3 18.0
	Flaked Oats, Loose. Pence per lb.											
1939 1943 1947 1948	3·1 3·6 3·9 4·4	3·2 3·6 3·9 4·6	3·3 3·6 3·9 4·6	3·4 3·5 4·0 4·7	3·4 3·5 4·1 4·7	$\begin{array}{c} 3 \cdot 4 \\ 3 \cdot 4 \\ 4 \cdot 2 \\ 4 \cdot 7 \end{array}$	3·3 3·4 4·3 4·9	3·2 3·4 4·3 4·9	3·3 3·5 4·3 4·9	3·3 3·5 4·3 5·2	3·4 3·5 4·3 5·2	3·4 3·5 4·3 5·3
				Potate	oes. Pe	ence per	7-lb.					
1939 1943 1947 1948	16.5 10.6 8.4 10.5	$21.4 \\ 10.9 \\ 8.4 \\ 10.5$	17.6 17.0 8.4 10.5	16·1 16·5 8·4 10·5	13·8 16·3 8·4 10·5	15·2 16·3 8·4 10·5	17.6 16.4 10.2 10.5	20·3 8·6 10·5 10·5	20·8 8·4 10·5 10·5	22·7 10·5 10·5 10·5	19·2 10·0 10·5 16·5	12·4 8·8 10·5 21·0
			Egg	s, Hen, l	New laid	l. Pend	e per de	ozen.				
1939 1943 1947 1948	19.5 23.9 24.5 31.4	25·4 27·3 28·2 37·3	18.6 27.4 28.6 34.5	$22.6 \\ 27.4 \\ 31.4 \\ 34.5$	23.8 27.4 31.4 41.5	23·9 27·4 31·4 41·5	$18\ 0$ $27\ 6$ $31\ 4$ $34\ 5$	15·0 27·6 28·4 31·5	$14.8 \\ 22.2 \\ 24.4 \\ 31.5$	14·8 22·2 24·4 31·4	$14.8 \\ 22.1 \\ 26.4 \\ 31.4$	16.8 22.2 28.4 34.5
			Ве	ef, Ribs,	Bone	in. Pe	nce per	lb.				
1939 1943 1947 1948	7·9 9·2 8·6 8·1	7·8 9·1 10·0 8·0	7·9 9·2 9·6 8·0	8.0 9.2 8.1 8.0	7·6 9·2 8·1 8·5	7·8 9·2 8·1 8·5	7·7 9·2 8·1 8·5	7·4 9·2 8·1 8·5	7·6 9·2 8·1 8·5	7·7 9·2 8·1 8·5	7·8 8·5 8·1 10·0	8.0 8.5 8.1 10.0
			Ве	ef, Run	ıp Stea	k. Pen	ce per	lb.				
1939 1943 1947 1948	$15.0 \\ 21.6 \\ 23.0 \\ 24.0$	$15.0 \ 21.3 \ 25.0 \ 24.0$	$14.9 \\ 21.8 \\ 25.0 \\ 24.0$	15.0 $22.0$ $23.6$ $25.0$	$14.9 \\ 22.0 \\ 23.6 \\ 26.0$	15·0 22·0 23·5 26·0	$15.0 \\ 22.0 \\ 23.5 \\ 26.0$	14·8 22·0 23·5 26·0	$14.7 \\ 22.0 \\ 23.5 \\ 26.0$	$\begin{array}{c} 14.8 \\ 22.0 \\ 24.0 \\ 26.0 \end{array}$	$14.8 \\ 22.0 \\ 24.0 \\ 27.2$	15·0 22·0 24·0 26·6
Mutton, Leg. Pence por lb.												
1939 1943 1947 1948	7·4 7·7 9·6 10·5	7·4 7·8 10·8 10·6	7·4 7·9 10·6 10·8	7.2 $7.9$ $10.6$ $10.8$	7·1 7·8 10·6 11·0	7·2 7·9 10·6 12·0	$\begin{array}{c} 7.2 \\ 7.9 \\ 10.6 \\ 12.0 \end{array}$	7·1 7·9 10·6 12·0	7·1 7·9 10·6 12·0	7.2 $7.9$ $10.4$ $12.0$	7·2 7·7 10·4 11·0	7·4 7·8 10·4 11·0
Mutton, Loin Chops. Pence per lb.												
1939 1943 1947 1948	$9.2 \\ 10.4 \\ 12.4 \\ 14.0$	9·1 10·5 14·2 14·1	$9.2 \\ 10.6 \\ 14.4 \\ 14.2$	$7.9 \ 10.6 \ 13.8 \ 14.2$	$8.2 \\ 10.6 \\ 13.8 \\ 14.5$	$8.4 \\ 10.6 \\ 14.2 \\ 16.5$	$8.8 \\ 11.4 \\ 14.2 \\ 16.5$	$8.6 \\ 11.4 \\ 14.2 \\ 16.5$	8·8 11·4 14·2 16·5	8·8 10·8 14·0 16·5	9·0 10·4 14·0 14·0	9·2 10·4 14·0 14·0

The price of cheese rose by about 2d. per lb. in 1942 and then was virtually stabilised until November, 1947, but it increased subsequently and at the end of 1948 was about .5d. per lb., or 33 per cent., dearer than

at the end of 1939. Marked rises in prices of tinned jam and loose flaked oats in 1948 followed gradual increases from 1942 to 1947 making them about 82 per cent. and 56 per cent. dearer than at the close of 1939. Prices of eggs showed sharp seasonal changes about the same general level from 1943 to 1946 and about appreciably higher levels in 1947 and 1948; in June and December, 1948, eggs were about 74 and 105 per cent. dearer than in the corresponding months of 1939.

Throughout the period covered by the table, increases in prices of mutton were proportionately greater than were those of beef. Beef, both in the joint and as rump steak, was relatively dear in 1943 and it was not until the end of 1947 that the average prices of rump steak and until 1948, of ribs of beef exceeded those of 1943. In December, 1948, ribs of beef were dearer by about 2d. and rump steak by more than 2½d. per lb. than in December, 1947. Legs of mutton were more than 3½d. and loin chops were more than 4¾d. per lb. dearer in December, 1948 than in the last month of 1939. Demands for sheep to restore flocks depleted by drought, coupled with high prices for wool, were factors affecting mutton prices from 1946 to 1948.

#### HOUSE RENTS.

Information concerning nature of occupancy supplied by householders at the census of 30th June, 1947 disclosed that there were 352,916 private dwellings occupied by tenants, including 218,988 in the metropolis. The corresponding numbers at the census of 30th June, 1933 were 270,740 and 160,260. The proportion of all private dwellings which were in the occupation of tenants increased slightly during the intercensal interval, from 47 to 48 per cent.

The information tabulated from the census concerning rent was restricted to the actual rent paid per week by tenants occupying unfurnished private dwellings. A classification of the private dwellings in 1933 and 1947 according to rent per week (unfurnished) is shown below. Rented furnished dwellings are included in the number "not stated." It is to be noted, however, that because of changes in local government areas in the intercensal interval the "urban-provincial" and rural areas are not identical in both years:—

Table 603A.—Tenanted Private Dwellings—Weekly Rentals, Censuses 1933 and 1947.

	Census, 30	Census, 30th June, 1947.					
Rent per Week (Unfurnished).	Urban  Metro- Provin politan. cial.	Rural.	New South Wales.	Urt Metro- politan.	Proviu- eial.	Rural.	New South Wales.
Under 5s	482 1,376 5,253 7,387 26,751 16,622 36,371 13,896 36,018 9,255 22,065 3,283 12,628 1,488 4,888 40 4,589 258 1,526 42 835 33 352 (7,786 4,358	10,728 12,321 6,114 3,480 2,1,006 3,458 93 92 2,31 12 2,3	6,922 23,368 55,696 56,380 48,751 26,353 14,574 5,381 4,939 1,599 879 360 725 24,813	116 966 10,080 21,152 32,770 35,137 33,352 21,588 17,026 5,574 2,200 1,043 1,597 36,387	394 1,972 7,850 10,262 14,847 11,507 7,148 2,621 1,812 448 108 42 44 11,132	1,591 6,815 11,273 8,233 7,956 3,995 2,615 781 714 225 99 23 29 19,392	2,101 9,753 29,203 39,647 55,578 50,689 43,115 24,990 10,552 6,247 2,407 1,108 1,670 66,911
Total Private Dwellings.  Average Weekly Rent per Unfurnished Private Dwelling	1 1		270,740	218,988 29s. 1d,	70,187	63,741	352,916 25s. 9d

<sup>\*</sup> Includes furnished private dwellings.

For unfurnished private dwellings occupied by tenants for which rents were stated, rentals up to 25s. per week applied to 77.7 per cent. of the total in 1933 but to only 47.7 per cent. in 1947. Those with rentals of between 25s. and 50s. comprised 20.8 per cent. in 1933 and 48.3 per cent. in 1947 and houses at rentals exceeding 50s. a week represented 1.5 and 4.0 per cent. in the respective years.

A large proportion of the tenanted dwellings in New South Wales are of three to six rooms with walls of wood and of brick or stone. In the next table the census data for 1947 is summarised to show the average rentals of unfurnished private houses (one family) and of flats (including shares of flats) in this group, and for purposes of comparison the corresponding averages for all tenanted unfurnished private houses (3 to 6 rooms) in 1933 are included. Comparative data regarding rentals of flats are not available for 1933.

Table 603B.—Average Weekly Rental of Unfurnished Dwellings of 3 to 6 Rooms Occupied by Tenants.

			Private	Houses.*			Flats.†	
Region.	Wo	ood.	Brick o	r Stone.	Wood, Brid	Wood, Brick or Stone.		
	1933.	1947.	1933.	1947.	1933.	1947.	1947.	
Metropolis Urban Provincial Rural Total, N.S.W	s. d. 15 0 14 7 11 3	s. d. 20 2 20 3 15 0 18 4	s. d. 21 1 17 10 16 2 20 6	8. d. 27 0 24 3 22 5 	s. d. 19 10 15 7 11 10	s. d. 25 11 21 7 16 2 23 5	s. d. 37 5 30 3 27 5	

<sup>\*</sup>All tenanted private houses in 1933; private houses (one family) in 1947. †Including shares of flats.

#### AVERAGE RENTS OF HOUSES, SYDNEY.

A comparative statement of average weekly rents in Sydney from 1865 to 1920 is published in the Statistical Register of New South Wales, 1919-20, and for later years to 1936 in the Statistical Register, 1935-36.

Information regarding rents of unfurnished houses containing four and five rooms is collected by the Commonwealth Statistician from a representative number of house agents in the capital cities and a number of towns in each State for use in the compilation of price index numbers. The agents' returns, supplied quarterly, show the rentals of a substantial number of houses, selected by field officers of the Commonwealth Bureau of Census and Statistics as being representative and providing a sample suitable to measure quarterly the ratio of changes in weekly rentals of houses.

The relative increases in average rentals so ascertained are shown below. The averages are essentially indices measuring changes for a constant standard; they do not indicate the average amount of rental actually paid for *all* rented houses, and still less do they indicate the rental at which vacant or new houses may be rented.

	Four I	Rooms.	Five I	Rooms,	Weighted
Year.	Wooden.	Brick,	Wooden,	Brick.	Average, 4 & 5 Rooms,
	s. d.	s. d.	s. d.	s. d.	s. d.
1929	20 0	22 8	24 7	29 3	25 7
1932	16  2	18 0	18 6	21 11	19 8
1933	15 8	17 6	18 4	21 1	19 0
1936 *	15 10	19 3	19 6	22 5	20 4
1937	17 0	21 0	19 7	24 0	21 8
1938	18 3	21 11	20 5	24 9	22 6
1939	19 1	22 7	21 2	25 5	23 3
1940	19 4	22 8	21 3	25 7	23 5
1941	19 4	22 9	21 4	25 7	23 5
1942 to 1945	19 5	22 8	21 5	25 7	23 5
1946	19 - 6	22 8	21 6	25 6	23 5
1947	19 - 7	22 9	21 5	25 6	23 5
1948	19 9	22 9	21 6	25 7	23 6

Table 603C .- Rents, per week, Unfurnished Houses, Sydney.

Note.—Kitchen is included as a room. \* Basis amended slightly.

There has been little rise in these house rentals since 1939 owing to the operation of the Fair Rents Regulations described below.

#### CONTROL OF RENTS.

Commonwealth War-time and Early Post-war Measures.

The control of rents by the Commonwealth Government was initiated under National Security (Fair Rents) Regulations on 29th September, 1939, but because comparable State legislation was already in operation, these regulations were not applied in New South Wales. The regulations were repealed in January, 1943, by which time National Security (Landlord and Tenant) Regulations had become the major instrument for the control of rent and tenancies. The latter regulations operated in New South Wales from the date of issue on 28th September, 1941—being kept in force in 1947 and 1948 by the Defence (Transitional Provisions) Acts of 1946 and 1947—until discontinued from the 16th August, 1948, after rejection at referendum of proposals to bring control of rents permanently within the constitutional powers of the Commonwealth (see page 49). An account of the extent and nature of the controls under these regulations and of the arrangements for their administration, together with records of fair rent determinations made up to 31st December, 1947, is given on page 734 et seq. of the Official Year Book No. 50.

#### New South Wales Measures.

Rights as between landlord and tenant in New South Wales are defined under the Landlord and Tenant Act, 1899 and its amendments. An amendment of 1931 restricted the right of ejectment of tenants from dwellings leased at rentals of up to £3 per week. A general statutory reduction of 22½ per cent in rentals, made in October, 1931 as a measure to combat the economic depression, applies in respect of leases of premises entered into prior to 30th June, 1930. In 1932 it was enacted that a landlord's right to eject a tenant might be stayed for a period of three months in cases where the tenants are impoverished because of unemployment.

## Landlord and Tenant (Amendment) Act, 1948.

A conference of State Premiers held in Canberra on 22nd and 23rd June, 1948, following upon announcement by the Commonwealth that its Landlord and Tenant Regulations would cease to operate after 16th August, 1948, resolved that continued control of rents and protection of tenants were nationally essential. The Government of New South Wales enacted the Landlord and Tenant (Amendment) Act, 1948 (the provisions of which follow closely the Commonwealth regulations then in force and about to be revoked) under which all determinations, etc. and matters in process under the Commonwealth regulations are deemed to be made or instituted under the Act.

The fair rent provisions of the Act apply only to prescribed premises, but practically all kinds of premises were proclaimed under the regulations (licensed premises, farm properties, and holiday premises the major exceptions) and thus virtually all rents are controlled. However, the Minister may, by order, exclude premises of any class from the operation of the Act. The rent-fixing tribunals, as under the regulations, were the Rent Controller in the first instance, and on appeal the Fair Rents Board constituted by Stipendiary Magistrates.

Rents are pegged at their level on 31st August, 1939, or of premises provided between that date and 1st March, 1945, at the rate payable on the last mentioned date. Rent of premises built later are not pegged, but in respect of any prescribed premises, either the landlord or the lessee may obtain a fair rent determination. The principles and procedure observed in determining the fair rent of shared accommodation and of other premises are as under the National Security Regulations as described on pages '735 and '736 of the Year Book No. 50, except that appeal from a determination of the Controller may be made within 21 instead of 14 days and a party to proceedings may have legal representation which the regulations debarred. The Government indicated in the House, however, the intention as soon as practicable to vest the original determination of rent of all prescribed premises other than shared accommodation in the Fair Rents Boards.

The provisions of the Landlord and Tenants Acts in regard to the recovery of possession of leased premises are outlined briefly in the chapter "Law Courts" of this volume.

### RETAIL PRICE INDEX NUMBERS.

Retail price index numbers for Sydney and other Australian cities and towns are compiled by the Commonwealth Statistician. The earliest index related to the prices of food and groceries and rents of all houses, with the year 1911 as the base. It was known as the "All Houses" or "A" series index, and has been superseded by the "All Items" or "C" series index.

The latter series originated in the findings of the Royal Commission, appointed by the Commonwealth Government in 1919, which investigated the cost of living in each capital city of Australia for a family consisting of man, wife, and three children under 14 years of age in November of each year from 1914 to 1920 at a standard which it determined. Following the recommendations of the Commission, the Commonwealth Statistician extended the scope of collection of retail prices to cover all the main groups of household expenditure on the basis of a regimen similar to that adopted by the Commission, in order to compile the "All Items" index numbers. The groups of household expenditure covered by the series are

food and groceries, rent of four- and five-roomed houses, clothing, and miscellaneous items, including fuel and light. Full particulars of the index are contained in the "Labour Report" published annually by the Commonwealth Statistician.

The "All Items" retail price index numbers for Sydney, as compiled by the Commonwealth Statistician, are shown below. The index numbers from 1914 to 1922 inclusive are available for the month of November only, and are shown in Table 671 of the 50th edition of the Year Book. In 1923 and later years the index has been compiled for each quarter, and the annual figures in the table represent the mean of the four quarters. Separate particulars are stated for the various groups of expenditure. The base of each group of household expenditure is the weighted average for that group in the six capital cities of Australia during the quinquennium 1923-1927, taken as 1000.

Table 604.—Retail Price Index Numbers: "All Items"—Sydney. (Base of each group: Weighted average, six capital cities of Australia, 1923-27 = 1000.)

Year,	Food and Groceries.	Housing (4 aud 5 Rcoms).	Food, Groceries and Housing Combined.	Clothing.	Mis- cellaneous.	Total Household Expendi- ture.
1923–27 1928	1012 1021	1111 1143	1047 1064	950 978	1021 1048	1020 1042
1929	1090	1162	1115	983	1046	1073
$1930 \\ 1931$	984 876	1197 1026	1059 929	931 835	$1040 \\ 1013$	1026 922
932	852	894	867	769	996	867
1933	800	864	822	742	988	832
1934	825	869	840	746	975	842
1935	840	891	858	$7\overline{46}$	976	852
1936	848	930	878	778	949	866
1937	868	965	904	818	949	889
1938	904	1004	941	833	936	913
1939	936	1035	972	843	940	936
1940	952	1042	985	950	984	974
1941	962	1043	992	1119	1051	1028
1942	1040	1043	1039	1302	1105	1107
1943	1042	1042	1040	1450	1166	1151
1944	1025	1043	1030	1440	1171	1144
1945	1035	1043	1036	1425	1163	1142
1946	1039	$1043 \\ 1044$	$1038 \\ 1082$	$1516 \\ 1572$	$1170 \\ 1216$	1165 1212
$1947 \\ 1948$	1110 1258	1044	1173	1766	1210	1318
1040	1400	1017	1119	1100	1200	1910

The index number of total household expenditure in Sydney fell by 22½ per cent. between 1929 and 1933, and then rose slowly, and in 1939 was still 13 per cent. below the level of 1929. During the next two and a half years, prices in all groups, particularly prices of clothing, became dearer, and the index number in the second quarter of 1943 was about 9 per cent. above that for the year 1929 and over 16 per cent. above its level in the immediate pre-war quarter. The prices stabilisation plan and related measures (see page 726 of the 50th edition of the Year Book) applied as from April, 1943 until the war ended. The subsequent relaxation of wartime controls and a strong upward trend of import prices led to rising retail prices, and by the close of 1948 the "All Items" index number had risen to 45.7 per cent. above the pre-war level. On the average throughout 1948, food was 34.4 per cent. dearer, rent was only 1.2 per cent. higher, but clothing was 109.5 per cent. dearer, and miscellaneous items were 34.9 per cent. dearer than during 1939.

The "C" series retail price index numbers for each quarter since March, 1939 are shown below; the base of each group is the same as the base of the index numbers in Table 604.

Table 605.—Retail Price Index Numbers: "All Items"—Sydney; Quarterly.

(Base of each group: Weighted average, six capital cities of Australia, 1923-27 = 1000.)

Quarter.	Food and	Housing	Food, Groceries	Clothing.	Miscell-		Iousehold nditure.
Quarter.	Groceries.	rooms).	& Housing Combined.	Clouning.	aneous,	Index No.	Increase from Sept Qr., 1939.
1000 35	044	1005	074	005			Per cent.
1939—March	944	1027	974	835	937	934	
June	930	1033	968	841	939	932	
September	930	1039	970	841	939	933	
December	940	1040	977	854	943	943	1.1
1940— <u>M</u> arch	933	1041	973	884	949	946	1.4
June	957	1041	988	923	985	970	4.0
September	945	1042	980	948	996	973	4.3
December	974	1042	998	1046	1004	1008	8.0
1941—March	982	1043	1003	1058	1030	1018	9.1
June	949	1043	984	1109	1039	1019	0.2
September	947	1043	983	1129	1062	1027	10.1
December	969	1044	996	1179	1072	1048	12.3
1942—March	1005	1045	1018	1211	1085	1070	14.7
June	1034	1043	1035	1279	1089	1096	17.5
September	1061	1042	1051	1337	1105	1122	20.3
December	1060	1042	1051	1382	1140	1138	22.0
1943—March	1050	1042	L045	1408	1145	1141	22.3
June	1065	1042	1054	1479	1162	1165	24.9
September	1039	1042	1038	1463	1176	1154	23.7
December	1015	1042	1023	1449	1179	1143	22.5
1944—March	1019	1043	1026	1443	1176	1143	22.5
June	1025	1043	1030	1437	1172	1143	22.5
September	1035	1043	1036	1437	1167	1146	22.8
December	1022	1043	1027	1441	1169	1142	22.4
1945—March	1027	1043	1031	1420	1163	1138	22.0
June	1040	1043	1039	1410	1163	1141	22.3
September	1042	1043	1040	1412	1163	1142	22.4
December	1029	1043	1032	1459	1163	1147	22.9
1946—March	1035	1043	1035	1463	1167	1151	23.4
June	1042	1043	1040	1510	1171	1165	24.9
September	1032	1043	1034	1537	1168	1167	25.1
December	1047	1043	1043	1555	1175	1177	26.2
1947—March	1097	1044	1073	1532	1186	1192	27.8
June	1096	1044	1073	1540	1187	1194	28.0
September	1109	1044	1081	1579	1244	1218	30.5
December	1139	1045	1099	1639	1245	1242	33.1
1948—March	1192	1046	1132	1674	1247	1270	36.1
June	1235	1046	1159	1748	1267	1305	39.9
September	1279	1047	1185	1811	1279	1337	43.3
December	1326	1047	1214	1831	1279	1359	45.7
1949—Mareh	1350	1048	1229	1891	1334	1391	49.1
June	1384	1048	1250	1980	1347	1425	52.7

When the "All Items" index number for Sydney reached the war-time peak in June quarter, 1943, it was 24.9 per cent. higher than in September quarter, 1939, with increases in the group indexes for food and groceries of 14.5 per cent., for clothing of 75.9 per cent., and for miscellaneous items of 23.7 per cent.; that for average rent of occupied houses (4 and 5 rooms) was barely changed.

The upward trend of prices was arrested during 1943 by the introduction of the price ceiling in April, reduction of sales tax on clothing, reduction by subsidy of prices of tea and potatoes in July, and by other measures to stabilise prices. The "C" series index number had returned by December quarter to the March quarter level, and remained stable during the next two years, after which prices tended to rise, at first very gradually and then more rapidly.

Between March quarter, 1946 and December quarter, 1948, the "All Items" index number rose by 18.1 per cent. The increases in group indexes since before the war were then food and groceries, 42.6 per cent.; rents  $\partial$ .7 per cent.; clothing, 117.7 per cent.; miscellaneous items, 36.2 per cent. and "All Items", 45.7 per cent.

# **EMPLOYMENT**

#### GOVERNMENTAL ADMINISTRATIVE AUTHORITIES.

Matters regarding employment and industrial conditions are administered by the Commonwealth and New South Wales Governments.

The State Department of Labour and Industry and Social Welfare deals with the registration of trade and industrial unions, administrative work in connection with industrial arbitration and conciliation within the jurisdiction of the State, workers' compensation, the inspection of factories and shops, and other matters of industrial welfare, including apprenticeship training and welfare of youths. Information regarding departmental activities, new industrial legislation, industrial awards and agreements, etc. is given in the New South Wales Industrial Gazette issued monthly by the Department.

The Commonwealth Department of Labour and National Service administers the re-instatement and apprenticeship provisions of the Reestablishment and Employment Act, 1945, provides advice to industry on personnel practice, working conditions, and other matters of industrial welfare, and is responsible for, inter alia, the organisation and maintenance of the Commonwealth Employment Service (see page ....), the supervision and regulation of industrial relations in the Commonwealth sphere, and the control of industrial training under the Commonwealth reconstruction training scheme.

#### WAR AND POST-WAR CONTROL OF EMPLOYMENT.

The various phases of the war-time control of employment and the scheme of demobilisation of the Defence Forces are outlined on pages 743 and 742, respectively, of the 50th edition of the Year Book.

# RE-ESTABLISHMENT AND RE-EMPLOYMENT.

The Re-establishment and Employment Act, 1945 provided for the re-establishment in civil life of ex-service personnel and of certain other qualified persons (e.g., civilians with "war" service as defined under the Act), preference in employment for seven years of ex-service men and women (and of other persons registered by the Preference Board), and the creation of the Commonwealth Employment Service.

#### Re-establishment.

Discharged members of the forces were entitled, on application within one month of date of discharge, to reinstatement in positions occupied by them prior to enlistment, without loss of benefits or privileges which would have accrued had they not been engaged on war service. Employers were obliged to re-employ them, terminating if necessary the employment of persons engaged in their places.

Apprenticeships or trainee apprenticeships interrupted by war service could be revived by the appropriate apprenticeship authority upon application within two months of date of discharge, with the original employer where practicable, or with another employer, by transfer of the apprenticeship contract. Terms and conditions of apprenticeship could be modified and an allowance could be awarded to increase earnings to what they would have been had the apprenticeship not been suspended. In respect of discharged service personnel the Act authorised the amendment by regulation of the conditions of entry into employment or the requirements relating to the following of any profession, occupation, business, trade, or industry.

Disabled ex-service personnel are registered and special provision was made for their training and rehabilitation. Employers of specified classes may be required to employ a specific number or proportion of these persons.

# Financial Assistance for Re-establishment.

Upon honourable discharge, members of the forces were given reestablishment leave for a period of thirty days (fifteen days if war service was less than six months), after which, if occupational re-establishment was sought and not secured, a re-employment allowance was payable for a period not exceeding three, or in special circumstances, six months (see Year Book No. 50, page 74).

Within five years of the termination of the war, eligible persons (mainly members of the forces and widows of deceased members) with not less than six months' war service, or who have been prejudiced by war service, and who, immediately prior to the war, were engaged in an occupation, business, or practice as a principal, an active partner, a share farmer, or as a contract worker, may receive a loan to enable their re-establishment satisfactorily in civil life. The amount of the loan (which is advanced only for a specific purpose and is expected to be repaid within a reasonable period) may not exceed £250, except that the maximum is £500 in respect of certain specified occupations, businesses and practices and £1,000 in respect of an agricultural occupation.

Business and agricultural re-establishment allowances, as distinct from loans, may be paid to assist the re-establishment of eligible persons while awaiting returns from their businesses. These allowances are payable for a period not exceeding six months (twelve months in the case of agricultural pursuits) after the commencement of the business, occupation or practice. The rate of allowance is determined according to the circumstances of each particular ease.

Assisted by funds provided by and under agreement with the Common-wealth, a State may acquire, develop, and improve land on which discharged members of the forces may be settled in terms of that agreement, as more fully described on page 502 of this volume.

Upon discharge, members of the forces could obtain tools of trade, plant and equipment (other than clothing) to a value of £10, and an interest-free loan up to £40 to obtain further such items. A grant by way of gift of up to £75 for the purchase of essential household furniture may be made to permanently totally incapacitated and blinded ex-servicemen and widows with dependent children and whose husbands died whilst on service or within five years after discharge.

# Reconstruction Training.

A Reconstruction Training Scheme is provided for the vocational training (including training for a professional or agricultural occupation) of prescribed classes of discharged members of the forces and other specified persons. The scheme, which is described in the chapter "Education" of this volume, is designed mainly to promote the rehabilitation of service personnel who commenced war service before attaining the age of 21 years, and these comprise by far the larger proportion of those eligible for its benefits.

# COMMONWEALTH EMPLOYMENT SERVICE.

Prior to the establishment of the Commonwealth organisation in 1946, a system of Labour Exchanges was operated throughout New South Wales by the State Department of Labour and Industry.

The Commonwealth Employment Service, which functions under the Re-establishment and Employment Act, 1945 and the Social Services Legislation Declaratory Act, 1947, was established to provide "services and facilities in relation to employment for the benefit of persons seeking to change employment or to engage labour, and to provide facilities to assist in bringing about and maintaining a high and stable level of employment throughout the Commonwealth". The Service has specific functions in relation to the re-establishment of ex-service personnel and war workers, the maintenance of a nation-wide labour exchange organisation, and the provision of occupational advice and vocational guidance to facilitate the employment of persons in positions appropriate to their qualifications and experience. It is also the agency which receives claims for unemployment and sickness benefits and for re-employment allowances (for discharged members of the forces) and makes payments in appropriate cases.

The Service is controlled by the Director of Employment within the Division of Employment of the Department of Labour and National Service. It is organised on a decentralised basis, with the Central Office in Sydney and subsidiary offices in each of the other capital cities, District Employment Offices in suburban and provincial centres (58 in New South Wales), and agents responsible to the District Offices in a large number of smaller country centres.

Particulars of the applicants for employment and vacancies handled in New South Wales by the Commonwealth Employment Service since July, 1946 are given in the following statement. Applicants for employment are either persons already in employment and seeking to change their jobs or unemployed persons seeking employment. The number of vacancies notified should not be construed as a measure of the demand for labour; many employers do not notify vacancies, believing it unlikely that their requirements would be met through the Employment Offices.

Table 606.—Employment Service: Applicants for Employment and Vacancies.

		Appl	icants for	Employn	nent.		٠,	Vacancies	
			Unplaced	at end	of period.		Ī		
Period.	Placed in Employ- ment,	Unem	ployed.	Already Employed.		Total.	Newly Notified.	Unfilled at end of Period.	
		Malcs.	Persons.	Males.	Persons.	Persons.		Males.	Persons.
1946—Sept. Qr.	20,906	8,888	10,375	922	1,300	11,675	35,813	11,973	27,759
Dec. Qr.	20,392	10,861	12,165	1,285	1,686	13,851	30,308	10,241	22,573
1947—Mar. Qr.	25,776	9,095	10,958	1,152	1,491	12.449	43,360	16,076	28,472
June Qr.	24,325	6,264	7,693	1,386	1,715	9,408	39,421	14,626	26,666
Sept. Qr.	24,019	5,177	6,604	1,238	1,609	8,213	42,069	17,497	30,292
Dec. Qr.	23,276	4,824	6,120	1,411	1,846	7,966	39,555	19,224	31,925
1948—Jan.	9,994	6,267	8,000	1,435	1,804	9,804	18,356	21,038	34,429
Feb.	9,834	5.475	7,237	1,544	2,005	9,242	16,812	21,688	35,153
Mar.	10,052	5,318	6,950	1,393	1.863	8,813	18,238	22,149	35,467
Apr.	9,989	5,289	6,943	1,427	1,942	8,885	17,320	23,261	37,066
May	8,900	4,880	6,317	$1,303 \\ 1,327$	1,760	8,077	15,084	23,788	37,522
June	8,164	4,957	6,434 6,460	1,527	$1,875 \\ 2,151$	8,309	12,699	23,694	37,168
July	10,191 9,069	$\frac{4,842}{4,802}$	6,281	1,437	2,131	$8,611 \\ 8,494$	$oxed{16,123} 15,541$	$24,268 \\ 23,870$	37,809 37,752
Aug.	8,884	$\frac{4,802}{4,265}$	5,717	1,378	2,170	7.887	14.513	24,247	38.738
Sept. Oct.	10,293	4,804	6,141	1,343	2,014	8,155	20,242	25,927	42,013
Nov.	9,305	4,751	6,220	1,399	2,086	8,306	13,839	25,715	41,255
Dec.	9,061	4,365	5,792	1,591	2,240	8,032	10,775	22,508	36,289

The next table shows a regional distribution of the number of applicants unplaced and vacancies unfilled by the Employment Service at the end of December, 1948 and earlier months:—

Table 607.—Applicants Unplaced and Vacancies Unfilled: Regional Distribution.

77-3 -6		Applica	nts Unp	laced.	Vacancies Unfilled.					
End of Period,	Metro- polis.	Hunter Valley.	Illa- warra.	Other.	Total.	Metro- polis.	Hunter Valley.	Illa- warra.	Other.	Total
- 1947—Mar.	7,376	1,596	405	3,072	12,449	24,892	499	783	2,298	28,472
June	4,985	1,459	356	2,608	9,408	22,781	656	690	2,539	26,66
Sept.	4,656	1,196	432	1,929	8,213	26,009	790	735	2,758	30,29
Dec.	5,046	1,100	418	1,402	7,966	26,735	1.128	791	3,271	31.92
1948—Jan.	6,246	1,135	540	1,883	9,804	29,349	1,066	791	3,223	34,42
Feb.	5,692	1,256	519	1,775	9,242	29,699	1,266	873	3,315	35,15
Маг.	5,803	1,008	439	1,563	8,813	29,589	1,297	992	3,589	35,46
Apr.	5,829	970	466	1,620	8,885	31,396	1,218	939	3,513	37,06
May	5,230	896	504	1,447	8,077	31,543	1,346	866	3,767	37,52
June	5,301	916	495	1,597	8,309	30,937	1,230	1,069	3,932	37,16
July	5,582	909	465	1,655	8,611	31,168	1,192	1,152	4,297	37,80
Aug.	5,437	921	521	1,615	8,494	30,831	1,274	1,309	4,338	37,75
Sept.	5,076	887 905	498	1,426	7,887	31,506	1,305	1,238	4,689	38,73
Oct.	4,820 5,090	911	1,063 887	1,367 $1,418$	8,155 8,306	34,769 33,223	$1,559 \\ 1,612$	$642 \\ 1,248$	5,043 $5,172$	$ 42,01 \\ 41,25$
Nov. Dec.	5,235	875	487	1,435	8,032	28,729	1,607	1,335	4,618	36,28

### EMPLOYMENT OF MIGRANTS.

Displaced persons who enter Australia under the Commonwealth migration scheme are under contract to the Commonwealth Government to remain for two years in the employment in which they are placed. The Commonwealth Employment Service acts as agent for the Department of Immigration in arranging placements with employers who register vacancies for migrants. Placement in any employment is conditional upon Australian workers not being available and accommodation being provided, and priorities are given to employers who are able to offer accommodation

for family groups. In June, 1949, the range of industries and occupations in which displaced persons could be employed included:

for males: the production of basic iron and steel products, building

materials, household equipment, pastoral and agricultural machinery, etc., rural work, mining, quarrying, forestry, food processing, public constructional work, public utilities (transport, gas, etc.), local authorities, and in schools, hospi-

tals, and institutions;

and for females: nursing, domestic, and similar work, laundries, food processing, and the manufacture of clothing, textiles, footwear,

and household equipment.

### EMPLOYMENT STATISTICS.

Statistical data of employment in New South Wales are not available in respect of periods prior to the census of 1891. Between 1891 and the census of June, 1933, data of employment were obtained only at the decennial

From July, 1933 to June, 1941, monthly estimates were prepared of the number of wage and salary earners (including rural workers and female private domestics) in employment. These estimates were based on information supplied by employers in remitting the Wages Tax levied by the State Government, supplemented by returns of persons in governmental employment and annual factory and farmers' returns collected under the Census Act, 1901.

A new series of monthly estimates of employment, commenced in July, 1941, relates to wage and salary earners in private or governmental employment (exclusive of rural workers and female private domestics), and is based upon the record of employment shown on pay-roll tax returns furnished by employers. (For details of this tax and the classes of employers not taxable, see page 780 of this volume.) The information is supplemented by monthly collections of governmental employment and annual factory returns collected under the Census Act, 1901.

Data of the number of rural workers and female private domestics in employment and of the number of employers, workers on own account, and unpaid helpers are available only on the occasion of a census or quasicensus (and, in respect of persons occupied in rural industry, from the annual rural returns collected under the Census Act, 1901). The quasicensuses held since the Census of June, 1933 were the National Register in July, 1939 (which covered males aged 18 to 64 years), the Supplementary Civilian Register in June, 1943 (which covered civilians aged 14 years and over), and the Occupation Survey of 1st June, 1945 (also covering civilians aged 14 years and over). The last full census was held on 30th June, 1947; the final results of this enumeration are not yet available.

### OCCUPIED PERSONS.

The following table shows the number of occupied persons in New South Wales recorded at the census of June, 1933 and the subsequent census and quasi-census enumerations listed above. The table affords particulars for each sex and distinguishes those occupied (a) in the defence forces (net enlistments, including servicemen oversea), (b) as employers or workers on own account in business or on farms, and (c) as wage and salary earners, whether as fully-employed or casual part-time, intermittent, or seasonal workers. Unemployed persons and government relief workers are excluded (see page 697 of this volume for available data of unemployment).

Unpaid helpers (male and female) in non-rural industries have been included with the wage and salary earners group. Unpaid male helpers in rural industry have been included with employers and workers on own account, on the assumption that they work as unofficial partners or as learners with farm owners. Most of the unpaid female helpers on farms are engaged mainly in home duties, and these, with all other women occupied in unpaid home duties, have been excluded altogether from the category of occupied persons.

Table 608.—Occupied Persons.
Thousands.

				Thou	ısands.					
	Employ	vers and '	Workers unt.	Was	ge and Sal	агу Еаг	ners.			
Year and Month.	Rural Indus- try.	Other Indns- tries.	Total.	Rural Indus- try.	Females in Private Domestic Service.	Other.	Total,	Total Occupied Civilians.	Defence Forces.	Total Occupied Persons.
,				м	ALES.					
1933—June	93.3	93-9	187-2	6516		380.6	446.2	633-4	2.9	636-3
1939— <b>J</b> uly	95.0	121.2	216.2	66'3		529'9	596-2	812-4	4.9	817:3
1943—June	82.6	58-4	141.0	38'6		525 <b>'</b> 1	563.7	704.7	257.4	962-1
1945—June*	90.2	74.0	164.2	42'8		534'1	576-9	741.1	229.1	970-2
1947—June†	ļ ţ	‡	196-2	‡		‡	717-4	913.6	21'3	934.9
				Fe	MALES.			_	-	
1933—June	4.1	20.5	24.6	1.5	88:9	125•8	166-2	190.8		190•8
1939—July	441	24.3	28.4	1.1	51.7	168.0	220.8	249.2		249.2
1943—June	3.7	12.5	16.2	9,0	13.3	254.4	276.7	292.9	15.9	308· <b>8</b>
1945—June*	5.1	16.2	21.3	7•3	19.0	247•7	274.0	295-3	16.6	3 <b>11·9</b>
1947—June†	‡	‡	26.9	‡	‡	‡	247.8	274.7	0.4	275.1
	•			Pei	rsons.					
1933—June	97.4	114.4	211.8	67.1	38.9	506•4	612.4	824.2	2.9	827.1
1939—July	99.1	145.5	244.6	67.4	51.7	697'9	817.0	1,061.6	4.0	1,066.5
1943—June	86.3	70-9	157-2	47.6	13.3	779•5	840-4	997-6	273.3	1,270.9
1945—June*	95.3	90.2	185.5	50.1	19.0	781.8	850.9	1,036-4	245.7	1,282.1
1947June†	‡	‡	223.1	‡	‡	‡	965-2	1,188-3	21.7	1,210.0
* 1st June	1945 (6	)connatio	n Survey	(r)	+ Pr	liminar	.,	+ No.	availab	

<sup>\* 1</sup>st June, 1945 (Occupation Survey).

The recovery from the economic depression of the early 'thirties and the general industrial expansion that preceded the outbreak of war in September, 1939 are reflected in the trend in the number of occupied persons in New South Wales between June, 1933 and July, 1939. The number occupied increased by 239,000 (181,000 males and 58,000 females).

<sup>†</sup> Preliminary.

<sup>‡</sup> Not available.

the sources of the increase being a rise of about 98,000 in the number available and offering for gainful occupation and a fall of about 141,000 in the number of unemployed persons. During the period, 33,000 more employers and workers on own account (29,000 males and 4,000 females) commenced business and a further 206,000 wage and salary earners (of whom 152,000 were males) entered employment.

The period July, 1939 to June, 1943 covers the intensive mobilisation of manpower resources for war purposes. Although the number of occupied persons increased by 205,000, because of the absorption of virtually all unemployed persons and those who normally would not be seeking occupation, the expansion of the defence forces by 269,000 caused a decline of 64,000 in the number of occupied civilians (a net gain of 44,000 females only partly offsetting the loss of 108,000 males). Significant features of this period were the direction of the civilian labour force into essential production (with the munitions programme reaching its peak in June, 1943), the drastic reduction in the number of workers in rural industry, and substantial decline in the number of females in private domestic service and of employers and workers on own account, the latter as a result partly of enlistment in the forces and partly of change to wage and salary earning.

Between June, 1943 and June, 1945, manpower policy was adapted to changes in the war situation. Employment on munitions was reduced, and special releases were made from the defence forces and other protected undertakings to expand employment in other vital fields, especially rural industry. During this period, the number of occupied civilians increased by 39,000 (36,500 males and 2,500 females), including an increase of 12,000 males in rural industry.

The movements during the period June, 1945 to June, 1947 reflect the general demobilisation of the forces, the removal of manpower controls, and the trend towards a peace-time economy. The number of occupied persons declined by 72,000 (35,000 males and 37,000 females), factors being the entry of ex-service personnel into full-time training, with others on extended leave prior to resuming or commencing civil employment, and the retirement from the forces or civil employment of persons not normally seeking gainful occupation. There were 224,000 persons (208,000 males and 16,000 females) discharged from the armed forces, and about 38,000 (32,000 males and 6,000 females) entered civilian employment as employers or workers on own account and 114,000 (the entry of 141,000 males offsetting the retirement of 27,000 females) as wage and salary earners. Although the number of occupied civilians rose by 152,000 (a gain of 173,000 males and a loss of 21,000 females) during the period, the increase in rural industry was small.

### WAGE AND SALARY EARNERS IN EMPLOYMENT.

The following table shows the estimated number of wage and salary earners in employment in New South Wales in certain months between June, 1933 and December, 1948. The estimates exclude workers in rural industry, female domestics in private households, government relief workers, and persons on the paid strength of the defence forces, and they distinguish between persons in the employ of governmental authorities and of private employers. The table traces the trends in that sector of wage and salary earning employment which can be estimated monthly.

Table 609.-Wage and Salary Earners in Civil Employment.

(Excluding rural workers, female domestics in private households, and persons on paid strength of defence forces).

TU	hor	ıa o	n d	la

37. 1		Males.			Females.			Persons,	
Year and Month.	Govern- mental.*	Private.	Total.	Govern- mental.*	Private.	Total.	Govern- mental.*	Private.	Total.
1933—June	103.2	277.4	380.6	16.8	109.0	125.8	120.0	386.4	506-4
1939—July	136.5	393.4	529.9	19.4	148-6	168.0	155.9	542.0	697.9
1941—July	141.5	406.2	547.7	21.7	196.6	218.3	163.2	602.8	766.0
1943—July	156.9	365.2	$522 \cdot 1$	46.1	207.7	253.8	203.0	572-9	775.9
Oct.	154.8	366.4	521.2	46.9	210.6	257.5	201.7	577.0	778.7
1945—June	156.0	380.0	536.0	43.6	204.3	247.9	199.6	584.3	783.9
Aug.	155.8	386.2	542.0	43.0	205.1	248.1	198.8	591.3	790.1
Dec.	157.1	373.7	530.8	37.1	200.5	237.6	194.2	$574 \cdot 2$	768.4
1946June	168.9	449.6	618.5	33.4	208.9	242.3	202.3	658.5	860.8
Dec.	172.7	474.7	$647 \cdot 4$	31.2	219.5	250.7	203.9	694.2	898.1
1947—June	178.2	493.6	671.8	32.3	219.8	$252 \cdot 1$	210.5	713.4	923.9
Dec.	181.7	506.9	688-6	32.6	228-2	260.8	214.3	735-1	949.4
1948—Jan.	182.2	507.5	689.7	32.9	224.5	$257 \cdot 4$	215.1	732.0	$947 \cdot 1$
Feb.	182.9	511.0	$693 \cdot 9$	33.3	225.9	$259 \cdot 2$	216.2	736-9	$953 \cdot 1$
Mar.	183 6	512.2	695-8	33.4	226.7	$260 \cdot 1$	217.0	738-9	$955 \cdot 9$
Apr.	185.3	513.9	$699 \cdot 2$	33.2	226.4	259.6	218.5	740.3	958.8
May	185.8	514.2	700.0	33.6	227.1	260.7	219.4	741.3	960.7
June	186.1	516.2	702-3	33.6	228.3	261.9	219.7	744.5	964.2
July	186.8	515.4	$702 \cdot 2$	33.4	229.3	262.7	220.2	744.7	964.9
Aug.	187.3	516.5	703.8	33.7	229.3	263.0	221.0	745.8	966.8
Sept.	187.8	517.0	704.8	33.7	232.0	265.7	221.5	749.0	970.5
Oct.	188.0	516.7	704-7	33.7	233.8	267.5	221.7	750.5	972.2
Nov.	188.7	519.4	708-1	33.9	235.8	269.7	222.6	755.2	977.8
Dec.	190.0	520-4	710.4	34.2	237.0	$271 \cdot 2$	224.2	757.4	981.6

<sup>\*</sup> Employces of Commonwealth, State, Allied and Local Government authorities.

Movements in the number of wage and salary earners in civil employment (excluding rural workers and female private domestics) conformed in general to the movements in the number of occupied persons described below Table 608.

During the period from 1945 to the end of 1947, civil employment rose rapidly with the general demobilisation of the forces and marked progress in the readjustment of the economy to a peace-time basis, and this increase continued, though at a retarded rate, throughout 1948. By December, 1948, industrial development had outrun, and caused intense competition for, supplies of labour, and there existed a condition of full employment at the record level of 981,000 (710,000 males and 271,000 females). In consequence, shortages of labour were checking the flow of goods (especially from the basic industries) and limiting further industrial expansion. With demobilisation virtually completed, unemployment at a minimum, and a smaller number of juveniles entering employment because of the low birthrate of the early nineteen-thirties and barely compensating losses due to death or retirement, migration became the main source of new labour.

The number of males in civil employment rose by 48,000 between July, 1939 and December, 1941. With the outbreak of war in the Pacific, manpower resources were very intensively organised and men were called rapidly to the Services. As a result male employment fell to its lowest ebb (521,000) in October, 1943, but then recovered gradually to 542,000 in August, 1945. After a temporary setback due to contraction in war production, transitional difficulties in resuming peace-time activities, the

retirement of many who worked temporarily during the war and did not normally seek employment, and to industrial disputes, a renewed rapid increase was sustained by general demobilisation of the forces and resumption of peace-time activities, and male civil employment rose by 117,000 in 1946 and 41,000 in 1947. The number increased more slowly in 1948, as nearly all demobilised personnel had been absorbed, fewer juveniles were reaching working age, and there was practically no unemployment. The gains in male employment in the latter months of 1948 were due mainly to displaced persons and free migrants entering employment in increasing numbers. By December, 1948, the number of male wage and salary earners in employment (excluding rural workers) had risen to 710,000 which was 180,000 (34 per cent.) more than in July, 1939, 168,000 (31 per cent.) more than in August, 1945, and 22,000 (3 per cent.) more than in December, 1947.

The mobilisation of labour resources increased the number of females in civil employment by 50,000 between July, 1939 and July, 1941 and, despite a heavy intake into the Services, by a further 41,000 to the peak (259,000) in December, 1943. During the next two years the number of females declined slowly but steadily by 21,000, because of gradual contraction of war-time activities, the return of men to civil life, and the retirement of women temporarily in employment because of war conditions. After December, 1945, with demobilisation and the re-adjustment of industry in progress, female employment began increasing again and rose by 33,500 during the next three years. In December, 1948, the number of female wage and salary earners in civil employment (excluding rural workers and female private domestics) was 271,000, which was 103,000 (61 per cent.) more than in July, 1939, 23,000 (9 per cent.) more than in August, 1945, and 10,000 (4 per cent.) more than in December, 1947. The marked improvement in wages and working conditions and delay in establishing homes during the war and post-war period induced females to enter or remain in employment, but the expansion in female employment was due largely to the transfer of women from paid domestic work.

Construction of defence works, expansion of government munition factories, administration of far-reaching war-time controls, and other war-time activities caused marked growth during the war years in the number of civilians in the employ of governmental authorities. During the postwar years, many of these activities were restricted or discontinued, but simultaneously there was a considerable extension of social and reconstruction services, public constructional works, and transport, communication, and other public utilities. Governmental employment occupied 25.8 percent. of male and 11.5 per cent. of female wage and salary earners in civil employment in July, 1939. By June, 1948 these proportions had increased to 29.9 and 17.7 per cent. respectively, but then declined to 28.7 and 17.3 per cent. in August, 1945, 26.4 and 12.5 per cent. in December, 1947, and 26.7 and 12.6 per cent. in December, 1948. Additional data of governmental employment are given on page 695 of this volume.

# WAGE AND SALARY EARNERS IN VARIOUS INDUSTRIES. .

In the next statement, the wage and salary earners (excluding rural workers and female private domestics, etc.) in employment in New South Wales in various months between June, 1933 and December, 1948 are classified in broad industrial groups. Employees of governmental authorities have been included in the appropriate industrial groups.

Table 610.-Wage and Salary Earners in Industrial Groups.

(Excluding rural workers, female domestics in private households, and persons on paid strength of defence forces.)

Tho	11 0 ព	ъđ	α
1.110	usa	шu	ю.

Year and Month.	Mining and Quarry- ing.	Fac- tories.*	Build- ing and 'Con- struc- tion.	Trans- port and Com- muni- cation.	Finance and Pro- perty.	Whole- sale Trade, etc.	Retail Trade.	Personal and Professional Services.	Other.	Total Wage and Salary Earners
				MAL	es.					
1933—June 1939—July 1941—July 1943—July 1945—June Dec. 1946—June Dec. 1947—June Dec. 1948—Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.	18-1 24-7 26-0 25-1 25-0 24-4 24-9 22-7 25-8 26-6 27-3 27-7 27-7 27-7 27-7 27-7 28-0 28-0 27-9 28-0 27-8 27-8	94·5 158·8 202·1 217·8 2119·5 214·8 2260·2 236·3 260·2 262·8 263·6 264·4 265·2 266·8 266·4 266·7	55·1 57·9 54·0 30·1 29·8 32·5 32·3 33·7 44·1 55·7 57·0 57·5 58·1 60·1 61·1 61·6 61·9 62·2 61·5	65-0 77-4 76-8 79-9 79-1 85-2 86-9 96-8 98-8 102-8 105-8 107-3 107-9 107-9 107-8 107-8 108-8	14-9 10-5 10-4 11-3 11-4 12-3 16-5 18-0 18-9 19-0 19-1 19-2 19-5 19-5 19-6 19-6 19-6 19-7 19-9	78·4\$ 9·0 28-7 28-7 28-7 24-3 24-9 27-4 36-1 37-6 39-8 39-8 40-9 40-5 40-9 41-1 41-3	44:0 41:6 28:7 28:3 30:0 30:5 36:1 40:6 46:3 46:3 48:9 48:9 48:8 49:4 49:3 49:4 49:7 49:3 50:6 52:6	44·2 56·6 49·3 39·6 40·5 46·4 46·5 48·8 60·2 62·4 64·8 65·2 64·9 64·9 64·7 64·6 64·8 65·1	25-3 51:6 54-3 67-5 68-1 68-1 68-1 69:6 67-8 67-8 67-0 67-1 67-5 67-8 67-1 67-8 67-1 67-8 67-8 67-9 68-1 68-2 68-4	380·6 529·9 547·7 522·2 536·0 542·0 530·8 618·5 647·4 671·8 688·6 688·7 693·2 700·0 702·3 702·2 703·8 704·7 708·1 710·4
				FEMA	LES.					
1933—June 1939—July 1941—July 1948—July 1945—June Dec. 1945—June Dec. 1947—June 1947—June 1948—Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.	0-1 0-1 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-2 0-3 0-3 0-3 0-3 0-3 0-3 0-3 0-3 0-3 0-3	36·3 59·3 76·0 94·6 96·8 86·9 86·9 88·5 88·4 88·8 87·4 88·8 89·9 90·2 90·5 93·6	0·3 0·5 0·7 0·7 0·7 0·7 0·7 0·9 1·0 1·0 1·0 1·1 1·1 1·1 1·1 1·1	3·7 4·2 8·2 12·9·1 13·2 14·6·1 13·8 13·4 12·1 12·8 13·5 13·5 13·5 13·9 13·9 13·9 13·9 13·9	8.3 9.9 10.0 10.7 10.6 10.3 10.1 10.0 10.4 10.5 10.7 10.8 10.9 10.9 10.9 10.9 11.0 11.0	. 33·6§ .5 9.5 10·7 11·0 10·8 10·6 10·9 11·9 11·9 12·4 12·5 12·7 12·7 12·7 12·7 12·7 12·7 13·6 13·2 13·6 13·8 13·6	36·0 41·0 38·5 37·8 37·8 42·0 43·1 44·3 43·0 42·6 42·7 42·7 42·7 43·1 43·1 43·1 44·8 44·8 44·8	49·4 49·1 60·2 65·9 67·3 69·8 79·3 75·7 77·7 77·1 78·6 79·6 79·6 79·4 80·9 80·9 80·9	2.4 10.3 14.2 20.5 17.2 17.1 14.8 12.5 10.4 11.0 10.8 10.4 11.0 10.8 10.1 10.1 10.1 10.1 10.1 10.9 9.8 9.8 9.8 9.8	125-8 168-0 218-3 253-8 267-5 247-9 248-1 287-6 242-3 250-7 259-1 260-7 261-9 262-7 263-6 267-7 267-5 267-7 267-5 267-7 267-5 267-7 267-5 271-2 271-2

Table 610.—Wage and Salary Earners in Industrial Groups—continued.

Thousands.

				3, 220 (15)						
Year and Month.	Mining and Quarry- ing.	Fac- tories.*	Build- ing and Con- struc- tion.	Transport and Communication.	Finance and Pro- perty.	Whole- sale Trade, etc.	Retail Trade.	Personal and Professional Services.†	Other.	Total Wage and Salary Earner
				PERS	ons.					
		4000		-0-						
1933—June	18.2	130.8	55.4	68.7		112·0§		93.6	27.7	506.4
1939—July	24.8	218.1	58.4	81.6	<b>l</b>	7.5	80.0	105.7	61.8	697.9
1941—July	26.2	278-1	54.7	85.0	23.2	38.2	82.6	109.5	68.5	766-0
1943—July	25.3	312-4	30.8	92.8	20.4	33.6	67.2	105.5	87.9	775.9
Oct.	25.2	316.3	30.5	92.3	20.4	34.1	66.1	107.8	86.0	778.7
1945—June	24.6	301.7	33.2	99.7	22.0	34.6	67.6	115.2	85.3	783.9
Aug.	25.1	302-9	33.0	101.3	22.0	3.57	68.3	116.8	85.0	790-1
Dec.	22.9	270.5	34.4	100.7	22.6	38.0	78.1	118.3	82.9	768-4
1946—June	26.0	318-6	45.0	109-8	26.6	44.3	79.7	129-4	81.4	860.8
Dec.	26.6	328-9	50-4	110.9	28.0	48.0	89.4	135.9	80.0	898-1
1947—June	26.8	338-6	56.7	115.6	29.2	49.5	87.1	139.5	80.9	923-9
Dec.	27.5	348-1	58.0	116-9	29.4	52.8	94-6	143.3	78.8	949-4
1948—Jan.	27.5	347-6	58.5	117-8	29.7	52.2	91.9	143.3	78∙6	947.1
Feb.	27.9	351.6	59.1	118.8	29.9	52∙0	91.2	144.5	78.1	953.1
Mar.	28.0	353-8	60.0	119.3	30.1	52.5	91.5	143.9	76∙8	955-9
Apr.	28.0	354.9	60.3	120.5	30.3	52.9	91.9	143.9	76.1	958-8
May	28.0	354.2	61.2	120.6	30.4	52.4	92.3	144.4	77-2	960.7
June	28.3	355.4	61.2	121.8	30.4	52.7	92.3	144.3	77-8	964-2
July	28.3	356-3	62-2	121.2	30.4	53.2	92.2	143.6	77.5	964-9
Aug.	28.2	357.1	62.7	121.2	30.5	53.1	92.4	144.0	77.6	966-8
Sept.	28.3	358-4	62.5	121.5	30.6	54.0	92-4	145.1	77-7	970-5
Oct.	26.7	358-8	63.0	122.3	30.6	54.5	92.7	145.7	77-9	972.2
Nov.	27.6	360.3	63.3	121.7	30.7	54.9	95.4	145.8	78-1	977-8
Dec.	27.8	358-8	62.6	122.4	30.9	54-9	99-8	146.0	78.4	981-6

<sup>\*</sup> Excluding working proprietors. From July, 1948, subject to revision. † Covers Education, Health, Law, Hotels, Restaurants, and other Professional and Personal Services. ‡ Covers Governmental employees not classifiable to any other industrial group shown, and persons engaged in Forestry, Fishing, Trapping, and Workshops not embraced by the statistical definition of "Factories". § Retail and Wholesale Trade and Finance and Property combined.

The course of employment in the various industries groups over the period reviewed bears the impress, firstly, of the necessities of total warfare, including the drastic curtailment of civilian production, and, secondly, after the cessation of hostilities, of general demobilisation of the forces and the resumption of a peace-time economy.

Employment in factories rose substantially to 316,400 in December, 1943, declined somewhat when munitions and other war-time production was tapered off towards the end of the war, and increased steadily during

and after 1946, as factories were converted to peace-time use and new plants and extensions to existing plants came into operation, to a record level of 360,300 in November, 1948. (For further details, see chapter "Factories" of this volume.) Heavy demands made on the transport and communication services during and since the war are reflected in the increasing number employed in this industrial group.

On the other hand, the distributive, finance, and personal and professional service industries were combed heavily for men and women for the Services and essential industries, and a more drastic reduction in employment in these industries was avoided only by the entry into them of women not subject to manpower control. Employment on building and constructional works, apart from defence works, also fell heavily as private and ordinary governmental building activity attenuated during the war years. Since hostilities ended, however, there has been a marked regain in employment in these industrial groups.

By the close of 1948, employment far exceeded the pre-war level in each of the industrial groups shown in the table, with the exception of building and construction and mining and quarrying, in which employment expanded much less than in other industries. The distribution of employment over the major industrial groups had changed significantly since before the war. A higher proportion of persons was employed in factories, reflecting greater industrialisation and probably accounting, in part, for the higher proportion in transport and communication. A reduced proportion was occupied in trade and commerce, personal and professional services, and also in mining and quarrying and building and construction in which the need for expansion was greatest.

### Persons Occupied in Rural Industry.

Particulars of persons occupied in rural industry are available from census and quasi-census enumerations and from annual returns collected under the Census Act, 1901 from the occupiers of rural holdings of one acre or more. The annual farmers' returns in respect of 1941-42 and earlier years showed the number of owners, lessees, and sharefarmers, unpaid relatives, and employees receiving wages who worked permanently full-time during the year. Farmers' returns for 1942-43 and later years show the total number of persons working on the holding at 31st March, distinguishing owners, etc., unpaid relatives, and employees working permanently full-time and those working temporarily for wages or on contract. Females engaged in home duties, unpaid helpers under fourteen years of age, and other persons working only part-time on the holding are omitted from the returns in all years.

The next table shows the number of persons (males and females combined) engaged in rural industries in New South Wales during the years 1933 to 1942 and at 31st March, 1943 to 1948. Permanent full-time workers are classified as owners, lessees, and sharefarmers, unpaid helpers, and as wage and salary earners. The number of persons working temporarily is given for the years available. Tables for each sex in similar form appear on page 285 of this Year Book, together with further details of rural employment. Statistics of females working rural industries are not entirely satisfactory; most women and girls on farms are engaged mainly in home duties and a relatively small proportion of their time is spent in rural production.

Table 611.—Persons Occupied in Rural Industries.

(Excluding females engaged in domestic duties and others working only part-time).

	We	orking Permai	nently Full-time	•	Working	Total
Year.*	Owners, Lessees, and Sharefarmers.	Unpaid Helpers.	Employees Receiving Wages	Total.	Temporarily on Wages or Contract.	Permanent and Temporary
1933	71,698	28,663	29,779	130,140	† †	t
1939	68,881	22,997	41,522	133,400	t t	t
1940	68,741	23,155	41,502	133,398	) t [	†
1941	67,670	22,500	39,900	130,070	t	†
1942	66,060	20,211	30,131	116,402	† !	†
1943	61,564	22,592	29,909	114,065	20,827	134,892
1944	67,034	23,038	26,129	116,201	14,360	130,561
1945	70,616	21,518	25,020	117,154	21,596	138,750
1946	73,891	17,442	28,757	120,090	t	†
1947	76,128	16,940	27,643	120,711	j	†
1948	75,011	16,804	32,108	123,923	23,842	147,765

<sup>\*</sup> To 1942, during year ended 31st March; from 1943, as at 31st March. † Not available.

Between 1933 and 1939 the number of persons wholly and permanently engaged in rural industries increased 3,000, a gain of 12,000 employees offsetting the loss of 6,000 unpaid helpers and 3,000 owners and share-From the outbreak of war in 1939 to 1941, there was little change in the number of permanent workers, the enlistment of persons engaged in rural industries being discouraged. After Japan entered the war and between 1941 and 1943, many rural workers enlisted in the defence forces or entered the rapidly expanding munitions and aircraft industries, and but for the return to work of retired farmers the decrease in the number of rural workers of 16,000 (6,000 owners and 10,000 permanent employees) would have been much greater. Beginning in 1943 rural workers were released from the armed forces and protected undertakings to re-enter rural industry to expand rural production, and general demobilisation commenced late in 1945. Between 1943 and 1948, the number of permanent rural workers increased by 10,000, comprising 14,000 more owners and sharefarmers, 2,000 more employees, and 6,000 fewer unpaid Compared with the pre-war year 1939, there were 9,000 fewer persons working permanently full-time in rural industries in 1948, a gain of 6,000 owners and sharefarmers being offset by losses of 6,000 unpaid helpers and 9,000 employees.

Under the influences affecting the number of permanent rural workers, there was a substantial gain between 1944 and 1948 in the number of persons working temporarily on farms either for wages or on contract, but even so, the number was probably much below the pre-war level.

Further details relating to employment in rural industries and particulars of salaries and wages paid, etc. are given in the chapter "Rural Industries" (see page 283) of this volume.

#### Employment in Retail Stores.

An index to measure the trend of employment in retail stores is computed by the Commonwealth Statistician on the basis of unadjusted data derived from the monthly pay-roll tax returns of taxable employers whose principal activity is given as retail trade. The index is not adjusted for seasonal variation and reveals the expansion associated with Christmas

trading in December when retailers generally employ a considerable number of students, women, and girls who do not seek employment at other periods. The following table shows the index of employment (distinguishing males and females) in retail stores in New South Wales for each month of the years 1945 to 1948. Additional details of employment in shops in registered shopping districts in the State are given on page 709 of this volume.

Table 612.—Index of Employment in Retail Stores.

Base: July, 1941 == 100.

		Ma	les.			Fem	ales.			Persons.			
Month.	Num Ju	ber of I ly, 1941	Employe	es in 38.	Num Ju	ber of I ly, 1941	Employe 1: 31,8	es in 10.		ber of I			
	1945.	1946.	1947.	1948.	1945.	1946.	1947.	1948.	1945.	1946.	1947.	1948.	
January	72	86	109	120	94	99	106	111	83	92	108	115	
February	71	88	108	121	94	100	103	110	83	94	106	116	
March	72	91	109	122	95	100	103	112	83	96	106	117	
April	72	94	110	124	95	99	103	112	83	96	107	118	
May	73	96	110	125	95	100	104	113	84	98	107	119	
June	72	98	112	125	96	100	104	114	84	99	108	119	
July	72	102	112	126	96	100	104	114	84	101	108	120	
August	73	102	113	127	97	99	104	114	85	100	109	121	
September	75	103	115	127	97	100	106	116	86	102	110	121	
October	76	106	116	127	98	101	107	117	87	103	112	122:	
November	80	109	119	131	101	105	112	121	90	107	116	126	
December	87	112	122	136	107	110	114	127	97	111	118	132	

The diversion of workers from retail trade to the Services and to essential industries was a feature of war-time control of manpower. By 1943-44 the proportion of male employees withdrawn from shops exceeded 30 per cent., but at no time did the reduction in female employees exceed 10 per cent., largely because many women not subject to manpower control (i.e., of 45 or more years of age) were attracted to the shops. After hostilities ceased, the lifting of labour controls, the demobilisation of Service personnel, and gradual resumption of normal trading activities enabled the re-expansion of employment in retail shops. In the closing months of 1948, the index numbers of persons employed in retail stores were from 40 to 50 per cent. above the level when hostilities ceased in August, 1945.

### Governmental Employment.

The next table shows the extent of governmental employment in June, 1933, December, 1948, and selected intervening months, distinguishing persons in the employ of Commonwealth, State, local, and allied governmental authorities. Persons on the paid strength of the defence forces, including those employees absent on military leave, and government relief workers have been omitted throughout.

Table 613.—Governmental Employees in New South Wales.

Thousands.

Year and		monwe ernme			State ernme	ent.		Local ernme	nt.		Allied ernm			Total.	
Month.	М.	F.	Р.	М.	F.	Р.	м.	F.	Р.	м.	F.	Р.	м.	F.	Р.
1933 — June 1939 — July 1941 — July 1943 — July Oct. 1945 — June Aug. Dec. 1946 — June Dec. 1947 — June June Apr. May June July Aug. Sept. Oct. Nov.	12·7 19·2 28·1 47·9 45·0 39·3 38·3 38·9 35·9 36·0 41·1 41·9 42·7 43·8 44·2 44·4 43·8 43·7 43·8	13·0 13·1 12·8 12·8	52.8 53.9 54.8 55.6 56.4 56.8 57.4 57.1	114·1 117·1 119·3 119·7 119·5 119·3 119·7 120·1 120·1 120·7 120·9 121·9 122·1	15·2 19·0 19·1 19·7 19·7 18·3 17·5 17·1 18·1 18·6 18·8 18·6 18·6 18·6	138·1 138·5 138·5 138·7 139·3 139·7 141·0 141·2	14·0 22·6 18·9 13·8 14·8 16·3 18·5 20·7 21·3 21·5 21·6 21·8 22·0 22·1 22·2 22·2	1.0 1.6 1.8 1.8 1.8 1.7 1.7 1.7 1.7 1.7 1.8 1.8 1.8 1.8 1.8	15.0 24.2 15.7 15.6 16.6 18.0 19.1 22.4 23.0 23.4 23.4 23.7 23.4 23.7 23.8 23.7 23.8 23.9 23.9	 4·1 4·9 6·9 6·7 4·5 1·7 1·1	1·6 1·1 1·8 2·1 1·4 0·7 0·1 0·1	6.0 8.7 8.8 5.9 2.4 1.2	103·2 136·9 141·5 156·9 154·8 156·9 155·8 167·1 168·9 178·2 181·7 178·2 182·9 183·6 185·8 186·1 186·8 187·8 187·8 188·9	19·4 21·7 46·1 46·9 43·6 43·0 37·1 33·4 31·2 32·3 32·9 33·3 33·4 33·2 33·6	201·3 199·6 198·8 194·2 202·3 203·9 210·3 216·2 217·0 218·3 219·3 220·2 221·3 221·3 221·3 221·3

M-Males; F-Females; P-Persons.

In July, 1939, 14 per cent. of government employees in New South Wales were in the employ of Commonwealth authorities, 70 per cent. were employed by State authorities, and 16 per cent. by local bodies. By June, 1943 the proportion in Commonwealth employment had increased to 35 per cent. and the proportions with State and local government authorities had fallen to 54 and 8 per cent., respectively. These proportions changed to 29, 58, and 8 per cent. of the total, respectively, in August, 1945, and were 25, 64, and 11 per cent. in December, 1947 and 26, 63, and 11 per cent., respectively, in December, 1948.

Due to war-time activities (see page 688), the number of Commonwealth employees increased by 49,000 (29,000 males and 20,000 females) between July, 1939 and the peak level in June, 1943. The slackening of munitions production and contracting defence power led to the subsequent decline of 23,000 by March, 1946. Thereafter, employment by the Commonwealth Government increased, as additional functions were assumed and existing activities were extended, and in December, 1948, the number of persons in Commonwealth employ was 35,000 (males 25,000 and females 10,000), or 150 per cent., greater than in July, 1939.

Employment by State governmental authorities remained almost unchanged from July, 1939 to the end of 1943, the loss by enlistments being countered mainly by employing persons who normally would be retired and, to some extent, by employing more females. During 1944 there was a small increase of 2,000, and thereafter the number of State employees rose steadily, by 8,000 in 1945, 11,000 in 1946, 6,000 in 1947, and 5,000 in 1948. In December, 1948 the number of persons employed by State authorities was 33,000 (28,000 males and 5,000 females), or 31 per cent., greater than in July, 1939.

The employees of local government authorities were drawn upon heavily for the Services, the Civil Constructional Corps, and other essential activities, and their number fell fairly evenly by 9,000 between July, 1939 and September, 1943. Employment subsequently rose steadily and by December, 1948 had about regained its pre-war level. The war-time growth in the employment (civilians only) of Allied Governments reflected the use of Australia as a base for British and Allied military operations and as a sanctuary for certain refugee government administrations.

During the war, many governmental employees were granted leave to serve with the armed forces; the number exceeded 20,000 in June, 1944, and at 30th June, 1948, there were still 237 employees (129 State and 108 Commonwealth) on military leave.

The following statement shows the number of persons employed (excluding those on military leave) in selected State and Commonwealth governmental instrumentalities in New South Wales at 30th June, 1948. These particulars afford some indication of governmental employment according to the nature of the services provided. Departmental employment may vary greatly as the result of new functions undertaken, inter-departmental transfers, and changes in practice in the construction of works by day labour or under contract. (The figures do not include employees of contractors engaged on governmental works.) It is difficult to trace such changes and their effects, but unless this is done, it is invalid to compare departmental employment from year to year.

Table 614.—Employees of Certain Governmental Authorities in N.S.W., 30th June, 1948.

Commonwealth A	.dministı	ration.		State Adminis	stration.		
Authority.	Males.	Females	Persons.	Authority.	Males.	Females	Persons
Civil Aviation Trans-Australia Airlines Air Army Navy Supply and Development (incl. Munitions factories) Australian Broadcasting Commission Commonwealth Bank Council for Scientific and Industrial Research Labour and National Service (incl. Employment Division) Prices Commission Postmaster-General Oversea Telecommunications Commission Post-War Reconstruction Repatriation Repatriation Social Services	2,679 337 3,964 646 467 378 17,639 354	50 97 90 265 272 348 340 1,168 343 341 163 5,457 78 250 1,302 266	503 535 858 1,236 4,294 3,027 677 5,132 989 808 539 432 601 3,400 547	Agriculture Forestry Mines Water Conservation and Irrigation Attorney-General Police Education (incl. Teachers and Child Welfare) Health Labour and Industry Lands Housing Commission Public Works Rural Bank Insurance Office Maritime Services Board Main Roads Meat Industry Commission Fire Commissioners Metropolitan Water, Sewerage and Dralnage Board	5,687	241 139 42 101 349 116 9,015 1,470 138 178 265 363 155 59 157 37 38	2,029 2,639 7771 2,220 1,005 4,702 18,725 3,403 3,094 1,045 832 6,633 1,968 3,247 1,686 1,295 5,829
Taxation Trade and Cnstons Works and Housing	1,010	1,029 201 205	2,519 1,211 3,458	Hunter District Water Board Railways	595 56,368 12,630	2,575 1,002	663 58,943 13,632

#### UNEMPLOYMENT.

#### UNEMPLOYED PERSONS.

The number of unemployed persons has been recorded only at the various censuses and quasi-censuses. The following table gives the number unemployed in New South Wales at the Censuses of 1933 and 1947, the

1947—Junet

National Register, 1939, the Civilian Register, 1943, and the Occupation Survey, 1945. The percentage which the unemployed bore on each of these occasions to all wage and salary earners, comprising those in employment and the recorded unemployed, is also shown. The data in this table should be interpreted in conjunction with the comment following theretupon.

Year and Month.	Wage and Sa	lary Earners U	nemployed*.	Proportion	of Wage and S Unemployed	
rear and Month.	Males.	Females.	Persons.	Males.	Females.	Persons.
	thous.	thous.	thous.	per cent.	per cent.	per cen <b>t.</b>
1933—June	216.2	48.5	264.7	32.6	22-6	30.2
1939—July	112.4	11.6	124.0	15.9	5.0	13.2
1943—June	7.7	2.4	10.1	1.3	0.9	1.2
1945—June	18.4	7.5	25.9	3.1	2.7	3.0

32.2

Table 615.—Unemployment (All Causes).

† Preliminary.

3.2

2.6

The figure shown for 1933 is the Census figure adjusted to make allowance for a number of youths and girls who normally would have been wage and salary earners, but who, on account of the economic depression, had never sought employment and were not shown in the schedules as (unemployed) wage and salary earners. The estimate for 1939 is based on the National Register, which covered males aged 18 to 64 years, and data available from other sources. Owing to the absence of a specific definition of an unemployed person on the Civilian Register Card used in 1943, and the use on the Occupation Survey (1st June, 1945) card of the definition "a person normally working for wages, but without a job on 1st June", it appears that the 1943 and 1945 figures exclude some persons who were temporarily absent from their jobs at the dates of the surveys. The data obtained at the quasi-censuses are thus not strictly comparable with those obtained at the Censuses, when the definition was specific.

The proportion of wage and salary earners unemployed in July, 1939 was estimated at approximately 13 per cent. By June, 1943, under conditions of intensive mobilisation of manpower for war purposes, practically the only unemployment was that due to sickness, accident, etc. The higher level of unemployment recorded in June, 1945 and June, 1947 reflected a limited measure of voluntary unemployment (persons not actively seeking work on account of sickness, industrial dispute, resting between jobs, etc.); involuntary unemployment was negligible and almost confined to unemployables.

# RELIEF OF UNEMPLOYMENT AND EMPLOYMENT AGENCIES.

Unemployment Benefits.—Details of the Commonwealth scheme of unemployment, sickness, and special benefits, which came into operation

<sup>\*</sup> Includes some normally self-employed who were without gainful occupation.

on 1st July, 1945, are given in the chapter "Social Condition" of this Year Book.

Labour Exchanges.—The activities of the Commonwealth Employment Service in relation to the placement of labour are described on page 684 of this volume.

Private Employment Agencies.—The Industrial Arbitration Act of New South Wales provides for the licensing and supervision of private employment agencies. At 31st December, 1948, there were 21 licensed agencies, of which 9 were in Sydney, 7 in the suburbs, and 5 outside the metropolitan area.

#### APPRENTICESHIP AND INDUSTRIAL TRAINING.

Conditions of apprenticeship are subject generally to the New South Wales Apprentices Act, 1901, which prescribes that children may not be indentured until they reach the age of fourteen years and that the hours of work may not exceed forty-eight per week except in farming occupations and in domestic service.

The New South Wales Industrial Arbitration Act authorises industrial tribunals to attach certain conditions to the employment of apprentices who are serving a period of training under indenture or other written contract for the purpose of rendering them fit to be qualified workers in an industry. Apprenticeship awards for various industries prescribing hours of work, wages, term of apprenticeship, extent of technical training, etc. are made by Apprenticeship Councils constituted for various industries. Each Apprenticeship Council consists of the Apprenticeship Commissioner as chairman and the members of the Conciliation Committee established for the particular industry in terms of the Industrial Arbitration Act, as described on page 718. The taking of a premium or similar reward for entering into any indenture or contract for apprenticeship or training without the consent of the Apprenticeship Council is prohibited. Terms of apprenticeship in various trades are prescribed also by awards of Commonwealth industrial tribunals.

In the years 1930 to 1932 indentures registered declined rapidly due to the unwillingness of employers to bind themselves for a period of five years under adverse economic conditions, and in September, 1933 a supplementary "trainee apprenticeship" system not requiring indentures was introduced. Under this system an employer who will provide facilities for trainees to learn a trade may be registered as an employer of trainee apprentices. Apprentices and trainees may be required to attend technical or other training schools during hours of work.

During the war (1939-45), the rights of apprentices and trainee apprentices whose training was interrupted by war service or other war-time conditions were protected by legislation. Selected persons were given courses of intensive training and suitable employees were advanced to tradesman status with the approval of committees constituted to supervise the war-time dilution of skilled labour.

The provisions for resuming apprenticeships interrupted by war service are outlined on page 683 of this volume.

The number of indentured apprentices and trainees registered by the Department of Labour and Industry in New South Wales during 1948 and earlier years is shown below:—

Year.	Indentured Apprentices	Trainee* Apprentices	Total.	Year.	Indentured Apprentices		Tota
1929	1,446		1,446	1939	1,317	1,645	2,96
1930	1,005	!	1,005	1940	1,601	1,697	3.29
1931	543	l l	543	1941	2,543	2,499	5,04
1932	403		403	1942	3,625	738	4,36
1933	529	58*	587	1943	3,910	554	4,46
1934	813	373	1,186	1944	3,903	616	4,51
1935	967	621	1,588	1945	4,536	840	5,87
1936	1,263	903	2,226	1946	5,552	1,605	7,15
1937	1,436	1,347	2,783	1947	5,447	1,239	6,68
1938	1,427	3,800	5,227	1948	5,171	1,030	6,20

Table 616.-Apprentices Registered.

The following statement shows the distribution of indentured apprentices amongst the various trades at the end of 1947 and certain earlier years; the number of apprenticeships in the various trades in December, 1948 is not available. During the war years, there were large increases in indentures in boilermaking, electrical engineering, sheet metal-working, and shipbuilding trades, reflecting industrial expansion associated with the production of munitions, etc.

Table 617.	—Apprenticeships	in	Various	Trades	in	December.
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	FP		про 11.			uuco 1		····	
Trade.	1935.	1939.	1941.	1942.	1943.	1944.	1945.	1946.	1947.
Baking	252	379	390	338	359	326	341	365	341
Boilermaking		161	254	362	483	676	753	753	702°
Bootmaking	298	294	201	280	300	320	331	390	415
Building	264	742	711	671	707	842	1,135	1,637	2,028
Butchering		17	22	21	15	18	10	8	5
Coachmaking		31	18	10	16	35	67	116	191
Confectioners		27	26	23	23	20	19	32	2 <b>2</b>
Electrical		688	910	1,112	1,487	1,908	2,180	2,344	2,350
Engineering	317	975	1,833	2,472	3,843	5,478	6,048	6,180	6,110
Farriery		12	10	9	9	3	4	5	4
Furniture		303	220	155	127	127	150	260	290
Gas meter making		2	2	1	2	2	2		
Glass-working	33	109	99	87	72	59	58	61	67
Hairdressing	156	497	533	569	650	541	669	956	1,193
Jewellery, Plating, etc.	59	128	88	126	131	121	152	103	118
Metal Moulding	45	114	157	185	230	276	286	247	217
Optical Trades	20	44	54	59	75	87	89	86	76
Pastrycooks	67	135	178	169	164	130	154	231	294
Pharmacists		144	171	178	181	161	241	382	485
Printing	227	285	252	239	205	217	204	215	225
Sheet Metal-working					ł				
and Tin-smithing	8	18	25	38	103	189	254	288	280
Ship and Boat Building	19	55	106	117	137	137	156	200	203
Other	40	64	217	102	140	104	128	256	279
Total	2,423	5,224	6,477	7,323	9,459	11,777	13,431	15,115	15,89ŏ

### INDUSTRIAL HYGIENE AND SAFETY.

In both State and Commonwealth Departments of Public Health, sections have been created to deal with industrial hygiene. The work of these units embraces the investigation of occupational diseases, the super-

<sup>•</sup> System introduced in last quarter of 1933.

vision of health conditions in industry, and the dissemination of advice regarding measures which safeguard the health of the workers. Responsibility for health conditions in the coal mining industry devolves upon the Joint Coal Board.

State legislation relating to factories and shops, scaffolding and lifts, and mining and shipping imposes upon employers the obligation to safeguard their employees against industrial risks. In 1946 it was provided that new factories or structural alterations and additions to factories must conform to approved standards.

A Factory Welfare Board was established in New South Wales in June, 1942 to advise the State Minister in regard to the welfare of employees and the prevention of accidents. The Board comprises representatives of employers and employees, with the Chief Inspector of Factories as Chairman. Welfare committees and safety committees function in individual factories.

Factories and shops must be registered annually by the Department of Labour and Industry and Social Welfare. The employment of women and juveniles in factories is subject to limitations. Outworkers in the clothing trades must be licensed by the Industrial Registrar of New South Wales. Lift-attendants and crane-drivers must obtain certificates of competency. Inspection with the object of securing compliance with the law is conducted by inspectors of the Department of Labour and Industry and Social Welfare.

# INDUSTRIAL ACCIDENTS.

Under various enactments relating to industrial hargiene, employers are required to notify the statutory authority of accidents which cause injury to workers, but the available data do not afford a comprehensive record of such occurrences. In factories, employers are required to report accidents causing loss of life; accidents due to machinery or to hot liquid or other hot substance, to explosion, escape of gas or steam, to electricity or to acid or alkaline solutions, if an employee is prevented thereby from returning to his work in the factory within forty-eight hours; and other accidents if an employee is disabled for seven days or more. New requirements introduced in 1946 were the notification of every case of lead, phosphorus, arsenical, or mercurial poisoning or poisoning due to work in connection with radio-active substances, or any other disease due to any cause which may be specified by order, and the submission by factory occupiers of a six-monthly return of all accidents and diseases which have occurred.

The accidents in factories in recent years, as reported to the Department of Labour and Industry, are classified in the following statement to show the extent of injury:—

Extent of Inju	ry.		1939.	1943.	1944.	1945.	1946.	1947.	1948.
Fatal		•••	21	31	9	12	21	20	12
Permanent		•••	126	156	115	122	142	181	178
Temporary	•••		9,042	20,100	20,195	16,741	16,225	18,756	15,102
Total Accident	s		9,189	20,287	20,319	16,875	16,388	18,957	15,292

The number of accidents reported to the Department of Labour and Industry in connection with lifts, scaffolding and cranes, with the number which proved fatal shown in parentheses, was 541 (6) in 1945, 533 (9) in 1946, 300 (16) in 1947, and 426 (14) in 1948.

Particulars of railways and tramway accidents and of accidents in mines are shown in other chapters of this Year Book.

#### WORKERS' COMPENSATION.

In New South Wales provisions to compensate workers (and their dependants) for injury sustained in connection with their employment are made by the Workers' Compensation Act, 1926-48 and by other legislation, of which the Workers' Compensation (Silicosis) Act, 1942-48, the Workmen's Compensation (Broken Hill) and Workmen's Compensation (Lead' Poisoning—Broken Hill) Acts, and the Coal Industry (Workers' Compensation Insurance) Order, 1948 are the most important. The Police-Regulation (Superannuation) Act, as described in the chapters "Social' Condition" and "Police" of this volume, provides for compensation to members of the police force killed or disabled by injury in the execution of duty, and Commonwealth legislation provides for compensation to employees of the Commonwealth Government and to men in particular classes of work (such as that of seamen) subject to special risks.

The Workers' Compensation Act is administered by the Commission described in the chapter "Law Courts" of this Year Book and administrative expenses are paid from the Workers' Compensation Fund, to which insurers contribute by annual levy on total premiums in respect of workers' compensation insurance. Separate committees (each comprising two representatives of employers, two representatives of the workers, and an independent chairman) administer the Acts relating to silicosis and to workers disabled by dust diseases contracted in the mines at Broken Hill. Appeal on questions of fact and of law from decisions of these committees lies to the Workers' Compensation Commission.

An Insurance Premiums Committee, comprising the Chairman of the Workers' Compensation Commission, a member nominated by insurers, and an officer of the public service, is responsible for the application of a fixed loss ratio scheme (see page 703) in respect of insurance effected under the Workers' Compensation Act and is required to levy and collect from insurers contributions to meet the cost of compensation under the Silicosis Act (see page 708). The Committee has the powers of a Royal Commission to investigate matters connected with its general functions and to enquire into matters affecting workers' compensation insurance referred by the Minister for Labour and Industry and Social Welfare.

## Workers' Compensation Act, 1926-48.

Under the Workers' Compensation Act, workers whose remuneration, exclusive of overtime payments, bonuses, and special allowances, does not exceed £1,250 per annum and who become incapacitated for any period of time are compensatable. Prior to 20th December, 1948, the limits of income and period of disability were £750 and three days, and prior to July, 1942, £550 and seven days. Rural workers on contract also are oligible, provided they do not sublet the contract nor employ other persons.

Compensatable injury is defined under the Act as personal injury arising "out of or in the course of the employment", including a disease contracted in the course of employment to which the employment was a contributing factor. Diseases caused by silica dust are compensatable under this Act only in the case of persons employed in or about coal mines. Compensation is payable for workers injured on daily or periodic journeys between place of abode and place of employment.

Injured workers and their dependants, including wife and children under school-leaving age, receive compensation in the form of weekly payments or lump sum (limited until 1942 to £1,000 to any one case) and also the cost of medical and hospital treatment and ambulance service.

From 1945 a worker electing to take a lump-sum payment in respect of an injury became entitled to a payment of not less than 50 per cent. of the prescribed lump sum for such injury, irrespective of the amount of weekly compensation received, and the wife or a female member of an injured worker's family obliged to leave employment to care for him became compensatable. From 1947 compensation was made payable in respect of workers, engaged by employers in New South Wales, who suffer injury in the course of employment in other parts of the Commonwealth, unless compensation therefor had been received otherwise than under the New South Wales Act. In 1945 and again in 1948, the rates of compensation payments and the liability of employers for medical and hospital benefits were increased.

Every employer is required to insure with a licensed insurer against his liability to pay compensation, unless he is authorised by the Workers' Compensation Commission to undertake the liability on his own account. The penalty for default is a fine not exceeding £100 or (since July, 1942) imprisonment for a period not exceeding six months. The Commission may pay from the Workers' Compensation Fund an aggregate amount not exceeding £5,000 in any year in respect of awards made against employers who were not insured; in such cases the employer must reimburse the Commission.

### Fixed Loss Ratio Scheme.

A Fixed Loss Ratio Scheme in connection with workers' compensation insurance was prepared by the Iusurance Premiums Committee and introduced from 1st July, 1945. Under the scheme the rates of premium payable in respect of workers' compensation insurance and the fixed loss ratio percentage are determined by the Committee. Any licensed insurer or class of insurers may be exempted from the scheme and the Commission may cancel licences in its discretion.

In 1945-46 the prevailing premium rates were made the maximum rates and the fixed loss ratio was determined as 70 per cent. These rates and ratio applied in 1946-47 and 1947-48, when insurers expended only 62.67 per cent. and 52.90 per cent., respectively, of the combined total premium income as cost of claims of and against all insurers, and they were required to expend the difference in rebates to insurers (5 per cent. in each year) and in payments to the Equalisation Reserve (2.33 per cent. and 12.10 per cent. respectively). The funds of the Reserve may be applied by the Committee toward meeting deficiencies when the cost of claims exceeds the fixed loss ratio.

Contributions for compensation under the Silicosis Act are not taken into account in determining the loss ratio under this scheme.

### Coal Mining Industry Scheme.

In terms of the Coal Industry (Workers' Compensation Insurance) Order, September, 1948, issued by the Joint Coal Board, employers in the coal mining industry must effect with the Board all workers' compensation insurance in respect of their mine working employees. Under this scheme, the cost of workers' compensation is spread evenly throughout the industry by the application of a uniform rate of premium. The Mine Owners' Insurance Co. Pty. Ltd. was acquired by the Board in June, 1948 by the purchase of all shares in the Company and, with its name changed to Coal Mines Insurance Ltd., acts as the Board's agent in the administration of the scheme.

## Compensation Cases Reported and Payments.

Employers are required to supply returns to the Workers' Compensation Commission in respect of cases admitted to compensation in terms of the Act. The number of cases for which returns are supplied does not represent the actual number of injuries sustained by workers in the course of their employment, because there are injuries not compensatable in terms of the Act, there are many cases of minor injury where medical treatment only is accepted as sufficient compensation, there are employees who receive full wages in cases of illness and accident and claim compensation only when death or serious disability results, and there are groups of employees outside the scope of the Workers' Compensation Act.

The following statement shows for each of the six years ended June, 1948 (a) the number of reported cases of compensatable injury in each year, excluding cases of injury sustained in a previous year but compensated partly or wholly in the current year, and including cases arising in the current year but "unclosed" (payments incomplete) at the end of that year; and (b) the amount of compensation paid in each year, including payments during the year on cases that were "unclosed" at the beginning of the year, and excluding outstanding liability on cases "unclosed" at the end of that year. The number of cases therefore cannot be related to the amount of compensation paid, nor can the amount of compensation per case nor the average duration of cases be calculated. The particulars for the years 1942-43 to 1944-45 are deficient in some degree because of non-supply of returns but those for later years are deemed to be nearly complete. The differences in coverage, however, do not appear to have affected the year to year comparisons very materially.

Table 618.—Workers' Compensation Act: Compensation Cases Reported.

(b) Amount of	satable Injuries.*	(a) Number of Reported Cases of Compensatable Injuries.*						
Compensation Pai	Persons.	Females.	Males.	Year ended June.				
£								
1,475,407	74,778	6,760	68,018	1943				
1,902,698	94,621	8,990	85,631	1944				
1,841,916	98,867	9,229	89,638	1945†				
2,200,726	98,017	7,393	90,624	1946				
2,471,921	113,362	7,964	105,398	1947				
2,414,339	97,590	7,083	90,507	1948				

<sup>\*</sup> See definitions preceding table. † Late returns for 1944-45-1,982 male workers and 174 female workers—are not included in the table.

The number of cases of injuries to males and the amount of compensation paid increased greatly between 1942-43 and 1946-47, as the provisions of the Act were extended and the number in civilian employment rapidly increased with general demobilisation of the forces. During 1947-48, there was a substantial fall in the number of compensatable injuries reported, following upon the introduction of the forty-hour working week and the change to a five-day week in many industries where hours were formerly spread into the sixth day, and the granting of sick leave and annual holidays with pay under certain awards.

The statement given below classifies the new compensation cases reported in each of the six years shown in the preceding table to distinguish those arising from industrial diseases and from accident in travelling to or from and in the course of employment, and shows also the number of fatal cases similarly classified:—

Table 619.-Workers' Compensation Act: Classification of Cases.

		_		J	Injury b	y Accident	<b>5.</b>			
Year ended June.	Injury by Industrial Disease.		On Journey to or from Employment.					Total Cases Reported.		
	Fatal.	Total.*	Fatal.	Total.*	Fatal.	Total.*	Fatal.	Total *	Fatal.	Total.
				Mali	Worki	ers.				_
1943 1944 1945 1946 1947 1948	5 23 20 9 23 31	1,616 2,099 2,732 2,398 2,736 2,208	† 6 19 17 41 60	1,081 1,705 2,364 2,426 3,275 3,101	112† 132 158 86 156 171	65,321 81,827 84,542 85,800 99,387 85,198	112 138 177 103 197 231	66,402 83,532 86,906 88,226 102,662 88,299	117 161 107 112 220 262	68,018 85,631 89,638 90,624 105,398 90,507
				FEMALI	e Work	ERS.				
1943 1944 1945 1946 1947 1948	 1 1 1 1	658 704 836 534 511 494	† 1 2  2	356 580 764 621 808 768	3† 2 1 1 3 	5,746 7,706 7,629 6,238 6,645 5,821	3 3 3 1 3 2	6,102 8,286 8,393 6,859 7,453 6,589	3 3 4 2 4 3	6,760 8,990 9,229 7,393 7,964 7,083
MALE AND FEMALE WORKERS.										
1943 1944 1945 1946 1947 1948	5 23 21 10 24 32	2,274 2,803 3,568 2,932 3,247 2,702	† 7 21 17 41 62	1,437 2,285 3,128 3,047 4,083 3,869	115† 134 159 87 159 171	71,067 89,533 92,171 92,038 106,032 91,019	115 141 180 104 200 233	72,504 91,818 95,299 95,085 110,115 94,888	120 164 201 114 224 265	74,778 94,621 98,867 98,017 113,362 97,590

<sup>\*</sup> Includes "fatal" injuries. † "On journey" cases included with "in course of employment" cases.

In 1947-48 the proportion of the cases of injury due to industrial diseases was 2.4 per cent. for male workers compared with 7.0 per cent. for female workers, and of the on journey cases, the proportion for females (10.8 per cent.) was more than three times that for males (3.4 per cent.). The proportion of on journey cases for male and female workers combined increased from 1.9 to 4.0 per cent. of all cases between 1942-43 and 1947-48.

In 1947-48 the proportion of fatal cases amongst male workers compensated was 14 per 1,000 cases due to industrial diseases, 19.3 per 1,000 journey accidents, and 2.01 per 1,000 cases of accidents whilst at work.

In respect of male workers, cases of compensation under the Act in 1947-48 were most numerous in metal and machinery works (17,292), with mining and mineral treatment (12,061) next in order, followed by food and drink factories (8,694), rural employment (7,484), construction and maintenance of works (7,075), building (6,710), and the transport industry (6,686); these represented 72.9 per cent. of the compensatable injuries sustained by male workers. Amongst female workers, about 45 per cent. of the injuries were sustained in manufacturing industries, and about 30 per cent, in domestic and personal employment.

Particulars of the total amount of compensation paid under the Workers' Compensation Act during 1946-47 and 1947-48, as defined in the paragraph preceding Table 618, are given below:-

Table 620.—Worker	s' Compensation Act:	Compensation Payments.
	1946-47.	1947–48.

		1946-47.		1947–48.				
Particulars.	Male Workers,	Female Workers.	Total Payments.	Male Workers.	Female Workers.	Total Payments.		
Fatal Cases	£ 82,493	70 	£ 82,563	109,624	£ 194	109,818		
Disability Compensated by—								
(i) Lump Sum	299,268	15,067	314,335	323,088	17,534	340,622		
(ii) Weekly Payments—								
On Account of Worker	1,266,531	64,941	1,331,472	1,192,852	71,719	1,264,071		
On Account of Dependants	401,501	433	401,934	358,522	505	359,027		
Medical Treatment, etc.	314,566	27,051	341,617	311,410	29,391	340,801		
Total (ii)	1,982,598	92,425	2,075,023	1,862,284	101,615	1,963,899		
Total Disability Cases	2,281,866	107,492	2,389,358	2,185,372	119,149	2,304,521		
Total Compensation Payments	2,364,359	107,562	2,471,921	2,294,996	119,843	2,414,889		

### Cost of Insurance under the Act.

The next table shows for each of the last ten years the estimated cost to employers of insurance effected (including the estimated premiums which would have been payable by self-insurers) to cover workers under the Workers' Compensation Act, and the number of compensatable injuries (including those for which medical expenses only were paid) as reported by insurers and self-insurers. Because of changes in the scope of the Act and the marked increase in employment and the amount of wages paid during the period, the comparative significance of the figures is limited. Similar information for the years 1925-26 to 1940-41 is published in Table 479 of the Year Book for 1940-41.

Table	621.—Workers'	Compensation	Act:	Cost	of	Insurance	and
	C	ompensatable :	Injuri	es.			

Year ended	Estimated Cost to Employers.	Compensatable	Year ended	Estimated Cost	Compensatable		
June.		Injuries.*	June.	to Employers.	Injuries.*		
1939 1940 1941 1942 1943	£ 2,577,046 2,547,985 2,827,688 3,324,110 3,784,045	No. 80,713 78,276 82,457 97,443 122,990	1944 1945 1946 1947 1948	£ 3,769,874 3,710,055 3,645,233 4,172,429 5,147,510	No. 116,605 118,206 124,301 148,026 144,552		

<sup>\*</sup> As reported by insurers and self-insurers.

The Workers' Compensation Commission estimated the amount of wages paid by insurers and self-insurers to workers covered by the Workers' Compensation Act at £242,067,811 in 1946-47 and £297,268,490 in 1947-48. Relating these amounts to the cost of insurance shown above, the average cost of insurance under the Act per £100 wages paid was £1.72 in 1946-47 and £1,73 in 1947-48.

### WORKMEN'S COMPENSATION (BROKEN HILL) ACTS.

The Workmen's Compensation (Broken Hill) Act, 1920-1948 and Workmen's Compensation (Lead Poisoning—Broken Hill) Act, 1922-1937 provide compensation for Broken Hill miners disabled by certain industrial diseases which cause gradual disablement. At Broken Hill there is a Bureau of Medical Inspection for the examination of men selected for employment in the mines and of employees with symptoms of lead poisoning, pneumonoconiosis, or tuberculosis.

Compensation in cases of pneumonoconiosis or tuberculosis contracted in the Broken Hill mines is paid by the mine owners without contribution by the Government if the worker entered employment in the mines after 31st December, 1920. For other cases the Broken Hill Pneumonoconiosis-Tuberculosis Fund is maintained by contributions—one-half by the Government of New South Wales and one-half by the mine owners. The following statement shows particulars of cases of compensation paid by mine-owners and from the Broken Hill Fund in the years 1943 to 1948:—

Table 622.—Workmen's Compensation (Broken Hill) Acts: Beneficiaries and Compensation Payments.

		Compensati	ion by Empl	oyers.	Compensation from the Fund.						
Year ended June.		Benefici	Beneficiaries*.			Benefic					
	Cases*.	Workers.	Dependants.	Payments.	Cases*.	Workers.	Depen- dants,	Payments.			
1943 1944 1945 1946 1947 1948	No. 74 82 89 90 88 85	No. 47 53 56 56 52 49	No. 91 108 105 98 96 86	£ 12,925 15,038 16,088 18,305 17,843 17,467	No. 577 567 570 561 553 534	No. 229 208 204 197 179 166	No. 566 554 549 532 524 500	£ 93,941 95,614 92,684 100,698 102,607 96,508			

Disbursements from the Fund in 1947-48 were £96,508, comprising compensation, £93,887, funerals and special expenses, £481, and management expenses, £2,140; payments from the Fund from its inception on 1st January, 1921 to 30th June, 1948 totalled £2,658,499 of which £76,110 was management expenses. Broken Hill mine-owners made payments under the Act totalling £244,542, and the aggregate disbursement to 30th June, 1948 was £2,903,041. In all, 1,065 mine workers have been compensated under the Act since its inception, including 218 receiving payments at 30th June, 1948.

## Workers' Compensation (Silicosis) Act, 1942-48.

Particulars of the two limited schemes in operation prior to July, 1942 for compensation for workers, other than Broken Hill miners and coal miners compensatable under the Workers' Compensation Act, contracting disease by exposure to silica dust are given on page 564 of the 1940-41 edition of the Year Book.

The Workers' Compensation (Silicosis) Act, 1942 provides a comprehensive scheme of compensation in respect of death or disablement through exposure to silica dust of workers other than Broken Hill miners and coal miners covered in that respect by the Acts described in preceding pages. The scheme, which commenced from 1st July, 1942, is administered by the Workers' Compensation (Silicosis) Committee.

Up to 30th June, 1945, the scheme was financed by an annual government grant and contributions from employers with workers in those classes of employment regarded by the Committee as having silicotic hazard. (For further details, see page 768 of the 50th edition of the Year Book.) With the amendment of the Silicosis Act in 1945 and 1946, the cost of the scheme was spread over industry generally by means of an annual levy on the wages paid by all insurers and self-insurers under the Workers' Compensation Act, 1926-48, the supplementary annual government grant being continued. The rates of contribution are determined, and the contributions are collected, by the Insurance Premiums Committee.

The classes of employment insured under the silicosis scheme in 1947-48 against injury caused by silica dust were in the following industries: abrasive soaps and powders, asbestos, bricks, tiles, pottery, refactory materials, glass making, metal mining, metal trades, ore milling, paint manufacturing, and sandstone working. The rates of contribution on each £100 of wages paid to workers in these classes of employment were £0.75 in the metal trades industry and £3 in other silica hazard industries in 1942-43 and 1943-44, £1.75 and £6, respectively, from 1944-45 to 1947-48, and £1.25 and £4, respectively, in 1948-49. In the case of all other classes of employment covered by the Workers' Compensation Act (except those where the tariff rate of premium is per capita), the rate of contribution per £100 of wages paid was 10d. in 1946-47 and 1947-48 and 8d. in 1948-49.

The Silicosis Committee received 236 applications from workers during the year ended 30th June, 1948, and on these and some applications from the previous year made 63 awards of compensation. Compensation awards in the six years ended June, 1948, numbered 672, of which 528 were in respect of workers who had complied with the general provisions of the Act and 144 were under its special provisions. Between 1942 and 1948 there were 221 silicotic workers who died, 177 from silicosis and 44

from other causes. The number of workers to whom weekly payments were being made under awards current at 30th June, 1948 was 579.

Particulars of operations on the Workers' Compensation (Silicosis) Fund in each of the years 1942-43 to 1947-48 are given in the following table:—

Table 623.—Workers' Compensation (Silicosis) Fund: Income and Expenditure.

		lncome.		Expenditure.							
Year ended				Co	mpensation	Adminis-					
30th June,	Employers' Contri- butions,	Treasury Grant.	Total.	Compen- sation.	Deposits on Trust for De- pendants.	Medical, etc., Ex- penses.		trative and Other Ex- penditure.	Total.		
	£	£	£	£	£	£	£	£	£		
1943 1944 1945 1946 1947 1948	15,797 22,887 40,081 19,206§ 84,514¶ 96,200∥	20,018 20,050 20,000 33,000 20,000 20,000	35,815 42,937 60,083‡ 52,233‡ 104,518‡ 116,200	33,867* 46,038 59,018 77,945 86,463 92,693	† 6,907 12,635 9,248 12,420 10,238	† 1,642 2,408 2,537 2,831 2,056	33,867 54,587 74,061 89,730 101,714 104,987	3,353 1,941 1,853 1,917 2,017 6,204	37,220 56,528 75,914 91,647 103,731 111,191		

<sup>\*</sup> Includes £18 under former scheme. † Included under compensation payments. ‡ Includes other income; £2 in 1944-45, £27 in 1945-46 and £4 in 1946-47. § Period 1st July to 31st December, 1945; first payment by Premiums Committee until August, 1946. ¶ Insurance Premiums Committee, £84,451; Employer's contributions, £63. ∥ Insurance Premiums Committee.

At 30th June, 1947, there was an accumulated deficiency in the Fund of £30,992 financed by Treasury advances of £32,750. During 1947-48 these advances were cleared, £4,000 being repaid and the balance (£28,750) being converted to a grant, and the accumulated position was changed to a surplus of £6,767 at 30th June, 1948.

The commitments of the Fund can be met, if necessary, from a Silicosis Outstanding Liability Reserve Fund held by the Insurance Premiums Committee. At 30th June, 1948, there was a balance of £45,030 in the Reserve Fund.

#### COST OF WORKERS' COMPENSATION INSURANCE.

In compensating workers under the special Acts relating to silicosis and Broken Hill miners, the costs incurred were, respectively, £103,731 and £120,449 in 1946-47 and £107,207 and £113,975 in 1947-48. These sums added to those given in respect of the principal Act (see page 707) gave totals of £4,396,609 and £5,368,692 in the successive years, but as noted elsewhere, there are workers compensated otherwise than under these Acts. Therefore, although these totals represent the major part they do not represent the total cost of workers' compensation insurance in New South Wales.

#### SHOPS REGISTERED.

The Factories and Shops (Amendment) Act, 1936 provides for the annual registration of shops in proclaimed shopping districts. The metropolitan shopping district is bounded approximately by a line joining (and including) Manly, Hornsby, Parramatta, and George's River, and the Newcastle shopping district is the City of Greater Newcastle; all other municipalities and most of the unincorporated country towns are also shopping districts.

The following particulars of registered shops and employees engaged in or associated with the sale of goods have been compiled from returns supplied in connection with the annual registration of shops. Interyear comparisons of the particulars are affected to some extent by variations in the proportion of returns supplied and tabulated and by alterations in the areas embraced in shop registration districts. Shops registered for the sale of petrol and oil have been included only where in shopping districts; elsewhere, these numbered 967 with 1,383 male and 376 female employees in 1942 (when first recorded) and 739 with 730 male and 399 female employees in 1948. Persons such as those engaged in factory or other work preparing goods to be sold, commercial travellers, newsboys, sellers in theatres, hairdressers working in saloons attached to shops selling hairdressers' goods, and mechanics working in garages where petrol is sold have been excluded, but waiters and waitresses have been included as shop employees in restaurants.

The uext table shows the number of shops registered in proclaimed shopping districts in New South Wales at 30th June, 1948 and earlier years, distinguishing those with no employees and giving particulars of the wage-earners employed according to sex and adult and junior status:—

Table	624.—	–Shops	in	Shopping	Districts:	Number	and	Employees.

	Shops.			Employees.								
At 30th				Ma	les.	Fem	ales.	Total,				
Juue,	With no Employ- ees.	With Employ- ecs.	Total.	Adults.	Minors.	Adults.	Minors.	Males,	Females.	Persons		
1939	13,843	15,904	29,747	30,144	13,959	20,967	16,052	44,103	37,019	81,122		
1940	14,440	16,556	30,996	30,545	14,373	21,413	17,200	44,918	38,613	83,531		
1941	14,476	16,170	30,646	28,977	13,663	22,874	18,672	42,640	41,546	84,186		
1942	14,270	16,106	30,376	24,731	10,801	26,086	20,073	35,532	46,159	81,691		
1943	13,170	15,621	28,791	22,312	8,897	26,865	17,502	31,209	44,367	75,576		
1944	13,013	15,895	28,908	21,994	8,477	27,721	16,659	30,471	44,380	74,851		
1945	12,709	16,294	29,003	22,107	8,914	27,705	17,099	31,021	44,804	75,825		
1946	10,871	17,141	28,012	33,753	11,774	27,953	19,689	45,527	47,642	93,169		
1947	10,930	18,303	29,233	37,266	11,941	29,444	18,516	49,207	47,960	97,167		
1948	10,831	18,142	28,973	37,602	12,021	31,115	18,611	49,623	49,726	99,349		

War-time mobilisation of manpower began affecting employment in shops in 1942 and between June, 1941 and June, 1943, retailers had a net loss of 8,610 employees. Female employees had increased by 2,821 and older persons not subject to manpower direction had replaced a large proportion of the younger men and women. There was no significant regain until after hostilities ceased; the number employed mounted rapidly in 1945-46 and 1946-47 and more steadily thereafter, and by June, 1948 there were over 18,000 (22.5 per cent.) more shop employees than in 1939 with males 5,520 and females 12,707 greater in number. The proportion of minors in the total decreased from 37 per cent. in 1939 to 30.8 per cent. in 1948, the school-leaving age having been raised by one year in that interval.

The classification of shops is not such as to show the number in which commodities of particular types are sold, because the shops classed as "General Grocery, Drapery, etc." include large departmental and chain stores in which the range of goods sold is very wide. The number of shops in this large group comprised 53 per cent. of the total in 1939 and 58 per cent. in 1948, and in those years had 75 per cent. and 73 per cent., respectively, of all wage-earners employed in registered shops. Over the period 1939 to 1947, restaurants and separate shops supplying cooked provisions, fish, and refreshments increased slightly in number and gained 44 per cent. in employees, but there was a decrease in the number of and employment in butcher shops. The hairdressing goods, tobacconist, and newsagent shops as a group were reduced in number, but showed a gain of 35 per cent. in employment over the period. Notwithstanding the rationing of motor spirit, shops registered in shopping districts for the sale of petrol and oil were 29 per cent. greater in number and had approximately 62 per cent. more employees in 1948 than in 1939.

The following statement shows the number of male and female employees recorded in the various shopping districts at 30th June, 1948 and earlier years. As noted previously, year to year comparisons are affected by the uneven supply of returns and by alterations in the area embraced in shop registration districts:—

Table	625.—Shops:	Number	of	Employees	bу	Shopping	Districts.
-------	-------------	--------	----	-----------	----	----------	------------

At	7	letropolita	ın.	Newcastle.		Other Districts.		All Shopping Districts.			
30th June.	Males.	Females.	Persons.	Males.	Females.	Males.	Females.	Males.	Females,	Persons.	
1989	25,229	25,853	51,082	1,947	1,491	16,927	9,675	44,103	37,019	81,122	
1940	25,181	26,684	51,865	2,301	1,853	17,436	10,076	44,918	38,613	83,531	
1941	23,887	28,785	52,672	2,139	2,106	16,614	10,655	42,640	41,546	84,186	
1942	19,609	30,854	50,463	1,706	2,428	14,217	12,877	35,532	46,159	81,691	
1043	16,920	28,804	45,814	1,436	2,588	12,853	12,885	31,209	44,367	75,576	
1944	16,003	28,104	44,107	1,404	2,607	13,064	13,669	30,471	44,380	74,851	
1945	16,183	28,249	44,432	1,376	2,730	13,462	13,825	31,021	44,804	75,825	
1946	25,599	31,106	56,705	2,106	2,821	17,822	13,715	45,527	47,642	93,169	
1947	28,613	31,509	60,122	2,222	2,713	18,372	13,738	49,207	47,960	97,167	
1048	28,571	32,291	60,862	2,407	2,930	18,645	14,505	49,623	49,726	99,349	
					ļ <u>.                                     </u>				(		

During the period covered by the table, there were increases of 5,520 in male employees and 12,707 in female employees in registered shops. Over the nine years wage-earners in all registered shops increased by 22.5 per cent.; the increase was proportionally greater in the Newcastle (55.2 per cent.) and the country shopping districts (24.6 per cent.) than in the metropolitan district (19.1 per cent.). In all districts, female shop employees increased by 34.3 per cent., the proportional gains being 24.9 per cent. in the metropolitan, 96.5 per cent. in the Newcastle, and 49.9 per cent. in the country shopping districts.

Particulars.

Further particulars of the registered shops in the metropolitan, Newcastle, and other shopping districts and their wage-earning employees at 30th June, 1948 are shown below:—

Table 626.—Shops: Number and Classification of Employees, June, 1948.

Newcastle

Other

All Shopping Districts.

Metropolitan

District.			District. Dist		Districts.		snopping Districts.				
	_	1		of Regi	STERED	SHOPS.					
	6,908 9,738							10,831 18,142			
16,646 1,389 10,998							<u> </u>	28,973			
		E	MPLOYMI	ent in R	EGISTER	ер Ѕнора	š				
Males.	Females	Persons.	Males.	Females	Males.	Females	Males.	Females	Persons		
13,342 3,818	14,848 5,512	28,190 9,330	1,025 526	826 1,004	8,534 4,119	4,437 6,103	22,901 8,463	20,111 12,619	43,012 21,082		
17,160	20,360	37,520	1,551	1,830	12,653	10,540	31,364	32,730	64,094		
1,922 385	4,285 2,068	6,207 2,453	114 49	219 401	746 232	1,165 1,610	2,782 666	5,669 4,079	8,451 4,745		
2,307	6,353	8,660	163	620	978	2,775	3,448	9,748	13,196		
7,752 1,352	4,401 1,177	12,153 2,529	538 155	320 160	3,629 1,385	614 576	11,919 2,892	5,335 1,913	17,254 4,805		
9,104	5,578	14,682	693	480	5,014	1,190	14,811	7,248	22,059		
23,016 5,555	23,534 8,757	46,550 14,312	1,677 730	1,365 1,565	12,909 5,736	6,216 8,289	37,602 12,021	31,115 18,611	68,717 30,632		
28,571	32,291	60,862	2,407	2,930	18,645	14,505	49,623	49,726	99,349		
	18,342 3,818 17,160 1,922 385 2,307 7,752 1,352 9,104 23,016 5,555	6,908 9,738 16,646  Males. Females  13,342 3,818 15,512  17,160 20,360  1,922 385 2,068 2,307 6,353  7,752 4,401 1,352 1,177 9,104 5,578  23,016 23,534 6,555 8,757	6,908 9,738  16,646  Ei  Males. Females Persons.  13,342 3,818 5,512 9,330  17,160 20,360 37,520  1,922 4,285 2,307 6,353 8,660  7,752 4,401 1,352 1,372 2,529  9,104 5,578 14,682  23,016 5,555 8,757 14,312	NUMBER   6,908   9,738   16,646   1,   EMPLOYMI   Males.   Females   Persons.   Males.   13,342   14,848   28,190   526   17,160   20,360   37,520   1,551   1,922   4,285   6,207   385   2,453   49   2,307   6,353   8,660   163   1,352   1,177   2,529   155   1,578   1,352   1,177   2,529   155   1,677   9,104   5,578   14,682   693   23,016   23,534   46,550   1,677   730   1,312   730   1,677   730   1,312   1,312   1,312   1,677   730	NUMBER OF REGION NUMBER	NUMBER OF REGISTERED	NUMBER OF REGISTERED SHOPS.    6,908   526   3,397   7,541     16,646   1,389   10,938     EMPLOYMENT IN REGISTERED SHOPS     Males.   Females   Persons.   Males.   Females   Males.   Females     13,342   14,848   28,190   1,025   826   8,534   4,437   6,103     17,160   20,360   37,520   1,551   1,830   12,653   10,540     1,922   4,285   6,207   114   219   746   1,165   385   2,068   2,453   49   401   232   1,610     2,307   6,353   8,660   163   620   978   2,775     7,752   4,401   12,153   153   160   1,385   676     9,104   5,578   14,682   693   480   5,014   1,190     23,016   23,534   46,550   1,677   1,365   12,909   6,216   5,555   8,757   14,312   730   1,565   5,736   8,289	NUMBER OF REGISTERED SHOPS.    6,908   526   3,397   7,541     16,646   1,389   10,938     EMPLOYMENT IN REGISTERED SHOPS.    Males.   Females   Persons.   Males.   Females   Males.   Females   Males.     13,342   14,848   28,190   1,025   826   8,534   4,437   22,901     3,818   5,512   9,330   526   1,004   4,119   6,103   8,463     17,160   20,360   37,520   1,551   1,830   12,653   10,540   31,364     1,922   4,285   6,207   114   219   746   1,165   2,782     385   2,068   2,453   49   401   232   1,610   666     2,307   6,353   8,660   163   620   978   2,775   3,448     7,752   4,401   12,153   538   320   3,629   614   11,919     1,352   1,177   2,529   155   160   1,385   576   2,892     9,104   5,578   14,682   693   480   5,014   1,190   14,811     23,016   23,534   46,550   1,677   1,365   12,909   6,216   37,602     5,555   8,757   14,312   730   1,565   5,736   8,289   12,021	NUMBER OF REGISTERED SHOPS.    6,908   9,738   863   7,541   10,938   28,973		

In the metropolitan shopping district, there were 16,646 registered shops and paid labour was employed in 9,738 shops. The number of employees was 60,862, or 6 per shop with wage-earning employees. In other shopping districts, including Newcastle, there were 12,327 registered shops and 8,404 shops employed 38,487 persons or between four and five per shop. There was a majority of females employees in the metropolitan and Newcastle shops, but in country shops 56 per cent. were males.

Awards made by the Industrial Commission of New South Wales in October, 1937 for shop assistants in the metropolitan and Newcastle districts and in July, 1938 for those in country districts govern the alloca-

tion of work between males and females and the proportion of juniors employed. Certain groups of shops are classified according to the commodities offered for sale therein. In one group, which includes shops or departments for the sale of groceries, mercery, hardware, furniture, sports goods, motor vehicles or bicycles, all the assistants must be paid at the rates prescribed for males. In the second group of shops or departments, the employer may employ all female assistants to sell such goods as women's clothing, haberdashery, fancy goods, etc. In shops not classified in these two groups, the award prescribed that 50 per cent. of the assistants were to be males, except where less than three shop assistants were employed, and it was suspended in April, 1942 owing to the shortage of male workers. As a general rule, the proportion of juniors to seniors must not exceed one to one, a senior being defined as an assistant twenty-three years of age or over receiving the full rate of wages and including any employer actively engaged in the shop.

#### TRADE ASSOCIATIONS.

### TRADE UNIONS.

The Trade Union Act of 1881-1936 provides for the registration of trade unions, the appointment of trustees, in whom the union property is vested, and for the constitution of rules. If union funds are used for political purposes, payments must be made from a separate fund, to which contribution by members is optional.

Two classes of trade unions are registered, viz., unions of employers and unions of employees, the latter being the most numerous. Any seven or more employers or employees who are members of a trade union and comply with the prescribed conditions as to rules, etc. may register under the Trade Union Act.

After the introduction of the Commonwealth system of industrial arbitration in 1904, some of the unions previously on the State registry became merged into federal associations, but unless a union elects to be regulated exclusively under Commonwealth arbitration and conciliation the branch in New South Wales retains its registration under the Trade Union Act.

### Unions of Employers.

Few unions of employers seek registration under the Trade Union Act, so that the available information concerning them is scanty and does not afford any indication of the extent of organisation amongst employers.

The unions of employers registered under the Trade Union Act at the end of 1947 numbered 25. The membership of 22 unions from which returns were received was 20,044 at the end of the year and the funds amounted to £99,614. The receipts during 1947 amounted to £75,563, and the expenditure to £74,462. The members included 8,902 in the pastoral industry, 7,116 retail tobacco traders, and 819 master bakers.

## Unions of Employees.

Statistics of registered trade unions of employees do not fully represent the position of trade unionism in the State because unions registered under Commonwealth law only are excluded and returns are not supplied by all unions. The following statement shows the number of registered trade unions of employees in New South Wales in 1947 and selected earlier years and particulars of the membership and finances of those unions which furnished returns:—

Table 627.—Trade Unions of Employees	Table	627.—Trade	Unions	of	Employees.
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	Number of		Re	gistered Un	ions Furnish	ing Returns	•	
Year.	Unions Registered.	Number of Unions.	Males,	Females.	Persons.	Receipts.	Expend- iture.	Funds at end of Year.
1911	179	171	145,784	4,743	150,527	£ 157,202	£ 146,757	£ 112,494
1921	197	187	234,898	23,965	258,863	363,067	345,854	194,360
1927	170	164	306,380	38,689	345,069	487,723	454,190	357,588
1932	170	166	241,127	39,718	280,845	330,167	316,931	336,574
1937	179	175	267,568	50,833	318,401	412,429	384,397	428,666
1938	181	175	275,400	53,048	328,448	462,449	426,725	463,613
1939	184	176	278,049	53,889	331,938	534,190	492,862	453,799
1940	181	175	285,810	57,032	342,842	656,181	613,059	499,641
1941	184	174	326,551	78,704	405,255	648,625	580,380	562,33 <b>3</b>
1942	182	175	368,575	80,669	449,244	677,211	$625,\!542$	613,023
1943	187	185	366,829	95,979	462,808	773,613	708,574	677,391
1944	186	181	358,852	106,214	465,066	754,380	724,882	706,537
1945	182	173	368,793	96,689	465,482	786,256	745,605	734,922
1946	188	176	387,890	108,343	496,233	834,756	793,615	776,174
1947	192	168	407,527	98,106	505,683	879,346	797,959	840,366

At the end of 1947, there were 192 registered trade unions of employees. The recorded membership in 1947 (505,633) was the highest on record and 173,659 greater than in 1939, the gain comprising 129,478 male and 44,217 female members. The major part of the increase occurred in the four years to 1943 (when the number rose by 130,870), but during the post-war years 1946 and 1947, there was an increase of 40,151.

Most of the unions have a small membership. Of those which supplied returns in 1947, there were 31 unions of less than 100 members; 53 with 1,000 members; 48 with 1,000 to 5,000 members; 19 with 5,000 to 10,000; 11 with 10,000 to 20,000 members; and 4 unions with more than 20,000 members. In 1947 there were thus 15 unions with more than 10,000 members, compared with 6 such unions in 1940.

The receipts during 1947 amounted to £879,346, including contributions, £810,660. The total expenditure (£797,959) included payments in respect of benefits (£126,282) and management and other expenses, such as legal charges in connection with industrial awards, etc. (£671,677). The total receipts and expenditure are liable to fluctuate under the influence of prevailing industrial conditions, the amounts being inflated in some years by the inclusion of donations for relief from one union to another. The funds at the end of the year include cash and freehold property and assets such as shares in Trades Halls and newspapers.

The following statement shows the recorded membership, receipts, expenditure, and accumulated funds of trade unions of employees classified according to industry in the year 1947:—

Table 628.—Trade Unions of Employees: Members and Funds\*, 1947.

		Membe	ership at Year.	end of			Funds	Eunds
Industrial Classification.	Union.	Males.	Fe- males.	Persons.	Receipts.	Expen- diture.	at end Year.	per Mem- ber.
Banking and Insurance Building	9 7 4 9 .12 9	No. 5,507 42,880 9,909 10,979 13,960 94,168 3,906 37,568 4,488 22,487 18,387 19,749 10,579 51,823 14,588 6,493 9,076	No. 1;186 184 6,075 25,499 4,745 5;074 2,689 23,512 7,497 6,999 2,755 11 2,102 3,835 1,681 294 51 3,967	No. 6,693 43,064 15,984 36,478 18,705 54,542 6,545 54,542 725,192 21,851 14,414 53,504 14,883 21,851 14,414 53,504 14,839 31,851 31,4043	\$\frac{\pmu}{8}, 253 74,320 16,417,35,398 76,398 13,322 54,602 72,475 8,804 30,950 87,848 32,007 24,584 90,627 24,442 21,338 21,338	£ 8,780 59,727, 13,759 24,095 23,014 218,126 9,465 52,304 62,180 8,618 37,330 78,512 27,987 24,882 81,422 21,972 223,368 18,824 3,644	£ 6,893 57,423 65,341 34,318 165,451 34,716 37,954 97,993 2,596 45,330 138,273 12,843 20,106 10,165 21,285 6,150	s. d. 20 7 26 8 6 3 35 10 36 8 33 4 106 1 13 11 43 6 36 0 141 4 11 4 11 3 24 3 4111 31 1 32 7
Total Unions of Employees	168*	407,527	98,106	505,633	879,346	797,959	840,366	33 <b>3</b> .

<sup>\*</sup> Excludes particulars of 18 unions and 6 associations of unions for which returns were not furnished.

In the main industrial centres of the State delegate associations of trade unions have been established. These central organisations (usually known as Trades Hall or Labour Councils) comprise representatives from affiliated unions and raise their revenue by means of a per capita impost on the union members.

Authority to deal with interstate industrial matters on behalf of Australian trade unions is vested in the Australasian Council of Trade Unions founded by the All-Australia Trade Union Congress in 1927. The Council comprises four representatives elected by and from the annual All-Australia Trade Union Congress and two representatives appointed by the central Labour Council of each State. The objective of the Council is the socialisation of industry, including production, distribution, and exchange,

### INDUSTRIAL UNIONS.

Industrial unions of employees and of employers are registered under the industrial arbitration laws of the State of New South Wales and the Commonwealth as part of the administrative machinery of the arbitration systems.

## Industrial Unions registered by the State.

For the purpose of bringing an industry under the review of the State industrial tribunals in New South Wales, employees must be organised as a trade union under the Trade Union Act and must obtain registration as an industrial union under the Industrial Arbitration Act. Registration

for the purpose has been effected by practically all classes of employees throughout New South Wales, but employees in rural industries were removed from the operation of the State industrial arbitration system in December, 1929.

Registration as an industrial union of employers may be granted to persons or groups of persons who have employed, on a monthly average, not less than fifty employees during the period of six months next preceding the date of application for registration. Prior registration under the Trade Union Act is not prescribed as in the case of unions of employees.

The Industrial Commission may cancel registration at its discretion, or upon the request of the union (unless an award or agreement relating to its members is in force or the union is accessory to an illegal lockout or strike). At 30th April, 1948, there were 208 unions of employers and 155 unions of employees on the register.

## Industrial Unions registered by the Commonwealth.

In the Commonwealth system of industrial arbitration, only registered unions may submit disputes to the industrial tribunals or be represented in proceedings relating to disputes. Associations of employees or employers representing at least 100 employees may seek registration. Registered unions include both interstate associations and those operating within one State only.

# INDUSTRIAL ARBITRATION

In New South Wales there are two systems of industrial arbitration for the adjustment of relations between employers and employees, viz. the State system which operates under the law of the State within its territorial limits, and the Commonwealth system which applies to industrial disputes extending beyond the limits of the State. Important changes were made in the Commonwealth system in 1947, as described on page 720.

Under Commonwealth law there are special tribunals to determine the industrial conditions of employment in the public service of the Commonwealth and in the stevedoring industry, and there is a joint Commonwealth and State tribunal in respect of the coal mining industry. Particulars of these special tribunals are given on pages 721, 546 and 134 of this volume.

During the 1939-45 war, the jurisdiction of the Commonwealth in industrial arbitration and conciliation was extended by regulations under the National Security Act as described on page 721.

## Commonwealth-State Relations in Industrial Arbitration.

The relation between the State and Commonwealth systems of industrial arbitration rests upon the distribution of legislative powers between the Commonwealth and the component States. The powers of the Commonwealth in regard to industrial arbitration are as defined in the Commonwealth of Australia Constitution Act; all residual powers remain with the States. The Commonwealth Constitution Act provides that if a State law is inconsistent with a valid Commonwealth law, the latter prevails and the State law becomes inoperative in so far as it is inconsistent. An award of the Commonwealth Court of Conciliation and Arbitration is held to be a Commonwealth law and therefore awards of the Commonwealth industrial tribunals over-ride those made by State tribunals.

The Commonwealth jurisdiction is delimited by the Constitution Act to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". In interpreting the law, the High Court of Australia has decided that the Commonwealth Parliament cannot empower an industrial tribunal to declare an award a "common rule" or industry-wide award to be observed by all persons engaged in the industry concerned. The Commonwealth industrial tribunals must proceed by way of conciliation and arbitration between actual parties and cannot bind by award any person who is not a party to an interstate dispute, either personally or through a union.

Notwithstanding these limitations of the Commonwealth jurisdiction in industrial matters, the Commonwealth system has gradually become predominant in the sphere of industrial arbitration throughout Australia. Its influence extended in the first place with the gradual adoption of the principle of federation in trade unionism and in political organisation, a tendency which gathered force during the 1914-18 war period. As industry expanded over interstate borders, uniformity of industrial conditions was sought by employers, while employees were attracted to the Commonwealth jurisdiction in the expectation of better terms as to wages, etc. than those

awarded under State legislation. In many cases, also, the organisations concerned in a Commonwealth award have taken action to have its terms embodied in State awards so that they become binding as a common rule in the industry. Again, for the sake of uniformity, legislatures of some States, notably New South Wales and Victoria, have adopted the Commonwealth wage standards as the basis of State awards and agreements. In New South Wales, for instance, the basic wages determined by the Commonwealth Court of Conciliation and Arbitration have been adopted for State awards and agreements in substitution for those declared by the Industrial Commission (see page 732). The Industrial Court of Queensland also adjusts its basic wage according to the Commonwealth Statistician's "All Items" index numbers.

### INDUSTRIAL ARBITRATION SYSTEM OF NEW SOUTH WALES.

INDUSTRIAL TRIBUNALS.

The principal State tribunal is the Industrial Commission of New South Wales. Its six members have the status of puisne judges of the Supreme Court and may sit simultaneously as two full benches of the Commission. The subsidiary tribunals comprise Conciliation Committees for various industries, each having an equal number representing employers and employees in the industry and a Conciliation Commissioner as Chairman. A Committee may proceed in any matter despite the absence of any members other than the Chairman. The Apprenticeship Commissioner, with the members of the appropriate Conciliation Committee, constitute the Apprenticeship Council for each industry (see page 699).

In 1943 provision was made for more effective enforcement of arbitration laws, the definition of employee was widened, the maxima in wages and salaries coverable by awards were raised from £15 to £20 a week and from £750 to £1,000 per annum, and preference in employment to persons with war service was prescribed. Then, too, it was provided that five Conciliation Commissioners (three in addition to the Senior Conciliation and the Apprenticeship Commissioners) to serve for a term of seven years should be appointed, to facilitate the settlement of disputes by conciliation.

A conference of Conciliation Commissioners must be convened by the Industrial Commission at least once in every four months to discuss the operation of the Act and means to expedite the prevention and settlement of disputes and to secure uniformity in standards and conditions in industry or any particular industry.

When an industrial dispute threatens or occurs, the employer and the union concerned are required at once to notify the Industrial Registrar. A Conciliation Commissioner (or since 17th May, 1948 a Special Commissioner appointed in that behalf by the Minister) may summon the parties to a compulsory conference and endeavour to conciliate them. If in proceedings before a Conciliation Committee or a Commissioner the parties come to an agreement, the terms are embodied in an award. As from 17th May, 1948, the Conciliation Commissioners have had power to arbitrate and make awards or orders in cases where the parties fail to agree. From that date Chairmen of Conciliation Committees, formerly without voting powers, were given an original vote, and, in case of equal division, a casting vote. A Committee or a Commissioner may refer any matter or question arising in proceedings for the direction or determination of the Industrial Commission.

Proceedings before a Conciliation Committee may be initiated upon the application of employers of not less than twenty employees or by an industrial union, and matters may be referred by the Minister or by the Industrial Commission. Awards are binding on all persons engaged in the industry as the tribunal directs and within the locality covered, until varied or rescinded.

Appeal lies to the Industrial Commission from awards or orders of a Conciliation Committee or Conciliation Commissioner.

Further particulars regarding the industrial tribunals are published in the chapter "Law Courts" of this volume.

## INDUSTRIAL AGREEMENTS.

Industrial unions and trade unions are empowered to make with employers written agreements which, when filed in the prescribed manner, become binding between the parties and on all the members of the union concerned.

The maximum term for which an agreement may be made is five years, but it continues in force after the expiration of the specified term until varied or rescinded, or terminated, after notice by a party thereto. An industrial agreement may not provide for wages (except for apprentices or trainee apprentices) lower than the basic wages prescribed for the industry concerned, and upon any variation of the basic wages the rates of pay in an agreement may be adjusted accordingly by the Industrial Registrar upon application by any party to the agreement.

# NUMBER OF INDUSTRIAL AWARDS AND AGREEMENTS.

The number of awards made and agreements filed by the State industrial tribunal during each year since 1943 is shown below:—

Year ended	Awards I	Published.	Agreements	In Force at end of Year,				
30th Tune.	Principal.	Subsidiary.	Filed.	Awards.	Agreements.			
1943	24	1,157	11	637	163			
1944	36	539	15	643	166			
1945	40	664	19	661	172			
1946	66	1,119	21	676	179			
1947	105	1,605	28	*	*			
1948	97	1,486	40	*	*			

Table 629.—State Industrial Awards and Agreements.

The subsidiary awards include a large number made by the Industrial Registrar in consequence of variations in the basic wage.

Complaints regarding breaches of awards and industrial agreements are investigated by officers of the Department of Labour and Industry and Social Welfare, who may direct prosecutions. Proceedings may be taken also by employers and by the secretaries of industrial unions, and the cases are dealt with by the Industrial Registrar or the industrial magistrates.

<sup>\*</sup> Not available.

#### COMMONWEALTH SYSTEM OF INDUSTRIAL ARBITRATION.

The main authorities are the Commonwealth Court of Conciliation and Arbitration, which began to function in 1905, consisting of a Chief Judge and other judges appointed by the Governor-General, with life tenure, and a Chief and other Conciliation Commissioners. The Conciliation Commissioners, appointed by the Governor-General, hold office until the age of 65 years. Conciliation Commissioners may be assigned to a particular industry or group of industries by the Chief Judge; otherwise the work of the Commissioners is organised and allocated by the Chief Conciliation Commissioner. Each judge and each Conciliation Commissioner is charged with the duty of endeavouring to reconcile the parties in industrial disputes, and for the purpose may convene compulsory conferences.

The respective powers and functions of the Judges and the Conciliation Commissioners underwent important changes under the Commonwealth Conciliation and Arbitration Act, 1947, proclaimed on 10th October, 1947. The Commissioners were given wide powers to go to the cause of impending or existing industrial trouble in endeavours to conciliate the disputants. A Commissioner may act on his own volition and must act upon advice of a dispute or impending dispute from an employer or from a Minister to him or to the Registrar.

Failing success by conciliation, and only then, and without further formalities, the Commissioner acts in an arbitral capacity to prevent or settle the dispute by making an award. An award or order of a Conciliation Commissioner may not be challenged or questioned, or be subject to prohibition, mandamus, or injunction in any Court whatsoever.

The Act reserves it to the Court to prescribe and alter (a) standard hours of work in industry and to alter them in any industry, (b) the basic wage or principles on which it is computed, (c) the period which shall be granted as annual leave with pay, and (d) the minimum rate of remuneration for adult females in industry. Matters which would result in the alteration of standard hours or of the basic wage or the principles on which it is computed (see page 734) are determined by the Chief Judge and at least two other judges. In all other respects, the Conciliation Commissioners have power to determine the rates of wages and the conditions of employment in industry.

The Court or a Conciliation Commissioner may refer for report matters of dispute to a Local Industrial Board, consisting of a State industrial authority, or a board constituted by the Court or a Commissioner (consisting of representatives of employers and employees in equal number and an independent chairman) and may delegate to the Board all or such of its or his powers as are deemed necessary to enable the Board to settle the dispute by amicable agreement.

Provision may be made in any award for the appointment of a Board of Reference to deal with matters arising under its terms. Such boards serve a useful purpose in implementing awards and in removing causes of friction between employers and their employees.

The industries subject to Commonwealth awards and agreements include shipping, pastoral industries, shipbuilding, timber trades, clothing factories, breweries, glass works and rubber works, metal aud printing trades, railway and tramway employees, journalists, and engine drivers.

### CROWN EMPLOYEES AND ARBITRATION.

Under the State industrial arbitration system, employees of the Government of New South Wales and of governmental agencies, with the exception of the police, have access to the ordinary industrial tribunals for the regulation of certain conditions of employment, viz., wages, rates for overtime, holidays, and other special work, preference to unionists, and deductions for board and residence. There is a Crown Employees' Appeal Board to hear and determine appeals in specified matters affecting individual employees not in the Special Division and whose salary does not exceed £1,000 per annum.

For the public service of the Commonwealth, rates of pay and conditions of employment are regulated by a special tribunal constituted by an arbitrator appointed by the Governor-General. Decisions of the arbitrator may be disallowed by a resolution of either House of the Commonwealth Parliament.

The Commonwealth Court of Conciliation and Arbitration may make awards in respect of employees of the State Government.

#### WAR-TIME REGULATIONS-INDUSTRIAL ARBITRATION.

During the war years and in the immediate post-war period, industrial relations were regulated largely under regulations made under the National Security Act. Commonwealth tribunals had jurisdiction over industrial disputes including those confined to any single State, and Commonwealth awards might be applied as common rules or industry-wide awards. Additional Conciliation Commissioners and conciliation officers were appointed and special tribunals were set up for certain specific industries (e.g., coal mining, maritime, stevedoring) and to deal with wages and conditions for the employment of women. These war-time arrangements are described briefly on page 780 of the 50th edition of the Year Book.

## HOURS OF WORK.

With the development of the industrial arbitration system, the working hours in organised trades and callings have become subject to awards and agreements.

Special legislation has been enacted in New South Wales from time to time for the direction of the industrial tribunals in regulating hours of work. Thus the Eight Hours Act of 1916 prescribed a standard working week of 48 hours. In 1920 the 44-hours week was proclaimed in many industries on the recommendation of a special court, but in September, 1922 the Court of Industrial Arbitration restored the 48-hours week in most of the cases in which the working time had been reduced. From 4th January, 1926 until 1st July, 1947, the standard was 44 hours, except that in the latter half of the year 1930 the hours were 48 per week.

As required by an Act of 1932, the Industrial Commission conducted a public inquiry in June, 1933, following upon which it announced its decision to declare 44 hours per week as the standard applicable to industry generally, to be applied with a degree of elasticity—as under former statutes—in order to meet the varying needs of different industries.

A standard 40-hours week was introduced under the (State) Industrial Arbitration (Forty Hours Week) Act, 1947 as from 1st July, 1947, and in respect of workers under Commonwealth awards as from 1st January, 1948 in accordance with a judgment of the Commonwealth Court of Conciliation and Arbitration given on 8th September, 1947.

The New South Wales Act prescribes as maximum working time 8 hours during any consecutive 24 hours, 40 hours per week, or, in periods of 14, 21 and 28 consecutive days, of 80, 120 and 160 hours, respectively. A measure of elasticity in working the 40-hours week is afforded by permitting the 8 hours in a day to be exceeded if a working week of less than six days is observed, or less than 8 hours are worked on other days of the week under an award or agreement.

The Commonwealth Court's decision applies to workers in industries in which standard hours were not expressly fixed and those in which the standard hours were 44; in industries in which hours exceeded 44, a reduction in hours on the basis of the judgment might be sought of and granted by a Judge or the Conciliation Commissioner concerned, by whom also the hours and days during which the work should be performed would be determined. Overtime may be permitted under certain conditions or it may be prohibited or restricted for the purpose of relieving unemployment by distributing the work available.

The hours of work in factories and shops are restricted in a general way by provisions of the Factories and Shops Act which prohibit the employment of youths under 16 years of age and of women for more than 44 hours in any week, though overtime not exceeding 3 hours in any day is allowed on 24 days in a year, or by written permission of the Minister, where necessary to meet the exigencies of trade, on 48 days.

Ordinarily the closing times of shops in shopping districts are the hours fixed by the industrial awards and agreements for the cessation of work by the employees. It was prescribed by National Security Regulations issued on 16th December, 1941 that shops, with certain exceptions, must close not later than 6 p.m., and consequently a former practice of opening shops until 8.30 p.m. on Fridays was discontinued. The Factories and Shops (Amendment) Act, 1943 precludes a return of the late shopping night. In grocery, drapery, ironmongery, radio, jewellery, fur, millinery, boot, furniture, glassware, crockery, photographic goods, etc. shops and secondhand shops, the closing hour is 5.30 p.m. in the Metropolitan district and country districts and 5 p.m. in Newcastle from Monday to Friday (6 p.m. in country districts on Friday), and there is a half-holiday from noon (1 p.m. in country districts) on Saturday. In some country centres the weekly half-holiday is observed on Wednesday instead of Saturday.

Farrieries must close at 5 p.m., hairdressers and petrol, oil, etc. vendors at 6 p.m., chemists at 7 p.m., fish, cake, cooked provisions, confectionery, and soft drinks shops and milk bars at 11.30 p.m., and restaurants, fish cafes, etc. at midnight. Fruit and vegetable shops close at 7.30 p.m. in the metropolitan and at 11.30 p.m. in the Newcastle and country districts. On Friday the closing hour may be one hour later in the metropolis for fruit and vegetable shops. Newsagencies close at 7 p.m. in the metropolis, 8 p.m. in the Newcastle, and 9 p.m. in country districts on Mondays to Saturdays.

The ordinary hours of work per shift in the coal-mines as fixed by an industrial award dating from 1st January, 1917 were eight hours bank to bank, inclusive of one half-hour for meal time, on Monday to Friday and six hours bank to bank, inclusive of one half-hour for meal time, on Saturday, Sunday, and holidays. The usual number of shifts was eleven per fortnight though in many collieries there was no work in winning coal on Saturdays.

In 1939 the Commonwealth Court of Conciliation and Arbitration reduced the maximum hours in coal mines ("from face to waggon") of underground workers to 40 per week, worked in shifts of eight hours, including one half-hour per shift for meal time counted as time worked, Monday to Friday inclusive. The ordinary hours of surface workers were fixed at 86 per fortnight in shifts of eight hours and one Saturday shift of six hours, including crib time (30 minutes) in all shifts counted as time worked. The hours of underground workers in coal mines are reckoned from the time the first person working on a shift leaves the surface to the time the last man on the same shift returns to the surface.

Hours in the maritime industry are fixed by the Maritime Industry Commission, constituted under National Security Regulations and con tinued in operation by the Defence (Transitional Provisions) Act, 1946-48

The following statement compiled by the Commonwealth Statistician for each State of the Commonwealth shows the average number of hours in a full working week (without overtime) for adult male workers in industrial occupations, except shipping and rural industries:—

Table 630.—Hours of Work per Week, Adult Males, in Australia.

At 31st December.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Australia
1914 (April)	49.42	48.80	48.78	48-60	47.78	48.62	48.93
1916	48.51	48.22	48.27	48:14	48.11	48:55	48.33
1921	45.66	46.95	45.52	47.07	46.24	46.84	46.22
1025	46.76	46.98	43.88	46.97	46.26	47.25	46,44
1926	44.55	46.94	43.95	46.95	45.80	47.27	45 57
1929	44.14	46.83	43.96	46.83	45.58	47.09	45.34
1930	45.64	46.85	44.43	46.83	45.55	47:09	45.98
1931	44.22	46.88	44.98	46.83	45:55	46:76	45.51
1936	44.08	46.41	43:69	46.55	45.30	46.33	45.09
1937	44.07	46.22	43.68	46.57	45.25	46 24	45.03
1938	44.01	45.85	43.67	46.31	45.14	46:00	44.85
1939	43.92	44.61	43.46	45.83	45.10	45.33	44.35
1940	43.70	44.28	43.46	45.23	44.09	44.92	44.04
1941	43.68	44.12	43.43	44.49	43.13	44:42	43.83
1942	43.52	43.94	43.32	44.25	43.11	43:51	43:65
1943	43.52	43.94	43.18	44.21	43.11	43.37	43.62
1944	43.50	43.91	43.18	44.21	43.16	43.39	43.61
1945	43.50	43.91	43:18	44.07	43.15	43.38	43.59
1946	43.50	43.82	43.18	44.07	43.15	43.38	43.57
1947	41.11	43.68	43.18	42.84	43.15	43:27	42:51
1948 (June)	40.00	39.99	40.00	40.00	39.57	40.00	39.96

Between April, 1914 and December 1929, the average nominal working week for adult males in New South Wales was reduced by 5½ hours to 44.1 hours per week. Except for a temporary increase of 1½ hours in 1930 the average declined steadily to 43½ hours in 1946. The hours shown for 1947 and 1948 reflect the introduction of the 40-hours week by New South

Wales law in July, 1947 and under Commonwealth awards from January, 1948, resulting in observance of the shorter working week throughout Australia during 1948.

### PUBLIC HOLIDAYS.

Certain days are observed as public holidays, on which work is suspended as far as practicable. In continuous processes and in transport and other services where the employees work on holidays, they receive recreation leave in lieu thereof, and in some cases extra wages for the time worked.

The days which are observed generally throughout the State as public holidays are as follows:—Ist January (New Year's Day), 26th January (the Anniversary of the first settlement in Australia), Good Friday, Easter Monday, 25th April (Anzac Day), Christmas Day, 26th December (Boxing Day), and the King's Birthday.

If a public holiday falls upon a Sunday, or if Boxing Day falls upon a Monday, the following day is usually a holiday. The birthday of King George VI is 14th December and the holiday is observed on the second or third Monday in June, so that it does not occur in the busy week preceding the Christmas holidays. Anniversary Day is usually observed on a Monday.

In addition to the days listed above, the day after Good Friday and the first Monday in August are bank holidays, observed in respect of banks and many other financial institutions and public offices.

The Governor may proclaim special days to be observed as public holidays throughout the State or any part of the State. It is customary in certain districts to proclaim a day in each year as Eight Hour Day. In the county of Cumberland, the first Monday in October is Eight Hour Day.

## ANNUAL HOLIDAYS WITH PAY.

In New South Wales, an annual holiday with full pay has for long been customary in some classes of employment, e.g., governmental services, banking and insurance, and in many commercial and industrial occupations. The High Court of Australia decided in 1912 that the Commonwealth Court of Conciliation and Industrial Arbitration might award holidays with pay, and a number of current Commonwealth awards contain provision for annual leave with pay, usually for from one to two weeks.

In 1915 the Court of Industrial Arbitration in New South Wales decided, upon appeal, that an industrial board in a proper case might grant a claim for annual holidays. The Annual Holidays Act, passed by the State Government in December, 1944, entitles every worker, including rural and domestic workers and those not covered by awards (but excluding workers under Commonwealth awards), to two weeks' holiday on full ordinary pay after twelve months' continuous service. The holidays must be taken within six months of becoming due (unless in exceptional circumstances the Industrial Registrar otherwise approves) in two consecutive weeks, or by arrangement between employer and employee, in two separate periods, but not otherwise. Employers may not pay, and workers may not accept, money in lieu of holidays, and the worker must be given a week's notice of, and be paid in advance for, the holiday period. Should employment endure less than twelve months, the worker must be paid holiday pay when his employment is terminated in an amount equal to one-twenty-fifth of ordinary pay for the period of employment. Subsisting rights to holidays conferred otherwise than under the Act are preserved where such rights are more favourable to the worker than those which the Act provides.

## PREFERENCE TO UNIONISTS AND EX-SERVICEMEN.

The laws relating to industrial arbitration confer upon both State and Commonwealth industrial tribunals the authority to embody the principle of preference to unionists in their awards, etc., but this may not operate to prevent the employment of discharged Service men and women to whom preference in employment is given under the Re-establishment and Employment Act, 1945.

The State industrial tribunals may prescribe by award that, as between members of a specified union and other persons offering or desiring employment at the same time, preference of employment be given to members of the union, other things being equal. It is a general rule to grant preference to a union which substantially represents the trade concerned.

The Commonwealth Court is authorised to grant preference to members of registered organisations, but in the exercise of the authority the Court adheres to the general principle that only in case of strong necessity should there be any interference with the employer's discretion in choosing his employees. Consequently it has been the usual practice to refuse to order preference if the respondents undertake not to discriminate against unionists. In 1932, however, preference was awarded in respect of women and girls in clothing factories with the object of preventing the exploitation of labour of this class.

### INDUSTRIAL DISLOCATIONS CONTINGENT UPON DISPUTES.

Records relating to industrial disputes in all classes of industry in New South Wales are kept by the Department of Labour and Industry. In the compilation of statistical tables relating thereto, it is the rule of the Department in counting the number of disputes that one dispute is recorded if a section of employees in an industry ceases work and the dispute extends subsequently to other employees in that industry in the same or in other localities. On the other hand, if employees in other industries cease work in sympathy with the striking unions, the sympathy strikes are counted as another dispute, that is, in addition to the original dispute.

In the coal-mining industry, when the action of one section of the employees has caused a complete cessation of the operations of the mine, the number of workers counted as involved is the full complement of the mine. Where a section has ceased work and the operations of the mine have continued, only those who ceased work have been included as workers involved.

In calculating the duration, only actual working days, viz., days on which work would be performed ordinarily, have been counted, but no allowance is made for intermittency of employment, and it has been assumed that if the dispute had not occurred, work would have been continuous during the period of its currency. Consequently the figures are inflated in such industries as coal mining, where there has been considerable intermittency due to causes other than disputes.

In analysing statistics of industrial disputes, especially in comparing them with those of other countries, careful consideration should be given to the

method of computation and the definition of terms, as shown on the preceding page, because the practices vary greatly in different countries.

The following statement shows, so far as can be ascertained, the number of workers involved, and, subject to the remarks above with respect to intermittency, the time lost in industrial disputes in each of the last eleven years. Particulars are shown separately regarding disputes which originated during the year specified, and those which commenced at an earlier date. Corresponding information in respect of the years 1929 to 1937 is given in Table 488 of the 1940-41 edition of the Year Book.

		Disputes.		W٥	rkers Ińvoly	ved.	Dura	tion—Workir	ng Days.
Year,	An- terior.	New.	Total.	An- terior.	New.	Total.	An- terior,	New.	Total.
1938	1	480	481	269	182,961	183,230	22,327	916,939	939,266
1939	1	532	533	50	211,565	211,615	850	445,633	446,483
1940	. 2	434	436	253	227,252	227,505	1,596	1,074,118	1,075,714
1941	2	766	768	1,755	342,722	344,477	22,165	889,870	912,035
1942	1	667	668	169	193,221	193,390	169	417,560	417,729
1943	5	812	817	1,037	355,597	356,634	10,710	903,536	914,246
1944	3:	994	997	291	312,211	312,502	1,566	732,425	733,991
1945		1,158	1,158		324,491	324,491	•••	1,878,753	1,878,753
1946	3	983	986	960	262,195	263,155	17,020	898,731	915,751
1947	2	1,326	1,328	7,650	291,276	298,926	379,000	747,560	1,126,560
1948		1,506	1,506		276,551	276,551		775,055	775,055

Table 631.—Industrial Disputes, New South Wales.

A classification of the disputes according to mining and non-mining industries reveals the fact that disputes leading to a suspension of work occur more frequently and are more extensive in the mining industry than in any other. Moreover, the time lost in coal-mining, as a general rule, exceeds the aggregate loss in other industries. In calculating the duration of the dislocations, however, allowance is not made for intermittency, and it is probable that there is considerable over-statement arising from this and other factors.

The following statement shows the particulars of the disputes in mining and in other industries which commenced in 1929 and in each of the last eleven years. The working days during each dispute have been assigned to the year in which the cessation of work occurred, and for this reason

the figures differ from those in the previous table (and those published by the Commonwealth Statistician), which show the working days lost in the year specified, irrespective of the year in which disputes originated.

Table 632.—Industrial Disputes According to Year of Commencement.

Year.	1	Disputes,		Wo	rkers Invol	ved.	Durati	on—Workin	g Days.
1001,	Mining.	Non- mining.	Total.	Mining.	Non- mining,	Total.	Mining.	Non- mining,	Total.
1929	300	30	330	94,692	5,984	100,676	3,689;891	746,486	4,436,377
1938	423	57	480	170,541	12,420	182,961	726,014	. 191,775	917,789
1939	497	35	532	202,621	8,944	211,565	382,458	.64,771	447,229
1940	385	49	434	206,022	21,230	227,252	977,744	118,539	1,096,283
1941	618	148	766	219,715	123,007	342,722	410,213	479,826	890,039
1942	540	127	667	139,501	53,720	193,221	228,129	200,141	428,270
1943	668	144	812	181,863	173,734	355,597	344,822	560,280	905,102
1944	780	214	994	205,660	106,551	312,211	450,165	282,260	732,425
1945	945	213	1,158	222,344	102,147	324,491	653,264	1,245,499	1,898,763
1946	878	105	983	180,852	81,343	262,195	299,570	992,301	1,291,871
1947	1,183	143	1,326	220,570	70,706	291,276	392,091	355,469	747,560
1948	1,379	127	1,506	228,630	47,921	276,551	527,428	281,283	808,711

Disputes which originated in 1929 involved 100,676 workers and caused the loss of 4,436,377 working days, of which 3,689,891 days were in respect of 94,692 mine workers. In seven of the eleven years from 1930 to 1940, the loss from originating disputes was less than 500,000 working days, but in 1940 the loss reached 1,096,283 working days, mainly due to unrest in the coal-mining industry. During the last ten years, losses of man-working days from originating disputes averaged 925,000 and were greatest (1,899,000) in 1945 and least (428,000) in 1942. Over the ten years, the losses were shared about equally by mining and non-mining industries, averaging 467,000 and 458,000 man-working days a year, respectively.

Numerous, short-lived industrial disputes arose in the mining industry in 1947, but over 200,000 of the days lost from disputes begun in that year in non-mining industries were due to one of 90 days' and another of 56 days' duration in metal working, which lost nearly 90,000 days, and three other stoppages (of waterside workers, dockers and painters, and building labourers) accounting together for about 120,000 working days. In 1948 two stoppages in coal mines, one of three days involving all northern district miners and the Kemeira tunnel dispute in the southern district, caused the loss of over 100,000 working days, and 50,000 working days were lost in the Captain's Flat (lead-zinc mining) dispute. Three shipyard disputes occasioned the loss of about 110,000 working days and there were stoppages of brewery (12,500 days) and tramway (21,000 days) workers.

Information is given in the following table regarding the duration of the disputes which originated during the last six years:—

Table 633.-Industrial Disputes: Duration.

			Mining.			Non-mini	ng.		All Indust	ries.
Duration in Working Days.	Year	Dis- putes.	Workers Involved.	Working Days Lost.	Dis- putes.	Workers Involved,	Working Days Lost.	Dis- putes.	Workers Involved,	Working Days Lost.
Under 1	1943 1944 1945 1946 1947 1948	67 75 27 44 46 99	9,965 12,521 6,674 5,804 5,780 19,202	3,696 2,815 3,536 2,989 3,891 4,264	14 37 26 1	7,476 15,449 6,323 3,500 	2,836 6,662 1,770 1,750	81 112 53 45 46 99	17,441 27,970 12,997 9,304 5,780 19,202	6,532 9,477 5,306 4,739 3,891 4,264
1	1943 1944 1945 1946 1947 1948	409 478 523 623 806 780	112,488 123,928 120,441 129,048 148,357 121,374	112,422 123,768 120,441 129,048 148,357 123,472	42 64 55 35 34 36	112,703 47,916 29,980 42,060 26,641 20,851	112,703 47,931 29,980 42,060 26,641 20,851	451 542 578 658 840 816	225,191 171,844 150,421 171,108 174,998 142,225	225,125 171,699 150,421 171,108 174,998 144,323
Over 1 to 10	1943 1944 1945 1946 1947 1948	177 216 361 204 323 471	56,645 63,511 87,670 44,125 64,951 81,560	170,334 214,106 340,093 136,441 208,069 268,472	73 97 80 40 93 62	40,530 37,523 45,118 17,116 35,717 19,310	185,431 140,072 195,271 113,006 154,664 66,382	250 313 441 244 416 533	97,175 101,034 132,788 61,241 100,668 100,870	355,765 354,178 535,364 249,447 362,733 334,854
Over 10 to 50	1943 1944 1945 1946 1947 1948	15 11 30 7 8 28	2,765 5,700 5,658 1,875 1,482 6,094	58,370 109,476 94,562 31,092 31,774 81,620	12 16 40 16 14 25	12,139 5,663 16,059 9,477 7,073 7,493	209,218 87,595 558,610 142,552 86,614 186,586	27 27 70 23 22 53	14,904 11,363 21,717 11,352 8,555 13,587	267,588 197,071 653,172 173,644 118,388 268,206
Over 50 to 100	1943 1945 1946 1947 1948	4 	1,909  	94,632  	1007	850 3,977 7,376 1,275 267	44,200 374,768 431,990 87,550 7,464	1 14 7 2 4	850 5,886 7,376 1,275 267	44,200 469,400 431,990 87,550 7,464
Over 100	1943 1945 1946 1948	 'ï	 4.	 9,600	2 2 6 	36 690 1,814 	5,892 85,100 260,943	2 2 6 1	36 690 1,814 400	5,892 85,100 260,943 49,600
Total	1943 1944 1945 1946 1947 1948	668 780 945 878 1,183 1,379	181,863 205,660 222,352 180,85? 220,57 228,630	344,822 450,165 653,264 299,570 392,091 527,428	144 214 213 105 143 127	173,734 106,551 102,147 81,343 70,706 47,921	560,280 282,260 1,245,499 992,301 355,469 281,283	812 994 1,158 983 1,326 1,506	355,597 312,211 324,499 262,195 291,276 276,551	905,102 732,425 1,898,763 1,291,871 747,560 808,711

The foregoing table indicates that, although the majority of disputes do not endure for more than a week or two, many of these involve workers in considerable numbers and the resultant loss of working time is very considerable; thus, of the time lost in disputes that originated in 1947 and 1948, about 72 per cent. and about 60 per cent., respectively, was in disputes which lasted for periods up to ten days and the disputes extending over ten and up to fifty days accounted for 16 per cent. and 33 per cent., respectively, of the working days lost. Long-enduring disputes (over fifty days) which arose in those years represented a much smaller loss of working days than usual. The records show that disputes in the years 1942 to 1948 which had a duration exceeding fifty days numbered only five in the mining industry, but 39 in non-mining industries.

The causes as classified by the Department of Labour and Industry, and the working days lost in respect of each cause, of the disputes which commenced in the years 1943 to 1948, distinguishing disputes in the mining industries and in the non-mining group, are shown in the following statement. Disputes regarding the employment of non-union labour are

included in the category "employment of persons, etc.". Those pertaining to the recognition of a union and the enforcement of union rules are classified under the head of "trade unionism".

Table 634.-Industrial Disputes: Causes-Working Days Lost.

Year of Commence- ment.	Wages.	Hours.	Working Con- ditions.	Employ- ment of Persons or Classes of Persons	Trade Union- ism.	Sym- pathy.	Miscell- aneous.	Not Stated.	Total, All Causes.				
	MINING INDUSTRY.												
1943 1944 1945 1946 1947	104,782 76,797 78,477 49,720 97,553 133,644	6,907 5,754 3,155 1,212 1,526 5,209	93,395 152,109 136,250 110,217 71,184 79,528	49,153 59,045 62,317 53,735 34,310 66,389	1,584 10,089 16,110 15,119 30,417 75,149	40,434 82,612 289,001 7,037 51,046 77,487	45,584 60,186 55,042 49.017 82,453 61,721	2,983 3,573 12,912 13,513 23,602 28,301	344,822 450,165 653,264 299,570 392,091 527,428				
	7		1ndustri	ES OTHEI	THAN I	IINING.							
1943 1944 1945 1946 1947 1948	46,450 54,169 109,567 657,093 200,941 98,255	125,799 39,699 116,806 57,990 88,772 21,447	133,091 93,076 47,852 91,876 14,850 2,860	226,263 56,574 142,679 124,160 12,441 41,409	6,251 84 15,713 676 21,671 103,406	3,960 8,497 746,647 43,671 490 1,469	7,421 29,370 56,688 16.835 15,604 10,937	11,045 791 9,547  700 1,500	560,280 282,260 1,245,499 992,301 355,469 281,283				
				ALL INDU	STRIES.	-							
1943 1944 1945 1946 1947 1948	151,232 130,966 188,044 706,813 298,494 231,899	132,706 45,453 119,961 59,202 90,298 26,656	226,486 245,185 184,102 202,093 86,034 82,388	275,416 115,619 204,996 177,895 46,751 107,798	7,835 10,173 31,823 15,795 52,088 178,555	44,394 91,109 1,035,648 50,708 51,536 78,956	53,005 89,556 111,730 65,852 98,057 72,658	14,028 4,364 22,459 13,513 24,302 29,801	905,102 732,425 1,898,768 1,291,871 747,560 808,711				

A review of the disputes which arose in all industries in the five years ended 1948 according to causes shows that the loss of working time was greatest in respect of disputes concerning wages (28.4 per cent. of the total), closely followed by stoppages in sympathy with other disputants (23.9 per cent.), with those regarding working conditions (14.6 per cent.) and the employment of persons or classes of persons (11.9 per cent.) next in order of magnitude; the loss in disputes classified to all causes other than the foregoing was 21.2 per cent. of the total. In this period the order of importance of disputes by causes (measured in working days lost) in the mining industry was working conditions, sympathy, and wages. In industries other than mining the order was wages, sympathy, and employment of persons or classes of persons.

Of the losses in working days from disputes which arose in 1947 and 1948, those regarding wages, hours, and working conditions accounted for about 64 per cent. and 42 per cent., respectively, and those respecting trade

unionism and employment of persons or classes of persons for approximately 13 per cent. and 35 per cent., respectively. In the mining industry, wages in 1947 and trade unionism in 1948 were the foremost causes. In the non-mining industries nearly 57 per cent. of the working days lost in disputes which arose in 1947 were about wages, and that cause also accounted for 35 per cent. of the working days lost by disputes originating in 1948, when trade unionism disputes were the cause of 37 per cent. of the man-days lost.

# WAGES

Wages paid to industrial workers in New South Wales are regulated for the most part by the industrial arbitration tribunals and special authorities described in the preceding chapter.

WAR-TIME AND POST-WAR CONTROL OF WAGES.

A review of the provisions made by various regulations under the National Security Act for the control and regulation of wages during the war of 1939-45 and the following two years is given on pages 790 to 792 of the Official Year Book No. 50, and are traced in greater detail in the Labour Reports published by the Commonwealth Statistician.

Briefly, wages neither higher nor lower than award rates (except for merit, special ability, etc. under prescribed conditions) might not be paid; special measures governed women's wages largely to encourage women to enter employment in fields furthering the war effort; and from February, 1942 wage rates were stabilised, except for correction of anomalies or as regards promotion, incremental progression, and automatic cost of living adjustments.

Wage pegging was relaxed in March, 1946 to the extent of permitting of variation by the Commonwealth Court of Conciliation and Arbitration of standard hours, the basic wage, and the principles of its determination. From December, 1946, industrial authorities were permitted to raise wage rates in certain circumstances within limits prescribed by a "formula" which allowed increases in male marginal rates of up to 25 per cent. over pre-war rates, and to the award to females of rates of wages up to 75 per cent. of the male rates; to adjust marginal rates to relate them to those ruling in other occupations; and to adjust piece, penalty, and shift rates. Subject to the Chief Arbitration Judge or the Joint Coal Board first certifying that the national interest was not prejudiced thereby, industrial authorities were given freedom to alter remuneration in any type of case as from 9th April, 1947.

The industrial provisions (Part V) of the National Security (Economic Organisation) Regulations were repealed upon proclamation in October, 1947 of the Commonwealth Conciliation and Arbitration Act, 1947, but new regulations under that Act prescribed award rates as the maximum as well as the minimum rates payable, and permitted variations by "consent" awards to be made only if certified, after review by an industrial authority, as not opposed to the national interest. It is reserved to the Commonwealth Court of Conciliation and Arbitration to determine and alter basic wage rates and the principles for their determination, and to fix standard hours of work, but in all other respects wage-fixing tribunals are unrestricted in regulating wages, hours, and conditions of employment in their several jurisdictions.

## THE LIVING WAGE.

In determining minimum rates of wages, the industrial tribunals apply the principle of a living wage which must be sufficient to enable the lowest-paid worker to live according to a reasonable standard of comfort.

### THE LIVING WAGE IN STATE AWARDS.

Within the State jurisdiction, the Court of Industrial Arbitration adopted the practice of fixing a living wage for the guidance of the wage-fixing tribunals in 1914, and in 1918 the living wage determined by the chief industrial tribunal after inquiry into the cost of living became a statutory right of men and women working under industrial awards. Information relating to the standard of living and living wage determinations up to April, 1937, the date of the last declaration by the State tribunal, is given on page 670 of the Year Book for 1938-39. In October, 1937, the basic wages determined by the Commonwealth Court of Conciliation and Arbitration were adopted by the State for the sake of uniformity.

The following statement shows the variations in the living wages from February, 1914 to April, 1937, as determined by the Court of Industrial Arbitration in the years 1914 to 1916, by the Board of Trade from 1918 to 1925, and later by the Industrial Commission (subsequent changes are shown in Table 636):—

Table 635.—Living Wages Declared by New South Wales Industrial Authority.

Date of	Living Wa	ge, per week.	Date of	Living Wage, per week.					
Declaration.	Adult Males.	Adult Females.	Declaration.	Adult Males.	Adult Females.				
1914—Feb., 16 1915—Dec., 17 1916—Aug., 18 1918—Sept., 5 —Dec., 17 1919—Oct., 8 —Dec., 23 1920—Oct., 8 —Dec., 23 1921—Oct., 8 —Dec., 22 1922—May, 12 —Oct., 9	s. d. 48 0 52 6 55 6 60 0 77 0 85 0 82 0 78 0	s. d.  30 0 39 0 43 0 41 0 39 6	1923—Apr., 10 —Sept., 7 1925—Aug., 24 1927—June, 27 1929—Dec., 20 1933—Aug., 26 1933—Apr., 11 —Oct., 20 1934—Apr., 28 1935—Apr., 18 1936—Apr., 24	s, d. 79 0 82 0 84 0 85 0 82 6 70 0 68 6 66 6 67 6 68 6 69 0 70 0	s. d. 40 0 41 6 42 6 46 0 44 6 33 0 37 0 36 6 37 0 36 6 37 0 38 6				

The family unit covered by the living wage for men consisted of a man, wife, and two children from 1914 to 1925, inclusive; a man and wife only in 1927; and a man, wife, and one child in 1929 and later. Men's wages were supplemented (subject to income qualifications) by family allowances paid by the State for dependent children under statutory school leaving age from June, 1927, one child in each family being excluded from endowment since December, 1929.

The living wage determinations of the Industrial Commission applied generally throughout the State to all industries within its jurisdiction. When the Commonwealth Court's method of determining basic wages was adopted by the State in October, 1937, provision was made for assessing different rates for certain districts, according to the practice of the Commonwealth Court. As explained later, the basic wages under the Commonwealth jurisdiction is not related to a defined family unit, and consists of the "needs basic wage", which is subject to periodical adjustment, and a constant loading addition. The "needs basic wage" fixed by the Court for the Metropolitan area and the districts of Newcastle and Port Kembla-Wollongong is adjusted according to the retail price index numbers for Sydney, the rate for the county of Yancowinna according to the index numbers for Broken Hill, and the rate for other localities is 3s. per week

less than the Metropolitan rate. The usual fixed loading addition is 6s. a week, but in awards based on index numbers for "five towns" it is 5s. a week.

The basic wages per week for the various districts and for Crown employees in New South Wales at intervals from 1937 to 1943, and by subsequent adjustments are shown below (rates for all quarters, 1938 to 1943 were shown in Table 703 of the 50th edition):—

Table 636.—Living Wages\* (per week) in N.S.W. Awards and Agreements.

Date.	Wolle	Newcastle, ongong- Kembla.	County of Yanco- winna.	Other I	Districts.	Crown E	mployees stricts).
	Men.	Women.	Men.	Men.	Women.	Men.	Women.
1937—October December	s. d. 78 0 78 0	s. d. 42 0 42 0	s. d. 78 0 79 0	s. d. 75 0 75 0	s. d. 40 6 40 6	s. d. 76 0 77 0	s. d. 41 0 41 6
1938—June December	79 0 81 0	42 6 43 6	81 0 82 0	76 0 78 0	$\begin{array}{ccc} 41 & 0 \\ 42 & 0 \end{array}$	78 0 80 0	42 0 43 0
1939—June December	82 0 82 0	44 0† 44 0†		79 0 79 0	$\begin{array}{cccc} 42 & 6 \\ 42 & 6 \end{array}$	80 0 80 0	43 0 43 0
1940—May November	83 0 85 0	44 6† 45 6†		80 0 82 0	43 0 44 0†	81 0 84 0	43 6 45 0†
1941—May November	88 0 89 0	47 6 48 0	90 0 91 0	85 0 86 0	45 6† 46 0†	87 0 88 0	46 6† 47 6
1942—May November	93 0 97 0	50 0 52 6	$\begin{array}{cccc} 94 & 0 \\ 99 & 0 \end{array}$	90 0 94 0	48 6 50 6†	$\begin{array}{ccc} 92 & 0 \\ 96 & 0 \end{array}$	49 6 52 0
1943—May November	98 0 99 0	53 0 53 6	99 0 101 0	95 0 96 0	51 6 52 0	97 0 98 0	52 6 53 0
1944—Feb., May Aug. November	99 0	53 6 53 6	101 0 102 0	96 0 96 0	$\begin{array}{ccc} 52 & 0 \\ 52 & 0 \end{array}$	97 0 98 0	52 6 53 0
1945—February May & Aug November	99 0 98 0 99 0	53 6 53 0 53 6	$\begin{bmatrix} 102 & 0 \\ 102 & 0 \\ 103 & 0 \end{bmatrix}$	96 0 95 0 96 0	$52   0 \ 51   6 \ 52   0$	97 0 97 0 97 0	52 6 52 6 52 6
1946—Feb. & Maj August November December‡	99 0 100 0 101 0 108 0	53 6 54 0 54 6 58 6	103 0 105 0 105 0 112 0	96 0 97 0 98 0 105 0	52 0 52 6 53 0 56 6	98 0 99 0 99 0 106 0	53 0 53 6 53 6 57 0
1947—February May August November	108 0 110 0 110 0 112 0	58 6 59 6 59 6 60 6	112 0 113 0 114 0 115 0	105 0 107 0 107 0 109 0	56 6 58 0 58 0 59 0	107 0 108 0 109 0 111 0	58 0 58 6 59 0 60 0
1948—February May August November	114 0 116 0 120 0 122 0	61 6 62 6 65 0 66 0	$\begin{array}{ccc} 119 & 0 \\ 121 & 0 \\ 125 & 0 \\ 127 & 0 \\ \end{array}$	111 0 113 0 117 0 119 0	60 0 61 0 63 6 64 6	113 0 115 0 118 0 121 0	61 0 62 0 63 6 65 6
1949—February May	$\begin{array}{ c c c c }\hline 124 & 0 \\ 127 & 0 \\ \hline \end{array}$	67 0 68 6	$\begin{vmatrix} 129 & 0 \\ 133 & 0 \end{vmatrix}$	$\begin{array}{c cccc} 121 & 0 \\ 124 & 0 \end{array}$	65 6 67 0	$egin{array}{cccc} 123 & 0 \\ 126 & 0 \\ \end{array}$	66 6 68 0

<sup>\*</sup> Family allowances are not included in the rates stated in this table. † 6d. higher in some awards.

<sup>‡</sup> Special increase (Males, 7s.) from December, 1946, under Interim Judgment of Commonwealth Court.

The "needs basic wage" for Crown employees, i.e., employees of the State Government and statutory bodies, is uniform in all districts. It is derived from the index numbers (weighted average) for five towns, Sydney, Newcastle, Broken Hill, Goulburn, and Bathurst, and the fixed loading is 5s. a week—the amount applied by the Commonwealth Court in its award for employees of the railways of New South Wales.

The basic wages for women are, as a general rule, 54 per cent. (calculated to the nearest 6d.) of the corresponding rates for men.

Except where an award or agreement provides otherwise, the basic wages are subject to adjustment at quarterly intervals according to the retail price index numbers of the preceding quarter. From December, 1937 to December, 1939 inclusive, the adjustments were made in March, June, September, and December, and since February, 1940, the rates have been adjusted a month earlier—in February, May, August, and November. Provision is made, however, for uniformity—according to the Commonwealth award—in regard to basic wages and periods of adjustment where there are both State and Commonwealth awards for the same industry.

# THE LIVING WAGE IN COMMONWEALTH AWARDS.

In the Commonwealth Conciliation and Arbitration Act, the basic wage or the principles to be adopted for its determination are not defined, though it is prescribed that cases relating to alterations in the basic wage or the principles on which it is computed are to be decided by the Chief Judge and at least two other Judges.

The general principles observed by the Court were stated in 1941 by the Chief Judge in the following terms: "The Court has always conceded the 'needs' of an average family should be kept in mind in fixing the basic wage. But it has never, as the result of its own inquiry, specifically declared what is an average family or what is the cost of a regimen of food, clothing, shelter, and miscellaneous items necessary to maintain it in frugal comfort, or that a basic wage should give effect to any such finding. In the end, economic possibilities have always been the determining factor. . . . What should be sought is the independent ascertainment and prescription of the highest basic wage that can be sustained by the total of industry in all its primary, secondary, and ancillary forms. . . . More than ever before wage fixation is controlled by the economic outlook".

A system of family allowances, payable at a flat rate—originally 5s. but raised to 7s. 6d. per week from June, 1945 and to 10s. from November, 1948—was introduced by the Commonwealth Government on 1st July, 1941, and the New South Wales system of child endowment was abolished from that date. The allowances are paid in respect of each dependent child under the age of 16 years, except one in the family (see the chapter "Social Condition"). These provisions have rendered the size of the family unit a potential consideration of lessened importance in relation to the living wage.

The major decisions which governed basic wage determinations between 1908 and 1947, traced below, are reviewed in greater detail on pages 795 to 797 of the 50th edition of the Year Book.

Adoption by the Court in 1908 of the "Harvester rate", apparently based on the needs of a family "of about five persons", as the standard wage was followed somewhat later by its periodical adjustment to accord with changes in the cost of living as indicated by retail price index numbers. In 1921, the "Powers 3s." was added to the Harvester equivalent to cover possible increases in the cost of living in intervals between adjustments. During the depression, from February, 1931, rates of wages (including basic and margin elements) were reduced by 10 per cent. by order of the Court.

The Court abolished the "Powers 3s.", restored the 10 per cent. to margins, and gave the basic wage itself a new start in April, 1934 with a simplified method of assessment and adjustment. It was then that the "All Items" index numbers (described on page 679) became the basis of adjustments, and separate rates for certain provincial towns (e.g., Newcastle, Broken Hill) and in certain industries were prescribed.

Since June, 1937, the basic wage has comprised (a) the needs basic wage, which is varied with movements in retail price index numbers, and (b) a fixed loading (6s. in New South Wales, with some exceptions), known as the "Prosperity loading" added by the Court at that time. Then, too, the Court introduced its own quarterly index numbers for the periodical adjustments, known as the "Court series", corresponding with the Commonwealth Statistician's "All Items" series. Adjustments prior to February, 1940 were made two months after the end of each quarter, and after that date, from the first pay period in February, May, August, and November. The minimum variation in the basic wage was 2s. from April, 1934 until June, 1937, when it became 1s., with the weekly rates adjusted to the nearest shilling.

An application by the combined unions for an increase in the basic wage heard between August, 1940 and February, 1941 was stood over for later consideration on account of the uncertain outlook under conditions of warfare. The question was revived in October, 1946, and on 13th December, 1946 the Court gave an interim judgment directing an increase of 7s. in the basic wage and continuing unchanged the existing loadings. Existing relationships between male, female, and juvenile award rates were preserved, but rates for females whose remuneration was as fixed by the Women's Employment Board or under National Security (women's minimum wage) Regulations were not affected by the judgment.

In fixing basic rates in an award in a particular industry, the Court may have regard to special circumstances affecting the industry and the cost of living in places of its location; consequently basic rates in various Commonwealth awards may differ considerably.

The trend of the basic rates for adult males generally used in awards of the Commonwealth tribunals is illustrated in the following statement of the rates per week for each capital city of Australia at intervals from February, 1929 to October, 1937, and quarterly since 1944. The Harvester equivalent for Sydney was at its pre-depression peak in February, 1930, then fell heavily, but has shown an uninterrupted upward trend since 1934.

Table 637.—Basic Wages\* (per week), Commonwealth Awards—Australian Capitals.

	-	apita	18.											
Date.	Sydne	э <b>у</b> .	Melbo	urne.	Brisb	ane.	Adela	ide.	Pert	h.	Hob	art.	Aver Six Ca Citio	pital
1929—February		d. 0	s. 86	d. 0	s. 80	d. 0	s. 84	d. 0	s. 85	d. 0	s. 83	d. 0	s. 87	d. 0
1930—February November		6 0	90 83	0	81 70	$_{6}^{0}$	87 78	0	83 79	6 0	86 82	$_0^6$	90 83	$_0^6$
1931—February	76	6	70	2	60	9	66	2	66	2	70	2	71	1
1932—February	68 1	0	63	5	58	6	58	1	60	9	64	10	64	4
1933—February May	66 67 1	7 10	60 63	4 4	55 59	$^{10}_{4}$	55 59	$\frac{4}{2}$	58 59	1 9	63 64	$\begin{matrix} 5 \\ 10 \end{matrix}$	61 64	8 2
1934—May	67	0	64	0	61	0	61	0†	66	0	65	0†	65	0
1937—June July October	72 75 78	0 0 0	69 72 76	0 0 0	68 71 73	0 0 0	69 70 73	0 0 0	71 72 75	0 0 0	69 72 75	$\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$	70 73 75	$\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$
$1939 - {\bf September}$	81	0	81	0	76	0	78	0	77	0	77	0	79	0
1940—May August	83 85	0	82 84	$0 \\ 0$	78 79	$_{0}^{0}$	78 80	0 0	77 79	0 0	78 80	0 0	80 82	$_{0}^{0}$
1941—February	88	0	86	0	82	0	82	0	81	0	83	0	85	0
1942—February August	91 95	0 0	89 94	$_{0}^{0}$	86 89	$_{0}^{0}$	86 91	0 0	86 89	0 0	87 91	$_{0}^{0}$	88 93	0
1943—February August	98 100	0	98 99	$_{0}^{0}$	91 94	0 0	93 94	0 0	92 94	$_{0}^{0}$	94 95	0	96 98	0 0
1944—Feb. & May August November	99 99 99	0 0 0	97 98 98	$\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$	93 93 93	0 0 0	93 93 93	0 0 0	93 93 94	0 0 0	94 93 94	0 0 0	96 96 96	$\begin{matrix} 0 \\ 0 \\ 0 \end{matrix}$
1945—February May August November	99 98 98 99	0 0 0	98 98 98 98	0 0 0 0	93 93 93 93	0 0 0 0	93 93 93 93	0 0 0 0	93 93 94 94	0 0 0 0	94 93 93 94	0 0 0 0	96 96 96 96	0 0 0 0
1946—February May August November December‡	99 99 100 101 108	0 0 0 0	98 98 99 99 106	0 0 0 0	93 94 94 94 101	0 0 0 0	94 94 95 95 102	0 0 0 0	94 94 95 95 102	0 0 0 0 0	95 95 96 97 103	0 0 0 0	96 97 98 98 105	0 0 0 0
1947—February May August November	108 110 110 112	0 0 0 0	107 107 108 109	0 0 0 0	103 104 104 105	0 0 0 0	102 103 104 106	0 0 0 0	103 103 104 106	0 0 0 0	104 104 105 107	0 0 0 0	106 106 107 109	$\begin{matrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{matrix}$
1948—February May August November	114 116 120 122	0 0 0 0	113 115 117 120	0 0 0 0	107 110 113 115	0 0 0 0	108 111 114 116	0 0 0 0	107 110 112 116	0 0 0 0	110 112 115 118	0 0 0 0	111 114 116 119	0 0 0 0
1949—February May	$124 \\ 127$	0 0	123 125	0	118 119	0	119 121	0	118 120	0	121 124	0	122 124	0 0

<sup>\*</sup> Not including Child Endowment in N.S.W. (from 23rd July, 1927) and Family Allowances in Australia (from 1st July, 1941). † Actual rates payable; further increase (3s. Adelaide, 2s. Hobart) to be made in stages. † Increase by interim judgment (see preceding page).

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### Female Basic Wages—Commonwealth Awards.

When necessary for an award, the Commonwealth Court or the appropriate Conciliation Commissioner assessed a minimum wage for women with regard to the needs of the employees in the industry concerned, and the ratio between the minimum wage for the women and the minimum for the men was preserved in periodical adjustments during the currency of the award. Although the determination of award rates of wages became the function of the Conciliation Commissioners under the Commonwealth Conciliation and Arbitration Amendment Act, 1947, the Act preserved to the Court the power to determine the living wage and to alter the minimum rate of remuneration for adult females in an industry. However, there had never been a general Commonwealth basic wage for females, and in a judgment given in July, 1948, the Arbitration Court held that this provision referred only to the basic element or factor, and that where that element or factor was not disclosed in the award rate, the appropriate Conciliation Commissioner alone had power to alter the rate. To meet this situation and to ensure uniformity, the Court was empowered by an amending Act of 1948 to fix, as well as to alter, basic rates of wages for female workers.

The majority of women working under Commonwealth awards is employed in the clothing and printing industries.

# LIVING WAGE DETERMINATION IN THE VARIOUS STATES.

Standards of living are determined by State industrial tribunals in Queensland, South Australia, and Western Australia under State laws. Since October, 1937, basic wages as determined by the Commonwealth Court of Conciliation and Arbitration have been applied in New South Wales. Formerly the State Industrial Commission determined State basic wages (see page 732). The Industrial Court of Queensland has adjusted basic wage rates according to the Commonwealth Statistician's "All Items" index numbers since March quarter, 1942. Victorian wages boards must adopt Commonwealth award rates where applicable, and in Tasmania the standard of the Commonwealth Court is observed to a large extent.

The Western Australian Arbitration Court determines a basic wage in June of each year, which it may review whenever quarterly data supplied by the State Statistician reveals a change of 1s. or more a week in the cost of living. Though special provision was made to increase the South Australian living wage in line with the Commonwealth Court's interim judgment of December, 1946, the power of the State Board of Industry to declare a living wage was not abrogated.

The State living wage determinations are related to family units of a man and wife with three children in Queensland and South Australia, and with two children in Western Australia. Family allowances (see page 734) are not taken into account in determining basic wages.

Living wage declarations by New South Wales, Queensland, South Australian, and Western Australian industrial tribunals in the years 1928 to 1947 are given in Table 705 of the 50th edition of the Official Year Book. When last determined before the Commonwealth Court's determinations were adopted for State purposes in New South Wales (Sydney) in October, 1937 and in Queensland (Brisbane) in May, 1942, the State living wages were 78s. and 91s., respectively, per week.

Declarations of living wage per week by the Board of Industry in South Australia (for Adelaide) and the Arbitration Court of Western Australia (for Perth) in the years 1939 to 1948 were operative as follows:—

Adelaide—5th Jan., 1939, 78s.; 28th Nov., 1940, 84s.; 27th Nov., 1941, 87s.; 15th Oct., 1942, 94s.; 26th Sept., 1946, 98s. 6d.; 7th Jan., 1947 (by Governor's proclamation), 102s.; 8th Aug., 1947, 104s.; 13th Nov., 1947, 106s.; 7th July, 1948, 117s.

Perth—24th Apr., 1939, 82s. 2d.; 1st July, 1940, 82s. 8d.; 28th Apr., 1941, 88s.; 1st July, 1943, 99s. 1d; 1st July, 1944, 100s. 1d.; 1st July, 1946, 101s. 1d.; 26th Feb., 1947 (special declaration), 107s. 1d.; 23rd July, 1947, 107s. 10d.; 30th 0ct., 1947, 110s. 9d.; 26th Apr., 1948, 115s. 9d.; 26th July, 1948, 117s. 5d.

### SECONDARY WAGES.

The basic rates of wages apply to unskilled labour and the assessment of the secondary wages or marginal rates is considered separately in connection with each occupation. Under the State system in New South Wales, it is the usual practice when varying wages on account of an increase or decrease in the cost of living, to preserve unaltered the recognised margin between the skilled and the unskilled workmen in an industry and to vary all rates of wages by the amount by which the basic wage has been increased or reduced.

The appropriate Commonwealth Conciliation Commissioner determines in each case a marginal amount which he considers to be the fair value, as at the date of the award, of the skill required. The 10 per cent. reduction in operation by order of the Court from February, 1931 to May, 1934 was applied to the secondary as well as the basic wages.

## RATES OF WAGES.

The rates of wages for various occupations at the close of 1921, 1929, and of certain years since 1939 is shown in the following statement. Corresponding information for certain of the years 1911 to 1938 is given in Table 496 of the 1940-41 edition of the Year Book. Except where specified, the figures indicate the minimum amounts payable for a full week's work on the basis of the weekly, daily, or hourly rates fixed by industrial awards and agreements, and for occupations not subject to industrial determination the ruling or predominant rates are stated. The table contains particulars of a few occupations only, but similar information relating to a large number of callings is published annually in the "Statistical Register of New South Wales".

Table 638.—Rates of Wages in Various Occupations, N.S.W.

Occupation.	1921	. 192	9.	193	9.	194	2.	1943 and 1944;	199	15.	194	16.	194	7.	At 8 Jui 194	ıe,
Manufacturing— Cabinetmaker Bollermaker Coppersmith Fitter Fitter, electrical Baker Bootelicker	101 107 109 107 108	1. s. 9 108 6 123 6 118 6 118 6 118 6 128 6 102		8. 108 112 113 112 118 120	0 0 0	127 133 133 133 139 137	d. 0 0 0 0 0 0 6	s, d 133 0 135 0 136 0 135 0 141 0	133 135 136 135 141 139	d; 0 0 0 0 0	8. 142 144 145 144 150 148	d. 0 0 0 0 0	8: 146 164 165 164 176 167	0	8. 166 168 169 168 180 171	d. 0 0 6 0 0 0 0
Tailor (ready-made) Compositor(jobbing,ha Building—	102 and) 105	6 102 6 108 0 116		105 101 109	0	125 125 129	0	128 0	† 126 † 127 † 132	6 0 0	135 136 141	6 0 0	140 139 156	0 0 0	145 166 165	0 0 6
Bricklayer Carpenter Painter Plumber	$ \begin{array}{c} & 110 \\ & 104 \end{array} $	$egin{array}{c c} 0 & 126 \\ 0 & 125 \\ 0 & 116 \\ 0 & 127 \\ \end{array}$	6 0 0	126 126 115 125	6 6 6	141 141 134 143	6 6 0	143 6 143 6 136 6 145 0	136	0 0 6 0	155 156 145 154	0 6 6 0	178 178 167 179	0 0 9 0	182 182 171 183	0 9 0
Mining— Coalwheeler per day.*	15	7 18:	3	18	8	25	0	25 6	25	6	27	3	31	1	31	10
Transport— Railway, loco-driver	{ Tto			108 tc		127 to		132 6	134 t		143 t		161 to		165 t	
Wharf-labourer per h		$\begin{bmatrix} 0 & 139 \\ 9 & 2 \end{bmatrix}$	$\frac{0}{11}$	144 2	$\begin{array}{c} 0 \\ 10 \end{array}$	163 . 3	0 8	168 0 3 8	170 3	0 8 <del>1</del>	179 4	0 <b>0</b>	204 4	0 11	209	9
Rural Industries— Shearer per 100 sheep Station-hand, with ke		0 41 0 54	0 § 8	35 45	<b>6</b>	40 57	3 6	41 3 60 3		0 8	46 64	9	51 80	3 0	56 80	6
Miscellaneous:— Pick and shovel man Standard minimum wag		6 95 0 82	6 6	94' 82	6	109 97	0	114: 0 99: 0		0:	124 108	0 0	128 112	0	143 116	7 0

<sup>\*</sup> Northern District. † Less 1s. in 1944. ‡ On railway construction. § Less 2s. 3d. per week.

The wages of coalminers are based on contract rates, which vary according to the condition of the seams or places where the coal is mined.

Particulars of the award rates of wages for various classes of workers in the rural industries are given on pages 286 et seq. of this volume. The rates for shearers and other pastoral employees are fixed by the Commonwealth Court of Conciliation and Arbitration. The award rates for shearing ordinary flock sheep in New South Wales from September, 1927 to September 1938 are shown in Table 497 of the 1940-41 edition of the Year Book. Changes in rates since September, 1938 were as follows:—

Table 639.-Wages Rates: Shearers in New South Wales.

		_			
Date of Change:	Rate per 100 Sheep (Ordinary Flock).*	Date: of Change.	Rate per 100 Sheep (Ordinary Flock).*	Date of Change.	Rate per 100:Sheep (Ordinary Flock)!*
1938—Sept. 1940—Aug. 1941—Mar. July 1942—Aug.	s. d. 35 6 36 0 36 9 38 0 39 3	1942—Nov. 1943—May 1945—June 1946—Dec. 1947—Mar.	s. d. 40 3 41 3 45 0 46 9 47 0	1947—June 23 1948—Apr. 12 July 1 Nov. 22 1949—May 16	56 6 60 6 62 3

<sup>\*</sup> Machine shearing; for hand shearing the rates were 1s. per 100 higher. † Inchallowance of 6s. 9d. per 100.

The average weekly rates of wages payable to adult males in various groups of industries and the weighted average for all groups in New South Wales are compiled by the Commonwealth Statistician. For the

<sup>†</sup> Includes wool value

computations, particulars are obtained in respect of 874 occupations. The industrial awards and agreements are the main sources of information, and for occupations not subject to industrial determinations, the ruling or predominant rates are ascertained from employers and from secretaries of trade unions. The occupations are classified into fourteen industrial groups, and the averages are calculated on the basis of the weekly rates payable to adult male employees in the metropolitan district, except in regard to the mining, shipping, and rural industries, which are conducted for the most part outside the metropolitan area.

In determining the average wage in each group, an arithmetic mean is taken (that is, the sum of the rates is divided by the number of occupations), no detailed system of weights being applied owing to the difficulty of obtaining satisfactory data as to the number of persons employed in each occupation. In computing the average for all the industries combined, the average for each industrial group is weighted in accordance with the relative number of all male workers engaged in that group.

A comparative statement of the average weekly rates of wages (all industries) payable to adult males in New South Wales is as follows:—

			_	_			
End of year.	Average rate per week.	End of year.	Average rate per week.	End of year.	Average rate per week.	End of year.	Average rate per week.
					<u> </u>	i	   
	s. d.		s. d.		s. d.		s. d.
1891	44 1	1920	94 0	1931	93 5	1942	118 3
1896	42 1	1921	95 10	1932	84 11	1943	121 3
1901	43 11	1922	91 6	1933	81 11	1944	121 4
1911	51 5	1923	94 6	1934	83 2	1945	121 10
1913	55 9	1924	93 6	1935	84 2	1946	130 11
1914	56 2	1925	96 0	1936	85 6	1947	141 3*
1915	57 7	1926	100 5	1937	92 1	1948	159 9
1916	61 11	1927	101 10	1938	95 0		
1917	64 5	1928	102 7	1939	96 7		
1918	65 11	1929	102 11	1940	99 7		
1919	76 9	1930	99 1	1941	105 4		

Table 640.—Average Rate of Wages in New South Wales.

\* Revised.

The increases in the years 1938 to 1942 reflect the increases in the basic wage as shown in Tables 636 and 637 with the addition of war loadings in some industries. Wage pegging rendered movements negligible from 1942 to 1945, but relaxation of war-time controls, the increase in the basic wage under the interim judgment of the Commonwealth Arbitration Court in December, 1946, and the general post-war rise in prices have resulted in a significant increase in wages rates since 1945.

The average rates in the various groups at the end of selected years since 1929 are shown below. In the shipping, pastoral, and domestic industries, where food and lodgings are supplied, the value of such has been added to the rates of wages.

Table 641.—Average Weekly Rates of Wages in Industries, Adult Males.

G	Group of Industries.		1929.		1939.		1943.		1945.		1946.		1947.		194	18.
			в.	đ.	8.	d,	s.	d.	l s.	d.	s.	d.	s.	d.	s.	d,
1. Wood Tir	, Furniture, nber Works, etc	Sawmill,	107	9	102	9	125	10	125	10	134	10	139	8	160	0
2. Engin Sm	eering, Sh elting, Metal W	ipbuilding, orks, etc.	103	10	100	10	122	5	123	0	132	0	143	1	158	0
3. Food, fac	Drink, and Toba ture and Distrib	cco, Manu- ution	101	2	99	4	120	2	120	9	129	8	137	0	152	1
4. Clothi Ro	ng, Hats, Boots pe, Cordage, etc.	, Textiles,	96	10	92	3	117	11	117	4	125	9	131	7	149	2
5. Books etc		okbinding,	123	6	120	9	136	1	135	7	154	3	163	7	190	5
6. Other	Manufacturing		103	7	99	1	120	8	120	9	130	0	137	0	155	10
7. Buildi	ng		114	7	110	0	132	0	132	10	142	11	160	11	175	3
8. Minin	g, Quarries, etc.		112	9	113	1	128	5	128	4	137	4	142	11	162	8
9. Railw	ay and Tramwa	y Services	107	8	97	4	124	2	124	4	133	7	137	0	159	9
10. Other	Land Transport		97	1	96	10	114	6	117	8	126	8	130	8	153	3
11. Shippi	ng, Wharf Labo	ur, etc.	106	2	99	1	123	4	122	11	132	2	136	3	180	2
12. Pastor	al, Agricultura ticultural, etc.	l, Rural,	100	9	80	2	119	7	121	6	129	3	133	8	162	1
<b>13.</b> Domes	stic, Hotels, etc.		92	7	92	1	111	0	111	9	121	4	125	4	148	2
14. Miscel	laneous		96	5	95	2	116	7	116	9	125	9	132	1	153	3
All	Industries		102	11	96	7	121	3	121	10	130	11	137	7	159	9

## INDEX NUMBERS-Nominal and Effective Wages.

The foregoing tables relate to the nominal rates of wages, that is the actual amounts of money payable in return for labour, and in order to show the effective value of these amounts it is necessary to relate them to the purchasing power of money as in the following statement. For this purpose the average rates of wages have been reduced to index numbers and these index numbers have been divided by index numbers of retail prices in Sydney computed from the Commonwealth Statistician's "All Items" index numbers, "C" series (see page 679). The results indicate very approximately the changes in the effective wage.

The nominal wage for each of the years ended June, as shown in the table, represents the mean of the average rates at the end of the four quarters, Index numbers, calculated on the foregoing bases, are as follows:—

Table 642.-Nominal and Effective Wages in New South Wales.

Year. ended	Average Nomina Week's Work	l Wage for a Full —Adult Males.	Index Number of Retail Prices,	Index Number of Effective Wages (Full Work).	
June.	Amount.	Index Number.	Sydney, "All Items."		
	s. d.				
1923-27*	96 0	1000	1000	1000	
1928	102 1	1063	,1020	1042	
1929	102 10	1071	1034	1036	
1930	102 11	1072	1042	1029	
1931	98 2	1023	954	1072	
1932	93 3	971	872	1114	
1933	85 0	885	827	1070	
1934	82 10	863	819	1054	
1935	83 2	866	826	1048	
1936	84 2	877	845	1038	
1937	85 .9	893	860	1038	
1938	91 9	956	881	1085	
1939	95 2	991	910	1089	
1940	96 9	1008	929	1085	
1941	101 1	1053	984	1070	
1942	107 6	1120	1039	1078	
1943	118 0	1229	1120	1078	
1944	121 5	1265	1124	1097	
1945	121 3	1263	1120	1128	
.1946	121 10	1269	1128	1125	
1947	129 6	1349	1160	1163	
1948	143 3	1493	1234	1210	

<sup>\*</sup>Calendar years. † Mean of the Commonwealth Statistician's index number for Sydney (base, average six Capital cities in 1923–27=1000) for the four quarters of each financial year expressed in ratio to the index number for Sydney (1020) for the base period 1923–27.

The rates of wages, nominal and effective, as stated in the foregoing tables, are based on the rates payable to employees under awards or agreements or predominant rates for work without intermittency or overtime, and not on actual earnings.

#### WAGES PAID IN NEW SOUTH WALES.

Particulars of the actual amount of wages paid in New South Wales are not available. Estimates based upon the information available appeared in issues of the Year Book up to 1940-41 (see page 592 of that edition). The Commonwealth Statistician publishes estimates in the "Monthly Review of Business Statistics" based upon employment and wages as recorded in payroll tax returns (which cover about 80 per cent, of total employment) and estimates of the unrecorded balance, but not including pay of members of the armed forces. The figures are not adjusted seasonally, but a seasonally adjusted monthly index of average weekly earnings in Australia is computed and published in the Monthly Review".

The amount of average weekly total wages paid in New South Wales as compiled (and recently revised) by the Commonwealth Statistician for financial years since 1941-42 and for each quarter since 1945-46 is as follows:—

Table 643.—Average Weekly Total Wages Paid, New South Wales.\*

Year ended June.	Amount.	Quarter ended.	Amount.	Quarter ended.	Amount.
	£ thous.		£ thous.		£ thous.
1941-42	4,202	1945—Sept.	4,809	1947—Sept.	6,480
1942 - 43	4,617	Dec.	4,910	Dec.	7,229
1943-44	4,757	1946—Mar.	4,817	1948—Mar.	6,753
1944-45	4,721	$_{ m June}$	5,384	June '	7,419
1945 - 46	4,980	Sept.	5,495	Sept.	7,759
1946-47	5,851	Dec.	5,949	Dec.	8,436
1947-48	6,970	1947—Mar.	5,713	1949—Mar.	7,730
	ļ. ·	June	6,246	June	8,493

<sup>\*</sup> Including Australian Capital Territory.

The increase between 1941-42 and 1945-46 was due mainly to the greater number in employment and in part to overtime earnings during the war years; in these years there was rigid pegging of wage rates. Both employment and rates of wages subsequently tended upward strongly, resulting in an increase in total wages paid per week of nearly 72 per cent. between December quarters of 1945 and 1948. Over this period, the basic wage for adult males in Sydney rose by 23 per cent.

There are records of actual wage payments in the manufacturing and mining industries and of the payments made to New South Wales and Commonwealth Government employees, but the amount of wages paid to persons employed on rural holdings has not been collected since 1940-41. At no time has it been practicable to ascertain with precision the total wages paid in private commercial, trading and transport enterprises, the professions, and building and construction industries, etc.

The greater proportion of wage and salary earners in New South Wales is covered by the Workers' Compensation Act (see page 702), and as shown on page 707, the estimated amount of wages paid to such workers was £189,877,888 in 1945-46, £242,067,811 in 1946-47, and £297,268,490 in 1947-48. The amount of salaries and wages paid in factories (distinguishing Governmental and private establishments) is shown on page 63 and in mines on page 123 of this volume. Certain, but incomplete, information regarding wages paid in rural industries is given on page 286. The following statement shows the amount of salaries and wages paid in New South Wales to employees of the New South Wales and Commonwealth Governments in each year (excluding 1941-42) since 1936-37:—

Table 644.—Salaries and Wages Paid to Government Employees in N.S.W. £ Thousand.

Year ended June.	New South Wales Government.	Common- wealth Government,	Total.	Year ended June.	New South Wales Government	Common- wealth Government.	Total.
1937 1938 1939 1940 1941 1942	25,195 28,383 29,526 30,364 32,587	4,665 5,178 5,844 6,726 8,597	29,860 33,561 35,370 37,090 41,184	1943 1944 1945 1946 1947 1948	42,023 41,063 41,265 43,535 49,867 60,261	19,717 20,675 18,971 17,030 17,558 22,322	61,740 61,738 60,236 60,565 67,425 82,583

<sup>\*</sup> Not available.

# **PRODUCTION**

The value of production, as shown in this section, relates to the primary industries—pastoral, agricultural, dairying and farmyard, mining, forestry, fisheries, and trapping—and to the manufacturing industries.

The values of rural production as stated in Table 645 are gross values as at the place of production. They have been ascertained by applying to recorded production the average annual wholesale prices in metropolitan markets and then deducting costs of marketing. The net values shown in Table 650 have been obtained by making allowance for the cost of items used in the process of production, such as seed, fertilisers, fodder consumed by stock, dips and sprays, and water for irrigation.

The value of production is known to be understated. For instance, the values as estimated for agricultural produce are deficient, because, with few exceptions, records are not available as to production on areas less than one acre in extent. The production from fisheries includes only catches of licensed fishermen.

The figures showing the estimated value of mining production in each year from 1911 to 1919-20 inclusive are based on the records of the Department of Mines, of which details are stated in the chapter of this volume relating to the mining industry. The values shown for 1921 and subsequent years are those supplied by the mine-owners in returns collected under the Census Act, and they indicate the estimated value at the mines of the minerals raised during each year. The values for 1925-26 and later years include the production from all quarries; in earlier years only the output from quarries held under mining title was included.

The value of the manufacturing production is taken as the value at the factory of the manufactured goods less the cost of materials, water, fuel, and electricity, and containers used, and of tools replaced. With a few exceptions, returns are not collected as to the production in small establishments employing less than four hands where manual labour only is used, nor from butchers' smallgoods factories. (See page 58 of this volume.)

The values quoted for the specified industries do not include the value added by reason of transportation to market and distribution to the consumer, nor do the estimates include values in respect of many important activities, such as the building industry, railway construction and commercial and other pursuits.

## ESTIMATED GROSS VALUE OF PRODUCTION.

The following statement shows the estimated value of production of the specified industries, at the place of production, at intervals since 1911. The values relate to the calendar year up to 1915-16 when the year ended June was substituted. The values for mines and quarries are an exception,

as those stated for the years 1915-16 to 1931-32 relate to the calendar years 1916 to 1932, and for those for 1932-33 to 1947-48 to the calendar years 1932 to 1947 respectively.

Table 645.—Value of Primary and Manufacturing Production.

(Value in £ thousand at Place of Production.)

			Pr	imary Indu	istries.			Ì	Total,	
Year.		Rural	Industries.		Forests, Fisheries,	Mines	Total,	Manu- facturing	Primary and Manu-	
	Pastoral.	Agri- cultural.	Dairying and Farm- yard.	Total, Rural Indus- tries.	and Trap- ping.	and Quarries, *	Primary Indus- tries.	Industries	facturing Indus- tries.	
1911	20,586	9,749	6,534	36,869	2,213	7,392	46,474	19,432	65,906	
1913	21,555	12,378	7,063	40,996	2,644	8,712	52,352	23,764	76,116	
<b>1</b> 920–21	20,336	32,373	16,447	69,156	4,089	10,192	83,437	43,128	126,565	
1928-29	40,679	19,356	14,559	74,594	5,298	10,207	90,099	73,627	163,726	
<b>1</b> 930–31	17,835	12,328	12,039	42,202	2,669	6,341	51,212	49,524	100,736	
<b>1</b> 931–32	19,331	14,547	11,525	45,403	2,578	6,227	54,208	46,653	100,861	
1935-36	33,641	16,796	14,112	64,549	4,165	8,045	76,759	69,470	146,229	
1936–37	40,306	23,416	14,592	78,314	4,196	9,690	92,200	76,754	168,954	
1937–38	35,257	20,430	16,113	71,800	3,853	12,014	87,667	85,168	172,835	
1938-39	24,894	18,459	16,359	59,712	3,485	11,702	74,809	90,266	165,165	
1939-40	35,550	21,254	16,188	72,992	3,710	12,914	89,616	96,609	186,225	
<b>1</b> 94 <b>0</b> –41	36,718	14,279	16,825	67,822	4,667	12,297	84,786	115,044	199,830	
1941–42	35,506	20,308	16,558	72,372	6,052	14,766	93,190	138,790	231,980	
1942-43	39,507	29,144	21,384	90,035	5,519	15,481	111,035	153,582	264,617	
1943-44	44,136	32,750	23,544	100,430	7,039	15,929	123,398	162,726	286,124	
1944-45	38,697	21,995	25,403	86,095	7,071	16,004	109,170	159,875	269,045	
1945-46	35,426	44,719	27,308	107,453	8,933	16,046	132,432	153,179	285,611	
1946-47	53,869	26,084	27,048	107,001	10,442	19,807	137,250	186,546	323,796	
1947–48	77,965	79,459	31,916	189,340	9,493	26,187	225,020	218,611	443,631	

<sup>\*</sup> Calendar year: see context above.

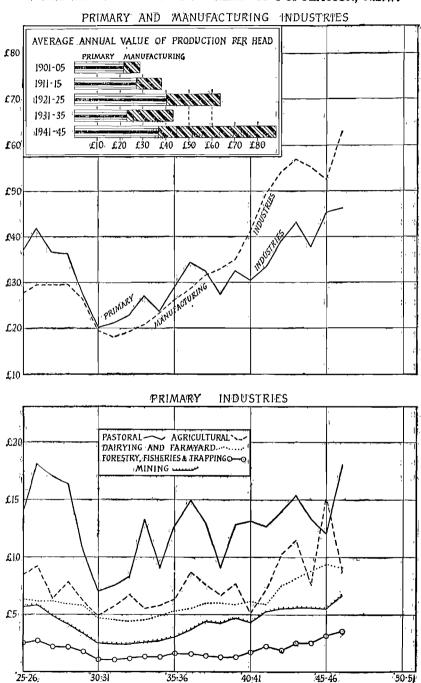
Apart from seasonal influences, fluctuations in the value of pastoral production are mainly the result of variations in the prices of wool.

In agriculture, wheat is the outstanding product. Seasonal conditions which affect the extent of cultivation and the size of the harvests are the cause of frequent fluctuations in the annual values of agricultural production, apart from the variations in the price of this cereal, which depends upon the state of oversea markets rather than upon local supply and demand. When the influence of both factors—season and price—bears in the same direction, up or down, the fluctuations are considerable.

A comparative statement of the quantity and value of wool, wheat and butter produced in various years since 1911 is shown in Table 647.

In the mining industry, coal is the principal product. The production in 1947 was estimated as follows:—coal mines, £12,101,000, other mines, £12,778,000, and quarries, £1,308,000.

# VALUE OF PRODUCTION PER HEAD OF POPULATION, N.S.W.



In the following table, the estimated value of production, as at place of production in each year, is shown in relation to the population:—

Table 646.-Value of Production per Capita.

(Valued at Place of Production.)

	Primary .Indus	stries.			Total	
Year.	Pastoral, Agricultural. Dairying and Farm-gural Industries.	Forests, Fisheries, and Trapping.	Total, Primary Indus- tries.	Manufac- turing Indus- tries	Primary and Manu- facturing Indus- tries.	
1911 1913 1928-29 1930-31 1931-32 1935-36 1936-37 1937-38 1938-39 1939+40 1940-41 1940-41 1942-43 1942-43 1944-45 1946-47 1947-48	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	£ s. d. £ s. d. 1 6 7 4 8 9 1 9 1 4 17 7 8 1 1 1 9 1 1 4 17 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1	£ s. d. 27 18 2 28 15 3 39 18 8 8 6 5 4 20 2 6 6 21 2 3 34 7 9 9 32 7 1 27 7 8 32 8 17 10 3 3 2 6 6 70 12 6 4 5 3 3 4 5 6 6 10 74 16 11		£ 8 d. 39 11 7 41 16 5 60 11 8 1 39 15 7 55 0 9 63 0 3 63 15 8 60 7 7 5 71 2 9 1 92 19 8 99 12 11 92 14 7 97 8 0 109 6 0 147 11 2	

WOOL, WHEAT, AND BUTTER—PRODUCTION AND FARM VALUES.

Season to season variations in the quantity and value of wool, wheat, and butter, the chief rural products, are the predominant causes of fluctuation in the value of primary production. Particulars regarding these major products are given in the next statement; those for value may be compared with the total values of pastoral, agriculture, and dairy and farmyard production shown in Table 645.

Butter production in seasons since 1934-35, as stated in the following table, is the quantity produced from New South Wales milk and cream used for making butter in this or other States, and excludes butter produced in New South Wales factories from Victorian or Queensland milk or cream. Prior to 1934-35 the production shown is the actual quantity made on farms or in factories in New South Wales, and is not entirely correct for value of production purposes. (In 1934-35 total production from New South Wales milk or cream was 147,962,646 lb. of butter, of which 2,695,051 lb. was made in Victoria and Queensland, and in that year New South Wales factories produced 828,733 lb. of butter from Victorian and Queensland milk or cream.) However, the figures illustrate fairly the fluctuations in value due to variations in production.

In valuing production, all receipts in respect of each product—market realizations and governmental assistance—are taken into account. Accordingly, the average value to the farmer per bushel of wheat or per lb. of butter are stated on this basis also. The amount of governmental assistance, the seasons affected, and the equivalent value per unit of production of these payments are shown in Tables 648 and 649. Woolgrowers have not received any corresponding assistance, and the average value per lb. quoted is the average price paid for greasy wool at auctions, in which manner the bulk of the clip is sold, or on appraisement during the war years. The average value for wheat is for wheat delivered at country railway stations, less the cost of bags, and for butter is the average per lb. paid to the farmer at butter factories for milk and cream supplied, stated as per lb. of butter made therefrom.

Wool. Wheat (Grain).	Milk	for Butte			
		Milk for Butter.*			
Value to Grower, Value to Farmer,		Value to Farmer.			
Quantity.   Av. price   Quantity Amount   Av. per	Quantity in terms of Butter.	Amount (incl. Govt. assist- ance).	Av. per lb. of Butter.		
thous.	thous.		<u></u>		
lb. £000 d. bus. £000 s. d.	lb.	£000	d.		
1911   404,655   12,421   8.1   25,088   4,113   3 3.0	83,205	3,631	10.5		
1913-14 379,450 13,143 9.1 38,020 5,988 3 2.0	77,779	3,450	10.8		
1920-21   275,269   13,023   12.5   55,625   20,164   7 3.0	84,268	8,411	24.0		
1925-26   402,490   26,223   16.5   33,806   8,590   5 1.0	106,968	7,045	15.8		
1928-29   482,920   30,879   16.5    49,257   9,851   4 0.0	96,244	6,779	17.1		
1929-30   459,970   18,099   10.5    34,407   5,448   3 2.0	105,022	6,842	15.8		
1930-31   427,220   13,705   8.7   65,877   5,215   1 7.0	114,202	5,931	12.6		
1931-32   501,648   15,233   8.3   54,966   8,130   2 11.5	123,847	5,750	11.2		
1932-33   532,080   16,659   8.5   78,389   9,800   2 6.0	128,931	5,018	9.4.		
1933-34   484,390   29,951   15.8   57,057   7,013   2 5.8	148,868	5,167	8.4		
1934-35   494,981   18,045   9.7   48,678   7,150   2 11.5	147,963	5,800	9.4		
1935-36   472,585   25,408   14.0   48,822   8,137   3 3.8	126,031	5,486	11.		
1936-37   503,616   32,091   16.4   55,668   12,989   4 8.0	110,746	5,630	12.2		
1937-38   495,027   24,060   12.7   55,014   9,229   3 5.0	121,507	6,582	13.0		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	119,542	6,489	13.0		
	117,883	6,666	13.6 13.6		
	110,058	6,241	13.6		
	90,553	5,119	16.0		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	99,636 93,197	6,607 7,130	18.6		
1944-45   448,683   26,112   15.1†   17,134   4,485   5 2.8	77,117	6,106	19.3		
1944-45   446,085   20,112   15·11   17,134   4,485   5 2/6   1945-46   431,549   25,234   15·11   62,520   21,790   6 11·6	79,309	6,618	20.3		
1946-47   432,621   40,277   23.6   15,682   8,025   10 2.8‡	65,828	5,504	20.3		
1947–48   422,260   63,713   37.9   95,227   56,454   11 10.3	81,439	8.030	24.0		

Table 647.--Production of Wool, Wheat, and Butter.

Market receipts of wheatgrowers were augmented by bounty or other direct governmental assistance in the seasons 1931-32 to 1935-36, in 1938-39 and 1940-41, and again from 1944-45 to 1946-47. In addition, the war-time and post-war wheat pool distributions included part of the proceeds of the Flour Tax which ceased as from 22nd December, 1947. In years of great seasonal adversity, growers were assisted on the basis of sown acreage which yielded no grain or only a few bushels per acre. Consequently the average values shown in the table for seasons such as 1944-45 and 1946-47, derived by relating all proceeds of assistance to the very small harvests, do not reflect the real unit values of wheat produced in those seasons.

See explanation in penultimate paragraph preceding this table.
 † Based upon price paid by agreement by United Kingdom Government.

Particulars showing the extent of governmental assistance to wheat growers since 1938-39 and the extent to which the value of wheat (grain) production in New South Wales was increased thereby are as follows:—

Table 648.—Governmental Assistance in Relation to Value of Production of Wheat (grain).

	Government	al Assistance.	Av. Value of wheat		Government	al Assistance.	Av. Value of wheat
Season.	Amount,	Equivalent per bushel of wheat.	per bushel excluding Government Assistance.	Scason.	Amouut.	Equivalent per bushel of wheat.	per bushel excluding Government Assistance.
1938-39 1939-40 1940-41 1941-42 1942-43	£ 1,329,180 306,788 583,853 297,372 353,560	d. 5·3 1·0 5·8 1·5 1·6	8. d. 1 10·0 2 10·9 3 1·2 3 2·1 3 10·1	194844 194445 194546 194647 194748	£ 814,956 1,360,840 442,900 1,508,380 124,820	d. 4·1 19·1 1·7 23·1 0·3	s. d. 4 5.5 3 7.7 6 9.9 8 3.7 11 10 3

The subsidisation of butter commenced in the season 1942-43. Subsidy is distributed through the factories and the price paid for milk or cream for butter since that season has included subsidy, with the effect upon value of production in New South Wales as indicated in the following statement:—

Table 649.—Governmental Assistance in Relation to Value of Production of Butter.

	Government	al Assistance.	Av. value		Government	tal Assistance.	Av. Value
Season.	Amount.	Equivalent per 1b. of butter.	per lb. excluding Government Assistance.	Season.	Amount.	Equivalent per lb. of butter.	excluding Government Assistance.
1942-43 1943-44 1944-45	£ 483,245 1,460,983 1,382,409	d. 1·24 3·99 4·63	d. 14·75 14·60 14·70	1945-46 1946-47 1947-48	£ 1,175,984 785,981 1,335,054	d. 3·80 3·12 4·21	d. 16·47 17·20 19·73

Wool production reached a record in 1941-42, and clips were heavy from 1939-40 to 1943-44, but severe drought subsequently caused heavy losses of sheep, and clips were about 20 per cent. below the high war-time level from 1945-46 to 1947-48. Nevertheless, as the result of the sharp and progressive post-war rise in wool prices, the value to woolgrowers in 1947-48 was, by far, the greatest ever recorded.

Except for average crops from 1941-42 to 1943-44, poor to very poor wheat harvests alternated with average to very large wheat yields during the war period. Severely affected by drought, wheat production in 1944-45 was very poor and the harvest of 1946-47 was the poorest since 1919-20, but that of 1947-48 surpassed the previous record (1932-33) by 20 per cent. The effect

upon the return to farmers in adverse seasons was cushioned to some extent by relatively high unit values and governmental assistance. The value of wheat production in 1947-48 was unprecedented, attaining within 5 per cent. of the aggregate value during the preceding five seasons.

Production of milk for butter contracted almost uninterruptedly during the war years and in 1946-47 (a very dry season), the output of butter was only 55 per cent. of the quantity in 1938-39. An increase in 1947-48 brought it within 32 per cent. of the pre-war level and as a result of higher market prices and subsidy payments, the value to dairy farmers was, with one exception (1920-21), the greatest on record.

The factors affecting the production and value of these major products are reviewed in more detail in the chapters of this volume relating to the rural industries.

# ESTIMATED NET VALUE OF PRODUCTION—PRIMARY INDUSTRIES.

The foregoing estimates of the value of primary production represent gross values (at the place of production), including such costs as fodder consumed by farm stock, seed, fertilisers, spraying, and water used in irrigating, etc. By deducting the estimated cost of these items from the gross values, without deduction for depreciation of capital, machinery or plant, the net values of primary production have been estimated for the year 1928-29 to 1947-48 as follows:—

Table 650.—Net Value of Primary Production. (Value in £ thousand at Place of Production.)

Year.	Pastoral.	Agricul- tural.	Dairying and Farm- yard.	Total Rural Industries.	Forestry, Fisheries, Trapping.	Mining.	Total Primary.
1928-29 1930-31 1931-32 1935-36 1936-37 1937-38 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45	40,356 17,592 19,024 32,799 39,300 33,939 23,613 34,562 35,305 34,121 38,212 42,580 37,452 34,043	15,631 9,776 12,969 14,139 20,515 16,260 13,401 18,093 11,215 16,043 24,444 27,916 17,499 39,345	12;092 10;383 9,624 11,466 11,357 12,480 13,147 13,266 13;368 12,834 17,070 18,112 20,080 21,596	68,079 37,751 41,617 58,404 71,172 62,679 50,161 65,921 59,888 62,998 79,726 88,608 75,031 94,984	5,241 2,608 2,527 4,117 4,145 3,798 3,429 3,658 4,646 6,045 5,507 7,026 7,048 8,908	8,722 5,249 5,074 6,792 8,350 10,416 9,948 10,927 10,233 12,897 13,158 13,137	82,042 45,608 49,218 69,313 83,667 76,893 63,538 80,506 74,767 81,446 98,130 108,792 95,216 117,008
1946–47 1947–48	52,666 76,622	20,285 71,003	21,179 25,692	94,130 173,317	10,338 9,284	16,506 22,285	120,974 204,886

Details regarding deductions from the gross values are published in the chapters of this volume relating to the rural industries.

# PUBLIC FINANCE

The collection and expenditure of public moneys in New South Wales are controlled by four authorities, viz.:—(1) The Government of the State of New South Wales; (2) the Government of the Commonwealth of Australia; (3) the Municipal, Shire, and County Councils (local governing bodies operating in defined areas); and (4) statutory bodies appointed by the Government to administer such public services as railways, tramways, water and sewerage, Sydney harbour, irrigation, and main roads.

The governmental revenue of the State Government is derived mainly from Commonwealth contributions under the uniform taxation laws and the Financial Agreement; State taxes; the State lottery; and the sale and leasing of its lands and forests. The expenditure of the State on governmental account includes the cost of such services as education, public health, law and order, social aid, navigation (in part), water conservation and irrigation, administration of land, agriculture, mining, fisheries, and factory laws, and the development and maintenance of the resources of the State, also public debt charges (in so far as they are not borne by State undertakings).

The governmental revenue of the Commonwealth Government is derived largely from customs and excise duties and taxes on income. Its expenditure is mainly in connection with war, defence and repatriation services, social services, including age, invalid and widows' pensions, maternity and child allowances and unemployment and sickness benefits; navigation (in part); bounties on production; the control of customs; post office; representation abroad; meteorological services; certain legal services; payments to the States, and public debt charges.

Local governing bodies levy rates on the capital value of lands within the areas administered by them. They provide minor services to meet local needs, such as streets and roads, recreation areas, the supervision of building operations, and, in some cases, the provision of public services. In general the cost of these services is defrayed from the rates but charges are imposed for special services rendered.

The revenue of the statutory bodies administering railways, tramways, Sydney harbour works, etc., is derived almost entirely from charges for the use of services which they administer, and all are ultimately subject to the control of the Government. Revenue by way of motor taxes is used for the most part by the Main Roads Department on the construction and maintenance of roads throughout the State.

Both State and Federal Governments have power to raise loans on their own security subject to approval by the Australian Loan Council. The constitution of the sinking fund and the management of the public debt are regulated by the Financial Agreement between the Commonwealth and States, described on page 800 hereof.

Municipalities, shires, county councils, and boards administering water supply services in the Metropolitan and Hunter districts and in Broken Hill have power to raise loans under certain conditions. Such loans are subject to the approval of the Governor and (if in excess of £100,000) of the Australian Loan Council.

# TAXATION.

The following statement shows particulars of taxation collected in New South Wales by State instrumentalities during the five years ended 30th June, 1948. State income tax collected after 1941-42 consists of arrears of tax only. Receipts from Commonwealth reimbursements under the uniform income tax and entertainments tax schemes, described later, are shown at the foot of the table.

Table 651.—State and Local Taxation in New South Wales	Table 651.	—State and	Liocal	Taxation in	New	South	Wales.
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Head of Taxation or Charge.	1943-44.	1944–45.	1945–46	1946-47.	1947–48.
STATE.	£	£	£	£	£
Income Tax Land Tax Probate Stamp Duties Racing and Betting Taxes Liquor Licences Other	797,747 $3,140$ $2,710,824$ $1,214,661$ $547,457$ $627,609$ $65,154$	526,010 2,283 2,779,572 1,337,286 686,693 686,904 63,418	2,326 3,317,401 1,653,851 881,898		‡ 238,609 1,966 4,610,742 2,462,483 1,066,611 1,073,646 79,210
Total Governmental Taxation	5,966,592	6,082,166	7,145,864	8,041,139	9,533,267
Motor Tax, Licences, etc.*—	2,326,186	2,370,442	2,618,341	2,937,593	3,469,003
Total, State Taxation	8,292,778	8,452,608	9,764,205	10,978,732	13,002,270
LOCAL RATES					
Municipalities, etc. † General Services Water, Sewerage, etc Special Boards— Water, Sewerage, Drainage	5,902,497 582,945 3,337,123	5,914,529 583,185 3,377,615	6,063,698 595,282 3,429,008	6,742,581 625,725 3,540,620	7,193,857 691,829 3,712,948
. 21					
Total Local Rates	9,822,565	9,875,329	10,087,988	10,908,926	11,598,634
Total State and Local	18,115,343	18,327,937	19,852,193	21,887,658	24,600,904
Commonwealth Reimburse- ments—Uniform Tax	14,719,083	14,990,820	15,045,039	16,127,942	18,302,325

<sup>\*</sup> Motor taxes, etc., are credited to special Road and Transport Funds. (See page 779.)
† Year ended 31st December preceding, ‡ £4,309 receivable in 1946-47 was not credited until 1947-48.

The amount of Federal taxation borne by the people of New South Wales cannot be determined definitely. Portion of customs and excise revenue collected in the State relates to goods consumed in other States. Federal land and income taxes paid by persons owning property and deriving income in more than one State are included in assessments made by the Central Office, and are not allocated to the individual States. The average amount of Federal taxation per head of population in the Commonwealth was £41 9s. 11d. in 1943-44, £45 14s. 2d. in 1944-45, £47 5s. 3d. in 1945-46, £49 14s. 4d. in 1946-47 and £54 3s. 9d. in 1947-48. The net amount of taxation retained by the Commonwealth, after reimbursing the States under the uniform income and entertainments tax schemes was £36 19s. 7d., £41 3s. 3d., £42 15s., £44 9s. 4d. and £48 7s. 1d. in the respective years.

The amounts stated in Table 651 are shown below at their equivalent rates per head of population:—

Table 652.-State and Local Taxation per Head of Population.

Head of Taxation or Charge.	19	43-4	14.	19	44-	45,	19	45-	16.	19	946-	47.	19		48.
STATE.  Income Tax Probate Stamp Duties Racing and Betting Taxes Liquor Licences Other  Total Governmental Taxation Motor Tax, Licences, etc		s. 5 18 8 3 4 0	d. 6 11 5 10 5 5	0 0 0 0 0 0 2	s. 3 19 9 4 4 0	d. 7 2 3 9 9 5 11		s. 3 2 11 6 5 0 8	d. 3 8 3 0 1 6		s. 2 4 14 6 6 0 14	4 11 5 1 0 6	1 0 0 0 0 0 3	s. 1 10 16 7 7 0 3	d. 7 8 4 1 2 6 4 1
Total State Taxation	2	17	9	2	18	3	3	6	7	3	14	1	4	6	5
LOCAL RATES.															
Municipalities, etc.*— General Services Water, Sewerage, etc Special Boards— Water, Sewerage, Drainage	$egin{bmatrix} 2 \ 0 \ 1 \end{bmatrix}$	1 4 3	1 1 3	2 0 1	0 4 3	9 0 4	$\begin{bmatrix} 2 \\ 0 \\ 1 \end{bmatrix}$	1 4 3	4 1 5	2 0 1	5 4 3	6 3 11	2 0 1	7 4 4	10 7 9
Total Local Rates	3	8	5	3	8	1	3	8	10	3	13	8	3	17	2
Total State and Local	6	6	2	6	6	4	6	15	5	7	7	9	8	3	7
Commonwealth Reimburse- ments—Uniform Tax	5	2	6	5	3	4	5	2	7	5	8	10	6	1	8

<sup>\*</sup> Amounts for year ended 31st December preceding.

#### STATE TAXES.

# STATE LAND TAX.

State land tax is levied only on freehold tenures in the unincorporated districts of the Western Division where local rates are not imposed. The rate of tax is 1d. in the £1 on the unimproved value of such lands. For the purpose of assessment a statutory deduction of £240 is made from the assessed value of the lands held by each individual. The amount of land tax collected in the year ended 30th June, 1948 was £1,966.

### STATE INCOME TAX.

Taxation on incomes was levied by the State of New South Wales from 1896 to 1941-42, the tax in the last year being levied on income derived in 1940-41. The State tax was discontinued in accordance with the Commonwealth uniform income tax plan described at page 758.

The reimbursements receivable yearly by the State under the uniform tax plan are shown below. The total amount receivable is reduced by the arrears of State income tax collected in the year and the balance is payable as grant by the Commonwealth. Included in the grants are £120,623

for the period October to June, 1942-43, and £160,830 in each of the next three years, received as separate grants in respect of the uniform entertainments tax; after 1945-46 one grant was made covering both income tax and entertainments tax. Preceding 1942-43, the State collected in income taxation £12,703,150 in 1938-39, £15,284,281 in 1939-40, £16,695,559 in 1940-41 and £16,935,929 in 1941-42; entertainments tax collected in these years amounted to £160,783, £154,180, £161,176 and £160,830, respectively, and £46,907 was collected in the three months ended 30th September, 1942.

Table 653.—Receipts by New South Wales under Uniform Taxation.

Year ended 30th June.	Common- wealth Grant.	Arrears of State Tax.	Total Reimburse- ment.	Year ended 30th June.	Common- wealth Grant.	Arrears of State Tax.	Total Reimburse- ment.
 1943 1944	£ 11,266,758 14,719,083	£ 4,209,865 797,747 526,010	£ 15,476,623 15,516,830 15,516,830	1947 1948 1949	£ 16,127,942 18,302,325	£ 349,058 234,300	£ 16,477,000 18,536,625 22,021,712
1945 1946	14,990,820 15,045,039	471,791	15,516,830	1949	,		22,021,712

<sup>\*</sup> Not available.

The arrears of State income tax as shown for 1942-43 excludes £137,592 credited in the accounts of that year but not counted for purposes of uniform tax reimbursements as the amount was actually collected in 1941-42. The arrears for 1946-47 include £4,309 which, though applicable to that year, was not credited in the State accounts until 1947-48.

#### STATE PROBATE DUTIES.

Probate Duties have been imposed by the State continuously since 1880. The tax is payable on assessment or within six months after the death of the deceased. Rates and incidence of the tax were altered in 1921, 1931, 1933 and 1939.

Estates of members of the Naval, Military and Air Forces of the British Empire and Allies who died during the World War 1939-45 or subsequently, as a result of injuries received or disease contracted on active service, have been exempted.

The dutiable value of an estate is the assessed value of all property of the deceased situated in New South Wales at his death, and in case of deceased persons domiciled in New South Wales at death, personal property outside New South Wales. Irrespective of domicile at death, an estate includes every specialty debt secured to the deceased over property in New South Wales. Where duty is paid on personal property situate in any part of His Majesty's Dominions outside New South Wales, a refund is allowed of the duty paid in the Dominions or the duty paid in New South Wales, whichever is the less.

Deductions are allowed in respect of all debts actually due and owing by deceased.

Probate duty is levied under several scales of rates graded according to the value of the estate, and the rates rise with each additional £1,000 of value to the maximum where the value exceeds £100,000 if the deceased was domiciled in New South Wales, or £75,000 if domiciled elsewhere at

death. The lowest scale applies to bequests of a philanthropic nature, as specified in the Stamp Duties Act; and there are separate scales for property of persons domiciled in New South Wales at date of death, which passes to beneficiaries within certain degrees of kinship. Where different scales apply to various portions of an estate, duty under each scale is calculated according to the rate applicable to the total amount of the estate. For example, if the dutiable value of the estate of a person with local domicile at death is valued at £10,000, the rate of duty on the portion passing to public hospitals, etc., is 4½ per cent.; on the portion passing to widow or lineal issue 5½ per cent., or to widower, brother or sister or issue of such, 7½ per cent.; and on other property 10½ per cent. Duty is not charged on estates of persons with New South Wales domicile if the value does not exceed £500, nor on property passing to widow or children under 21 years of age if the value of the estate does not exceed £1,000.

The rate of duty payable under the various scales where the date of death was 7th November, 1939 or later, are shown in the following table:—

Table 654.—State Probate Duties (N.S.W.)—Rates.

	Ra	ates of Duty Payab	le on Property	
Final Balance of Estate	Passing to public hospital or trust for poor relief or education in New South Wales.  A.	Passing to widow or lineal issue of deceased.	Passing to widower, lineal ancestor, brother or sister or issue of brother or sister. C.	Other.
£	Per cent.	Per cent.	Per cent.	Per cent.
	Domicile in New	v South Wales.		
501 to 1,000	2	3	5	8
3,001 to 4,000	$2\frac{3}{4}$	$\uparrow$ per cent. per $4$	6	9
60,001 to 61,000	17	per cent. per <del>{</del>   18 <del>1</del>	$20\frac{1}{4}$	231
75,001 to 76,000	20	‡ per cent. per	24	27
100,001 and over	Rising by 4	per cent. per £   27	21,000 to— 29	32
	Domicile outside N	Iew South Wales.		
500 or under 501 to 1,000	3 3 <sup>1</sup> / <sub>3</sub>	1 1	8 81 81 000 4	
50,001 to 51,000	20	by $\frac{1}{3}$ per cent.	25	
65,001 to 66,000	23	by $\frac{1}{3}$ ‡ per cent	30	-
75,001 and over	Rising	by $\frac{1}{6}$ per cent.	per £1,000 to—	

<sup>\*</sup> Lower rates may be charged if estate does not exceed £5,000, see below.

Provision is made for abatement of duty, where necessary, so that the value of the estate will not be reduced by the tax below the value (less duty) of an estate of the highest value taxable in the next lower grade.

<sup>†</sup> The rate in Column A rises by ‡ per cent. per £1,000.

<sup>‡</sup> The rate in Column A rises by  $\frac{1}{5}$  per ceut, per £1,000.

If the value of an estate—local domicile—does not exceed £5,000, property passing to widow and/or children under 21 years of age is dutiable as follows:—

Final E	Balance	of Estate	e	B	late of Du	ty.
£	£					
501 to	1,000	•••		Exempt		
1,001 to	2,000	***	•••	l rates in	n Column H	3 of Table 654.
2,001 to	3,000		•••	<u>5</u>	,,	,,
3,001 to	4,000	•••	•••	3 ,,	,,	,,
4,001 to	5,000	•••		<del>7</del> ,,	**	••

Particulars of the amount of probate duty collected in each of the past five years are shown in Table 651. The number and value of estates assessed annually are shown in the chapter "Private Finance" of this Year Book, and in greater detail in the Statistical Register of New South Wales.

#### STATE STAMP DUTIES.

Stamp Duty is imposed on a considerable number of legal and commercial documents, as described in the 1939-40 issue of the Year Book. The rates of certain stamp duties were increased as from 7th November, 1939.

The amount of Stamp Duty collected in each of the past five years is shown in Table 651.

#### STATE TAXES ON RACING AND BETTING.

Taxes in respect of horse and greyhound racing and trotting contests include taxes on racing clubs and associations and on bookmakers which were first imposed by the Finance (Taxation) Act, 1915.

Taxes in respect of racing clubs are levied on licence or registration fees received from bookmakers, including a charge imposed since 1st January, 1948, by metropolitan horse racing clubs of 1 per cent. on bookmakers' turnover. The existing rates of tax are 50 per cent. of the fees and charge for racecourses within 40 miles of the General Post Office, Sydney, and 20 per cent. of the fees in respect of other racecourses.

Greyhound racing clubs which conduct meetings within 40 miles of the General Post Office, Sydney, are required to pay tax at the rate of 15 per cent. of their gross income arising out of the conduct of these meetings.

Taxes payable by bookmakers comprise a registration tax, stamp duty on bets made, and a tax on the total amount of bets.

The registration tax is payable in respect of the licences issued by the racing clubs and associations to entitle bookmakers to operate on various racecourses or groups of racecourses.

Stamp duty is payable on betting tickets issued by bookmakers; also on the number of credit bets made, at the same rate as if tickets were issued. Since the 1st October, 1932 the rates have been one penny for each ticket issued in the saddling paddock and one-halfpenny in the other parts of the racecourse.

A tax on bookmakers' turnover has been charged since 1st October, 1932 as a percentage levy on the total amount of bets made by backers. The rate was first fixed at 1 per cent., reduced to ½ per cent. on 1st January, 1938, and increased to ½ per cent. on 4th November, 1939.

Totalisator Tax is payable by registered racing clubs and associations which, when directed by the Government, must establish an approved totalisator on the racecourses at which they hold race meetings. Commission is deducted by the club concerned from the total amount invested by patrons, a proportion being paid as tax to the Treasury and the balance retained by the club. Since 1st January, 1938 the rate of commission has been 10 per cent. of the investments. The Government's share is 5 per cent. in respect of metropolitan meetings (except trotting) and 2 per cent. elsewhere, also unpaid fractions and unclaimed dividends; and the clubs retain 5 per cent. and 8 per cent., respectively.

The following table shows the total amount of taxation collected by the State in connection with betting, horse and greyhound racing in the last ten years; the statement includes tax on admission to racecourses, which was discontinued in October, 1942, on the introduction of the uniform entertainments tax plan.

						J		
<b>37</b>	Do atro-					Race-o		
Year ended 30th June.	Racing Clubs and Associa- tions.	Book- makers Licences.	Book- makers Turnover.	Betting Tickets.	Totalisator.	Greyhound Meetings (Sydney and Newcastle).	Other Meetings (Entertain- ments Tax).	Total.
	£	£	£	£	£	£	£	£
1939	94,125	35,579	53,483	58,996	94,155	14,371	44,716	395,425
1940	91,622	32,749	80,454	55,142	102,508	13,104	50,130	425,709
1941	84,121	30,462	98,888	55,365	121,771	14,160	49,706	454,473
1942	65,779	31,409	82,369	46,421	112,600	10,348	49,644	398,570
1943	40,969	31,134	73,863	40,295	143,068	1,723*	24,811*	355,863
1944	49,483	34,894	142,515	57,877	262,687		•••	547,456
1945	65,315	41,874	182,464	65,053	331,987		•••	686,693
1946	76,134	44,833	257,972	77,570	425,389			881,898
1947	92,181	47,281	276,904	76,675	413,425		•••	906,466
1948	109,716	45,978	328,696	97,865	484,356		•••	1,066,611
	[				I		1	I

Table 655.—State Taxes on Racing and Betting.

Commonwealth entertainments tax collected on admissions to race meetings in New South Wales amounted to £81,371 in the nine months ended 30th June, 1943, £168,013 in 1943-44, £184,479 in 1944-45, £237,125 in 1945-46, and £265,986 in 1946-47; these amounts are exclusive of tax on periodical and season tickets.

Further references to taxes on betting and racing are contained in the chapter "Social Condition."

#### STATE ENTERTAINMENTS TAX.

The tax on admissions to entertainments imposed by the State Government as from 1st January, 1930, was discontinued on 1st October, 1942, in accordance with the uniform tax plan described on the next page.

<sup>\*</sup> Discontinued on 1st October, 1942.

<sup>†</sup> Calendar year ended six months earlier.

#### STATE MOTOR TAX.

Taxes are levied by the State on motor vehicles, and fees and charges are imposed in respect of motor transport services and the registration and licensing of vehicles and drivers in terms of the Motor Vehicles (Taxation) Act, the Motor Tax Management Act, the Transport Act, and the State Transport (Co-ordination) Act. Details as to the rates of taxes, fees and charges, the amounts collected and their allocation among the various road and transport funds are shown in the chapter "Motor and Other Licensed Vehicles" of this Year Book. See also Tables 651 and 668 in this chapter.

#### COMMONWEALTH TAXES.

UNIFORM INCOME TAX AND ENTERTAINMENTS TAX.

Plans to achieve uniformity in the taxation of incomes and entertainments throughout Australia were adopted in 1942, and the Commonwealth became the sole authority levying these taxes. Formerly the Commonwealth and each of the States levied separate taxes on incomes and each of the States, except Queensland, taxed entertainments.

The uniform income tax, introduced as from 1st July, 1942, was first levied on income derived in 1941-42. The uniform entertainments tax operated as from 1st October, 1942. Initially the plans were devised as temporary war-time measures. In 1946, however, the Commonwealth passed legislation continuing the uniform income tax indefinitely, and the uniform entertainments tax has been continued in practice.

The States are reimbursed for vacating these fields of taxation by annual grants from the Commonwealth. Separate reimbursement grants were paid in respect of each tax until the end of 1945-46, when provision was made for the payment of an annual grant covering both taxes. Payment of these grants is conditional upon a State refraining from levying tax on incomes; a similar restraint upon State taxation of entertainments was suspended as from 1st July, 1946.

Annually from 1942-43 each State received in respect of the uniform income tax a fixed sum (aggregate for all States £33,489,000) calculated on the basis of its average receipts from income tax in the two years ended 30th June, 1941. Under the uniform entertainments tax an annual aggregate grant of £765,787 (£574,341 for nine months in 1942-43) was paid to the States, each receiving an amount equal to its collections of entertainments tax in 1941-42.

The scale of reimbursements was increased under the legislation of 1946 and provision for further increase was made in 1947 and again in 1948.

The 1946 plan provided for an aggregate grant of £40,000,000 in 1946-47 and 1947-48, and in each year thereafter the aggregate grant was to be determined by increasing the sum of £40,000,000 proportionately with the growth of population since 1st July, 1947, and further increasing the resultant amount by a percentage equal to one-half the percentage in the average wage per person employed as compared with the average wage in 1946-47.

By the 1947 amendment the minimum aggregate grant for 1947-48, and later years was raised to £45,000,000. Any excess of £45,000,000 over the aggregate grant as determined under the 1946 plan was to be payable as a separate supplementary grant.

The 1948 amendments varied the formula for determining the total amount to be distributed amongst the States in 1948-49 and subsequent years. For each of these years the aggregate grant is to be computed by increasing the sum of £45,000,000 (in place of £40,000,000 as formerly) in the proportion which the total population of the States at the beginning of the year bears to the population at 1st July, 1947, and increasing the resultant amount by the full (instead of one-half) percentage, if any, by which the average wage per person employed in the year preceding the year of grant exceeds the average wage in 1945-46 (instead of 1946-47).

The annual reimbursements in the years 1942-43 to 1948-49 and their distribution amongst the States are shown in the following table:—

	Aı	nount Reimb	ursed to Stat	es.	Propo	ortion of I	Fotal.
State.	1942–43 to 1945–46.	1946–47.	1947–48,	1948–49.	1942–43 to 1945–46.	1946-47 and 1947-48.	1948-49.
New South Wales Victoria Queensland South Australia Western Australia Tasmania	 £ 15,516,830 6,890,259 5,821,000 2,458,043 2,644,186 924,469	£ 16,477,000 8,860,000 6,601,000 3,458,000 3,384,000 1,220,000	£ 18,537,000 9,967,000 7,426,000 3,890,000 3,807,000 1,373,000	£ 22,021,712 12,098,479 8,832,622 4,630,081 4,494,632 1,666,945	per cent. 45:30 20:11 16:99 7:18 7:72 2:70	per cent. 41·19 22·15 16·50 8·65 8·46 3·05	per cent. 40.98 22.51 16.43 8.62 8.36 3.10
Total	 34,254,787	40,000,000	45,000,000	53,744,471	100.00	100.00	100.00

Table 656.—Annual Reimbursements to States under Uniform Taxation.\*

Of the basic grants of £40,000,000 in 1946-47 and 1947-48 each State received a prescribed amount and the supplementary grant of £5,000,000 in 1947-48 was allocated in the same proportions. After 1947-48 the aggregate grant is distributable in accordance with the following formula:—

- (a) In nine years, 1948-49 to 1956-57; a part of the total diminishing by one-tenth yearly from nine-tenths in 1948-49 to one-tenth in 1956-57 is to be allocated in the same proportions as the sum of £40,000,000 in 1946-47. The balance (i.e., one-tenth in 1948-49, rising to nine-tenths in 1956-57) is to be distributed in proportion to the populations of the States as adjusted (1) to give weight to the number of school children and relative sparsity of popula-
- (b) In 1957-58 and each year thereafter the total amount is to be distributed in proportion to the adjusted population (1) of the States.

is of the total population.

<sup>\*</sup> Total reimbursements, comprising Commonwealth grant and arrears of State income tax collected. † Total reduced by £191,446 in 1942-43 as uniform Entertainments Tax operated only nine months.

<sup>(1)</sup> The adjusted population of a State in any year is calculated by adding to the population at the beginning of the year four times the number of children aged 5 to 15 years, and increasing the resultant number by a percentage equal to the percentage which the sum of-

<sup>(</sup>a) three-quarters of the population in areas with density of less than one person per square mile,

<sup>(</sup>b) half the population in areas with a density of one and under two persons per square mile, and

<sup>(</sup>c) one-quarter of the population in areas with a density of two and under three persons per square mile,

If in any year the amount due to a State as thus calculated is less than the amount allotted to it in 1946-47, the State is to be paid the same as in 1946-47, and the balance is to be distributed amongst the remaining States as if they were all the States.

The reimbursements denoted are the gross amounts receivable by the States under the uniform tax plan. The amount receivable from the Commonwealth as grant in any year is the net amount after deducting arrears of State income tax collected in the year. In the event of the uniform income tax ceasing to operate an amount equivalent to the aggregate of such deductions, less refunds of State taxes made by the Commonwealth, is to be paid to the States, with interest thereon to 30th June, 1946, at a rate not less than 3 per cent. per annum. Collections of arrears of State income taxes totalled £11,003,658 to 30th June, 1948, while the Commonwealth paid £1,342,245 in refunds of State income taxes.

COMMONWEALTH INCOME TAX AND SOCIAL SERVICES CONTRIBUTION.

Income tax has been levied by the Commonwealth since 1915-16.

Commonwealth taxation of incomes of individuals is levied in the form of "income tax" and "social services contribution." The social services contribution was introduced as from 1st January, 1946; proceeds of the levy are paid into the Consolidated Revenue Fund and are then transferred to the National Welfare Fund for expenditure on social services (see the chapter "Social Condition").

Company income tax is levied on income derived in the year preceding the year of tax, and the tax is payable in a lump sum following the issue of an assessment notice.

As from July, 1944, the taxation on incomes of individuals, including the social services contribution since January, 1946, has been on the "pay as you earn" system. Under this system, individuals are required to make payments on a prescribed scale during a year on account of tax on income derived in that year. In the case of employees instalments are deducted at the source from weekly, etc., salaries and wages. Non-employees are required to pay in lump sum a provisional tax which, as a rule, is calculated on the assumption that income of the current year will be equal to that of the previous year. The actual liability for income tax and social services contribution is finally assessed from returns which all taxpayers must render after the close of the income year. Differences between instalments and provisional tax paid, and the liability assessed, are adjusted in assessment notices.

Residents of Australia are liable for tax on income derived in Australia and on dividends from sources outside Australia. The tax on ex-Australian dividends is, however, limited to any excess of Australian tax over non-Australian tax thereon. Other income from non-Australian sources is exempt if subject to tax in the country where it is derived.

Non-Residents of Australia are liable for tax on income derived from sources within Australia.

An agreement between the Governments of the United Kingdom and Australia provides for the avoidance of double taxation of income originating in one country and accruing to a resident of the other country. Zone Allowances of £20 or £120 are made as a special deduction from the income of residents of certain prescribed areas by reason of uncongenial climatic conditions, isolation and high living costs.

Exemptions.—Certain incomes are exempt from income tax and social services contribution, including the official salary of the Governor-General, the State Governors and official representatives of other countries, and of prescribed international organisations; the revenue of local authorities and of charitable, religious, scientific and similar institutions not carried on for gain; income from gold mining; war pensions and invalid, old age and widows' pensions; child endowment; and Commonwealth unemployment and sickness benefits.

There is a general exemption from social services contribution where the income does not exceed £104, and from income tax on incomes up to £250 in 1947-48 and £350 in 1948-49. Where, however, there are dependants the concessions allowed have the effect of raising the limit of exemption as illustrated in the following table:—

	1946-	<b>-47.</b>	1947	<b>'-4</b> 8.	1948-49.		
Individuals with Dependants as under.	Social Services Contribution.	Iucome Tax,	Social Services Contri- bution,	Income Tax.	Social Services Contri- bution.	Income Tax.	
	£	£	£	£	£	£	
Vone	104	200	104	250	104	350	
<b>V</b> ife	156	280	200	396	200	501	
" and child …	175	345	283	513	283	613	
" " two children	211	378	317	572	317	669	
" ,, three children	257	412	350	630	350	726	
" " four children	277	447	400	689	400	783	

Table 657.—Limits of Income not Subject to Tax.

Taxable Income is gross income less expenses incurred in earning it.

Rates of Tax.—The rates of social services contribution are the same for both personal exertion income and property income, but the rates of income tax are generally higher on property than on personal exertion income. In the case of composite incomes the rate of income tax applicable to each class of income is that which would have applied if the whole income had been derived from that class.

Where income is derived from agricultural or pastoral pursuits the rates are determined by averaging the taxable income from all sources over a period of five years ending with the year of income.

Rates of Social Services Contribution—1947-48 and 1948-49 Income.—The contribution is levied on taxable income as determined for purpose of income tax. Concessions for dependants, medical expenses, etc., which in the case of income tax are allowable as rebates of tax, are made by adjustment of the rate of contribution where the taxable income exceeds the sum of the rebatable amounts (see page 763) by less than £250 in 1947-48 or £350 in 1948-49. Where the excess of taxable income is greater the concessions are allowed in the income tax assessment.

The rates of social services contribution per £1 of taxable income are as indicated below:—

- (a) Basic Rate, payable by individuals not entitled to concessional allowances—
  - On 1947-48 income, 3d. increasing by 10d. for every £1 by which the taxable income exceeds £100 to the maximum rate of 18d, on taxable income of £250 and over.
  - On 1948-49 income, 3d. increasing by \$\frac{3}{6}\$ d. for every £1 by which the taxable income exceeds £100 to the maximum rate of 18d, on taxable income of £350 and over.
- (b) Concessional Rate (payable by individuals entitled to concessional allowances) ascertained by the following formulae in which B = basic rate, T = taxable income (£'s) and RA = rebatable amounts (£'s) as used in the calculation of concessional rebates of income tax—

On 1947-	48 Incomes.	On 1948-49 Incomes.			
Taxable Income	Rate per £1 in pence	Taxable Income	Rate per £1 in pence		
£105 to £250	$B \times \frac{T - RA}{T}$	£105 to £350	$B \times \frac{T - RA}{T}$		
£251 and over	$\mathrm{B}  imes rac{\mathrm{T} - \mathrm{RA}}{250} *$	£351 and over	$B \times \frac{T - RA}{350} *$		

<sup>\*</sup> Or basic rate, whichever is the less.

The contribution payable may not exceed half the excess of the taxable income over £104, or where there are dependants, £156. The minimum contribution is 10s.

Rates of Income Tax.—The amount of income tax ascertained by reference to the rates of tax shown below is reducible by rebates calculated as described on page 763. As an example of the computation of rates of tax, the rate on a taxable income of £793 derived in 1947-48 from personal exertion is 29.0166d, being the average amount of tax per £1 of income taking £250 @ nil, and £543 @ 42.376d., i.e.  $543 \times [25 + (543 \times .032)]$ .

Rates, 1947-48 In	rcome.—			
Taxable		Rates of Tax per	£1 of Taxable Income	•
Income.		PERSON	AL EXERTION.	
££	${f \pounds} \qquad {f d}.$	d.	d.	
251 to 1,000	250 at Nil,	balance at 25 i	ncreasing by 032 for	each £1 of balance.
1,001 ,, 2,500	1,000 <b>"36·7</b> 5	,, 73	" ∙018	"
2,501 ,, 5,000	2,500 <b>,,</b> 74·7	" 127	,, ⋅007	,, ,,
5,001 and over	5,000 ,, 109.6	,, 162.		
		Prop	ERTY.	
££	£ d.	d.	d.	
251 to 500	250 at Nil,	balance at 35 i	nereasing by .052 for	each £1 of balance.
501 ,, 1,000	500 ,, 24	,, 61	,, ⋅032	,, ,,
1,001 ,, 2,500	1,000 , 50.5	,, 193	,, ·018	"
2,501 ,, 5,000 5,001 and over	2,500 ,, 92·2 5,000 ,, 123·35	,, 147 ., 162.	<b>,,</b> ·003	"
o, oor and over 1	0,000,,,,120,00	,, 102,		

Rates.	1948-49	Income
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Taxable Income.	Rat	es of Tax per : Personal	£l of Taxable. L Exertion.	Income.		
£ £ 351 to 1,000 1,001 ,, 2,000 2,001 ,, 5,000 5,001 ,, 9,000 9,001 and over	£ d. 350 at Nil, 1,000 , 26·325 2,000 , 53·1625 5,000 , 97·465 9,000 , 124·3694	,, 154	" "	d. •03 for ea •02 •009 •001	oh £1 of ",	balance.
		Prope	RTY.			
££	£ d.	d.		d.		
351 to 500	350 at Nil,	balance at 30	increasing by	·06 for ea	ch £1 of i	balance.
501 ,, 1,000	500 ,, 11.7	,, 48	,,	.03	,,	,,
1,001 ,, 2,000	1,000 ,, 37.35	,, 78	,,	$\cdot 021$	,,	,,
2,001 ,, 5,000	2,000 ,, 68.175	,, 120	,,	.007	,,	,,
5 001 and over	5,000 111.87	1:62	"			

Concessional Rebates of Income Tax are based on rebatable amounts as prescribed for allowable dependants and as represented by actual payments in respect of certain items of expense incurred by the taxpayer. The amount of rebate is calculated by applying to the rebatable amounts the personal exertion rate of income tax appropriate to the taxpayer's total taxable income plus 18d., which is the maximum rate of social services contribution. The rebatable amounts are indicated below, those relating to dependants showing the maximum rebate allowed for each:—

(1) For Dependants:—	Rebatable amount.	Maximum Rebate,
	£	£
a. Spouse (or female relative caring for widowed taxpayer's children	) 150	45
b. Daughter keeping house for widowed taxpayer	. 150	45
c. Housekeeper caring for children dependent on taxpayer †	. 150	45
d. Mother and Father wholly maintained by taxpayer, each	. 150	45
e. Children under age 16 years—		
one child	. 100	45
each other child	. 50	15
f. Invalid child, brother, or sister, age 16 years or over, each		45
g. Children age 16 to 19 years, at School or University (full time) each	1 75§	45

\*A taxpayer (income under £350) entitled to rebate for a dependant is allowed an additional rebate of tax on £50 less £1 for every £2 of income in excess of £250. † Not allowed if rebate under (a) or (b) is claimed. ‡ Less amount of any invalid pension received. § Less value of any Government assistance for education.

No rebate is allowed in respect of a spouse (or female relative), or daughter-housekeeper, whose separate income is £100 or more; full rebate is allowed if the separate income does not exceed £50 and partial rebate if the income is between £50 and £100.

- (2) The actual payments in respect of the taxpayer, spouse, and children—including only those under age 21 years in respect of items (a) to (c) for: (a) medical and hospital expenses (including dental expenses up to £10, optical expenses and, in case of blindness or total invalidity, pay of attendant) up to a maximum of £50 for each member of the family; (b) artificial limbs, eyes or hearing aids; (c) funeral expenses up to £30; and (d) life assurance, superannuation and friendly society benefits, up to £100.
- (3) The actual payments in respect of (a) annual rates and land tax on non-income producing property and (b) gifts of £1 or more for certain philanthropic or educational objects or defence purposes (not exceeding taxable income).

The concessional rebates under (1) and (2) above are allowed to residents only; those under (3) are allowed to residents and non-residents.

Other Rebates are the excess of tax at current rates over tax at 1930-31 rates on interest from Commonwealth loans issued prior to 1st January, 1940; 2s. in the £1 on interest from Commonwealth loans of later issue and State and semi-Governmental loans issued free of State income tax; one-third of tax at personal exertion rate on calls paid to companies engaged in afforestation or mining or prospecting for gold, oil, and certain other minerals.

Amount of Tax Payable.—Examples of the amount of tax payable on incomes of individuals derived in the years 1947-48 and 1948-49, are shown in the following table. The amounts are the totals of the separate levies for social services contribution and income tax. In the successive income years following 1944-45, when the highest war-time rates were applied, the rates of tax have been reduced, and in 1947-48 the rebates allowed for dependants were enlarged:—

	On Property Income.		On Personal Ex	ertion Income.		
Taxable Income. Without		Without		Vith Dependants,		
	Dependants.	Dependents.	Wife,	Wife and Chlld.	Wife and Two Children	
	TAX (INCOME AND	SOCIAL SERVICES	s) on Income Des	RIVED IN 1947-4	8,	
£ 105 150 200 250 300 350 400 500 600 800 1,000 1,250 1,500 2,000 4,000 1,000 10,000 20,000	£ s. 0 10 5 0 10 17 18 15* 30 7 43 0 56 15 87 10 121 15 198 5 285 8 405 15 585 8 822 18 822 18 1,494 16 2,947 6 6,694 16 14,194 16	£ s. 0 10 5 0 10 17 18 15* 28 1 38 0 48 12 71 17 97 16 157 12 228 2 227 12 436 9 682 6 1,275 0 1,987 10 2,668 7 6,408 7 13,908 7	£ s 3 15 11 5 21 0* 30 7 50 6 73 7 128 1 193 18 288 6 392 16 637 6 1,230 0 1,892 10 2,613 7 6,363 7 13,863 7	£ s, 2 5 10 10 18 8 0 37 10* 57 1 108 7 171 1 262 2 363 14 603 4 1,187 10 1,847 10 2,568 7 6,318 7 13,818 7	£ s 5 5 5 12 0 30 0* 48 18 98 10 159 13 249 0 349 3 588 4 1,172 10 1,832 17 1,832 7	
	TAX (INCOME AN	D SOCIAL SERVICE	es) on Income Di	ERIVED IN 1948-	49.	
105 150 200 250 300 300 400 500 600 800 1,250 1,500 2,000 3,000 4,000 5,000 10,000 20,000	0 10 3 15 7 10 12 10 18 15 26 5* 36 17 61 17 90 12 155 12 230 12 230 12 336 2 452 10 718 2 1,322 6 1,984 16 2,705 12 6,455 12 13,955 12	0 10 3 15 7 10 12 10 18 15 26 5* 34 14 53 9 74 14 124 14 184 14 271 3 308 0 503 0 1,122 4 1,726 7 2,405 10 6,088 17 13,588 17	2 10 7 16 15 0 21 9 37 10* 56 1 101 6 157 0 238 12 331 4 548 10 1,077 4 1,681 7 2,860 10 6,043 17 13,543 17	1 11 7 10 12 17 26 16 45 0* 85 15 138 11 216 18 306 13 518 17 1.039 16 1,638 4 2,315 10 5,998 17	3 15. 8 11 21 9 38 11 27 79 19 6 206 2 294 8 504 1 1,024 16 1,623 4 2,300 10 5,983 17	

<sup>\*</sup> To this level the amount is Social Services Contribution only; succeeding amounts include Social Services Contribution at 18d. per £1 of income and the balance is income tax.

In the examples no allowance has been made for rebates other than the concessional rebates for the dependants indicated. The concessions for dependants are the same whether the income is derived from personal exertion or property; therefore, the tax payable on property income where there is dependent wife or wife and one or two children may be ascertained by the allowance of concessions equal to the amounts allowed under personal exertion income.

Assessments of Resident Individuals.—Analysis of the assessments of Commonwealth tax on incomes derived in 1945-46 by individuals resident in New South Wales and Australia is shown below. The particulars are classified according to the actual income of taxpayers, which includes certain deductions of a concessional nature and exempt income.

Table 659.—Commonwealth Tax Assessments on Incomes Derived in 1945-46 by Resident Individuals.

	Residents	of New So	uth Wales	Residents of Australia.			
Grade of Actual Income.	Number of Tax- payers.	Total Income.	Tax Assessed.*	Number of Tax- payers.	Total Income.	Tax Assessed.*	
£ 150 and under 151 to 200 201 ,, 250	 83,359 103,614 82,790	£000 10,687 18,339 18,602	£000 400 1,168 1,711	220,366 263,536 219,402	£000 28,114 46,388 49,327	£000 1,059 2,933 4,481	
251 ,, 300	 269,763 96,862	47,628 26,877	3,279 2,611	703,304	123,829 73,836	8,473 7,052	
301 ,, 350 351 ,, 400 401 ,, 500	 120,123 96,674 101,602	39,061 36,111 45,054	4,328 4,604 6,884	312,094 242,171 245,503	101,484 90,609 108,813	11,148 11,407 16,495	
	685,024	194,731	21,706	1,769,434	498,571	54,575	
501 ,, 600 601 ,, 800 801 ,, 1,000	 41,413 32,944 13,059	22,523 22,477 11,616	4,177 4,978 3,019	102,435 82,678 33,727	55,711 56,463 29,992	10,244 12,453 7,787	
	772,440	251,347	33,880	1,988,274	640,737	85,059	
1,001 to 1,250 1,251 ,, 1,500 1,501 ,, 2,000	 8,177 4,603 5,089	9,097 6,295 8,779	2,659 2,020 3,179	21,536 12,285 13,111	24,002 16,778 22,523	7,003 5,416 8,232	
	790,309	275,518	41,738	2,035,206	704,040	105,710	
2,001 ,, 3,000 3,001 ,, 4,000 4,001 ,, 5,000	 3,508 1,106 490	8,411 3,771 2,160	3,675 1,943 1,219	9,569 3,165 1,404	22,949 10,790 6,210	10,119 5,595 3,476	
	795,413	289,860	48,575	2,049,344	743,989	124,900	
5,001 to 10,000 10,001 ,, 15,000 15,001 and over	  532 84 56	3,465 984 1,377	2,178 679 947	1,511 231 162	9,890 2,742 3,944	6,133 1,813 2,574	
Total	 796,085	295,686	52,379	2,051,248	760,565	135,420	

<sup>•</sup> Comprises Social Services Contribution and Income Tax.

# Commonwealth Taxation of Companies.

Company Income Tax is levied on the net income of a company derived in the year preceding the year of tax. A co-operative company is allowed a deduction of the amount distributed among its shareholders as rebates or bonuses based on business done by shareholders with the company, also the amount of interest or dividends on shares distributed to shareholders. Otherwise dividends paid by companies to shareholders are not allowed as a deduction and are assessable in the hands of the shareholder, but a resident company receives a rebate of the tax on dividends included in taxable income. Prior to the income year 1939-40, other shareholders were entitled to rebates of tax on dividends as described in earlier issues of the Year Book. Social services contribution is not payable by companies, except in respect of the special tax on undistributed income of private companies (see below).

Ordinary Company Tax on income derived in 1947-48 is at the rate of 5s. in the £1 on the taxable income up to £5,000 and 6s. in the £1 on the balance of such income. The rates payable by mutual life assurance companies are 4s. and 5s., respectively. On incomes derived in the years 1941-42 to 1946-47 the rate of tax was 6s. (mutual life assurance companies 5s.) in the £1 on the whole of the taxable income.

Company Super Tax at the rate of 1s, in the £1 is payable on the taxable income in excess of £5,000 derived in the years 1939-40 to 1947-48 by companies except the following, viz., private companies, co-operative companies and mutual life assurance companies.

Undistributed Profits Tax has been applied to public companies since 1940-41 (on income derived in 1939-40 and subsequently) at the rate of 2s. in the £1 on the undistributed income. The undistributed income of a public company is the taxable income less ordinary company tax and super tax assessed thereon, undistributed profits tax and non-Australian taxes (on income assessable to Australian tax) paid in the year of income, net loss incurred in non-Australian business, and dividends paid out of the taxable income within six months (non-resident company, nine months) after the close of the year of income.

Private Companies are required to pay as undistributed profits tax the additional amount of income tax and social services contribution which would have been payable by shareholders had a sufficient distribution of the distributable income been made. The principles governing the application of this tax under amended provisions operative in respect of income derived in 1947-48 and subsequent years, broadly stated, are as follows :-The "distributable income" is ascertained by deducting from taxable income ordinary company tax assessed thereon, non-Australian tax paid on income assessable to Australian tax and net loss incurred in non-Australian business. A company is allowed to retain portion of its distributable income free of undistributed profits tax, the amount of deduction consisting of the aggregate of 30 per cent, of the first £2,000 of distributable income, then 25 per cent., 20 per cent. and 15 per cent., respectively, of each successive £2,000, and 10 per cent. of the distributable income in excess After this deduction from the distributable income, the remainder represents a "sufficient distribution" and calculation of the additional tax is based upon the excess of this amount over dividends paid from taxable income within a prescribed period. Rebates of tax are allowed to shareholders in respect of dividends received by them from a private company out of income on which undistributed profits tax has been paid.

War-time Company Tax was imposed on taxable profits derived in 1939-40 and subsequent years until repealed in respect of profits derived after 1945-46.

# COLLECTIONS OF COMMONWEALTH TAX ON INCOMES.

The amount of Commonwealth tax on incomes collected in each of the last three years, inclusive of tax instalments deducted from wages of employees, is shown below—

Commonwealth Tax on Income—		1945-46.	1946-47.	1947-48.
		£	£	£
Individuals—				
Income Tax Social Services Contribution	}	159,329,362	154,405,599	<pre>{ 91,663,127 71,447,848</pre>
Companies	′	55,264,216	53,359,341	69,789,080
Total Collections	•••	214,593,578	207,764,940	232,900,055

Reimbursement grants paid by the Commonwealth to the States under the uniform tax plan amounted to £33,521,057 in 1945-46, £39,463,848 in 1946-47, and £44,588,023 in 1947-48. In addition the States received arrears of State income taxes totalling £733,730 in 1945-46, £536,152 in 1946-47 and £411,977 in 1947-48.

### COMMONWEALTH ENTERTAINMENTS TAX.

Commonwealth Entertainments Tax was levied for the first time in January, 1917, and discontinued in October, 1933. The Commonwealth reimposed the tax (at higher rates) as from 1st October, 1942, when the States—except Queensland, where the tax was not levied—suspended taxation of this nature in accordance with the uniform tax plan described on page 758.

Exemptions from the Commonwealth tax include, generally, admissions to entertainments conducted for purely public, patriotic, philanthropic, religious or charitable purposes, also to entertainments which are wholly educational in character or partly educational and partly scientific and conducted by a body not carried on for profit.

The tax is payable on admissions for which the charge is 1s. or more. On an admission charge of 1s. the tax is 3d. and the rate increases by 2d. for each additional 6d. or part thereof until the admission charge reaches 5s., then it increases by 3d. for each additional 6d. or part thereof. For entertainments where all the performers are actually present and performing (e.g., stage play) the rates of tax are approximately 25 per cent. below the general rates.

A special scale of rates is payable where a separate charge of 3d. or more is made for refreshments at dances, etc., or for the use of facilities for participation in entertainments at amusement parks.

The amount of Commonwealth Entertainments Tax collected in Australia was £5,069,672 in 1945-46, £5,137,805 in 1946-47 and £5,198,337 in 1947-48 including collections in New South: Wales of approximately £2,210,000, £2,175,000 and £2,160,000 in the respective years.

Further particulars are shown in the chapter "Social Condition."

# COMMONWEALTH LAND TAX.

The land tax imposed in 1910 was the first direct taxation by the Commonwealth. It is a graduated tax on the unimproved value of the lands in Australia.

Land to the value of £5,000 owned by a resident of Australia is exempt from the tax. The ordinary rate of tax payable by residents is  $1_{18750}$ d. for the first £1 of value in excess of £5,000, then it increases uniformly by 18750 d. for every increase of £1 to 5d. in the £1 on a taxable value of £75,000, and the tax is 9d. for every £1 in excess of that amount.

The ordinary rate payable by absentee owners is 1d. in the £1 on the value up to £5,000 and the rate on higher values is 1d. more than the corresponding rate payable by a resident.

Super tax is levied on assessments made after 1st July, 1941, where the taxable value exceeds £20,000. The rate is 20 per cent. of the tax at ordinary rate or 1 per cent. of the amount by which taxable value exceeds £20,000, whichever is the less.

Lands owned by a State, municipality, or other public authority, or a State savings bank and those used for religious, charitable or educational purposes are exempt from the tax. There is also exemption of lands owned by life assurance societies and trade unions, and grounds owned by clubs, etc., and used for sports (except golf and horse racing), but the exemption is only partial if the lands are not used solely for the purposes of such bodies. In the case of non-mutual life assurance societies, the amount of exemption is reduced in the proportion which the value of policies in Australia bears to the total value of policies.

Land values for purposes of assessments of land tax after 13th March, 1942, have been "pegged" at the values assessed for the financial year 1939-40 and the compilation of statistics regarding land tax assessments, as given below in respect of taxable lands held in New South Wales from 1937 to 1941, has been discontinued temporarily.

Table 660.-Federal Land Tax, Value of Taxable Lands in New South Wales.

	Ta	xable Lands	at 30th Ju	ne.	Tax As	Tax Assessed.		
Year.	Improve	d Value.	Unimproved Value.		Town	Country	Area of Country Lands	
Town.	Town. Country. Town.	Country.	Lands.	Lands.	Assessed.			
	1	1 0000	2000	4000			thous	
	£000.	£000.	£000.	£000.	£	£	acres	
1937	144,572	117,429	63,920	53,948	436,692	208,651	32,78	
1938	149,889	119,377	64,832	53,502	497,221	227,912	32,10	
1939	163,213	119,455	71,964	54,269	567,391	231,523	32,03	
1940	163,751	123,589	72,365	56,933	1,142,123	471,573	34,33	
1941	173,918	124,277	71,977	57,123	1,368,264	545,829	35,13	

Ordinary rates of tax were increased by 11.1 per cent. in 1938-39 and 100 per cent. in 1940-41, and a super tax was imposed in 1941-42.

Receipts from Federal land tax in Australia amounted to £3,782,359 in 1945-46, £3,679,481 in 1946-4% and £3,640,900 in 1947-48.

#### COMMONWEALTH ESTATE DUTIES.

The Estates Duty Assessment Act, which came into operation on 21st December, 1914, provided for the imposition of a Federal duty on properties of persons who died after the commencement of the Act.

Where the whole of the estate passes to the widow, children or grand-children there is a statutory exemption of £2,000 from the value of the estate for duty and it diminishes by £1 for every £10 of value between £2,000 and £10,000, and by £1 for every £2 of value in excess of £10,000. Where no part of the estate passes to the widow, children or grandchildren, the exemption is £1,000, diminishing by £1 for every £10 of value between £1,000 and £6,000 and by £1 for every £8 of value in excess of £6,000. Proportionate deductions are allowed when only part of an estate passes to the widow, children and grandchildren.

Estates of members of the Naval, Military and Air Forces who die during the war or within three years thereafter, as a result of injury received or disease contracted on active service, are exempt, to the extent of £5,000, in respect of such part of the estate as passes to certain next of kin.

The rates of duty, ranging from 1 per cent. to 15 per cent. of the dutiable value of the estate, remained unchanged from the date of commencement in 1914 to 20th May, 1940; then a new scale, ranging from 3 per cent. to 20 per cent., was introduced. The rates on estates exceeding £20,000 in value were increased in the following year and the rates on estates of persons who die on or after 3rd December, 1941, are as follows:—

Value for Duty of the Est	ate.		Rates of Duty (per cent. of value for duty).
Not exceeding £10,000	•••	•••	3 per cent.
£10,001 to £20,000			3 per cent. increasing by $\frac{3}{100}$ per cent. for every £100 of value in excess of £10,000.
£20,001 to £120,000	•••	•••	6 per cent, increasing by $100$ per cent. for every £100 of value in excess of £20,000.
£120,001 to £499,999	•••	•••	26 per cent. increasing by $\frac{1}{200}$ per cent. for every £1,000 of value in excess of £120,000
£500,000 or more		•••	27.9 per cent.

The amount of Federal estate duty collected in the Commonwealth was £3,880,041 in 1945-46, £4,018,620 in 1946-47 and £4,555,004 in 1947-48.

# GIFT DUTY.

A gift duty has been imposed by the Commonwealth on dispositions of property, real or personal, made after 28th October, 1941, without adequate consideration in money or money's worth. Gifts by residents are subject to duty if the property concerned is situated in or out of Australia, and gifts by non-residents if the property is in Australia.

In respect of gifts made on or after 3rd June, 1947, duty is not payable unless the aggregate value of all gifts by the same donor at the same time, or during the period of 18 months previously or 18 months subsequently. exceeds £2,000. The previous exemption was £500. The rates of duty, based on the aggregate value of the donor's gifts within the period of three years, are the same as the rates of estate duty shown above.

Duty is not payable in respect of gifts by employers in the form of contributions to funds for employees' pensions, etc., or retiring allowances,

gratuities or bonuses; gifts to institutions or organisations not carried on for profit; gifts to Commonwealth or a State; business gifts for the purpose of obtaining commercial benefit or writing off irrecoverable debts; premiums up to £100 per annum for life assurance for the benefit of wife or children; small gifts to the same donee which do not exceed in the aggregate £50 during the period of three years; and gifts for the maintenance, education or apprenticeship of any person, having regard to the legal and moral obligations of the donor to afford such assistance.

Commonwealth receipts from gift duty were £392,949 in 1945-46, £544,673 in 1946-47 and £780,401 in 1947-48.

#### PAY-ROLL TAX.

A tax on pay-rolls was introduced by the Commonwealth in July, 1941, to secure additional revenue for child endowment. Since July, 1945, the tax has formed part of the finances of the National Welfare Fund, as described in the chapter "Social Condition."

The tax is payable by employers, including the State Government and statutory bodies; municipal and local government bodies; also by Commonwealth public authorities, where wages are not paid out of the Commonwealth Consolidated Revenue Fund. Employers whose pay-roll does not exceed £1,040 in the year, religious or public benevolent institutions and public hospitals are exempt; and the tax is not levied on wages paid by the Governor-General or State Governors or wages paid to official staffs of British or Dominion trade commissioners or of diplomatic or consular representatives of any country.

The tax is levied on wages, salaries, commission, bonuses and allowances paid or payable in respect of any period after 30th June, 1941, less a deduction of £1,040 per arnum. As a general rule the tax is collected monthly on pay-rolls which exceed £20 a week, and adjustment is made annually where necessary. The rate of tax is  $2\frac{1}{2}$  per cent.

Receipts from pay-roll tax in Australia amounted to £11,499,243 in 1945-46, £13,646,736 in 1946-47 and £16,594,764 in 1947-48.

#### Customs, Excise and Primage Duties.

The power to impose customs and excise duties in Australia is vested exclusively in the Commonwealth. Particulars regarding the customs and excise tariffs and the ad valorem primage duty, are published in the chapter "Oversea Trade" of this Year Book.

#### SALES TAX.

A sales tax on locally manufactured and imported goods has been imposed by the Commonwealth since 1st August, 1930. The tax is payable by manufacturers and wholesale merchants on sales of taxable goods to retailers or consumers, and by importers on taxable goods imported by retailers, consumers and users. The tax is not charged on sales by manufacturers or wholesale merchants to other manufacturers or merchants (unless the goods are for use by the purchaser).

Certain goods are exempt from the tax and since November, 1940, taxable goods have been classified into groups each with a different rate of sales

tax. The list of exempt goods and the classification of taxable goods have been varied from time to time.

The rate of tax was 2½ per cent. of sale value as from 1st August, 1930. Subsequent changes were as follows:

Date.		per cent.	Date.	per cent.
1930—1st August	•••	$2\frac{1}{2}$	1940—3rd May	$8\frac{1}{3}$
1931—11th July		6	1940-22nd November	5, 10 or 15
1933—26th October		5	1941—30th October	5, 10 or 20
1936—11th September		4	1942—1st May	$12\frac{1}{2}$ or $25$
1938—22nd September		5	1943—21st July	$7\frac{1}{2}$ , $12\frac{1}{2}$ or 25
1939—9th September		6	1946—15th November	10 or 25

The amount of sales tax collected in Australia was £33,600,175 in 1945-46, £36,264,585 in 1946-47 and £34,728,579 in 1947-48.

#### GOLD TAX.

The Gold Tax, imposed by the Commonwealth on gold produced in Australia or in any Australian Territory and delivered on or after 15th September, 1939 to the Commonwealth Bank, was suspended in respect of deliveries after 19th September, 1947. Wrought gold and gold coin were exempt from the tax and rebates of tax were allowed to prospectors in respect of the first 25 ounces of gold in any year and to other producers where the profit from working, after payment of tax, did not exceed 30s. per ounce fine. The rate of tax varied according to the price of gold and was one-half of the amount by which the price exceeded £9 per ounce fine. Collections derived from gold produced in the Mandated Territory of New Guinea are to be expended for the defence and other purposes of the territory.

The amount of gold tax collected by the Commonwealth was £383,552 in 1945-46, £556,435 in 1946-47 and £10,713 in 1947-48.

#### FLOUR TAX AND WOOL TAX AND CONTRIBUTORY CHARGE.

Particulars of the tax on flour and wheat are given on page 328 and of the contributory charge on wool on page 423 of this Year Book. Proceeds of these charges are used for the special purposes of the wheat and wool-growing industries and are, therefore, to be distinguished from taxation as applied to general revenue purposes.

#### STATE FINANCE.

The divisions of the public accounts of the State of New South Wales at 30th June, 1948, are listed in Table 672. The following are the chief operating accounts.

The Consolidated Revenue Fund was created by the Constitution Act. All taxes and territorial and other revenues of the Crown are paid to this fund, unless it is prescribed by statute that they are to be paid into some other fund. Subject to certain charges fixed by the Constitution Act, the fund may be appropriated by Parliament for expenditure on specific purposes, as prescribed by statute. Parliamentary appropriations may be

either special or annual. A special appropriation is one which is contained in an Act which itself gives authority for the expenditure incurred on the object or function to which it relates. Annual appropriations are made each year to meet expenses of government not covered by special appropriations and not provided for by payments from special funds. Annual appropriations or balances of consolidated revenue are not available for expenditure after the end of the year for which they were voted.

The funds of the Railways, Transport Trusts and Sydney Harbour Trust relating to the State-owned transport services are described in the chapter "Trade, Transport and Communication" of this Year Book.

Particulars of the Closer Settlement Fund for the promotion of land settlement are shown on page 782.

The Road Transport and Traffic Fund and the State Transport (Coordination) Fund dealing with the administration and control of road traffic and the regulation of commercial motor vehicles are described in the chapter "Motor and Other Licensed Vehicles."

The Special Deposits Account is an account in the Treasury books for recording transactions relating to sums held by or deposited with the Treasurer, which the Treasurer directs to be carried to the Special Deposits Account. The funds in this account are not subject to annual appropriations by Parliament, and balances may be expended at any time subject to certain regulations and the issue of warrants.

The General Loan Account receives moneys borrowed by the Government on the issue of stock, Treasury bills, and debentures under the authority of a Loan Act. Expenditure on works, services and redemptions is debited to the account in the year in which it is voted by Parliament.

All expenditure from loan moneys must be authorised under an Appropriation Act, in the same manner as the ordinary expenditure chargeable to the general revenue. At the close of a financial year unapplied appropriations and balances of appropriations made by a Loan Act passed two years or longer lapse, except for the payment of claims in respect of any outstanding contract or work in progress.

### REVENUE ACCOUNTS OF NEW SOUTH WALES.

A summary of the combined revenue operations of the Governmental section of the State accounts, the chief business undertakings of the State and the road vehicles registry and traffic control branch is shown in Table 661. Though not embracing all State activities, the table covers the field usually embraced within the State Revenue Budget. The special roads funds are considered separately on page 779.

The Governmental section relates to the administrative functions of Government, including the provision of social services for which there were special funds in some of the years under review.

The funds within the Governmental section, together with the Road Transport and Traffic Fund, are on a "cash" or "receipts and payments" basis, but the revenue and working expenses of the business undertakings are on an "income and expenditure" basis. The public debt charges relate only to activities included in the table; the total debt charges paid in respect of all State activities are shown in Tables 687 and 690.

Table 661 .- State Revenue and Expenditure.

<del></del>		- Juli-Stat	e Kevende	and Expe	Jilait	u. c.			
			REVENUE (	£ thousand).					
W7 T- 1		Bu	siness Undertal	kings.					
Year ended 30th June.	Govern- mental.	Railways.	Tramways and Omnibuses.	Sydney Harbour	Sydney Harbour.		oad nsport    Fraffic and.	Total State Revenue.	
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948	26,422 19,147 28,523 19,955 30,147 23,216 31,038 27,686 30,178 34,072 30,425 34,501 34,853‡ 31,577 32,569 31,313 36,004 30,353 41,085 36,906		4,468 1,203 4,790 1,15 5,429 1,193 5,582 1,193 5,700 1,314 5,936 1,424 6,105 1,386		1,156 1,203 1,151 1,193 1,192 1,315 1,446 1,420 1,380 1,447		11 06 92 19 10 29 47 20 84 34	51,710 54,755 59,896 65,865 71,534 72,470 74,213‡ 71,858 74,526 88,026	
	<u>'</u>	I	Expenditure	£ thousand)	) <b>.</b>				
	Govern-	Business Undertakings (Working Expenses).*				ad	Public	Total	
	mental (Ordinary Depart- mental).	Railways.	Tramways and Omnibuses	Sydney Harbour,	ar Tra	nsport Debt nd Charge affic and.		State Expen- diture.	
1939 1940 1941 1942 1943 1944 1945 1946 1947	20,430 22,571 23,319 22,290 21,822 21,954 22,522 24,086 28,414 33,123	14,321 14,359 16,770 21,218 27,023 27,391 24,570 24,708 25,406 30,471	3,962 4,057 4,378 5,026 5,176 5,341 5,519 5,983 6,378 8,154	380 359 375 393 405 451 474 641 705 795		611 606 592 519 510 529 547 620 684 734	14,465 15,115 15,317 15,534 15,456 15,621 19,613 15,450 14,789 14,871	57,067 60,751 64,980 70,392 71,287 73,245‡ 71,488	

<sup>\*</sup> Excluding Interest, exchange and sinking fund charges. † Interest, exchange and sinking fund. ‡ Includes exceptional items—in Governmental Revenue £3,888,772, and in Public Debt charges (for redemption of Deficiency Treasury Bills) £3,840,000.

To avoid duplication the governmental expenditures and railway revenues as shown omit a contribution of £800,000 annually from Consolidated Revenue Fund towards losses on developmental railways.

With railway earnings attaining high levels and other receipts buoyant, revenue surpluses were realised annually from 1941-42 to 1945-46 after reserving large sums for maintenance and other works deferred by reason of wartime shortages. Rising costs, accompanied by some decline in railway earnings, resulted in a substantial deficit in 1946-47. To check the adverse trend in finances of the State transport services, tram and omnibus fares were increased in July, 1947, and railway fares and freight rates in August, 1947. In 1947-48 there was a small deficit, a further heavy loss in the tramway and omnibus services exceeding surpluses in other accounts.

Chief among the reserve provisions of the war years were amounts included in railway working expenses for deferred maintenance, renewals, etc., as detailed in the chapter "Railways," and repayments of a Treasury advance for reconditioning tracks, of which the normal yearly instalment was £165.000. The amounts were as follows:—

	1940-41	1941-42	1942 - 43	1943-44	1944 - 45
For deferred maintenance,	£	£	£	£	£
etc	720,000	2,276,000	4,884,000	3,020,000	670,000
For repayment of Treasury					
advance	495,000	495,000	330,000	495,000	330,000

No further charges of this nature have been made in the railway accounts since 1944-45, but of the reserve provisions totalling £11,570,000 a sum of £9,379,801 has been disbursed, including £3,912,111 in 1946-47 and £2,295,638 in 1947-48. The unexpended balance of the railway reserves amounted to £2,190,199 at 30th June, 1948.

The annual surpluses and deficiencies of the several accounts forming the above aggregate statement, after the allocation of debt charges, were as follows:—

Year ended 30th June.	Governmental		Governmental Rail		Tramways and Omnibuses.			ydney urbour.		Total,
1939	_	£ 1,541,243	_	£ 1,171,522	+	£ 14,505	+	£ 238,726	L	£ 2,459,534
1940	_	2,181,206		443,833	+	11,505	+	301.198	-	2,312,336
1941	-	1,353,718	+	235,951	+	14,566	+	248,023		855,178
1942	+	402,897	+	203,899	+	26,841	+	252,083	+	885,720
1943	+	88,418	+	774,542	+	33,948	+	244,962	+	1,141,870
1944	+	104,670	+	754,054	+	8,124	+	316,500	+	1,183,348
1945	+	103,131	+	544,903		95,027	+	415,020	+	968,027
1946	+	371,481	+	149,588	_	379,106	+	228,527	+	370,490
1947	+	172,140	-	1,557,943	-	600,813	+	136,809	-	1,849,807
1948	+	<b>3</b> 19,105	+	111,585		675,890	+	123,301		121,899

Table 662 .- State Revenue Accounts, Surplus or Deficit.

The balance in respect of Governmental services in 1947-48 is before payment of £205,452 represented almost wholly by debt charges due by the tramways and omnibuses and debited to them in these tables. Contributions to the National Debt Sinking Fund charged to the several accounts before striking the balances shown amounted to £2,640,162 in 1946-47 and £2,769,556 in 1947-48, and in the ten years ended 1947-48 aggregated £22,752,416.

### GOVERNMENTAL RECEIPTS.

The following table provides a summary of the main items of Governmental receipts during the last five years, together with the amounts per head of population.

Balances after transfer of £800,000 annually from Governmental Account towards losses on developmental railways.

Table 663.—Governmental Receipts.

			•	_						
		Year ended 30th June.								
Classification.	1944.	1945.	1946.	1947.	. 1948.					
	Ам	OUNT.								
Receipts from Commonwealth for— Interest on Public Debt Reimbursement—Uniform Taxes Hospital Benefits Taxes Land Revenue Receipts for Services Rendered General Miscellaneous Total	14,719,083 5,966,592 1,690,620 1,681,655 3,549,382 80,424,752	£ 2,917,411 14,990,820 6,082,166 1,054,243 1,708,052 7,500,911* 34,853,603*		£ 2,917,411 16,127,942 1.058,000 8,041,139 1,862,400 1,974,688 4,022,555 36,004,135	£ 2,917,411 18,302,325 1,210,000 9,533,267 2,658,181 2,265,914 4,198,251 41,085,349					
Receipts from Commonwealth for— Interest on Public Debt	5 2 6  2 1 7 0 11 9 0 11 0 1 4 9	£ s. d.  1 0 1 5 3 4 2 1 11 0 11 5 0 11 9 2 11 8*  12 0 2*	£ s. d. 0 19 11 5 2 7  2 8 9 0 11 3 0 12 5 1 7 2	£ s. d. 0 19 8 5 8 10 0 7 2 2 14 3 0 12 7 0 13 4 1 7 2 12 3 0	£ s. d. 0 19 5 6 1 8 0 8 0 3 3 4 0 17 8 0 15 1 1 7 10					

<sup>\*</sup> Includes exceptional items, £3,888,772 (£1 6s. 10d. per head).

Commonwealth grants for interest, tax reimbursements (including arrears of State Income Tax) and hospital benefits constitute the principal source of governmental receipts. In 1947-48 these items totalled £22,668,345, or 55 per cent. of all governmental receipts, whilst State taxes (omitting arrears of income tax, £238,609) amounted to £9,294,658 or 23 per cent. Details of the State taxes are shown in Table 651.

An increase in the receipts of £3,435,440 in 1946-47 included the initial grant of £1,058,000 from the Commonwealth in terms of the Hospital Benefits Act, described in the chapter "Social Condition." To an increase in receipts of £5,081,214 in 1947-48, amounts received under the uniform tax scheme contributed £2,068,243, probate duty £920,759, stamp duties £326,846, racing and betting taxes £160,145, liquor licences £189,358, land revenue (mostly mining royalties) £795,781 and lottery profits £430,850.

Certain Commonwealth grants are paid into special funds, the principal being grants for roads and contributions to sinking fund for repayment of the State debt. The system of Federal aid for roads is described in the chapter "Roads and Bridges" of this Year Book.

# Land, Forestry, and Mining Revenue.

At the establishment of responsible government in 1856, the control of lands was vested exclusively in the Parliament of New South Wales. At that date only 7,000,000 acres had been alienated, and approximately 191,000,000 acres of land were owned by the Crown. Nearly all these lands have been made available for settlement. Large areas are occupied under various leasehold tenures and are in course of sale on terms.

In a considerable area the State has reserved to itself mineral rights, which produce a substantial income from royalties. In addition, State

forests and timber reserves and land within irrigation areas return revenue to the Government.

The receipts from lands, mineral resources, and forests credited to the Consolidated Revenue Fund during the last five years are shown below:—

Table 664.—Governmental Revenue from Land, Minerals and Forests.

	Year ended 30th June-								
Particula	rs.			1944.	1945.	1946.	1947.	1948.	
Alienations Leases Western Lands (Leases, Mining Occupation Forestry Miscellaneous Total, Land				£ 580,689 425,259 118,621 318,265 225,825 21,970 1,690,629	£ 535,723 411,322 119,028 341,608 224,108 22,454 1,654,243	£ 522,614 424,994 114,852 332,844 229,546 23,854 1,648,704	£ 572,071 428,996 125,313 473,547 236,102 26,371 1,862,400	£ 544,709 501,085 125,516 1,155,768 302,228 28,875 2,658,181	

Royalties on minerals and one half of the royalties from timber and other forestry receipts are payable to Consolidated Revenue Fund. The balance of the forestry receipts is not included in the accounts of the Consolidated Revenue Fund, but is paid to a special fund and set apart for afforestation. Payments to the special fund amounted to £223,114 in 1946-47 and £261,530 in 1947-48.

Royalties on minerals which constitute the principal item of mining revenue amounted to £447,808 in 1946-47 and £1,131,053 in 1947-48. These are net receipts after paying small refunds of £7,710 and £7,813 in the respective years. The gross collections comprised royalty on coal £256,013 and £259,525, on silver, lead, zinc, £193,319 and £871,050, and gold and other minerals £6,186 and £8,291. The royalty on silver, lead and zinc from the Broken Hill field is based on a graduated profits scale, hence, with export prices rising steeply, there was a large increase in the amount of royalty in 1947-48.

#### Receipts for Services Rendered.

Fees charged in respect of services rendered by the administrative departments which are within the ambit of the Consolidated Revenue Fundamount to a considerable sum. The principal items are shown below:—

Table 665 .- Governmental Revenue, Receipts for Services Rendered.

	Year ended 30th June—							
Particulars.	1944.	1945.	1946.	1947.	1948.			
Harbour Rates and Fees, Pilotage, etc	£ 291,510	£ 293,901	£ 319,763	£ 367,537	£ 381,229			
Fees— Registrar-General	115,617	137,299	185,729	233,167	267,647			
Law Courts and Public Trustee Valuation of Land	190,555 54,354	200,994 56,614	203,656 62,403	242,315 66,376	232,012 66,731			
Public Instruction Department Grain Elevators—Handling Fees, etc,	149,458 304,186	164,003 377,211	181,580 333,787	206,547 378,851	324,916 349,322			
Maintenance of Inmates of Public Institutions	58 <b>,2</b> 20	55,536	59,128	40,966	49,422			
Maintenance of Patients in Mental Hospitals	155,505	160,083	165,509	164,923	176,737			
Commonwealth Contributions— Maintenance of Pensloners in In-	·	, ·	'					
stitutions Other Services	$\frac{56,712}{17,804}$	60,742 21,107	85,365 26,832	36,359 13,737	31,748 124,935			
Other	187,734 1,581,655	180,562	198,483	193,910 1,974,688	261,215			

Receipts from pilotage, harbour and light dues in all ports, and from tonnage and wharfage rates, rents, etc., in ports other than Sydney and Port Kembla, are paid into the Consolidated Revenue Fund. The tonnage and wharfage rates, rents, etc., collected in the port of Sydney are paid into the Sydney Harbour Trust (Maritime Services Board) Fund, and those collected at Port Kembla are paid into the Port Kembla Haulage and Shipment Account. Both of these accounts are operated as separate business undertakings.

# General Miscellaneous Receipts.

All items not placed under headings already shown are included in the general miscellaneous group:—

Table 666 .- Governmental Revenue, General Miscellaneous Receipts.

Tr42 1	Year ended 30th June—						
Particulars.	1944.	1945.	1946.	1947.	1948.		
Miscellaneous Interest Collections—	£	£	£	£	£		
Metropolitan Water Board Advances	170,326	167,771	165,127	162.391	159,558		
Country Water Supply and Sewerage Works	21,110	20,285	20,427	24,607	22,498		
Rural Bank Agencies	100,000	101,964	107,262	109,356	137,045		
Daily Credit Balances with Banks	0 0 000	48,131	66,438	36,456	60,493		
Advances-Shallow Bores, Wire Netting		18,518	16,151	15,115	19,987		
Other Interest	44.070	63,859	125,392	63,875	93,282		
Rents of Premises	95,500	37,689	39,230	45,354	63,347		
Rents Darling Harbour Resumed Area	45,004	47,126	47,713	49,224	49,953		
Clnes and Forfeltures	101,890	108,533	134,524	183,326	199,342		
Repayments—Advances for Unemployment		100,000	101,041	100,010	100,012		
ກົວປິດຄ	10100	25,220	18,063	15,338	15,423		
Repayment—Balances not required	14,191	15,791	25.841	22,496	23,862		
Repayments to Credit of Votes, previous years		794,720	928,121	848,602	548,203		
State Tothering (Clause Deadt)	1 000 000	1,343,245	1,452,700	1.611,900	2.042,750		
State Superannuation Board—Repayment of		1,010,210	1,402,100	1,011,000	2,0 12,100		
part Employers' contributions and Interest							
IL	000 004	285,612	250,032	215,436	181,776		
Bassist Decesar Callections	10,000	69,234	145,536	176,091	190,547		
Delean Todackelse	74'504	89,297	93,895	92,919	109,717		
Bale of Products, etc., of Departments	00'004	97,548	101,395	137,060	138,062		
Water Conservation and Irrigation—Rents,		01,040	101,000	151,000	150,002		
Datos oto	7 5 10	6,941	13,035	9,780	29,258		
Commonwealth—Special Contributions	000'=00	154,078	115,773	41,740	29,200		
Nthan Migaellamaaya Dagalmta	OE'ENO	4,005,349*	122,787	161,489	113,148		
other miscenaneous neceipis	00,010	4,000,040	144,107	101,400	110,140		
Total	3,549,382	7,500,911*	3,989,442	4,022,555	4,198,251		

<sup>\*</sup> Includes exceptional items, £3,888,772.

Recoveries of amounts expended in previous years are usually taken to account as revenue in the item "Repayments to Credit of Votes, Previous Years." Such recoveries included recoups to the Governmental account of public debt charges due but not paid by business undertakings in earlier years, viz., £263,360, '£313,597, £572,705, £132,841 and £30,098 in each of the last five years.

Special contributions by the Commonwealth were made in respect of free rail passes to members of the defence forces and emergency war expenditure, including air raid precautions. The contribution towards the cost of free rail passes amounted to £158,000 in 1943-44, £143,000 in 1944-45, £109,200 in 1945-46 and £41,740 in 1946-47.

# GOVERNMENTAL EXPENDITURE.

The Governmental expenditure from revenue during the last five years and the amount per head of population are shown in the following table.

The ordinary departmental expenditure is classified according to functions. The annual contribution to railways, £800,000, is included here but not in Table 661.

Table 667.—Governmental Expenditure, Functional Classification.

<del></del>		Year	ended 30th	June—	
Classification,	1944.	1945.	1946.	1947.	1948.
			AMOUNT.		
Ordinary Departmental—	£	£	£	£	£
Legislature and General Administration (ex- clusive of interest, etc., shown below) Maintenance of Law, Order, and Public	2:081,711	2,176,558	2,045,657	2,219,957	3,288,425
Safety	3,067,528 128,966 6,292,174 92,062 3,666,929 1,632,641	3,144,630 135,428 6,551,562 94,739 3,890,582 1,486,240	3,335,050 167,250 7,054,760 122,939 4,475,299 1,381,553	3,768,153 214,959 8,599,271 169,612 5,934,995 1,487,155	4,465,789 295,014 9,641,769 188,538 7,918,572 1,609,790
Development and Maintenance of State Resources Local Government War Obligations—	4,089,701	4,486,069 420,621	4,523,309 490,253	5,323,923 513,181	5,170,643 496,392
National Emergency Services, etc Other Adjustment of Old Accounts	588,207	143,838 479,512 312,454	112,768 511,158 665,427	96,474 486,403 400,000	39,617 108,222 700,000
Total Ordinary Departmental	22,754,383	23,322,233	24,885,423	29,214,033	33,922,771
Public Debt Charges—            Interest            Exchange on Interest            Sinking Fund		5,461,383 749,143 5,217,713†	5,329,443 725,217 1,250,222	4,940;098 670,950 1,002,037	5,009,815 554,495 1,279,162
Total Public Debt Charges	7,565,699	11,428,239	7,304,882	6,613,135	6,843,472
Total Governmental	30,320,082	34,750,472	32,190,305	35,827,218	40,766,243
	:	PER HEAD	OF POPULAT	юх,	
Ordinary Departmental—	£ s. d.	£ s. d.	£ s, d.	£ s, d.	£ s. d.
Legislature and General Administration Maintenance of Law, Order and Public	0.14 6	0 15 0	0 14 0	0 15 0	1 1 10
Safety Safety Regulation of Trade and Industry Seducation Science, Art and Research Public Health and Recreation Social Amelioration Social Amelioration Social Science Social Science Science Science Science Science Scien	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 1 8 0 0 11 2 5 2 0 0 8 1 6 10 0 10 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1 9 8 0 2 0 3 4 1 0 1 3 2 12 7 0 10 8
Development and Maintenance of State Resources	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1 10 11 0 2 11 0 4 3 0 2 2	1 10 10 0 3 4 0 4 3 0 4 6	1 15 11 0 3 6 0 3 11 0 2 8	1 14 4 0 3 4 0 1 0 0 4 8
Total Ordinary Departmental	7 18 6	8 0 9	8 9 8	9 ·17 2	11 5 5
Public Debt Charges— Interest Exchange on Interest Sinking Fund	1 18 6 0 5 8 0 8 6	1 17 8 0 5 2 1 15 11†	1 16 4 0 5 0 0 8 6	1 13 4 0 4 6 0 6 9	1 13 4 0 3 8 0 8 6
Total Public Debt Charges	2 12. 8	3 18 9	2 9 10	2 4 7	2 5 6
Total Governmental	10 11 2	11 19 6	10 19 6	12 1 9	13 10 11

<sup>\*</sup> Excludes £216,216 paid by Consolidated Revenue Fund for debt charges due by business undertakings.
† Includes special repayment of Deficiency Treasury Bills £3,840,000 (£1 6s. 6d. per head) direct to lender, not through sinking fund.

Expenditure designated "Ordinary Departmental" rose by £4,328,660 in 1946-47 and £4,708,688 in 1947-48. This growth was partly a result of

the return of ex-servicemen to their employment and the resumption of peace-time services, but it has been influenced in increasing degree by rising wage and price levels. Following increases of £2,112,578 and £2,067,208 in the respective years, payments of salaries and items in the nature of salary totalled £15,775,461 in 1947-48.

Education and public health form the largest items of expenditure in the governmental account. Expenditure on these, with the functions of law and order, and science, art and research, amounted to £22,214,668, or 54 per cent. of the total governmental expenditure in 1947-48. Details of such expenditures are given in the relevant chapters of this Year Book.

The operation of the Commonwealth Hospital Benefits Act from 1st. July, 1946, was largely responsible for the increase in expenditure on public health of £1,459,696 in 1946-47. State payments towards the upkeep of hospitals were thereby enlarged, as hospital revenues were reduced by the abolition of charges for patients in public wards and the allowance of a deduction from charges for non-public ward patients. By way of contra the State receives an annual grant from the Commonwealth; of allocations in 1946-47 and 1947-48, £201,706 and £190,000 were paid into a Trust Fund for capital expenditure on hospitals and £1,058,000 and £1,210,000, respectively, were credited to governmental revenue as shown in Table 663.

Costs of administration, in the foregoing table, include sums reserved for the construction and reconstruction of Government offices, viz., £100,000 in 1945-46 and £300,000 in each of the years 1943-44, 1944-45 and 1947-48. Expenditure from such reserves totalled £17,397 to 30th June, 1948.

The State bore considerable costs in connection with air raid precautions, other war emergency services and travel concessions to members of the defence services. However, contributions by the Commonwealth and proceeds from realisation of assets, taken to account as receipts, provided partial offset to expenditure designated war obligations.

Entries giving rise to the item "Adjustment of Old Accounts" were in the nature of book-keeping adjustments. Their effect was to transfer to Consolidated Revenue Fund part of long standing overdraft balances of other Treasury Accounts to which certain expenditures incurred in earlier years had been charged. The amount in 1945-46 included an advance to the Sydney Harbour Bridge Account of £400,427, equal to the accumulated deficiency of the account at 30th June, 1944.

The total amount of public debt charges paid in respect of all State activities is shown in Table 687, which relates to interest and exchange, and Table 690, which relates to sinking fund.

# ROAD AND TRAFFIC FUNDS.

Revenues derived by the State from the taxation and registration of road transport vehicles, licensing of drivers, etc., are paid into separate funds and devoted to road and traffic purposes. Particulars of the funds, (viz., Road Transport and Traffic, Public Vehicles, State Transport Coordination and Main Roads) are shown in the chapter, "Motor and Other Licensed Vehicles," of this Year Book.

The following table shows a brief classification of the receipts and payments of these funds in the years ended 30th June, 1946 to 1948. The Road Transport and Traffic Fund, which is included in the aggregate statement

of State revenue and expenditure shown in Table 661 is repeated below in order that the special finances provided by the State for road and traffic purposes may be viewed as a whole.

Table 668.-Motor Taxes, Fees, etc., Receipts and Disbursements.

- Table 00	0.— <u>-</u> WIOL	OF TAXE	8, 1'ees,	etc., Kecerpts	and Dis		
Receipts.	Yea	r ended Ju	ne.	Disbursements.	Yea	r ended Ju	ne.
,	1946.	1947.	1948.	]	1946.	1947.	1948.
		ROAD TE	ANSPORT A	ND TRAFFIC FUND.	-		
	£	£	£	1	£	£	£
Registration, Dri- vers' Licences, etc Miscellaneous	608,500 11,997	668,351 15,409	718,104 15,639	Administration and Control Traffic Facilities Paid to Road Making Author-	449,147 7,228	644,643 11,294	697,039 12,004
				ities	164,122	27,823	24,700
Total	620,497	683,760	733,743	Total	620,497	683,760	733,743
	Ривы	VEHICLES	FUND (SI	PECIAL DEPOSITS AC	COUNT).		
Motor Tax, Public Vehicles	65,866	72,342	81,464	Traffic Facilities Paid to Road	5,708	9,846	7,954
Omnibus Service Licence	12,861	11,897	14,244	Making Author- ities Paid to Tramways	43,232 6,404	46,459 5,967	56,605 7,493
Total	78,727	84,239	95,708	Total ,	55,344	62,272	72,052
	\$	STATE TRA	NSPORT CO	ORDINATION FUND.		<u> </u>	
Licences Commercial Motor Transport Charges— Passenger	28,844 10,468	33,348 29,934	37,165 56,831	Administration and Transport Control Paid to Railways Paid to Tramways		21,105 54,287 42	44,537 406,318 269
Passenger Goods Permits, etc Miscellaneous	29,026 1,316 561	52,298 3,670 442	275,191 3,748 4,853				
Total ,	70,215	119,692	377,788	Total	49,441	75,434	451,124
	Z.	IAIN ROAD	S SPECIAL	DEPOSITS ACCOUNT	s.		
Motor Tax (except Public Vehicles)	1,861,460	2,065,753	2,282,256	Paid to Road Making Author- ities		2,065,753	2,282,256
			TOTAL ALI	Funds.			
Motor Tax Registration, Drivers' Licences, etc Special Licences, Charges Com-	1,927,326 608,500	2,138,095 668,351	2,363,720 718,104	Administration and Control Traffic Facilities Paid to Road Making Author-		665,748 21,140	741,576 19,958
mercial, Motor Vehicles	82,515	131,147 15,851	387,179 20,492		2,068,814	2,140,035	2,363,561 414,080
	2,630,899	2,953,444	3,489,495	Total Payments	· ·	2,887,219	3,539,178

The funds distributed amongst road-making authorities are paid for the most part to the Main Roads Department, and only small amounts to municipal and shire councils. A contribution by the Commonwealth Government towards the activities of the Road Safety Council is omitted from the revenue and expenditure of the Road Transport and Traffic Fund. The initial contribution was £16,800 in 1947-48.

# STATE ENTERPRISES.

The principal State enterprises are those usually known as business undertakings, viz., railways, tramways and motor omnibus services, and Sydney Harbour Works. The capital of these enterprises has been provided by the State Treasury, mostly from loan funds. Their financial operations are kept in a separate account in the State Treasury and these combined with the Governmental accounts (Consolidated Revenue and other funds) and the Road Transport and Traffic Fund form the State Revenue Budget.

Comparative details regarding the individual business undertakings are published in other chapters of this Year Book. Particulars of their revenue and expenditure during the year ended 30th June, 1948, are summarised in the following table:—

Table 669.—State Business Undertakings, Revenue and Expenditure, 1947-48.

	_						
			E	xpenditu	re.		
Service.	Revenue.	Working	Capital	Debt Cl	narges.		Surplus.
		Expenses.	Interest.	Ex- change.	Sinking Fund.	Total.	ļ 
Business Undertakings–	£	£	£	£	£	£	£
Railways	37,705,862	30,471,277	5,145,000	648,000	1,330,000	37,594,277	111,585
Trams and Omnibuses  Metropolitan—							
Tramways	4,983,623	7,376,670	207,999	26,032	51,316	7.712.563	() 601,658
Omnibuses ,	2,127,282	) ''''	42,152	5,230	3,164	J ',','	
Total, Metropolitan	7,110,905	7,376,670	250,151	31,262	54,480	7,712,563	() 601,658
Newcastle— Tramways Omnibuses	326,155 417,302	777,933	26,954 2,378	3,402 302	6,486 235	} 817,690	(—) 74,233
Total, Newcastle	743,457	777,933	29,332	3,704	6,721	817,690	(—) 74,233
Total, Trams, Buses	7,854,362	8,154,603	279,483	34,966	61,201	8,530,253	() 675,89 <b>1</b>
Sydney Harbour	1,446,779	795,011	383,388	45,886	99,193	1,323,478	123,301
Total, Business Undertakings	47,007,003	39,420,891	5,807,871	728,852	1,490,394	47,448,008	(—) 441,005

The railway revenue, as shown in the table, includes a contribution from the Consolidated Revenue Fund of £800,000—made annually since 1928-29—towards losses incurred on developmental country lines. The accounts of the tramway and omnibus services for 1947-48, as well as including the debit of £61,201 for sinking funds, contain in working expenses charges

for depreciation totalling £254,657. These are distributed as follows: Metropolitan, tramways £97,828 and omnibuses £126,774, Newcastle, tramways £2,337 and omnibuses £27,718.

In addition to the business undertakings there are several State-owned utilities and trading concerns. The capital of such enterprises has been provided from State loan and revenue funds and, in some cases, from surplus earnings. Their revenue accounts, however, have not been brought within the scope of the State Revenue Budget, although they are part of the Special Deposits Accounts in the Treasury. The following table shows the revenue and expenditure of the major State enterprises (other than the business undertakings) which were in operation during the last two years:—

		• '		-			
Enterprise.	Year e	nded 30th	June, 1947.	Year ended 30th June, 1948.			
•	Revenue.	Expen- diture.	Surplus.	Revenue.	Expenditure. Surplus.		
	£	£	£	£	£	£	
Water Supply—							
	10,803	18,750	() 7,947	10,024	18,480	() 8,456	
South-West Tablelands* .	45,308	69,734	() 24,426	44,236	69,865	() 25,629	
Southern Electricity Supply .	551,898	481,157	70,741	661,797	563,539	98,258	
Metropolitan Meat Industry	881,771	946,138	() 64,367	834,915	970,465	()135,550	
Port Kembla Shipment, etc., † .	77,227	77,227	` ´	85,989	97,570	() 11,581	
State Coal Mine Lithgory	325,118	328,345	(-) 3,227	403,790	403,159	5,631	
Engineering and Shipbuilding † .	796,676	770,808	25,868	873,489	847,659	25,830	
State Briefrwerke +				162,885	172,401	(—) 9,516	

Table 670.—State Enterprises, Revenue and Expenditure.

The expenditure of the Southern Electricity undertaking includes £10,003 in 1946-47 and £28,417 in 1947-48 reserved to provide against higher costs as they arise as a result of fluctuations in the generation of electricity by water power.

The State Government controlled the Newcastle fish markets from December, 1943 to October, 1947, when they were transferred to a co-operative society; the Sydney fish markets have been controlled since September, 1945. Revenue from the markets amounted to £81,729 in 1946-47 and £67,676 in 1947-48, returning surpluses of £9,010 and £920, respectively. A State coal mine is being developed at Awaba, preliminary and developmental expenditure thereon totalling £34,864 to 30th June, 1948.

The activities of the Rural Bank of New South Wales are reviewed on page 818 and of the Government Insurance Office of New South Wales on page 850.

# CLOSER SETTLEMENT ACCOUNT.

The Closer Settlement Fund is maintained as a separate account, and its transactions are not included in the ordinary revenue budget of the State.

It was established under an Act passed in 1906 and in 1928 its scope was widened to embrace the accounts of returned soldier settlers.

The operations of the fund are confined to settlement projects instituted prior to the adoption of new schemes for the settlement on the land of ex-servicemen of the 1939-1945 war. In respect of these latter projects

<sup>\*</sup> Year ended 31st December.

<sup>†</sup> Year ended 31st March.

financial transactions pass through the General Loan Account and Consolidated Revenue Fund.

A large measure of relief has been granted to debtors of the fund in the form of reduction of capital value of the lands, and debts have been written off and interest charges, etc., reduced or suspended because of financial difficulties of settlers. As a result the fund disclosed a deficiency of £3,087,838 at 30th June, 1948. Particulars of the operations of the fund on an income and expenditure basis in each year since 1940-41 are summarised below:—

Year		Inco	ome.			Expenditure.					
ended 30th June,	Interest.	Rentals.	Other Income.	Total.	Interest.	Adminis- tration, etc.	Debts Written Off.	Forfeit- ures, etc.	Total.	Defic- iency.	
	£	£	£	£	£	£	£	£	£	£	
1941	391,311	17,734	1,146	410,191	422,594	22,079	57,335	23,317	525,325	115,134	
1942	382,266	16,304	852	399,422	420,055	21,215	376,239	60,375	877,884	478,462	
1943	376,906	20,911	9,556	407,373	420,001	25,560	334,547	58,775	838,883	431,510	
1944	360,147	19,431	5,317	384,895	412,582	19,806	273,479	14,292	720,159	335,264	
1945	336,722	32,851	12,493	382,066	235,319	22,431	362,818	24,504	645,072	263,006	
1946	212,434	86,130	6,725	305,289	233,620	24,706	240,708	10,090	509,124	203,835	
1947	215;379	105,640	2,099	323,118	231,840	37,530	124,960	25,616	419,946	96,828	
1948	175,725	121,541	1,650	298,916	230,015	36,757	77,539	14,660	358,971	60,055	

Table 671.—Closer Settlement Fund, Income and Expenditure.

Interest earnings declined and rentals rose as a result of an enactment in March, 1944, which gave to settlers acquiring holdings by instalment purchase the right to apply for conversion to leases in perpetuity at an annual rental equal to  $2\frac{1}{2}$  per cent. of outstanding indebtedness or, if less, of appraised value.

The fund is required to pay interest on its loan debt and contribute to the National Debt Sinking Fund, but since 1932 has not been charged with a share of the exchange on interest paid on the State overseas debt. The charge for interest was reduced from 3½ per cent. to 2 per cent. from 1st July, 1944.

At 30th June, 1948, liabilities of the fund consisted of creditors for rentals charged in advance, £46,638 and capital items, viz., loan liability, £11,455,351, grants from State revenue £1,635,000, Crown lands, £369,606 and assurance fees received under the Real Property Act, £787,437. Assets totalling £11,206,194 were represented by debtors for land, advances and interest, £5,254,153, land, £5,022,043 (including £4,775,684 let under leasehold), buildings, plant, etc., £28,163 and bank balance, £901,835.

# LEDGER BALANCES.

The Audit Act provides that the Treasurer may arrange with any bank for the transaction of the general banking business of the State. The various accounts open at 30th June, 1948, are shown below. All amounts paid into any of the accounts mentioned are deemed to be "public moneys."

Account.	Balance.	Account,	Balance.
Credit Balances.  Consolidated Revenue Government Railways Metropolitan Transport Trust Newcastle and District Transport Trust Sydney Harbour Trust Road Transport (Co-ordination) General Loan Special Deposits Special Accounts—Supreme Court Miners' Accident Relief Closer Scttlement	£ 1,760,279 286,626 81,463 15,888 1,701,156 4,335 25,917 6,449,541 34,853,256 443,601 77,000 901,835	Debit Balances.  Advances for Departmental Working Accounts and Other Purposes and Advances to be recovered  Metropolitan Water, Sewerage and Drainage Board—Advance  Debenture Deposit Account  Debits not Trausferred to Treasurer's Public Accounts	£ 7,850,310 4,475,055 13,200,000 353,306
Total Credit Balances	46,600,797	Total Debit Balances	25,878,667

Table 672.—State Accounts, Balance at 30th June, 1948.

All the accounts are combined to form the "Treasurer's General Banking Account" in which the balances of the accounts in credit offset the over-drafts on others.

The account "Advances for Departmental Working Accounts and Other Purposes, and Advances to be Recovered" embraces a number of individual accounts which have been opened for the purpose of drawing against the Treasurer's General Banking Account to provide capital for Departmental Working Accounts and certain advances of a recoverable nature. The debit balances at 30th June, 1948, consisted largely of sums advanced to Government accounts, the chief being the Railways Fund £5,375,000, Family Endowment Fund £1,723,984 and Housing Commission £250,000. The advances as stated for Railways and Family Endowment Funds were made prior to 1932-33 and represent balances outstanding after repayments since 1940-41 of £1,675,000 and £775,000, respectively, from votes of the Consolidated Revenue Fund.

The Metropolitan Water, Sewerage and Drainage Board Advance Account represents the outstanding balance of repayable advances from the Treasurer's General Banking Account. These advances, amounting to £6,495,000, were made to the Board between April, 1925 and June, 1929, and are being paid by annual instalments of £243,314, including principal and interest, spread over a period of forty years.

The Debenture Deposit Account is a medium for the withdrawal, for investment in the Commonwealth Bank, of the net amount of cash held in other accounts which is not required for immediate use. The account was opened in December, 1945, when short-dated Treasury Bills, until then used for financing cash deficiencies, were funded into long-term debentures. Under the funding arrangements surplus cash, which formerly was applied to the temporary retirement of Treasury Bills, is deposited with the Commonwealth Bank, where it earns interest at the rate of 1 per cent., and may be withdrawn as required. The investment in the Commonwealth Bank, also designated "Debenture Deposit Account" is included in the Special Deposits Accounts.

The net ledger balances at 30th June in each of the last five years were represented by the following assets:—

Balances held in—				1944.	1945.	1946.	1947.	1948.	
Sydney— General Cash Bala Deposit with Com		ealth Ba	 ınk		£ 3,315,702	£ 2,150,477 7,960,000	£ 1,897,821 5,500,000	£ 931,385 3,800,000	£ 278,014 13,200,000
London					3,315,702	10,110,477	7,397,821	4,781,385	13,478,014
Cash Balance					33,181	26,225	6,377	8,396	824
Remittances in Tr	ansit	***			1,856,000	1,865,000	1,660,968	1,752,382	2,030,736
Securities	•••	•••			2,796,290	2,979,151	3,348,431	4,061,640	5,212,556
Total					8,001,173	14,980,853	12,413,597	10,553,803	20,722,130

Table 673.—State Accounts, Net Credit Balances at 30th June.

Cash applied to the temporary retirement of the Deficiency Treasury Bills amounted to £9,800,000 at 30th June, 1944. This sum is to be regarded as the equivalent of deposits with the Commonwealth Bank in comparing the cash balance in 1944 with the balances in later years.

#### SPECIAL DEPOSITS AND SPECIAL ACCOUNTS.

The Special Deposits and Special Accounts form a very important division of the public finances, not only from the nature and volume of the transactions, but also by reason of the manner in which they are used in connection with the general finances of the State.

These funds assist in the banking operations of the Government. Although the Audit Act provides that the funds cannot be used except for the specific purpose for which they were deposited, it is the custom to merge balances into the "Treasurer's General Banking Account." By this means they provide a substantial reserve against which the Treasurer may draw to meet temporary requirements and to finance the overdrafts of other accounts. The great bulk of the funds bear interest, whether invested or not, and the power to use them enables the Government to effect a large saving in the interest which might otherwise be charged for loan accommodation.

The following table dissects the cash balances of the Special Deposits and Special Accounts as between those consisting of Government funds, such as departmental working accounts, and trust moneys representing Treasury liabilities. Balances held in the Debenture Deposit Account (see page 784) are excluded.

Balance.	1944.	1945.	1946.	1947.	1948.
Cash— Trust Funds Government Funds		£ 16,947,769	$\begin{cases} £ \\ 9,771,208 \\ 7,844,731 \end{cases}$	£ 8,030,792 7,937,706	£ 8,337,965 8,623,236
Securities	2,719,290	2,902,151	3,271,431	3,984,640	5,135,556
Total	19,094,518	19,849,920	20,887,370	19,953,138	22,096,757

Table 674.-Special Deposits and Special Accounts at 30th June.

# STATE LOAN FUNDS.

Moneys raised on loan by the State are credited to the General Loan Account, with the exception of loans used in funding revenue deficiencies, and small amounts credited to the Closer Settlement Fund for the conversion, at maturity, of portion of the fund's loan debt.

The loans credited to the General Loan Account comprise both new loans to be expended on works and services, and conversion or renewal loans for repayment of maturing loans. Additional credits are obtained from repayments to the account of loan moneys expended in earlier years. These repayments are derived mainly from the sale of land, works, materials, etc., acquired by means of loan funds, and the repayment of loan capital advanced to settlers and local governing and statutory bodies. Normally they constitute an important contribution towards the funds available for expenditure on new loan works.

The expenditure from the General Loan Account is subject to Parliamentary appropriation and consists of amounts expended on works and services, repayment of maturing loans—mostly from the proceeds of conversion loans—and the payment of flotation expenses and stamp duty on the transfer of stocks issued in London.

#### ANNUAL LOAN EXPENDITURE ON WORKS AND SERVICES.

Particulars of the loan expenditure on works and services by the State Government since 1901 are shown in the following table. The average annual amounts at intervals of five years are stated from 1901 to 1945 and the annual amounts during the last eleven years. Gross loan expenditure represents the new expenditure in each period; from this repayments to the loan account are deducted to obtain the net loan expenditure or net amount added to the accumulated loan expenditure outstanding.

Year ended 80th June.	Gross Loan Expendi- ture,	Repay- ments of Amounts spent in Previous Years.	Net Loan Expendi- ture,	Year ended 30th June.	Gross Loan Expendi- ture.	Repay- ments of Amounts Spent in Previous Years.	Net Loan Expendi- ture.
Annual Average	£	£	£		£	£	£
1901-05	3,441,660	226,920	3,214,740	1939	8,788,604	3,380,748	5,407,856
1906-10	2,248,947	157,127	2,091,820	1940	6,945,371	1,059,105	5,886,266
1911–15	7,032,586	357,577	6,675,009	1941	5,361,838	1,019,258	4,342,580
1916-20	6,996,935	479,126	6,517,809	1942	4,618,419	1,460,388	3,158,081
1921 - 25	11,829,369	1,220,688	10,608,681	1943	2,789,311	887,789	1,901,522
1926-30	12,594,670	1,183,143	11,411,527	1944	3,029,172	1,617,633	1,411,539
193135	6,700,108	712.895	5,987,213	1945	3,138,747	1,415,934	1,722,813
1936-40	8,103,669	1,961,692	6,141,977	1946	4,554,301	1,291,173	3,263,128
1941-45	3,787,497	1,280,200	2,507,297	1947	9,102,014	462,251	8,639,763
1938	8,110,740	3,009,875	5,100,865	1948	16,241,077	1,111,961	15,129,116
	1 -,,	1 .,,	-,-:0,000	1 -510	,,	_,,	,

Table 675.—Annual Loan Expenditure on Works and Services.

The expenditures shown in the table do not include flotation expenses and stamp duty on transfers of stock issued in London, which are paid from the proceeds of loans. Such expenses amounted to £375,988 in 1946-47, principally on account of conversions in New York, and to £128,667 in 1947-48.

Transactions relating to Closer Settlement Debentures, £5,041,500, issued between 1914-15 and 1929-30 in part payment of large estates acquired for

closer settlement, and Commonwealth advances for the construction of the Grafton-Kyogle-South Brisbane railway line, £1,419,593, expended between 1925-26 and 1930-31, are omitted from Table 675. Liability in respect of both items is reflected in the public debt of the State, but the transactions were not passed through the General Loan Account although they provided works and services of a type usually acquired from loans.

# DISTRIBUTION OF ANNUAL LOAN EXPENDITURE.

The principal items of the gross loan expenditure by the State Government on works and services, and of repayments to the loan account, during each of the past five years are as follows:—

Table 676.—Distribution of Annual Loan Expenditure.

Wronk Consider		Year	ended 30th	June.	
Work or Service.	1944.	1945.	1946.	1947.	1948.
Gross	LOAN EXPE	NDITURE,			
	£	£	£	£	£
Railways	005	1,600,000	2,356,517	3,200,000	5,625,000
Tramways	. 825	523	9,900	12,250	24,000 1,056,000
Omnibuses Water Supply, Sewerage and Drainage		#0.040	79,350	467,600	
Water Supply, Sewerage and Drainage Water Conservation and Irrigation—	49,157	72,379	79,300	71,516	131,731
"Notice and the second of the	54544	97 105	191:961	905 550	310.078
Clanbourn Dam		87,425	131,361	295,559 91,237	267.310
Tracker and Deathers months at		63,975	127,530	235,083	267,310 239,703
		20,445	61,301	210,584	236.068
Other		10,105	88,813	178,492	380,581
Harbours, Rivers, Wharves, etc.—	1,000	10,100	00,010	1,0,104	000,002
Sydney Harbour •	53,000	59,100	98,400	161,000	205,000
Other	0.070	105,532	147,115	305,125	410,796
Roads, Bridges and Punts	11,200	6,598	338,074	400,500	805,032
Circular Quay Improvements		202	11,738	34,489	19,449
Industrial Undertakings, etc.—			,	,	' '
Electricity	95,151	137,151	315,518	145,676	120,741
Abattoirs, Tourist Resorts, Shipbuilding	,				'
Brickworks, etc	29,816	45,065	44,562	482,797	184,963
Land and Agriculture—	1	· ·		· ·	
War (1939-45) Service Settlement			248,484	1,261,067	3,251,534
Forests				351,633	562,501
Soil Conservation			1,468	58,588	79,280
Other		11		105,000 7,513	50,007
Housing		618,477		7,513	915,325
Public Buildings, Sites, etc.—	1				100 000
Courts, Police Stations and Gaols	11,738	4,913	13,373	40,980	81,010
Educational and Scientific	182,687	95,698	215,359	291,989	576,829
Hospitals and Charitable		169,911	220,132	531,902	792,371
Recreation Reserves, Parks, Baths, etc		6,123	2,153	29,010	10,231
Administrative		3,821	1,425	26,364	36,404
Miscellaneous	7,482	7,177	13,213	. 105,097	303,258
Miscellaneous Works in Shires and Munic	l-  0.550	01110	00 717	0.010	85 900
palities	9,778	24,116	28,515	6,012	65,880
Total Gross Loan Expenditure of	n				
Works and Services	. 3,029,172	3,138,747	4,554,301	9,102,014	16,241,077
	<u> </u>	<u> </u>			<u>.                                    </u>
REPAYM	ENTS TO LOA	N ACCOUNT.			
	£	£	£.	£	£
Railways	710 004	414,378	81,563	96,687	81,759
Tranways		307,921	6.852	6,554	7,859
Omnibuses	F1 HEQ	450	2,260	2,595 15,916	5,732
Water Supply, Sewerage and Drainage	10 015	18,171	11.244	15,916	29,640
Water Conservation and Irrigation	168,009	51,510	104,860	94(640	69,815
TT 1 among Diseases Titles was ad-	17,264	49,199	52,876	32,242	39,792
Darada Daldasa and Duuta	83,010	50,005	53,889	52,822	730,657
Industrial Undertakings, etc	72,178	83,997	105,037	55,794	45,326
T \ 3 to to \$1 A mark and \$1 to a	25,182	25,104	25,057	706	6,824
Housing	28,989	78,157	640,032	10,767	8,558
Public Buildings, Sites, etc	5,212	2,561	6,051	6,050 .	2,768
Miscellaneous Works in Shires and Munic			l		0.040
palities	17,263	7,541	2,463	5,655	6,249
Unemployment Relief Works, etc	147,328	376,940	198,989	1,823	76,982
Total Repayments	1,617,633	1,415,934	1,291,173	462,251	1,111,961
	1,011,000				,,
Net Loan Expenditure on Works an	d	1 200 050	0.000.300	0.000 769	15 190 114
Services	1,411,539	1,722,813	3,263,128	8,039,768	15,129,116
		<del></del>	-		

#### TOTAL LOAN EXPENDITURE.

A broad view of the field of State capital investment is provided by the following table, which shows the aggregate loan expenditure on principal works and services from 1853 to 1948. It is apparent from the table that a large proportion of the loan expenditure has been devoted to the establishment of assets which provide essential aids to industry and community services, and constitute valuable assets. Normally, these assets return sufficient revenue to pay a large proportion of the interest, sinking fund, etc., on the Public Debt. Some, however, are of a developmental character, and promote the growth of settlement and industry without earning any part of the capital debt charges on money spent in their construction. Transport services (i.e., railways, tramways and omnibuses) are the most important object of investment and account for 48.9 per cent. of the total loan expenditure; water, sewerage and drainage works represent 11.2 per cent., harbours and rivers 6.4 per cent., roads and bridges 5.7 per cent., and water conservation and irrigation, 6 per cent.

Table 677.—Accumulated Loan Expenditure on Works and Services, 1853 to 1948.

Work or Service.	£	Work or Service,	£
Railways	170,649,135	Grain Elevators	5,301,442
Tramways	7,709,277	Land and Agriculture—	
Omnibuses	1,894,624	Closer Settlement and Returned	11,678,689
Water Supply, Sewerage and Drain-		War (1939-1945) Service	11,078,009
age— Metropolitan	28,601,108	Settlement	4,756,359
Hunter District	7,406,159	Advances to Settlers (n.e.i.)	2,252,099
Country Towns	5,257,733	Forests and Crown Lands Improvement	1,172,356
•	0,201,100	Soil Conservation	132,180
Water Conservation and Irrigation— Water and Drainage Trusts, etc	5,129,230	Other	128,247
Murrumbldgee Irrigation Area	10,744,461	Housing	
River Murray Commission	3,017,194	Observatory Hill Resumed Area	944,765
Wyangala Storage Reservoir	1,210,108	Military Hutments	773,000
Keepit Storage Reservoir	775,275	Other	973,944
Glenbawn Dam	355,278	Public Bulldings, Sites, etc.— Courts, Gaols, Police and Fire	
Other	892,951	Courts, Gaols, Police and Fire Stations	1,650,344
		Educational and Scientific	9,881,373
Harbours, Rivers, Wharves, etc.— Sydney Harbour	12,704,119	Hospitals and Charitable	6,678,571
Other	10,945,820	Recreation Reserves, Parks, Baths,	1,000,458
Roads, Bridges and Punts (Harbour	' '	A 31-441	937,757
Bridge £8,070,275)	21,019,249	Other	1,619,729
Circular Quay Improvements	215,073	Miscellaneous Works in Shires and	1,010,120
Industrial Undertakings—		Municipalities	1,834,419
Newcastle Dockyard, Dredge Repairs, etc	1,603,867	Unemployment Relief (including Grants and Repayable Advances to Shlres and Municipalities)	16,278,708
Tourist Bureau and Resorts	191,899	Immigration	569,930
Abattoirs and Meat Distributing	1,766,837	Works transferred to Commonwealth	3,964,468
Electricity	3,056,408	Works in Queensland prior to	, ,
Coal Mines	668,673	Separation	49,855
Brick and Tlle Works	155,747	Other	89,283
Other	807,015	Total Loan Expenditure on Works and Services to 30th June, 1948	368,945,216

At 30th June, 1948, the accumulated loan expenditure on works and services amounted to £368,945,216, and the public debt of the State was £384,079,999. The difference between the two amounts is due to a number of factors, such as the inclusion in the public debt of certain items which are not recorded in the General Loan Account and the redemption of public debt from the sinking fund. The following statement furnishes a reconciliation:—

Table 678.—Reconciliation of Accumulated Loan Expenditure with Public Debt of State, 30th June, 1948.

Accumulated Loan Expenditure from General 1	Loan Ac	count or	£	£
Works and Services (Table 677)			,	368,945,216
Add—Loan Expenditure not shown in Account—	Gener	al Loan		
Commonwealth Advance—Grafton—S	South :	Brisbane		
Railway			1,443,576	
Closer Settlement Debentures			1,144,750	
Advances to Settlers	•••			
Immigration Debentures	•••		329,700	
Revenue Deficiencies—			j l	
То 1927–28			9,693,378	
After 1927-28	•••	•• •••	37,864,373	
Flotation and Negotiation Expenses	:	•• •••	21,925,260	72,521,087
Unexpended Loan Funds				6,449,541
			ĺ	447,915,844
Less-Redemptions of Public Debt from-	_			111,020,012
National Debt Sinking Fund			44,144,889	
70 1 011 70 J		·· ···	4,738,084	
Revenue Accounts			10,164,867	
Debt cancelled by Commonwealth			20,-02,001	
Properties transferred from Sta				
wealth			4,788,005	
				63,835,845
Public Debt at 30th June, 1948 (Tables	680 to	684)		384,079,999

Thus the aggregate State loan expenditure to 30th June, 1948, consists of £371,983,292 expended on works and services of various kinds, £47,557,751 expended to meet revenue deficiencies and £21,925,260 being discounts allowed to lenders and other loan expenses. The total liability in respect of this expenditure, with £6,449,541 unexpended loan money on hand, was covered by loans which have been offset to the extent of £63,835,845 by redemptions of debt from revenue and sinking fund and transfer of certain properties to the Commonwealth.

# LOAN RAISINGS AND COST OF MANAGEMENT, ETC.

Matters relating to the raising of loans by Australian Governments, with certain exceptions, are determined by the Australian Loan Council in terms of the Financial Agreement of 1927, to which reference is made on page 800. Operations incidental to the flotation of loans are conducted by the Commonwealth Government and the loans are secured by the issue of Commonwealth stock, debentures, bonds, etc. Each State is liable to the Commonwealth for the loans raised on its behalf.

At 30th June, 1948, the loans outstanding on account of the State of New South Wales amounted to £384,079,999, of which £233,098,932 was owing in Australia, £139,671,912 in London and £11,309,155 in New York. These loans are represented by Commonwealth securities, except for £21,993,624 owing in London, which is secured by New South Wales securities issued prior to adoption of the Financial Agreement in 1927.

Inscription and management of the Commonwealth securities are conducted by the Commonwealth Government, but the State is required to pay expenses allocated to its share of the total securities issued. Similar services in respect of New South Wales securities are performed by the Westminster Bank Ltd., in London. Commission and other expenses of management are charged to revenue; the amount was £61,672 in 1947-48.

Expenses incidental to the issue of loans, such as underwriting commission, brokerage, advertising, printing, etc., are paid from the proceeds of loans. The amount in 1947-48 is shown on page 786.

The following table shows particulars of loans placed on the market by the Commonwealth Government since 1944 for public subscription in Australia, and the amounts allotted therefrom to New South Wales and other State Governments. These do not include a number of smaller loans raised by direct negotiation with financial institutions and Government instrumentalities. The total amount of loans raised by or on behalf of the State in the last five years is shown in Table 685.

Table 679.—Commonwealth Loans Raised by Public Subscription in Australia.

		Floated	l by Con Aust	ınıonwealth ralian Gover	on Account uments.	of all	Share of Raising A	
Date of Flotation,			_		Amount	of Loan.		
		Interest Rate.	Issue Price.	Year of Maturity.	Conver-	New Raising.	New South Wales.	Other States.
<u></u>		per cent.	£		£000	£000	£000	£000
19 E March	Ş	$2\frac{1}{2}$	100	1948-49	•••	25,710		•••
IN MINION	J	31	100	1950-60	•••	124,839		•••
September	ſ	$2\frac{1}{2}$	100	1948-49	6,999	15,361	•••	•••
Dojitoni,yer	ſ	31	100	1950-60	33,667	98,576		•••
1945—March	اح	$2\frac{1}{2}$	100	1949-50	•••	12,341	]	•••
242011	₹	31	100	1950-61	•••	94,958		•••
August	5	$2\frac{1}{2}$	100	1949-50	13,498		•••	•••
2218(10)	∫	31	100	1950-61	4,495	i i		
September	5	21.	100	1949-50		24,100		•••
Dopumnet	∫	31	100	1950-61		63,129		•••
1946—March	ſ	2	100	1949		17,208		•••
I DEO MAICH	∫	31/4	100	1955-58		61,260		•••
August	ſ	2	100	1949	4,593			•••
Yithan	∫	3 <del>1</del>	100	1955-58	7,879			
October	5	2	100	1949	5,253	4,824	207	380
Ottober	…{	. 31	100	1955–58	9,576	64,947	2,793	5,120
47—April	ſ	2	100	1950		1,457	433	395
*1-Alin	ე	31	100	1956-59		28,366	8,417	7,680
August	•••	31	100	1956-59	27,903			
October		31	100	1956-59	17,721	61,226	15,000	11,600
1948—April		31	100	195760		43,298	12,855	16,178

The new loans raised publicly from October, 1941 to March, 1946, were used by the Commonwealth for war and rehabilitation purposes. In this period works programmes of the State on a restricted scale were financed from Treasury cash resources. The loan issued in October, 1946, marked the resumption of borrowing for State works.

No new loan money has been raised overseas by the State since 1931, and in several conversions of London loans maturing since 1944-45 portion of the liability has been repatriated to Australia.

Moneys obtained by the Commonwealth by the sale of War Savings Certificates (Savings Certificates from June, 1946), are not included in the table. The issue of these certificates, begun in March, 1940, was discontinued on 1st February, 1949. The certificates may be cashed on demand and bear tax-free interest which is payable on redemption. On issues prior to 1st March, 1947, the interest rate is 3½ per cent. per annum if held for the maximum term of seven years; subsequent issues bear interest at 2  $\frac{5}{6}$  per cent. for a maximum term of five years. At maturity after seven years the earlier issues may be held for a further five years at the reduced interest rate of  $2\frac{5}{6}$  per cent. The maximum permissable investment in certificates is £450 at purchase price. The net amount raised in Australia (i.e., sales less repayments) was £4,848,823 in 1946-47 and £4,956,787 in 1947-48, and £64,482,698 to 30th June, 1948.

# THE PUBLIC DEBT.

The public debt of New South Wales had its origin in 1841, when, or 28th December, the first loan amounting to £49,000 was offered locally. The first overseas loan was raised in London in 1854.

The growth of the debt to 1895 is described in earlier issues of the Year Book and subsequent movements are shown in the following table:—

At 30th June,	Long Term Debt.	Short Term Debt.	Total Public Debt.	Per Head of Population.
	£	£	£	£ s. d.
1901	67,361,246	•••	67,361,246	49 6 11
1906	85,641,734	•••	85,641,734	57 13 10
1911	95,523,926		95,523,926	57 9 9
1916	130,544,040	•••	130,544,040	68 19 9
1921	175,084,911		175,084,911	83 4 9
1926	222,148,707		222,148,707	94 15 9
1931	268,268,698	19,037,033	287,305,731	112 9 5
1936	306,137,718	40,570,276	346,707,994	130 0 10
1939	316,983,114	42,895,276	359,878,390	130 18 5
1940	322,230,262	42,095,276	364,325,538	131 3 6
1941	327,084,672	41,890,276	368,974,948	131 16 10
1942	322,884,037	43,618,776	366,502,813	129 11 0
1943	321,083,514	39,169,776	360,253,290	$126 \ 11 \ 0$
1944	320,045,148	31,925,876	351,971,024	121 18 4
1945	345,255,104	9,795,876	355,050,980	121 12 10
1946	343,444,060	9,795,876	353,239,936	119 18 9
1947	352,231,754	9,795,876	362,027,630	$121 \ 5 \ 3$
1948	374,284,123	9,795,876	384,079,999	126 19 1

Table 680.—Public Debt of New South Wales.\*

Includes oversea debt at book values, unadjusted for changes in relationship between Australian and overseas currencies, see page 793.

The decrease in the public debt after 1941 was due to redemptions from Sinking Fund, the temporary retirement of short term debt, in the form of Treasury Bills, permitted by a substantial growth of Treasury cash balances and the cessation, owing to war conditions, of borrowing for public works. The increase in 1944-45 resulted from the re-issue of temporarily retired Treasury Bills under a funding arrangement by which Treasury Bills totalling £26,120,000 were converted into long-term debentures, these being taken up by the Commonwealth Bank. Then it became the practice to deposit surplus Treasury cash balances with the Commonwealth Bank, instead of retiring Treasury Bills as formerly, and the amount so deposited was £7,960,000 at 30th June, 1945. Borrowing for public works was resumed in 1946-47, and in 1947-48 approximately £9,000,000 of new debt was incurred to replace general cash balances which had been used in financing normal loan works during the war years.

The nominal amount of debt, as quoted in these tables, has been increased on several occasions by change in the currency unit at which liability is taken to account. This occurs when London maturities (expressed in sterling) are repaid from loans raised in Australia (expressed in Australian currency). Nominal increases in the debt from this cause amounted to £1,496,169 in 1944-45, £275,772 in 1945-46 and £761,199 in 1947-48.

In considering the rate of growth of the debt, attention should be paid to variations in the purchasing power of the money expended, the steady growth of population throughout the period, the economic development of the State, as measured by the growth of its wealth, income and productiveness, and the earning power of the works constructed from loans.

Furthermore, comparisons of the rate of growth of the State debt with that of other States of Australia should take into account the differences in the distribution of governmental functions as between the central and local governments and the inclusion or non-inclusion of the capital debts of public utilities controlled by governmental authority.

Similarly, in making international comparisons care should be taken to allow for differences in the distribution of debt as between central, provincial and local governments and the existence or otherwise of reproductive assets acquired from loan funds.

# DOMICILE OF PUBLIC DEBT.

For many years the London money market was the principal source of New South Wales loan moneys. Loan funds amounting to approximately £14,000,000 were obtained in New York in 1926-27 and 1927-28.

Since 1931 the State's requirements for new loan capital have been met from local resources. The total of oversea debt has therefore declined as a result of redemptions through the sinking fund and repayment from locally raised loans of maturing London loans totalling £9,982,820 between 1944-45 and 1947-48.

The following table shows the amount of State public debt outstanding in Australia, London and New York at quinquennial intervals from 1901 to 1936 and annually from 1939.

Table 681.—Public Debt of New South Wales, Place of Domicile.

,		Public Debt Ou	ıtstanding—		Propo	ortion.
30th June.	Australia.	Ove	rsea.	Total	Australia.	Oversea.
	1	London.	New York.	Public Debt.	Australia.	Oversea.
	£ (Aust.)	£ (Stg.)	£*	£	Per cent.	Per cent.
1901	12,690,796	54,670,450	•••	67,361,246	18.84	81.16
1906	19,726,884	65,914,850	•••	85,641,734	23.03	76.97
1911 -	29,968,321	65,555,605	•••	95,523,926	31.37	68-63
1916	<b>43,3</b> 90,452	87,153,588	•••	130,544,040	33.24	66.76
1921	66,667,308	108,417,603	•••	175,084,911	38.08	61.92
1926	81,826,091	140,322,616	•••	222,148,707	36.83	63.17
1931	107,501,666	165,978,441	13,825,624	287,305,731	37.42	62.58
1936	172,099,601	161,437,120	13,171,273	346,707,994	49.64	50.36
1939	188,413,400	158,751,952	12,713,038	359,878,390	52.35	47.65
1940	193,088,910	158,697,020	12,539,608	364,325,538	53.00	47.00
1941	197,961,784	158,696,920	12,316,244	368,974,948	53.65	46.35
1942	198,914,999	155,517,949	12,069,865	366,502,813	54.27	45.73
1943	194,047,014	154,342,616	11,863,660	360,253,290	53.86	46.14
1944	186,888,244	153,413,716	11,669,064	351,971,024	53.10	46.90
1945	197,566,662	145,922,107	11,562,211	355,050,980	55.64	44.36
1946	197,198,139	144,675,312	11,366,485	353,239,936	55-83	44.17
1947	205,914,118	144,675,312	11,438,200	362,027,630	56.88	43.12
1948	233,098,932	139,671,912	11,309,155	384,079,999	60.69	39·31

<sup>\*</sup> Repayable in "Dollars"-converted at rate of 4.8665 dollars to £1.

The public debt as shown in Tables 680 to 684 represents the amounts used for book-keeping purposes, without adjustment for changes in the value of Australian currency relatively to English and American currencies which have been considerable since 1929. The London debt, therefore, represents the amount repayable in sterling, and the New York debt represents the amount repayable in dollars converted at the rate of 4.8665 dollars to £1.

DOMICILE, AND RATES OF INTEREST ON PUBLIC DEBT.

The following tables show the amount of New South Wales public debt in the various registers and the rates of interest as at 30th June, 1948:—

Table 682.—Public Debt of New South Wales at 30th June, 1948.

Domicile and Rates of Interest.

Ditama	Públic	Debt Outsta	nding.	Total.	Annual
Rate per cent.	Australia.	London.	New York.	Public Debt.	Interest.
Short Term Securities—	£(Aust.)	£ (Stg.)	£*	£	£
2 5 0	.,. 2(1145,0.)	9,795,876		9,795,876	. 220,407
Long Term Securities—5.00		1,000		1,000	50
4 0 0	26,758,739	19,556,842		46,315,581	1,852,623
3 17 6 3 15 0 3 12 6 3 10 0	23,028,350 16,197,890 1,931,000 	7,607,632  33,477,901	3,406,555	23,028,350 23,805,522 1,931,000 36,884,456	892,349 892,707 69,999 1,290,956
Total £3 10s, and under	£4 41,157,240	41,085,533	3,406,555	85,649,328	3,146,011
3 9 9 3 7 6 3 5 0 3 2 6 3 2 0 3 0 0	19,000 7,262,870 61,173,266 43,113,100 473,010 12,238,752	 1,867,622  47,066,400	3,857,804 4,044,796 	19,000 11,120,674 67,085,684 43,113,100 473,010 59,305,152	663 375,323 2,180,285 1,347,284 14,663 1,779,155
Total, £3 and under £3 I	0s. 124,279,998	48,934,022	7,902,600	181,116,620	5,697,373
2 15       0           2 14:       3           2 10       0           2 6       6           2 0       0	291,421 13,645,760 645,653 1,315,000	10,864,600  9,432,089 		10,864,600 291,421 23,077,849 645,653 1,315,000	298,776 7,905 576,946 15,011 26,300
Total, £2 and under £3	15,897,834	20,296,689		36,194,523	924,938
1 0 0 Matured	25,002,536 2,585	1,950		25,002,536 4,535	250,025
Total Long Term	233,098,932	129,876,036	11,309,155	374,284,123	11;871,020
Total Public Debt	233,098,932	139,671,912	11,309,155	384,079,999	12,091,427

<sup>\*</sup> Repayable in " Dollars "—converted at the rate of 4.8665 dollars to £1.

The debt of £25,002,536 at 1 per cent. interest consists of debentures issued to the Commonwealth Bank in 1944,45 for the funding of deficiency Treasury Bills which bore the same interest rate. The initial debenture issue, £26,120,000, has been reduced by annual redemptions through the Sinking Fund totalling £1,117,464.

The amount of annual interest as shown in the table represented an average rate of 3.15 per cent, on the face value of the debt at 30th June, 1948, and the corresponding rates on the debt on the several registers were:

Australia 3.12 per cent., London 3.17 per cent. and New York 3.37 per cent.

Rates thus calculated take no account of the fact that portion of the debt has been issued at a discount; consequently they understate the actual interest charge on cash proceeds of the debt. Nevertheless, a comparison of the average nominal rates of interest gives some indication of the benefits to the State finances of the general decline in interest rates since: 1931.

Table 683.—Public Debt of New South Wales, Annual Interest and Average Nominal Interest Rates.

Debt Outstanding.		1931.	1932.	1939.	1946.	1947.	1948.
-							
Australia-		,			1	1	ļ
Debt	£000	107,502	127,143	188,413	197,198	205,914	233,099
Annual Interest	£000	5,741	5,043	6,418	6,133	6,451	7,280
Average Rate p	er cent.	5.34	3.97	3.41	3.11	3.13	3:12
London-	•						
Debt	£በበበ	165,978	164,972	158,752	144,675	144,676	139,672
Annual Interest	£000		7,837	5.901	5.188	4,983	4,430
	per cent.	4.72	4.75	3.72	3.59	3.44	3.17
11.01460 21400 11.	E.O						
New York-							
Debt	£000	13,826	13,608	12,713	11,367	11,438	11,309
Annual Interest	£000	672	661	616	549	385	381
Average Rate	per cent.	4.86	4.86	4.85	4.83	3.37	3.37
Total—			· · · · · ·				
Debt	£000	287,306	305,723	3594878	353,240	362,028	384,080
Annual Interest	£000		13,541	12,935	11,870	11,819	12,091
	per cent.		4.43	3.59	3.36	3.26	3.15
11. 02.080 11000 111	1,02 001101	1.00	10	500		520	010

Though the public debt increased by one-third between 1931 and 1948, annual interest thereon decreased by 15 per cent. with the decline in the average interest rate from 4.96 per cent. to 3.15 per cent.

Ordinarily the interest bill of the State is slow to reflect changes in the level of market rates, which take effect gradually as new loans and conversions of maturing loans to which they apply, increase in ratio to the total debt. The substantial decline in the average rate in 1931-32 was a result of the general conversion of debt registered in Australia in accordance with plans adopted in the depression to achieve a reduction of 22½ per cent. in interest rates generally. Subsequent decreases were due in part to the growth of short-term debt to finance revenue deficiencies, on which the rate of interest was reduced in stages from 4 per cent. in 1932 to 1 per cent. in 1945. The yields on Government securities sold on the Stock Exchange in Australia and the rates of discount on Treasury Bills are shown on pages 827 and 828 of this volume.

#### DOMICILE AND TERM OF PUBLIC DEBT.

The dates of repayment of the debt extend to 1983 and the amounts falling due for redemption in successive years vary considerably. This is

seen from the following table, which shows the amount outstanding as at 30th June, 1948, in Australia, in London and in New York, according to the latest due dates for repayment:—

Table 684.—Public Debt of New South Wales, at 30th June, 1948, Domicile and Dates of Maturity.

Year of Maturity	Pu	blic Debt Outstand	ing—	Total	
(ended 30th June),	Australia.	London,	New York,	Public Debt.	
	£000 (Aust.).	£000 (stg.).	£000*	£000	
Short Term Debt		9,796		9,796	
Long Term Debt—					
1949	16,541	2,741		19,282	
1950	22,261	•••		22,261	
1951	6,509	11,707	•••	18,216	
1952	10,281			10,281	
1953	378	11,790		12,168	
1954	4,900	11,018		15,918	
1955	13,373			13,373	
1956	14.353			14,353	
1957	12,249		4,045	16,294	
1958	22,100	20,141		42,241	
1959	20,884	3,829		24,713	
1960	37,295			37,295₁	
1961–1965	28,241	37,209	3,858	69,308	
1966–1970	3,601	1,868	3,406	8,875	
1971–1975	4,488	29,570	l	34,058	
1976–1980	5,593	•••		5,593	
1981–1983	3,614			3,614	
interminable	363			363	
Permanent	1	1	٠	-2	
Government Option	6,071			6,071	
Overdue	3	2		5	
Total, Long Term	233,099	129,876	11,309	374,284	
Total Public Debt	233,099	139,672	11,309	384,080	

<sup>\*</sup> Repayable in "Dollars"-converted at rate of 4.8665 dollars to £1,

The loans have been classified according to the latest date of maturity, but some of them are redeemable earlier at the Government's option, subject to notice ranging up to twelve months being given. The loans outstanding at 30th June, 1948, included £38,817,405 which had passed the earliest maturity date and £6,070,723 issued on terms placing redemption within the option of the Government. These loans comprise £8,846,899 in Australia, £24,732,074 in London and £11,309,155 in New York.

The following table indicates the movements which have taken place in the public debt of New South Wales during the last five years. It shows the conversion loans and new loans raised, including those arranged privately as well as those publicly subscribed shown in Table 679; also redemptions from conversions, sinking fund and the loan account.

Table 685.—Transactions on Public Debt of New South Wales.

		Year	ended 30th Ju	ne	
Particulars,	1944.	1945.	1946.	1947.	1948.
	£ Long Te	£ RM LOANS RAIS	£	£	£
	-			1	
Conversion or Renewal Loans- Overseas-					
Cash subscribed and Converted Stocks			15 644 000	01 070 0074	10 677 110
Discounts Australia—			15,644,922 281,100	31,678,897† 90,946	12,677,442 193,058
Cash Subscribed and Converted Stocks*	6,734,610	14,928,480a	3,395,360 <i>b</i>	1,868,000	9,204,100
Total Conversions	6,734,610	14,928,480	19,321,382	33,637,843	22,074,600
New Loans—		•			
Australia— Cash Subscribed	105,000	26,120,000‡		11,850,000	25,490,000
Total New Loans	105,000	26,120,000		11,850,000	25,490,000
Total Long Term Loans Raised	6,839,610	41,048,480	19,321,382	45,487,843	47,564,600
	Long T	ERM LOANS RE	PAID.	<u>-</u>	
From Conversion and Renewal					
Loans— Overseas		5,896,231	16,731,709	31,515,385	15,677,243
Australia From Sinking Fund—	6,734,610	7,536,080	2,032,800	1,868,000	5,443,100
Overseas Australia	379,596 763,770	$1,702,231 \\ 703,982$	636,833 1,731,084	182,743 3,134,021	2,325,703 2,066,180
From Loan Accounts					5
Total Long Term Loans Repaid	7,877,976	15,838,524	21,132,426	36,700,149	25,512,231
		ET INCREASE.	I		
In Long Term Debt (- In Short Term Debt (-	-) 1,038,366 -) 7,243,900	25,209,956 (—) 22,130,000	() 1,811,044	8,787,694	22,052,369
In Public Debt (-	-) 8,282,266	3,079,956	(—) 1,811,044	8,787,694	22,052,369

Includes loans raised in Australia: (a) £7,392,400, (b) £1,382,560 and (c) £3,761,000 for conversion of London loans, viz, £ Stg. 5,896,231, £ Stg. 1,086,787 and £ Stg. 2,099,801.

# LOANS GUARANTEED BY THE STATE.

In addition to liability for its own loans, the State has guaranteed, in terms of various Acts, the loans and overdrafts of certain corporate bodies and institutions, etc., engaged, as a rule, in the promotion of public welfare and development. The guarantees extend to all loans issued by certain corporate bodies, the issue of the loans being subject to the Governor's approval. In other cases, with minor exceptions, the guarantee is given by the Treasurer with the Governor's approval and on the recommendation of the appropriate administrative authority.

The loans and overdrafts under State guarantee as at 30th June, 1948, are summarised in the following statement. The amounts shown do not indicate the net amount of the contingent liability of the State, because sinking funds for repayment have been accumulated in respect of some

<sup>†</sup> Includes new money, £163,512, towards expenses of conversion in New York.

<sup>‡</sup> Issued at 1 per cent. for funding Short Term Debt.

of the loans. Furthermore, the amounts shown under the Government Guarantees Act, 1934-1948, represent the limit of overdrafts and not the amount outstanding.

Table 686 .- Loans Guaranteed by State, 30th June, 1948.

Loans Issued by—	£	£
Metropolitan Water, Sewerage and Drainage Board	33,051,701	
Hunter District Water Board	4,118,000	
Broken Hill Water Board	542,612	
Rural Bank of New South Wales	20,121,921	
Public Hospitals	1,916,118	
Municipal, Shire, and County Councils	736,446	
Fire Commissioners	27,500	
_	<del></del>	60,514,298
Overdrafts and Advances (under Government Guarantees Act, 1934–1948—Limit of Guarantee)—		
	2;000	
1934-1948—Limit of Guarantee)—	2;000 38,463,325	
1934–1948—Limit of Guarantee)— Hospitals	•	
1934–1948—Limit of Guarantee)—  Hospitals  Co-operative Building Societies	38,463,325	30 465 435.
1934–1948—Limit of Guarantee)— Hospitals Co-operative Building Societies Other Co-operative Societies, Marketing Boards, etc Other	38,463,325 994,860	39,465,435
1934–1948—Limit of Guarantee)—  Hospitals Co-operative Building Societies Other Co-operative Societies, Marketing Boards, etc	38,463,325 994,860	39,465,435 113,158

The loans shown for the Metropolitan Water, Sewerage and Drainage Board include £stg.2,000,000 repayable in London and £1,2,2,7,851 repayable in New York (converted at the rate of \$4.8665 to the £1).

#### THE INTEREST BILL OF THE STATE.

The amount of annual interest on the public debt of New South Wales as at 30th June, 1948 is shown in Table 682 as £12,091,427. This amount is calculated to represent a full year's interest at the rates applicable to the various loans outstanding at that date. It differs, therefore, from the amount of interest actually paid which embodies the effects of changes in the composition of the loan debt during the year, and includes interest paid on temporary deposits lodged with the Government.

The amount of interest actually paid during the year ended 30th June, 1948 was £12,159,598, viz., £11,744,797 on Debentures and Funded Stocks, £220,634 on Treasury Bills, £194,167 on moneys held temporarily by the Government. The amount paid overseas was £5,350,893, viz., £4,983,079 in London and £367,814 in New York; and £6,808,705 was paid in Australia.

The amounts of overseas interest payments are recorded for book-keeping purposes in the same terms as the amounts of overseas debt, as explained on page 793. An additional charge, therefore, is incurred in acquiring, at current rates, the sterling and dollar funds with which to pay interest in London and New York. The additional charge is taken into account as exchange and amounted to £1,414,113 in the year ended 30th June, 1948.

The following table shows the amount of interest actually paid on the public debt in Australia, London and New York at intervals since 1901; also the interest paid on moneys temporarily held by the Government (i.e., bank overdrafts and Special Deposits accounts) and, since 1931, the cost of exchange on overseas interest payments.

Table 687.—Interest and Exchange on Public Debt and Temporary Advances, Amount Paid

Year ended 30th June.		Interest P	aid on—	m / 1	Exchange	Total	
	I	Public Debt.		Moneys in Temporary Possession	Total Interest Paid.	Overseas Interest Payments,	Interest and Exchange
	Australia.	London.	New York.	of Govern- ment.		Taymosos,	
	£	£	£	£	£	£	£
1901	355,354	1,991,499		151,604	2,498,457		2,498,457
1911	914,967	2,321,489		81,001	3,317,457		3,317,457
1921	2,690,626	4,422,115		416,691	7,529,432	***	7,529,432
1931	5,517,620	7,256,883	583,567	768,651	14,126,721	536,645	14,663,366
1936	5,594,412	6,643,050	640,785	278,511	13,156,758	1,846,921	15,003,679
1939	6,279,857	5,884,254	621,922	318,921	13,104,954	1,666,828	14,771,782
1940	6,591,090	5,863,608	614,016	349,582	13,418,296	1,781,816	15,200,112
1941	6.588,214	5,875,452	604,389	346,566	13,414,621	1,801,558	15,216,179
1942	6,594,663	5,840,851	592,622	299,140	13,327,276	1,785,609	15,112,885
1943	6,415,918	5,712,759	581,354	321,404	13,031,435	1,747,334	14,778,769
1944	6,221,591	5,767,198	573,314	287,376	12,849,479	1,756,858	14,606,337
1945	6,117,148	5,637,150	560,954	264,774	12,580,026	1,718,235	14,298,261
1946	6,203,777	5,483,327	557,387	257,187	12,501,678	1,640,060	14,141,738
1947	6,210,397	5,137,837	461,089	244,585	12,053,908	1,595,712	13,649,620
1948	6,614,538	4,983,079	367,814	194,167	12,159,598	1,414,113	13,573,711

A proportion of the interest and of the exchange on interest payments overseas is allocated to the various business undertakings and other activities that have been provided with capital from State loan funds and are conducted as separate enterprises or accounts, and the balance is paid from the Consolidated Revenue Fund. Payments by the undertakings in respect of the current year's charges amounted in 1946-47 to £7,113,810 for interest and £924,762 for exchange, and in 1947-48 to £7,030,461 and £826,765, respectively. In addition a considerable amount of interest, etc., accrued to the Consolidated Revenue Fund as revenue from various other objects on which loan moneys have been expended. Payments of interest and exchange by the undertakings in the last two years included the following:—

Table 688.—Public Debt, Interest and Exchange Payments by State Undertakings.

	1946	3–47.	1947-48.		
Undertakings, etc.	Interest.	Exchange on Interest.	Interest.	Exchange on Interest.	
-	£	£	£	£	
Railways	$5,\!125,\!956$	689,620	5,145,000	648,000	
Tramways and Motor Omnibuses	236,522	31,560	159,886	l <u>.</u> .	
Closer Settlement Fund	231,840		230,014	l '	
Metropolitan Water, Sewerage and		1			
Drainage Board	447,192	59,575	443,089	54,975	
Hunter District Water Board	110,500	14,746	109,562	13,700	
Maritime Services Board (Sydney			,	,	
Harbour)	391,000	52,000	383,662	48,000	
Sydney Harbour Bridge	265,000	35,300	256,662	32,000	
Main Roads Department	139,569	17,849	121,274	15,287	
Southern Electricity Supply	101,000	13,500	97,481	13,284	
	ı		<u> </u>		

A classification of the public debt of New South Wales as at 30th June, 1948, according to the nominal rates of interest payable, is shown in Table 682.

The average "effective rates of interest" quoted below are calculated on the basis of the amount of interest actually paid and take into account changes in the composition of the debt during each year by reason of the flotation of new loans, conversion of old loans and redemptions from sinking funds, etc. The rate was 3.66 per cent. in 1900-01, and prior to 1946-47 the lowest rate since that year was 3.489 per cent. in 1912-13. During the next ten years there was a gradual rise to 5.1606 per cent. in 1922-23 and the rate remained above 5 per cent. until 1931-32, the peak being 5.172 per cent. in 1929-30. Variations since 1928-29 are shown below:—

Table	689.—Interest	on	Public	Debt	of	New	South	Wales,	Average
			Effec	tive R	ate	s.			

Year ended 30th June.	Rate Per cent.	Year ended 30th June.	Rate. Per cent.	Year ended 30th June.	Rate. Per cent.
1929	5.14062	1936	<b>3</b> ⋅81666	1943	3.59375
1930	5.17204	1937	3.70787	1944	3.61055
1931	5.14421	1938	3.66774	1945	3.60326
1932	4.85673	1939	3.67296	1946	<b>3</b> ·50954
1933	4.37804	1940	3.67829	1947	3.44141
1934	4.12554	1941	3.66042	1948	3.36638
1935	3.92041	1942	3.62519		

# REDEMPTIONS AND SINKING FUNDS.

An account of the debt redemptions and sinking funds of New South Wales prior to the transfer to the National Debt Commission in terms of the Financial Agreement, was published on pages 170 and 171 of the Official Year Book for 1929-30. The present sinking fund is described below.

# FINANCIAL RELATIONSHIPS BETWEEN COMMONWEALTH AND STATES.

The history of the financial relationships existing between the Commonwealth and States since federation in 1901 has been sketched in earlier issues of this Year Book.

# FINANCIAL AGREEMENT, 1927.

The financial agreement between the Commonwealth and States was brought into operation as from 1st July, 1927. The provisions were outlined on page 682 of the 1930-31 Year Book, and full details are given in the Commonwealth Year Book, 1938, on pages 21 to 33.

In terms of the agreement the Australian Loan Council was created to co-ordinate public borrowing. All borrowings by the States are arranged by the Commonwealth, in accordance with the decisions of the Council, which consists of a Minister of the Commonwealth and of each State. The Council determines the amount, rates and conditions of loans to be raised after consideration of the annual programmes submitted by the Commonwealth and by each State. In June, 1939, by common consent, the borrowings of local governing and semi-Governmental authorities were brought within the purview of the Loan Council.

On 1st July, 1929, the Commonwealth took over the debts of the States, and assumed, as between the Commonwealth and States, the liabilities of the States to bondholders. The Commonwealth also relieved the States of the liability of principal, interest and sinking fund on an amount of debt equal to the value of properties transferred to the Commonwealth after federation.

The Commonwealth, as agent for the States, has agreed to pay to bond-holders interest due on the public debt of the States and, for a period of fifty-eight years from the 1st July, 1927, to contribute £7,584,912 per annum towards the interest, the States to pay the balance to the Commonwealth. After this period the States will pay to the Commonwealth the whole of the interest due. The contribution by the Commonwealth is equal to the amount paid by the Commonwealth to the States in 1926-27, at the rate of 25s. per head of population, and the contribution to New South Wales is £2,917,411 per annum.

#### NATIONAL DEBT SINKING FUND.

A national debt sinking fund was established in terms of the financial agreement, and is controlled by the National Debt Commission. The annual payments to the fund on account of State debts are contributed partly by the Commonwealth and partly by the States. The contributions in respect of New South Wales debt commenced as from 1st July, 1928, one year after the commencing date of other States.

Contributions in respect of the net debt outstanding on 1st July, 1927, are payable for a period of fifty-eight years at the rate of 7s. 6d. per cent. per annum, the Commonwealth contributing 2s. 6d. per cent. and the State 5s. per cent. The rate on new loans raised after 1st July, 1927, other than revenue deficiency loans, is 10s. per cent. for a period of fifty-three years, of which the Commonwealth pays 5s. and the State 5s. The State's contribution may be increased to shorten the period of repayment of loans expended on wasting assets. Contributions on special revenue deficiency loans incurred during the depression were at the rate of 10s. per cent. shared equally by the Commonwealth and State until 30th June, 1944, when the rate was increased to 20s. per cent. (Commonwealth 5s. and State 15s.) to provide for repayment in thirty-nine years. On other loans raised to meet revenue deficiencies, annual contributions at a rate not less than 4 per cent. are payable by the State. Loan securities redeemed and repurchased by the sinking fund are cancelled and the State is required to pay interest at the rate of 4½ per cent. per annum on the cancelled securities, in addition to the contributions stated above. Additional contributions are paid by the State to recoup the sinking fund for appropriations from the fund to meet discounts on conversion loans; the contribution in respect of each conversion loan is spread over the currency of the loan.

The operations of the National Debt Sinking Fund in regard to the debts of the State of New South Wales during each of the last eleven years, and the aggregate since 1st July, 1928, are shown below:—

Table 690.—National Debt Sinking Fund, Transactions on Account of New South Wales.

				:	Receip	ts.				
		Contributions by—								
Year: ended	;	, St	ate o	f New	South	Wale	s	1	Interest.	_ Total
	Common- wealth.	On Los Issued		4½% Canc Secur			Cotal v South Vales.	, -		Receipts.
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	£ 628,401 635,91: 657,30: 664,64: 674,65: 678,30: 670,18: 667,10: 671,04: 704,45:	3 1,081, 4 1,171, 9 1,247, 2 1,314, 3 1,340, 4 1,426, 7 1,582, 1 1,582, 1 1,438, 7 1,446,	877 075 525 615 663 078 241 297 610 419	56 68 80 88 98 1,12 1,26 1,36 1,44 1,48	£ 18,154 16,232 106,852 106,118 19,653 24,258 12,975 11,772 16,412 19,305 19,305 10,291	1, 1, 2, 2, 2, 2, 2, 2, 2, 3,	£ 644,785 778,109 971,927 143,643 304,268 464,921 689,053 944,013 983,709 937,915 066,710 538,090	44,786 14,786,78,109 11,71,927 15,48,643 13,04,268 18,64,921 14,93,9553 7,44,013 44,013 45,66,710 11,		£ 2,287,476; 2,425,677 2,644,472; 2,822,060 2,997,188; 3,167,261 3,641,762 3,666,894 3,782,649
Total, 1929 to 1948		22,112,	232	14,42	19,808	30,	538,090		280,011	48,952,611
		of Securitie	Payments.  f Securities Repurchased and ned. (Australian Currency.)						Value of S ased and I	
	Australia.	London:	Nev	v York.	Tot	al.	Australi	a.	London,	New York.
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	\$ 468,159 1,537,858 1,970,382 541,220 557,127 1,567,955 763,785 2,673,906 1,729,638 3,148,714 2,066,758	£ 2,096,130 793,902 56,646 4,047,167 1,747,335 1,165,620 2,000,204 552,686 2,754,208	25 22 27 28 10 28 29	£ 86,472 58,960 17,028 14,905 79,512 72,706 88,170 81,121 95,880 76,958 78,054	2,750 2,590 2,244 756 4,883 3,587 2,217 4,835 2,578 3,420 4,999	,761 ,720 ,056 ,125 ,806 ,996 ,575 ,231 ,204 ,672	£ 408,16 1,536,18 1,966,17 541,04 554,78 1,567,98 763,77 2,673,98 1,731,08 3,134,02 2,066,18	50 15 15 30 30 70 32 34	£ stg. 1,720,608 694,318 48,832 3,228,050 1,394,125 928,900 1,595,378 441,107 2,196,657	£** 151,135 206,925 173,481 223,364 246,378 206,206 106,858 195,726 182,743 129,045
Total, 1929 to 1948	22,182,250	26,53	9;668		48,721	,918	22,138,90	08	18,830,738	3,175,243

<sup>\*</sup> Face value of securities in Dollars converted at \$4.8665 to £1.

The payments shown in the table for repurchases and redemptions of securities are expressed in terms of Australian currency, the exchange on overseas remittances being included in the net cost of securities acquired in London and New York.

The face value of securities repurchased and redeemed corresponds with the value at which the securities were included in the statement of public debt (Tables 680 to 684), as described on page 793. During the twenty-years the sinking fund has been in operation the average price in Australian currency paid for £100 face value of securities repurchased and redeemed was £100 3s. 11d. in Australia, £120 12s. in London and New York, and £110 7s. 4d. in the three centres. In 1947-48 the average

price per £100 face value was £100 0s. 7d. in Australia, £125 7s. 5d. in London, £137 19s. 7d. in New York, and the general average was £113 16s. 6d. The balance at credit of the sinking fund as at 30th June, 1948 was £230,693. The following table indicates the source of contributions by New South Wales:—

Table 691.—National Debt Sinking Fund, Source of Contributions by New South Wales.

Source,	Contribut	Contributions in respect of year—			
gomee,	1945-46.	1946-47.	1947-48.	to 1947-48.	
Railways	1,716 88,200 95,375 23,400 4,538 55,450  97,000	\$ 1,480,295 59,983 2,360 89,992 98,000 23,974 5,485 57,210 97,500	\$ 1,330,000 2,117 91,356 100,284 24,290 4,850 56,561 96,353	£ 10,083,864 778,347 25,205 1,222,998 1,664,636 371,880 189,914 625,201 404,492 1,233,813	
Southern Electricity Supply South-West Tablelands Water Supply Consolidated Revenue Fund Other	1,250,222	15,900 4,804 1,002,087 325	16,039  1,343,203 1,657	164,137 27,626 19,693,068 52,908	
Total	2,983,709	2,937,915	3,066,710	36,538,089	

Over the twenty years 53.9 per cent. of the State contributions were paid from the Consolidated Revenue Fund, 27.6 per cent. by the railways and 18.5 per cent. from other accounts.

# PRIVATE FINANCE

#### WAR-TIME AND TRANSITIONAL CONTROLS.

During the war years, 1939 to 1945, far-reaching economic controls were exercised by regulations made under the National Security Act, 1939. These included the regulation of banking and control over oversea exchange and monetary dealings, the licensing of import and export transactions, the rationing of goods, and control over capital issues, real estate and stock market transactions, interest rates, building activity, prices, rents and wages. Reference to the war-time regulations is made on pages 289 to 291 of the 50th edition of the Year Book.

Certain of these controls have been terminated or transferred to State administration. Control over stock exchange transactions ceased as from 1st January, 1947. The controls passed to the States include those over building activity late in 1945, those over real estate transactions and rents in August, 1948, and those over prices in September, 1948. Certain other controls were replaced by post-war legislation, such as those over banking and oversea exchange, which now are applied under the Banking Act, 1945, or under existing statutory powers, as, for example, those of the Department of Trade and Customs over external trade.

The National Security (Economic Organisation) Regulations, Part IV, which regulate interest rates, and the Capital Issues Regulations may be continued in operation to 31st December, 1949, under the Defence (Transitional Provisions) Act, 1946-1948. Under the regulations first-mentioned the Commonwealth Bank, subject to direction by the Commonwealth Treasurer, has authority to fix maximum interest rates on loans, advances, deposits, hire purchases or instalment purchases, cash orders, or other forms of debt. Particulars of rates fixed in terms of the regulations are shown later in this chapter.

The Capital Issues Regulations were formulated in October, 1939, to establish control over the issue of capital by companies, borrowing by the issue of securities and mortgages and charges upon property, and the acceptance of deposits. Exemptions from the regulations include advances made and deposits accepted by banks, declared pastoral companies, and building societies.

The regulations have been amended from time to time; those in force since December, 1946, provide that the consent of the Treasurer must be obtained before a company may issue capital, give a mortgage or charge or accept deposits exceeding £25,000 in the aggregate in a period of two years. No issue of preference capital, or of bonus shares from a revaluation of assets, may be made without the Treasurer's approval. The maximum amount which a person may borrow by way of mortgage or charge in a year without obtaining the Treasurer's consent is £5,000.

#### CURRENCY.

Currency matters in Australia are under the supervision of the Commonwealth Government.

#### Coinage.

Australian coins are legal tender in Australia as follows, viz., gold for the payment of any amount, silver up to forty shillings, and bronze up to one shilling. Imperial coins also are legal tender for these amounts, except silver coins minted since 31st March, 1920, but few Imperial coins are in circulation in Australia. Australian notes, which have replaced gold coins as units of internal currency, are legal tender for any amount.

Branches of the Royal Mint are in operation in Melbourne (Victoria) and in Perth (Western Australia). The Commonwealth Coinage Act, 1909-1947, empowers the Federal Treasurer to make and issue silver and bronze coins of specified denominations. The denominations of silver coins are two shillings, one shilling, sixpence and threepence, and of bronze coins one penny and one halfpenny. Crown pieces, in value equivalent to five shillings, were issued for the first time in 1937, but are not in general circulation.

The standard fineness of gold coins as fixed by the Coinage Act is  $\frac{1}{12}$  fine gold,  $\frac{1}{12}$  alloy; thus standard or sovereign gold has a fineness of 22 carats, and the standard weight of a soverign is 123.27447 grains. For silver coins the standard fineness was fixed at  $\frac{37}{40}$  fine silver,  $\frac{3}{40}$  alloy, until 8th July, 1947, when it was altered to one-half fine silver and one-half alloy. Bronze coins are of mixed metal—copper, tin and zinc, and since 1943 the issue of bronze coins containing copper and zinc only has been permitted.

# PAPER CURRENCY.

Prior to 1910, the right to issue paper currency in New South Wales was vested in private banking institutions by virtue of Royal Charter or special Act of Parliament, and a tax of 2 per cent. per annum was imposed by the State on the bank notes current. In 1910 the Commonwealth Parliament authorised the issue of Australian notes, and to prevent the circulation of other notes, declared notes issued by any of the States not to be legal tender and imposed a tax of 10 per cent. per annum on the notes of the trading banks issued or re-issued after 1st July, 1911. The Commonwealth Bank Act, 1945 prohibits the issue of notes by any person, including a State.

The Australian note issue was controlled by the Commonwealth Treasury until 1920. Then it was transferred to the Note Issue Department of the Commonwealth Bank, under the management of a Board of Directors comprising the Governor of the Bank and three others. Since 1924 the Note Issue Department has been managed by the authority controlling the Commonwealth Bank; viz. a Board of Directors from 1924 to 21st August, 1945, and thereafter the Governor of the Bank assisted by an Advisory Council.

The notes are legal tender and are issued in denominations of 10s., £1, £5, £10, £20, £50, £100, and £1,000. A provision that the notes were to be redeemable in gold coin was withdrawn in 1932. The money derived from the issue may be invested in gold, on deposit with any bank, or in

securities of the Government of the United Kingdom, the Commonwealth or a State. The requirement of a reserve in gold and/or English sterling amounting to not less than 25 per cent. of the notes on issue was abolished as from 21st August, 1945.

The average amount of Australian notes in circulation in New South Wales and elsewhere in each year since 1928-29 is shown in the following table.

Table 692.—Australian	Note	Issue,	Averages	of	Weekly	Figures.
	£t	housar	ıd.			

Year ended	Notes held by			Year ended	Notes held by-		
June.	Public.	Banks.	Total,	June.	Public.	Banks.	Total.
1929 1930 1931 1932 1933 1934 1936 1937 1938	25,701 24,617 23,528 25,991 24,991 25,166 26,780 28,184 29,363 31,552	19,100 18,635 23,007 26,050 23,699 21,972 20,568 19,285 18,032 17,655	44,801 43,152 46,535 52,041 48,690 47,138 47,348 47,469 47,395 49,207	1939 1940 1941 1942 1943 1944 1945 1946 1947	32,874 37,924 49,312 67,816 106,299 147,735 176,997 175,391 180,661 175,845	15,738 14,095 14,057 14,644 15,774 15,907 16,732 16,760 18,740 22,245	48,612 52,019 63,369 82,460 122,073 163,642 193,729 192,151 199,401 198,090

Between June, 1939 and June, 1945 there was an almost sixfold increase in notes held by the public. The total gradually increased to the record monthly average of £184,775,000 in August, 1947, then declined to £170,837,000 in February, 1948, and rose again to £180,862,000 in December, 1948.

The following table shows particulars of the note issue as at the last Monday in June of various years since 1939. In May, 1945, it was announced that notes of denomination higher than £10 would cease to be legal tender after 31st August, 1945. Though effect was not given to this decision, many of the larger notes were exchanged for notes of lower denomination.

Table 693.—Australian Note Issue, Denomination of Notes. £thousand.

Denom	ı-		Last	Last Wednesday in June.				
ination	۱.	1939.	1943.	1944.	1945.	1946.	1947.	1948.
10s.		4,124	6,589	7,875	8,354	8,083	7,952	8,369
£1		20,776	48,732	59,081	74,253	71,715	66,591	64,140
£5		11,580	50,949	68,778	72,972	79,154	79,197	77,229
£10		5,147	23,319	44,441	27,133	39,416	48,662	45,715
£20		104	57	50	26	9	´ 8	8
£50		1,285	3,443	3,812	1,131	118	94	79
£100		2,306	4,874	5,053	1,494	195	176	155
£1,000		2,208	393	422	381	274		910
Held by-	. 1							
Public		32,701	123,864	174,258	169,810	181,673	183,643	173,839
Banks	•••	14,829	14,492	15,254	15,934	17,291	19,037	22,766
Total		47,530	138,356	189,512	185,744	198,964	202,680	196,605

A statement of the profits of the Note Issue is shown at page 813, and of the balance sheet at page 812.

# BANKING.

During the war (1939-1945) the Commonwealth Government exercised various controls over the banking system by National Security Regulations, chiefly by regulating the volume of credit and the advance policy of banks, fixing maximum interest rates and controlling dealings in foreign exchange.

Legislation enacted in 1945 gave permanency to powers of regulation of banking, strengthened the Commonwealth Bank in its central banking functions and defined the relationship between the Bank and the Commonwealth Government on questions of financial policy.

The Banking Act, 1945, was brought into force on 21st August, 1945. Under it banking business in Australia may be conducted only by a body corporate possessing the written authority of the Governor-General. Each Bank must establish with the Commonwealth Bank a special account consisting of (a) the credit balance as at 28th August, 1945, of a similar account until then maintained under war-time regulations, and (b) such part of subsequent increases in the amount of its total assets in Australia as the Commonwealth Bank may direct. These special accounts may be drawn upon only with the consent of the Commonwealth Bank. Interest is paid on the daily balances of the special accounts at a rate (not exceeding 17s. 6d. per cent. per annum) fixed by the Commonwealth Bank with the Treasurer's approval. The rate actually paid was 15s. per cent. until reduced to 10s. per cent. on 1st February, 1947. When deemed necessary in the public interest the Commonwealth Bank may determine the general advance policy to be followed by the banks, and they may not, except with the prior consent of the Commonwealth Bank, purchase or subscribe to Commonwealth, State or local government securities or securities listed on a Stock Exchange in Australia. Regulations may be issued by the Commonwealth Bank, with the approval of the Treasurer, to control the rates of interest payable to or by the banks or other bodies in the course of banking business. Authority is given to the Commonwealth Bank to requisition upon the foreign currency receipts of the banks from their Australian business, and the Governor-General may issue regulations to control all dealings in foreign exchange. Provision is made also for the mobilisation of gold in Australia upon the issue of a proclamation by the Governor-General.

Unless otherwise authorised by the Commonwealth Bank, each bank must hold in Australia tangible assets of a value not less than its deposit liabilities. Deposit liabilities are given priority over all other liabilities. The banks must furnish prescribed returns and such other information concerning their business as the Commonwealth Bank directs, but they may not be required to disclose the affairs of an individual customer. The Auditor-General is required to investigate the affairs of each bank periodically and when directed by the Treasurer. If it appears that the position of a bank is insecure the Commonwealth Bank may investigate that bank's affairs and assume control of its business.

State banks are not bound by the provisions of the Banking Act, 1945, other than those relating to the control of gold and foreign exchange. Such bodies as pastoral companies and building societies which transact some banking business, though not engaged in the general business of banking, may be exempt from all or part of the Act.

# NATIONALISATION OF BANKING.

On 16th August, 1947, the Prime Minister announced the Government's intention to nationalise banking and the Banking Act, 1947, was passed by the Commonwealth Parliament on 27th November. State banks and savings banks were not subject to the Act.

The Act made provision for the prohibition of the carrying on of banking business in Australia by private banks, for the taking over by the Commonwealth Bank of the banking business in Australia of private banks, and for the acquisition of property used in that business. It prescribed, as the main methods of acquisition, voluntary or compulsory acquisition of the Australian business and assets of the banks, or compulsory acquisition of shares in the private banks incorporated in Australia. Failing agreement, the fair and reasonable compensation to be paid by the Commonwealth Bank for property and shares compulsorily acquired was to be assessed by a Federal Court of Claims constituted by the Act.

The validity of the Act was contested by the private banks and the States of Victoria, South Australia and Western Australia, and on 11th August, 1948, the High Court ruled certain vital clauses invalid. An appeal by the Commonwealth against the judgment of the High Court was dismissed by the Privy Council in a decision given on 26th July, 1949.

#### THE COMMONWEALTH BANK OF AUSTRALIA.

The Commonwealth Bank of Australia was constituted under an Act passed by the Federal Parliament in 1911. It commenced savings bank business on 15th July, 1912, and general trading bank business on 20th January, 1913. The Savings Bank Department was separated from the Commonwealth Bank in 1928, but both institutions remained under the one control. Details regarding the Savings Bank are given on page 821.

The Bank was at first placed under the management of a Governor. In 1924 control passed to a Board of Directors comprised of the Governor of the Bank (who was its chief Executive Officer), the Secretary to the Treasury, and six others with experience in agriculture, commerce, finance or industry. On 21st August, 1945, the Board of Directors was dissolved and control of the Bank reverted to the Governor, who is appointed for a maximum term of seven years. To advise the Governor with respect to monetary and banking policy and other matters referred to it, there is an Advisory Council consisting of the Secretary to the Treasury, the Deputy Governor, an additional representative of the Treasury and two officers of the Bank.

The Commonwealth Bank functions as a central bank and controls the note issue (see page 805). It also transacts general banking business, and in the Rural Credits, Mortgage Bank and Industrial Finance Departments engages in special forms of lending.

The development of the Bank as a central bank gained impetus from the events of the depression, and the Bank's responsibilities and powers were greatly enlarged as a result of the war (1939-1945). By the Commonwealth Bank Act, 1945, it is the general function of the Bank to pursue a monetary and banking policy directed to the greatest advantage of the people of Australia, and to exercise its powers (including those under the Banking Act, 1945) in the manner best contributing to the stability of the currency, the maintenance of full employment, and the economic prosperity and welfare of the people of Australia.

The Bank must keep the Treasurer informed as to its monetary and banking policy and, where there is difference of opinion thereon between the Bank and the Government, endeavour to reach agreement with the Treasurer. Failing agreement, the Bank must adopt a policy in accordance with the opinion of the Government upon the Treasurer indicating that the Government accepts responsibility for, and will take such action as it considers necessary by reason of, the adoption of that policy.

The following items taken from weekly balance statements relating to the note issue and central and general banking business illustrate the development of the Commonwealth Bank between 1929 and 1945.

Table 694.—Commonwealth Bank, Note Issue and Central and General Banking Business, 1929 to 1945.

Average of Weekly Figures (Australia and elsewhere).—£thousand.

Year ended June or month of June.	Notes.	Special Accounts of Trading Banks.	Other Deposits (including Banks).	Gold and Sterling Reserves, and Short Call in London.	Government and Other Securities.	Discounts and Advances.
						,
Year—1928-29 †	44,801		41,873	39,983	34,967	9,994
1930–31 †	52,041		57,740	22,856	75,207	8,640
1938–39	48,612		86,016	36,260	94,291	15,389
194142	82,460	12,045	123,211	55,212	146,875	25,798
1942–43	122,072	68,881	159,651	74,110	265,692	23,432
1943-44	163,642	140,632	176,887	106,281	364,152	22,065
1944-45	193,729	209,260	199,487	179,861	401,144	23,210
June-1939	47,530		83,142	33,394	93,834	16,684
1942	100,914	36,886	125,740	63,734	185,241	27,985
1943	138,356	103,366	178,419	83,776	326,551	21,304
1944	187,637	183,742	189,761	157,865	385,077	26,835
1945	185,494	243,378	196,693	184,740	418,105	20,573

<sup>\*</sup> Includes Commonwealth Treasury Bills. after in Australian currency.

The general and central banking activities of the Bank were separated as from August, 1945.

The following averages of weekly figures relate only to the note issue and central banking business and, therefore, are not comparable with figures in the foregoing table:—

Table 695.—Commonwealth Bank, Note Issue and Central Banking Business.

Average of Weekly Figures (Australia and elsewhere).—£thousand.

Year ended June or month of June.	Notes on Issue.	Special Accounts of Trading Banks.	Other Deposits of Trading Banks.	Other Liabilities (excl. Cap. and Reserves).	Gold and Balances Held Abroad.	Govern- ment and Other Securities.	Other Assets.
1945-46 ‡	193,813	241,843	26,864	144,385	181,594	418,266	10,189
1946–47	199,402	266,951	24,063	122,101	217,642	392,217	6,152
1947-48	198,090	263,689	28,017	142,014	196,694	419,858	16,331
June-1946	197,714	260,612	21,579	147,205	201,788	418,003	9,675
1947	201,555	277,234	20,071	127,696	207,397	414,457	8,156
1948	195,785	294,040	29,372	167,148	253,188	400,523	32,369

<sup>\*</sup> Includes Commonwealth Treasury Bills. † Excludes Australian coin, cheques and bills of other Banks, and bills receivable (£0,732,000 at June, 1948). † Ten months ended June, 1946.

The Commonwealth Bank Act, 1945, makes it the duty of the Bank to develop and expand its general banking business. It also authorises the General Banking Division to make loans, at the lowest practicable rate of interest, to individuals and building societies for the edection or purchase of homes or for the discharge of mortgages on homes. A loan to a building society may not exceed 90 per cent. of the value of the property on which the building society makes an advance. The scheme under which loans are made to individuals was inaugurated on 2nd January, 1946. Such loans are restricted to homes in which the borrower intends to reside. They are on credit foncier terms, secured by first mortgage on land and, subject to a prescribed maximum, may be granted up to 85 per cent. of valuation for periods not less than five nor more than thirty-five years. The maximum amount of a loan was raised from £1,250 to £1,750 on 14th June, 1948.

The Rural Credits Department was formed in 1925 to assist the marketing of products of the rural industries. The department may make seasonal advances upon the security of primary produce to co-operative

associations, marketing boards, and such other bodies as may be specified by proclamation. In lieu of making advances the department may discount bills secured upon primary produce on behalf of any of these institutions.

The Mortgage Bank Department was established in September, 1943. It makes long-term loans to primary producers upon the security of a first mortgage of land used for primary production. The money lent may be used only in connection with the borrower's business of primary production or to discharge a prior encumbrance on land used for such purpose. Subject to a maximum of £10,000 (£5,000 prior to 6th January, 1949), loans may be granted up to 70 per cent. of the Bank's valuation of security for periods not less than five nor more than forty-one years. Borrowers are required to pay equal half-yearly instalments on account of principal and interest and such instalments may not be less than an amount calculated on the original loan at a rate 1 per cent. per annum above the rate of interest chargeable, shown on page 829.

The Industrial Finance Department was opened on 2nd January, 1946, to provide finance for the establishment and development of industrial undertakings, particularly small undertakings, and to provide advice to promote the efficient organisation and conduct of undertakings. Financial accommodation is given by way of overdraft, fixed loan and hire purchase.

#### CAPITAL OF COMMONWEALTH BANK.

The aggregate capital of the Commonwealth Bank amounted to £16,767,387, and general reserves totalled £2,145,063, at 30th June, 1948. From a special reserve—premium on gold sold—of the Note Issue Department transfers have been made to the Mortgage Bank Department, £1,000,000, and Industrial Finance Department, £2,000,000, and the balance of the account amounting to £4,754,954 at 30th June, 1948, is to be held for the purpose of preserving the external value of the currency and for purposes of the Note Issue Department.

The capital accounts of the separate departments at 30th June, 1948, were as follow:—Central Banking, £4,000,000, and General Banking, £4,000,000, derived wholly from banking profits; Rural Credits £2,000,000, obtained from profits of the Note Issue between 1925 and 1932; Mortgage Bank, £2,767,387, comprising transfers from the Note Issue special reserve (profit on gold sold), £1,000,000, and from the profits since 1943-44 of the Note Issue and banking business, £714,144 and £1,053,243, respectively; Industrial Finance, £4,000,000, comprising £2,000,000 from the Note Issue special reserve and £2,000,000 from other funds of the Bank. The capital account of the Mortgage Bank Department is to be increased to £4,000,000 by annual appropriations from the Note Issue Department and Central Banking business.

In addition to the capitals stated and reserve accretions, funds may be obtained by way of advances from the following sources, viz., for the purposes of the Rural Credits Department, from the Treasurer and Commonwealth Bank; for the Mortgage Bank Department, from the Commonwealth Bank and Commonwealth Savings Bank; and for the Industrial Finance Department, from the Treasurer, Commonwealth Bank and Commonwealth Savings Bank. The balance outstanding in respect of advances from the Treasurer to the Rural Credits Department may not exceed £3,000,000 at any time and advances by the Commonwealth Bank to either the Mortgage Bank Department or the Industrial Finance Department are limited to £1,000,000.

The following statement shows particulars as at 30th June, 1948, of the balance-sheets of the several departments of the Commonwealth Bank, together with an aggregate balance-sheet from which inter-departmental accounts totalling £3,852,316 have been excluded.

Table 696.—Commonwealth Bank, Balance-sheet at 30th June, 1948.

Particulars.	Central Bank,	Note Issue.	General Bank,	Rural Credits.	Mortgage Bank.	Industrial Finance.	Aggregate
	L	IABILITIE	s (£thou	sand).		· · · · · · · · ·	
Capital	4,000		4,000	2,000	2,768	4,000	16,767
Reserves	937		530	498	93	87	2,145
" —Profit on Gold		4,755					4,755
Notes on Issue		196,605					196,605
Deposits, Bills, etc., (incl. provisions)	499,957*	2,177	75,072	950	696	4,422	579,422
Total	504,894	203,537	79,602	3,448	3,557	8,509	799,694
	1	Assets (£	thousand	i).	'		
Gold, Balances Abroad	204,417	50,880	2,711				258,008
Australian Notes, Cash	3,922		4,535	1,146			8,457
Cheques, etc., of Banks	11,752		421				12,173
Securities— Commonwealth†	238,982	152,595	31,565	1,205			424,346
Other Govt., Local	5,243	•••		• • • •			5,243
Bills, Remit in Transit	838		13,765				14,603
Premises	232		763				995
Loans, Advances, etc	39,508	62	25,842	1,097	3,557	8,509	75,869
Total	504,894	203,537	79,602	3,448	3,557	8,509	799,694

Includes Special Accounts of Trading Banks, £294,480,000, Other Deposits of Trading Banks £28,201,000, and Other Deposits and Provisions for Contingencies, £175,998,000.

† Includes Commonwealth Treasury Bills.

# PROFITS.

The Commonwealth Bank Act, 1945 provides that of the annual profits of the Note Issue Department £150,000 is payable to the capital account of the Mortgage Bank Department until its capital reaches £4,000,000 and the remainder is payable to the Commonwealth Treasury. Profits from the Central Banking business are allocated as to one-half to the National Debt Sinking Fund, one-quarter to the Mortgage Bank capital account until it reaches £4,000,000 and the remainder to reserve account. Profits of the General Banking Division are shared equally between the reserve account and the National Debt Sinking Fund. Those of the Rural Credits Department are divided equally between reserves and the development fund used for the promotion of primary production. The whole of the profits of the Mortgage Bank and Industrial Finance Departments are credited to the respective reserve accounts.

The following statement shows the net profits earned in various years since 1938-39 and the manner in which they were distributed. For convenience, the profits of the Commonwealth Savings Bank are included in the statement; as a result of amalgamations with State Savings Banks, part of such profits is payable to State authorities and the balance is divided equally between the reserve account and the National Debt Sinking Fund.

Table 697.—Commonwealth Bank and Savings Bank, Net Profits.

75		Year ended 30th June—								
Department, etc.	1939.	1944.	1945.	1946.	1947.	1948.				
		Profits (£	).	_						
Note Issue  Central Banking }  General Bank }  Rural Credits Mortgage Bank Industrial Finance Savings Bank	356,579 31,580  532,736	2,743,115 985,104 37,827 (-) 13,186  848,934	3,098,472 956,596 86,807 16,452 1,403,029	3,089,405 ( 670,304 \	3,942,384 700,319 350,427 36,575 30,274 23,514 1,526,566	4,286,702 900,648 376,500 34,869 34,491 56,884 1,536,398				
Total	1 , ,	4,601,794 UTION OF P	5,511,356 	5,670,212	6,610,059	7,175,992				
Capital and Reserves Commonwealth Treasury National Debt Sinking Fund Rural Credits — Developmen Fund State Authorities	352,221 766,730 336,431 t	861,815 2,628,971 741,943 18,913 350,152	1,064,240 2,948,472 879,385 18,404 600,855	1,135,741 2,939,405 937,684 16,432 640,950	1,187,796 3,792,384 965,720 18,287 645,872	1,340,054 4,086,702 1,081,497 17,184 650,565				
Total	. 1,687,626	4,601,794	5,511,356	5,670,212	6,610,059	7,175,992				

(-) Net loss.

#### TRADING BANKS.

There were eighteen trading banks operating in Australia in June, 1948, fourteen of them authorised private banks in terms of the Banking Act, 1945, and four of them Government institutions. Of these, twelve authorised private banks and two Government banks conducted business in New South Wales. The fourteen authorised banks include the Queensland National Bank, Ltd., which, since January, 1948, has been in process of voluntary liquidation and amalgamation with the National Bank of Australasia Ltd.

The number of branches and amount of deposits and advances of each bank in New South Wales and Australia in June, 1948, are shown on page 814. Large sums held by the banks in the form of cash balances, special deposits with the Commonwealth Bank and investments in Government

securities are omitted from this statement but the totals for all banks are shown in later tables.

Table 698.—Trading Banks, Branches, Deposits and Advances, June, 1948,

	In Ne	w South	Wales.	In Australia.			
Bank.	Branches	Deposits	Loans and Advances		Deposits	Loans and Advances	
	No.	£ mi	illion.	No.	£ m	illion.	
Bank of N.S.W	273	$116 \cdot 17$	54.71	542	201.73	90.84	
Commercial of Sydney	202	62.22	27.02	322	99.64	39.19	
Commercial of Australia	62	15.80	7.94	301	77.20	35.13	
National of Australasia Queensland National; }	44	14.65	10.72	400	116.31	56-01	
Bank of Adelaide	1	1.01	0.68	59	17.31	4.53	
Bank of Australasia	69	$21 \cdot 12$	15.23	199	65.81	38.62	
English, Scottish and Australian Union of Australia	59 61	16·86 17·56	14·16 12·40	226 188	77·73 61·10	52·37 32·09	
Nine Banks	771	265.39	142.86	2,237	716.83	348.78	
Commonwealth†	238	35·22§	14.868	400	61.798	37.908	
Rural Bank of N.S.W.†	68	9.84	25.27	68	9.84	25.27	
Bank of New Zealand	Ī	1.74	1.39	2	2.30	1.83	
Comptoir National	ī	0.88	1.83	$\tilde{2}$	1.06	2.49	
Bank of China		0.02			0.02		
In N.S.W. (14)	1,079	313.09	186-21	2,709	791.84	416.27	
State Bank (South Australia)†		•••		19	3.12	1.40	
Rural (Western Australia)†	•••	•••		26	2.64	4.74	
Ballarat Banking Co	•••	•••		2	0.40	0.39	
Brisbane P.B. & Banking Co		•••		1	2.02	1.85	
	1,079	313.09	186.21	2,757	800.02	424.65	

<sup>\*</sup> Excludes agencies numbering 189 in New South Wales and 927 in Australia. † Government Banks. ‡ In voluntary liquidation. § New South Wales figures relate to General Banking Department only, and Australian figures to General, Rural Credits, Mortgage and Industrial Finance Departments.

The group of nine private trading banks appearing first in the table transacts most of the trading bank business; they held 84 per cent. of the total deposits in New South Wales and 90 per cent. of the Australian total. The Commonwealth Bank held 11 per cent. and 8 per cent. of deposits, respectively.

Of the nine private trading banks two were incorporated in this State, two in Victoria, and one each in Queensland and South Australia and three in England. The Queensland bank is in process of absorption by the National Bank of Australasia Ltd., incorporated in Victoria. Regarding these as a single unit, six of the banks have branches in all the Australian States and there are two with branches in four and five States, respectively. Four of the banks operate in New Zealand, but by far the greater proportion of their business is transacted in Australia.

The following table shows in respect of the nine private trading banks the average amount of deposits and principal assets in Australia in various years since 1929, and in the month of June of certain years since 1939. Also shown are figures in respect of the Commonwealth Bank (other than central banking) and all trading banks as listed in Table 698; comparable figures relating to the Commonwealth Bank are not available for earlier years.

Statistical returns issued by the Commonwealth Bank were restricted to business of the General Banking Division until extended in October, 1948, to include also the Rural Credits, Mortgage Bank and Industrial Finance Departments. Returns of the Rural Bank of New South Wales related only to the Rural Bank Department until extended to embrace the Advances for Homes and Personal Loans Departments in January, 1948. Figures contained in the following table for both these banks for periods prior to the months indicated have been revised to include all departments comprised in current returns.

Table 699.—Trading Banks, Deposits and Principal Assets in Australia.

Average of Weekly Figures—£thousand.

Year ended 30th June and Month of June.	Deposits.			Cash	Common- wealth	Special Accounts with	Govern- ment and	Advances
	Not Bearing Interest.	Bearing Interest.	Total Deposits.	Items,	Treasury Bills.	Commou- wealth Bank,	Municipal Securities,	Discounts, etc.
			NINE TRA	DING BAN	KS,			, , , ,
Year—1928-29 1931-32 1935-36 1938-39 1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47	107,196 85,661 108,411 118,868 130,028 152,732 178,438 233,299 290,088 343,773 385,022 429,749	170,984 184,122 179,520 198,792 205,235 206,129 199,827 193,358 211,703 224,023 220,415 200,862	278,180 269,783 287,931 317,660 335,263 358,501 378,265 426,657 502,691 567,796 606,367 636,611	51,064 47,517 33,045 33,597 37,932 41,163 41,416 43,322 40,908 38,038 38,462 37,928	23,037 24,192 21,533 31,329 39,937 42,267 59,443 63,826 60,283 50,782 25,831	  16,848 68,420 139,965 207,992 238,098 264,991	16,644 9,472 18,279 20,477 30,165 52,903 59,640 62,906 79,960 105,842 115,272 95,028	237,620 231,011 258,282 288,109 288,484 282,426 273,729 248,719 232,421 208,719 212,178 261,139
1947-48 1947-48 June—1939 1942	117,122 195,867 256,128	200,897 200,897 191,987 197,329	318,019 387,854 453,457	28,598 40,439 33,418	23,870 39,630 50,813	262,258 262,258  36,397 102,917	65,606 22,099 56,272 75,715	291,716 291,716 268,294 245,955
1944 1945 1946 1947 1948	314,604 358,468 413,953 446,727 516,595	219,861 224,062 213,149 201,616 200,235	534,465 582,530 627,102 648,343 716,830	38,017 36,488 32,276 34,406 45,562	55,425 46,480 40,049 13,800 19,090	182,838 241,770 258,469 275,422 292,953	89,052 104,334 122,698 80,553 59,469	221,789 207,895 224,341 289,741 348,779
	Солмо	NWEALTH ]	BANK (OTH	ER THAN (	ENTRAL B	ANKING).*		•
June 1946 1947 1948	39,181 43,342 49,039	19,365 16,047 12,717	58,546 59,389 61,786	5,983 6,398 7,725	5,100 2,100 750		37,755 35,695 33,620	21,717 28,911 37,903
		A	LL TRADIN	O BANKS.				
June—1946 1947 1948	461,480 500,648 580,859	237,618 222,829 219,158	699,098 723,477 800,017	39,894 43,146 57,253	45,827 17,175 20,990	260,612 277,234 294,040	173,521 127,938 103,416	270,456 352,056 424,650

<sup>\*</sup>Revised-see context above.

Deposits not bearing interest are on current account and may be withdrawn on demand. Further deposits on current account are included under "interest bearing"; e.g., nine banks £14,450,000 and all trading banks £19,295,000 in June, 1948. The balance of the interest bearing deposits represents amounts deposited for fixed terms—usually three, six, twelve or twenty-four months. Government balances held on deposit with the trading banks amounted to £10,766,000 (viz., non-interest bearing £6,105,000 and interest bearing £4,661,000) in June, 1948, including £6,015,000 with the nine banks.

Cash items of the nine banks in June, 1948 comprised gold coin, £97,000, other coin, £2,591,000; Australian Notes, £16,899,000; and balances (other than Special Accounts) with the Commonwealth Bank, £25,975,000. Treasury Bills are usually of three months' currency and may be rediscounted at the Commonwealth Bank. The Special Accounts with the Commonwealth Bank represent accretions to the funds of the trading banks which they have been required to place on deposit with the Central Bank; they are used as a means of control over bank credit, and may be drawn upon only with the consent of the Commonwealth Bank. Advances, discounts, etc., are comprised mainly of overdrafts repayable on demand.

Deposits in the nine trading banks increased by £69,835,000 to £387,854,000 in the three years from June, 1939 to 1942, then rose rapidly as a result of war expenditures by £239,248,000 in the next four years to £627,102,000 in June, 1946. The largest growth in these years was £81,008,000 in 1943-44. With high incomes from exports, accompanied by an expansion of bank advances, there were further increases in deposits of £21,241,000 in 1946-47 and £68,487,000 in 1947-48. The total increase from June, 1939 amounted to £398,811,000 or 125 per cent., and as interest-bearing deposits declined slightly by £662,000, the ratio of non-interest bearing to total deposits in June rose from 37 per cent. in 1939 to 72 per cent. in 1948.

Advances by the nine banks in June decreased by £83,821,000 or 29 per cent. between 1939 and 1945, but after the termination of hostilities increased by £140,884,000 in the next three years to £348,779,000 in June, 1948, or £57,063,000 more than June, 1939.

The following table shows, in respect of the nine private trading banks, the ratio of non-interest bearing deposits and of the various classes of assets to total deposits in Australia in various years since 1929.

Table 700.—Nine Private Trading Banks, Ratios in Australia.

Average of Weekly Figures.

		Cash and Investments in Australia.									
Year ended June.	Deposits not Bearing Interest,	Cash Items.	Treasury Bills.	Special Accounts with Common- wealth Bank.	Government and Municipal Securities.	Advances, etc.					
		Rat	IO PER CENT.	TO TOTAL DE	POSITS						
1929	38.5	18.4			6.0	85.4					
1932	31.7	17.6	8.5		3.5	85.6					
1939	37.4	10.6	6.8		6.4	90.7					
1942	47.2	10.9	11.2	4.4	15.8	72.4					
1943	54.7	10.1	13.9	16.0	14.7	58· <b>3</b>					
1944	57.9	8.1	12.7	27.8	15.9	46.2					
1945	60.5	6.7	10.6	36.6	18.6	36.8					
1946	63.6	6.3	9.9	39.3	19.0	35.0					
1947	67.5	6.0	4.1	41.6	14.9	41.0					
1948	70.0	6.6	2.7	38.9	9.7	49.0					

TRADING BANK DEPOSITS AND ADVANCES IN NEW SOUTH WALES.

Particulars of the deposits and advances in New South Wales of the nine trading banks listed in Table 698, are shown below for various years since 1928-29. The business of the banks is conducted on an Australia-wide basis and little significance attaches to the cash balances, Government securities, etc., held by the banks in any one State; hence such figures have been omitted from the table.

Table 701.—Nine Trading Banks, Deposits and Advances in N.S.W. Average of Weekly Figures—£thousand.

			Deposits.			
Year ended June or month of June.	Not Beari	ng Interest.	Bearing	Interest.	Total	Advances.
	Govern- ment.	Other.	Govern- ment.	Other.	Deposits.	
Year—1928-29	819	46,711	4,843	60,540	112,913	95,834
1931-32	483	35,066	853	58,041	94,443	92,226
1935-36	412	44,100	409	55,495	100,416	100,148
1938-39	319	49,384	1,273	63,199	114,175	119,266
1939-40	248	55,997	2,018	64,872	123,135	118,930
1941-42	346	77,005	2,483	63,825	143,659	110,459
1942-43	393	93,912	2,403	61,991	158,699	99,083
1943-44	485	115,966	2,771	69,808	189,030	88,309
1944-45	462	137,478	2,146	76,013	216,099	83,309
1945–46	594	150,917	1,664	75,906	229,081	86,089
1946–47	542	168,690	1,150	72,372	242,754	104,687
1947–48	568	181,731	1,106	68,909	252,314	134,441
June—1946	662	162,410	1,425	72,722	237,219	90,600
1947	662	173,878	1,111	68,622	244,273	116,52 <b>0</b>
1948	954	196,495	1,098	66,841	265,388	142,861

#### CLASSIFICATION OF TRADING BANK ADVANCES.

The following classification of bank advances outstanding in New South Wales and Australia at the end of December, 1948 has been compiled by the Commonwealth Statistician from returns furnished by the Commonwealth Bank (General Banking, Rural Credits, Mortgage and Industrial Finance Departments) and the "Nine Trading Banks" listed in Table 698. Business advances (classified according to the main industry of the borrower) are those made mainly for business purposes and include all loans to corporate bodies other than public authorities. Advances to public authorities are those made to Commonwealth, State and Local Governments, Government Agencies and Semi-Governmental Authorities, irrespective of the purpose of the advance or the industry in which the authority is engaged. Personal advances are those to persons in their private capacity for such purposes as the purchase of a house or household equipment, repayment of personal debts, etc.

Table 702.—Classification of Bank Advances, at End of December, 1948.

Nine Trading Banks and Commonwealth Bank.

	New Sou	th Wales.	Australia.			
Main Purpose of Advance.	Amount.	Proportion of Total.	Amount.	Proportion of Total.		
Business Advances, according to Industry—  1. Agriculture, Dairying and Grazing:—	_		£000	per cent.	£000	per cent.
(a) Mainly Sheep grazing			24,306	14.58	42,374	10.27
(b) ,, Cattle ,,		٠.٠	2,673	1.60	9,178	2·22 3·79
(c) ,, Wheat growing $(d)$ Sugar			6,079 $191$	3.65 0.12	15,621 3,884	0.94
(a) Thuist		• • •	1,059	0.12	4,964	1.20
(f) ,, Dairying and Pig Raising		•••	7,170	4.30	26,750	6.48
(g) Other Rural			2,165	1.30	7,009	1.71
Total		-	43,643	26.19	109,840	26.61
2. Manufacturing			33,076	19.85	87,438	21.18
0.00		ŀ				2:01
3. Transport, Storage and Communication	•••	•••	3,258	1.95	8,274	2.01
4. Finance and Property :-						1.04
<ul> <li>(a) Builders and Contractors</li> <li>(b) Building Investment Cos. and Building</li> </ul>	 Societi	es,	3,036	1.82	7,666	1.84
etc (c) Other (Banking, Insurance, etc.)*			10,399 10,606	6·24 6·36	$\frac{13,515}{27,532}$	3·28 6·67
Total	•••	[	24,041	14.42	48,653	11.79
5. Commerce:— (a) Retail Trade (b) Wholesale Trade			10,204 15,511	6·12 9·31	27,671 37,283	6·71 9·03
Total		][	25,715	15.43	64,954	15.74
6. Miscellaneous†			9,143	5.49	24,170	5-86
7. Not elsewhere specified			970	0.58	2,454	0.59
Total Business Advances			139,846	83.91	345,792	83.78
Advances to Public Authorities—(including Go Scmi- Governmental and Local Government	vernme Bodies)	nt,	3,097	1.86	7,485	1.81
Personal Advances, according to purpose— 1. For Building or purchasing own home 2. Other (including personal loans)		 	14,918 8,805	8·95 5·28	39,501 19,085	9·57 4·84
Total Personal Advances			23,723	14.23	59,486	14.41
Total Advances			166,666	100.00	412,763	100.00

<sup>\*</sup> Includes trustee, pastoral finance and cash order companies, friendly societies, stockbrokers, real estate agents, etc. † Includes (a) fishing, hunting, trapping and forestry; (b) mining and quarrying; (c) legal and other professions, religious, charitable and benevolent institutions, hospitals, schools and industrial and trade associations; (d) anusements, wireless broadcasting, sporting associations and promoters; and (c) hotels, boarding houses and restaurants, laundries, social clubs, etc.

#### THE RURAL BANK OF NEW SOUTH WALES.

Particulars of the foundation and development of the Rural Bank of New South Wales were stated on page 709 of the 1930-31 edition and in subsequent issues of the Year Book.

The Bank was reconstituted in December, 1947, by the Rural Bank of New South Wales (General Banking) Act, 1947. Formerly the Bank functioned in three departments, viz., Rural Bank, Advances for Homes,

and Personal Loans. In the Rural Bank Department lending activities were restricted to advances to primary producers and co-operative societies associated with rural production.

As reconstituted, the three departments have been merged into a single General Bank Department which is empowered to conduct general banking business without restriction as to lending. There is also a Government Agency Department, established in 1934, in which the Bank administers various lending activities on behalf of the Government. Control of the Bank is exercised by three Commissioners, of whom one is President, appointed during ability and good behaviour until age sixty-five years,

At 30th June, 1948, there were 68 branches in Sydney and important country centres; in other places the Commonwealth Bank acts as agent of the Rural Bank.

# GENERAL BANK DEPARTMENT.

The balance sheet of the General Bank Department at 30th June, 1948, and the net profit earned in 1947-48, are shown in the following table, with comparative figures for earlier years obtained by aggregating the separate accounts of the Rural Bank, Advances for Homes and Personal Loans Departments.

Table 703.—Rural Bank, General Department—Balance Sheet and Profits.

Particulars.	1939.	1946.	1947.	1948.
LIAB	ILITIES AT 30	TH JUNE (£.).	'	
Stock and Debentures Issued General Reserve	$25,333,470 \\ 1,625,440 \\ 1,103,884$	21,558,652 2,165,305 2,554,794	20,883,928 2,234,629 2,944,059	20,159,079 2,311,626 3,335,444
and Reserves for Contingencies Government Agency Dept.	3,144,708	8,507,695	9,348,116	12,887,110
Capital Accounts	80,280	180,282	252,425	431,442
Re-establishment and Employment Act		100,224	1,107,492	1,915,166
Total Liabilities	31,287,782	35,066,952	36,770,649	41,039,867
· As	SSETS AT 30TE	JUNE (£).		,
Cash and Bank Balances Clieques, etc., and balance	411,366	1,005,907	1,017,136	1,718,530
with and due by other Banks Treasury Bills Government and Public Se-	620 <b>,</b> 955	$611,875 \\ 399,804$	177,993 1,248,871	$361,647 \\ 1,097,455$
curities  Loans and Advances  Bank Premises  Sundry Debtors and Other  Assets	1,839,433 27,539,120 686,653	$\begin{array}{c} 10,788,898 \\ 21,449,466 \\ 661,245 \end{array}$	9,070,013 24,353,319 663,715	8,923,123 $27,972,690$ $674,092$
	190,255	149,757	239,602	292,330
Total Assets	31,287,782	35,066,952	36,770,649	41,039,867
Net Profit—Year Ended 30th June	73,092	72,731	69,325	/76j99 <b>6</b>

Deposits amounting to £9,671,105 held by the Bank at 30th June, 1948, comprised £9,099,095 on current account and £572,010 fixed deposits. The net profits were transferred to the general reserve.

In terms of the agreement under which the savings business of the Government Savings Bank of New South Wales was amalgamated with the Commonwealth Savings Bank in 1931, the Commissioners of the Rural Bank also receive one-half of the profits earned in New South Wales by the Commonwealth Savings Bank. Amounts received in this manner are credited direct to a special reserve account which, at 30th June, 1948, amounted to £3,335,444. The share of the profits was £395,379 in 1946-47, and £397,385 in 1947-48.

Lending activities within the General Bank Department are sectionalised in four divisions for administrative purposes and the loans and advances totalling £27,972,691 at 30th June, 1948, comprised the following, viz.:—General Bank Division, £2,147,818; Rural Bank Division, £13,033,739; Advances for Homes Division, £9,987,035; and Personal Loans Division, £950,768; also advances under the Commonwealth Re-establishment and Employment Act, £1,853,331. Comparative statistics of loans to primary producers such as those granted by the Rural Bank Division are shown in the chapter "Rural Industries," and of advances for homes in the chapter "Social Condition" of this Year Book.

The Personal Loans Division provides facilities for small loans on terms generally more reasonable than are otherwise obtainable by persons requiring such accommodation. Interest is charged at a discount rate and deducted from the amount of the loan. The rate was 5 per cent. per annum until raised to 6 per cent. in October, 1945. The number and amount of advances made were 8,629 and £707,759 in 1946-47, and 9,899 and £1,028,320 in 1947-48. The average amount per advance was £82 and £104 in the respective years.

# GOVERNMENT AGENCY DEPARTMENT.

A Government Agency Department was established under the Rural Bank Act, 1932, with the object of co-ordinating under the control of a central authority certain lending activities conducted formerly through Government Departments. The scope of the Department's functions and powers is defined by the Rural Bank (Agency) Act, 1934, as amended, in terms of which various agencies were created.

In respect of each agency the Rural Bank acts in an administrative expacity as agent for the Government, collecting charges and principal sums owing, and making new advances in accordance with Government policy. In four agencies concerned with building and housing the Bank ceased to make new advances as from 31st October, 1942, when this function was transferred to the Housing Commission. The cost of administering the agencies is payable to the Bank from Consolidated Revenue Fund, and revenue earnings are payable to the State Treasurer. Collections on account of principal sums due by borrowers (except for building and housing), may be retained by the Department for the purpose of making further advances.

The financial operations of the various agencies during the year ended 30th June, 1948, are summarised in the following table. Further particulars of the loans for building purposes and the housing of soldier's families are shown in the chapter "Social Condition" of this Year Book, and details

regarding finance for rural industries in the chapters "Rural Industries" and "Land Settlement."

Table 704.—Rural Bank of New South Wales, Government Agency Department, 1947-48.

		A 3	Partic	ulars of Ad	vances.
Agenoy.	Revenue Collections	Adminis- trative Expenses.	Made during Year.	Repaid during Year.	Outstanding at 30th June.
Building Relief	6,695	£ 1,732 1,309 1,742 104 10,994 86,983 180 30,526 35,677 500	£ 67 468  84 25,065 933,978 19,267 160,441 89,659 	£ 12,772 30,389 2,495 1,324 88,415 861,724 155,938 295,367 6,553	£ 41,524 136,554 15,244 3,583 284,193 4,700,120 8,658 1,486,344 657,706 151,419
Total 1947–48 " 1946–47 " 1945–46	514,445 446,421 430,426	169,747 167,166 144,162	1,229,029 1,315,978 1,209,622	1,454,967 954,465 787,481	7,485,345 7,986,954 7,788,339

Amounts advanced and repaid during the year represent capital sums only, but balances outstanding at 30th June include amounts due for interest and other charges as well as capital.

It is not possible from the figures in the table to calculate the net profit or loss of the various agencies, as no charge is made for interest on capital resources used in making loans and advances.

## SAVINGS BANKS.

Savings bank business is conducted in all Australian States by the Commonwealth Savings Bank, also by State savings banks in Victoria and South Australia and by two trustee savings banks in Tasmania.

The Commonwealth Savings Bank opened as a separate department of the Commonwealth Bank in Victoria on 15th July, 1912, and in the other States within six months; operations commenced in New South Wales on 13th January, 1913. It was established as a separate institution—the Commonwealth Savings Bank of Australia—on 9th June, 1928, but remained under the control of the Board of Directors of the Commonwealth Bank until the Board was abolished as from 21st August, 1945. The control then reverted to the Governor of the Commonwealth Bank.

The savings bank funds are available for long-term investments, e.g., public securities, loans on the security of land, advances for warehouses and stores for primary products, advances to the Mortgage Bank and Industrial Finance Departments of the Commonwealth Bank, and deposit with the Commonwealth Bank.

1947

1948

660.0

681.3

Particulars of the deposits in Australia and total assets in Australia and elsewhere of the Commonwealth Savings Bank and all savings banks are shown below in respect of 1939 and the last six years.

Table 705.—Savings Banks, Deposits in Australia and Total Assets.

£million. Total Assets. Deposits in At. 80th Other June. Cash and Common-Australia. Money at Short Call. wealth Other. Total. Securities. Securities. COMMONWEALTH SAVINGS BANK. 1939 146.1 11.4 108.4 32.74.2 156.730.6 4.3233.4 1943 220.6 44.5 154:0 1944 299.340.7 233.8 33.75.0 313.2382.21945 40.6 304.732.04.9 366.4 30.7 4.9 451.91946 434.0 43.3 373.0 1947 424.0 39.2 369,5 30.6 4.6 443.9 450.5 1948 429.4 43.2 369.6 30.9 6.8ALL SAVINGS BANKS. 1939 245.642.2207.8 15.7265.71943 358.0 90.5 277.8 15.0 383.3 1944 471.5 101.2 15.3 498.6328.8 53.3 567.0 14.7 596.8 1945 110.2420.651.31946 663.6  $102 \cdot 9$ 529.548.5 15.1 696.0

## SAVINGS BANKS IN NEW SOUTH WALES.

533.0

541.3

51.9

55.9

15.6

18.2

695.4

718.6

94.9

103.2

Savings bank business in New South Wales has been conducted solely by the Commonwealth Savings Bank since the savings bank business of the Government Savings Bank of New South Wales was merged with that institution on 15th December, 1931. At 30th June, 1948, savings bank business was transacted in New South Wales at 239 branches of the Bank and at numerous post offices and other agencies. Deposits are received in sums of one shilling or more, and interest is allowed on the minimum monthly balance at the rate of 2 per cent. per annum up to £500, and at 1 per cent. on an additional amount up to £1,000 on personal accounts, and at the rate of 2 per cent. per annum up to £2,000 and 1 per cent. on the excess of accounts of bodies not operating for profit, such as friendly societies. Changes in the rates of interest are shown in Table 717.

The following statement shows the operations on savings bank accounts and the amount of depositors' balances in New South Wales in various years since 1920.

Amounts Credited. Deposits at 30th June Vear Increase in Withdrawals. Depositors ended 30th June. Balances. Deposits.\* Interest. Amount. Per Head. £ 53,394,739 80,847,878 73,652,380 67,154,749 71,339,989 62,754,320 76,384,815 76,294,244 93,501,460 95,73,592 £ 1,597,050 3,051,191 54,660,882 81,941,134 58,179,625 49,951,362 85,727,514 69,810,769 1920 2.862.745 1929 4,099,847 1931 1939 2,799,637 1,609,757 27 31 12,654,661 66,576,777 64,125,646 66,567,655 81,633,010 87,473,789 82,110,900 87,750,208 94,537,932 16 11 7 8 1,458,104 5,362,889 1940 1,604,057 1941 1,577,770 1,539,529 5,639,308 6,787,724 31 33  $1943 \\ 1944$ 102,234,510 131,404,836 1,927,348 2,558,376 27,867,614 40,461,752 35,335,748 122,405,546 162,867,298 42 16 56 1945 1946 1947 109,573,592 156,874,265 167,922,196 141,706,128 3,203,212 198,203,046 18 191,112,181 158,994,486 160,874,544 3,800,574 4,053,943 236,241,536 231,367,769 80 77 38.038.490 4,873,767 10 1948 3,991,065 159,269,832 5,595,777 236,963,546

Table 706 .- Savings Bank Deposits in New South Wales.

Depositors' balances increased rapidly after 1941 as war industries were developed and business activity and employment expanded. Scarcity of civilian supplies and services contributed, in some measure, to the increase, which was favoured also by reductions in the rates of interest paid on fixed deposits in the trading banks and by large sums of deferred pay received by servicemen upon discharge. The decrease in 1946-47 occurred as lodgments to the credit of ex-servicemen diminished and the growth of civil production permitted increased spending by the public.

Savings Certificates, which bear some resemblance to savings bank deposits, were sold by the Federal Government from March, 1940, to January, 1949, as described on page 791. The net sales in New South Wales to 30th June, 1948, are shown below:—

	Net 8	lales.*		Net Sales.*		
Year.	In Year.	Accumulated Total.	Year.	In Year.	Accumulated Total.	
1939-40 1940-41 1941-42 1942-43 1943-44	£ 2,439,917 4,040,026 3,004,632 3,054,076 3,150,898	£ 2,439,917 6,479,943 9,484,575 12,538,651 15,689,549	1944–45 1945–46 1946–47 1947–48	£ 3,483,810 839,200 1,970,889 3,735,411	£ 19,173,359 20,012,559 21,983,448 25,718,859	

<sup>\*</sup> After deducting redemptions.

The number of savings bank accounts in active operation as at 30th June, 1939 and each succeeding year is shown below, together with the average amount on deposit per account.

Table 707.—Savings Bank Accounts in New South Wales.

30th June.	No. of Active Accounts.	Average Deposit per Account.	30th June.	No. of Active Accounts.	Average Deposition per Account.
1939 1940 1941 1942 1943	1,330,404 1,312,697 1,339,740 1,378,612 1,535,690	£ s. d. 65 15 0 62 11 0 65 10 0 68 11 5 79 14 1	1944 1945 1946 1947 1948	1,702,273 1,797,079 1,910,810 1,967,374 2,012,742	£ s. d. 95 13 6 110 5 10 123 12 8 117 12 1 117 14 8

<sup>\*</sup> Interstate transfers have been included in 1941-42 and later years.

<sup>(-)</sup> Decrease iu Deposits.

The number of accounts does not represent individual depositors, as many are joint accounts or accounts of societies, trusts, etc., whose members have also personal accounts. It is apparent, however, that an increasingly large proportion of the people practice thrift through the medium of the savings bank.

## BANKS EXCHANGE SETTLEMENT.

The Banks' Exchange Settlement Office was established in Sydney on the 18th January, 1894. Since 27th April, 1925, exchange balances between the banks have been settled by cheques drawn on and paid into the Commonwealth Bank, and for this purpose the banks have established accounts with the Commonwealth Bank through which settlements are made in full each day. The amount of the cheques drawn on the Commonwealth Bank is included in the exchanges.

The following table shows the growth in the volume of exchanges made through the Settlement Office. The figures represent the aggregate value of cheques drawn on one bank and deposited in another in the metropolitan area and the net balances of transactions at country inter-bank clearings. Abnormal transactions on Government account in respect of Treasury Bills have been excluded since 1930.

Calendar Year.	Amount of Exchanges.	Year ended June.	Amount of Exchanges.	Year ended June.	Amount of Exchanges.
1911	£000 304,488	1939	£000 926,818	1944	£000 1,476,336
1921	709,735	1940	1,005,301	1945	1,495,422
1929	1,043,325	1941	1,098,575	1946	1,616,630
1931	* 683,176	1942	1,189,706	1947	2,011,126
1939	932,367	1943	1,362,699	1948	2,334,833

Table 708.-Inter-bank Clearings, Sydney.

The figures are affected by amalgamations of banks which took place from time to time between 1916 and 1931.

These exchanges do not include the amount of transactions settled by intra-bank cheques and do not represent the total value of transactions settled by cheque. They are, however, considered an indication of the degree of variation in the volume of business transactions settled by cheque from year to year, provided due allowance is made for changes in price levels and amalgamation of banks.

In compiling the following index of bank clearings, the years 1926 to 1930 (inclusive) are taken as the base period, and the amount of clearings in each month is calculated as a ratio per cent. of the average amount of clearings in the same month in the base years, after adjustment of both sets of figures to remove the effects of special factors. By this means seasonal fluctuations are virtually eliminated. In order to smooth out casual fluctuations the ratio for each month is re-computed as a three months' moving average, so that the index for each month, as published

<sup>\*</sup> Government Treasury Bill transactions excluded from amounts stated for 1931 and later years.

below, represents the average of the ratios for that month and the two preceding months, with the average for respective months in 1926-1930 as base represented by 100.

								_				
Month.	Average,											
1930.	1929.	1932.	1939.	1942.	1943.	1944.	1945.	1946.	1947.	1948.	1949.	
July August September Oetober November December	100 100 100 100 100 100	103 103 106 108 108 107	66 65 64 65 66 64	101 101 99 101 102 102	125 123 124 123 124 124 124	130 135 134 138 135 136	155 160 155 152 149 150	168 169 163 159 153 152	167 168 166 166 164 159	206 214 217 216 211 208	229 227 232 234 243 243	291 287 293 291 298 296
January February March April May June	100 100 100 100 100 100	107 107 106 104 104 104	63 62 * * * 66	98 96 93 98 100 101	123 122 119 125 125 133	136 138 138 150 155 163	150 147 146 150 158 166	152 149 145 154 160 169	154 157 164 176 184 195	196 194 193 218 229 236	236 231 230 253 269 289	282 274 267 300 315 336
Year	100	106	64	99	125	143	154	157	171	214	248	298

Table 709.-Index of Bank Clearings, Sydney.

It should be noted that no adjustment has been made for normal growth nor for changes of price levels.

## MONEY ORDERS AND POSTAL NOTES.

Exchange by means of money orders and postal notes is conducted by the Post Office.

The following table gives particulars of the money orders issued and paid in New South Wales during 1938-39 and the six years ended June, 1947:—

Vear	Money Ord	ers issued in paymen	New South t in—	Wales for	Money Ord in N	lers issued elsewhere, paid Iew South Wales.		
ended 30th June. New South Wales.		Other Australian States,	Other Countries.	Total.	In other Australian States.	Beyond the Common- wealth.	Total.	
	£	£	£	£	£	£	£	
1939	7.837,252	716,693	180,152	8,734,097	753,010	337,205	1,090,215	
1942	9,810,878	785,491	56,051	10,652,420	966,563	121,290	1,087,853	
1943	11,678,941	1,079,187	49,250	12,807,378	1,481,044	80,034	1,561,078	
1944	12,467,569	1,148,137	56,154	13,671,860	1,836,582	94,909	1,931,491	
1945	10,779,830	1,202,014	61,535	12,043,379	1,729,031	126,890	1,855,921	
1946	10,892,037	1,268,399	66,386	12,226,822	1,564,011	238,554	1,802,565	
1947	11,463,408	1,261,633	83,531	12,808,572	1,379,017	302,198	1,681,215	

Table 710.-Money Order Business in New South Wales.

The amount of money orders issued in other Australian States and oversea countries for payment in New South Wales usually exceeds the amount sent from this State.

<sup>\*</sup> Index not ascertainable on account of suspension of State Government banking transactions.

The maximum amount for which a single postal note is issued is £1, and particulars regarding postal notes are shown below:—

Table 711.-Postal Note Business in New South Wales.

	issued	l Notes in New l Wales.	Postal Notes paid in New South Wales.					
Year ended 30th June.				Amount.				
soin June,	Number.	Amount.	Total Number.	Issued in New South Wales.	Issued in other States.	Total.		
·	·	£		£	£			
1939	9,413,689	3.491.630	8,791,224	2,971,205	306,022	3,277,22		
1942	9,185,135	3,721,851	8,906,241	3,269,304	357,322	3,626,62		
1943	8,624,790	3,641,680	8,782,330	3,202,280	634,600	3,836,88		
1944	8,303,190	3,496,340	8,783,131	3,035,126	941,080	3,976,20		
1945	8,337,509	3,515,509	8,682,697	2,997,548	891,949	3,889,49		
1946	8,482,240	3,578,707	8,517,640	3,066,251	697,570	3,763,82		
1947	9,673,715	4,009,343	9,190,024	3,417,284	403,391	3,820,67		

## INTEREST RATES.

As part of a plan for economic rehabilitation, measures were adopted by Commonwealth and State Governments in 1931 to effect a reduction in rates of interest. By conversion, interest rates on existing internal debts of the Governments were reduced by 22½ per cent. and legislation was enacted to effect, as far as practicable, a corresponding reduction in respect of private indebtedness. The rates payable on debts due to the Crown also were reduced.

During the war period the Commonwealth Government established control over interest rates in terms of National Security Regulations to which reference is made at the beginning of this chapter. By successive orders since 1942, maximum rates of interest have been prescribed for bank overdrafts, fixed deposits and savings bank deposits as shown in Tables 714 to 717; also for certain other loans listed below—

	Loans by	Loans to Lo	ocal Bodies.	Loans by Building	Loans to Building	Loans by Life Assur-	
Date of Order.	Pastoral Co's.	Guaranteed by Gov't.	Other.	& Co-op. Societies.	Societies Guaranteed by Gov't.	ance Co's. on Own Policies.	
March, 1942 August, 1944 December, 19#5 January, 1947 *	$5\frac{1}{4}$ $5\frac{1}{4}$	Per cent. $3\frac{5}{8}$ $3\frac{1}{2}$ $3\frac{1}{2}$ $3\frac{1}{2}$	Per cent. 378 368 368 368	Per cent.  5½ 5½ 5½ 5 5	Per cent.  37/8 37/8 37/8 37/8 37/8	Per cent.  5 43 43 43 41 41	

<sup>\*</sup> Current on 30th June, 1949.

The maximum rates as fixed applied only to new loans made after the order was issued, with the exception that the rate fixed for loans by past-oral companies was applied also to existing loans if by way of overdraft payable on demand.

## YIELD ON GOVERNMENT SECURITIES.

The yield on Government securities sold on the Stock Exchange is an important determinant of interest rates in other spheres. From 15th June, 1940, the Stock Exchanges in Australia fixed minimum prices for the sale of Government securities and prohibited their members from selling at lower than the fixed prices. This control, which had the effect of imposing an upper limit on interest yields on the securities, was repealed on 6th May, 1947.

The average yield, including redemption, at the end of June, at current market prices of Commonwealth Government securities maturing in Australia, was 5.52 per cent. in 1928, 5.26 per cent. in 1929, and 6.06 per cent in 1930. These rates are indicative of the general level of yields prior to the depression. The trend, at appreciably lower levels, following the general conversion of the internal Government debt in 1931, is illustrated by the following statement:—

Table 712.—Yields on	Commonwealth	Securities	in	Australia.
Rate	per cent. per an	mum,		

Year.	Short- dated.	Long- dated.	Year.	Short- dated.	Long dated
1932	<b></b>	4.44	1941	2.47	3.23
1933		3.75	1942	2.45	3.24
1934	1	3.32	19 <b>43</b>	2.48	3.23
1935		3.59	1944	2.45	3.24
1936	3.64	3.89	1945	2.47	3.25
1937	3.44	3.86	1946	1.90	3.24
1938	3.38	3.76	1947	2.12	3.17
1939	3.84	3.92	1948	2.26	3.16
1940	3.14	3.30			

<sup>\*</sup> Weighted average of yields on securities maturing in periods "nnder 5 years" and "10 or more years," respectively. † Yield on security maturing in 2 years and 12 years, respectively, estimated from yields on securities maturing "under 5 years" and "10 or more years."

The yields quoted are the annual average of yields as calculated by the Commonwealth Bank on the last Wednesday in each month. Those for the years 1932 to 1940 refer to Commonwealth securities issued prior to 1940. Interest on such securities was subject to Commonwealth Income Tax and exempt from State Income Tax, but the Commonwealth tax was limited to the rates of tax imposed by the Income Tax Act, 1930.

The yields for the years 1941 to 1948 relate to securities issued after 1st January, 1940; interest on these is subject to Commonwealth tax on income at current rates of tax as levied from year to year, but a rebate of tax is allowed of 2s. for each £1 of interest. The allowance of this rebate was a consequence of the introduction in 1942-43 of the uniform tax system under which State income taxation was discontinued.

# RATE OF DISCOUNT, COMMONWEALTH TREASURY BILLS.

Commonwealth Treasury Bills were first issued in 1927. They are discounted exclusively by the Commonwealth Bank and the trading banks, although in March, 1936, a single issue of small amount was made available for discount by the public.

In 1931 the Commonwealth Bank guaranteed that the bills taken up by the trading banks would be redeemed on maturity, and undertook to

1930-Oct.

re-discount them on demand during currency at the rate of interest at which they were issued. In respect of new issues or re-issues of Treasury Bills after 30th June, 1934, the guarantee of repayment was withdrawn, and re-discounting is undertaken by the Commonwealth Bank at a rate to be fixed at the time of the transaction. Variations in the rates of discount since June, 1927, have been as follows:—

						=	
Month of Change.	Rate of Dis- count.	Month of Change.	Rate of Dis- count.	Month of Change.	Rate of Dis- count.	Month of Change,	Rate of Dis- count.
	Per cent.		Per cent.		Per cent.		Per cent.
1927—June 1928—Feb. 1929—Oct.	$\frac{4}{4\frac{1}{2}}$ $5\frac{1}{4}$	1931—July 1932—Nov. 1933—Jan.	$\frac{4}{3\frac{1}{4}}$	1933—June 1934—April Oct.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1940—May 1943—Nov. 1945—Mar.	1½ 1½. 1

Table 713.—Rate of Discount on Commonwealth Treasury Bills.

## FIXED DEPOSIT RATES.

The trading banks provide a large part of the temporary financial accommodation needed in various business activities. The funds for this purpose are obtained partly as fixed deposits from customers. Variations in the rates of interest paid by trading banks to such customers in New South Wales in recent years are shown below:—

Month of		Period of Deposit.					Period of Deposit.			
Change.	3 months.	6 months.	months.	24 months.	Month of Change.	months.		24 months.		
1920—July 1927—Aug. 1930—Jan. 1931—June Nov. 1932—Mar. June Aug. Nov. 1933—Feb. 1934—April	312 4 4 3 12 12 12 12 14 3 2 2 2 2 2 2 2 2	4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	41/2 4 31/2 4 31/2 3 3 3 3 21/2 2 2 2	5 5 4 4 4 3 3 3 3 2	1934—Aug, Oct. 1936—Mar, 1940—Jan, May 1941—Sept. 1942—Mar.* 1944—Jau.* Aug.* 1945—Dec.*‡	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21 21 21 21 11 11 11 11 11 11 11	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2413 3 4424 2224 2 2 3412 1 1 2 1 4 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1	

Table 714.—Trading Banks, Fixed Deposit Rates.

Per cent. per annum.

Alterations in rates apply to deposits lodged or renewed after the date of change and not to deposits accepted at former rates.

## OVERDRAFT RATES.

According to information supplied by trading banks, the rates of interest on overdrafts charged by certain trading banks and dates of changes since 1920 were as follows; the rates are quoted as a range between the minimum and maximum rates charged:—

<sup>\*</sup> Rates paid were the maximum permitted by order under National Security Regulations. † Rate on first £10,000 of all 24 months deposits of any one depositor; on excess the rate is 1 per cent. † Current at June, 1949.

Date of Change.	Change. Overdraft Rates. Date of Change.		Overdraft Rates.	Date of Change.	Overdraft Rates.	
1920—July 1924—January 1925—January 1927—August	Per cent. 6 to 8 6 to 8 6 to 8 6 to 8 6 to 8	1932—July 1934—June July 1936—April to Aug.	Per cent. 5 to 6 4½ to 5½ 4½ to 5 4½ t	1942—March 1944—August 1947—January*	Per cent. 4½ to 5 4½ to 4½ 4½ to 4½	

Table 715.—Trading Banks, Overdraft Rates.

4 to 5

The maximum rates charged by trading banks since March, 1942, were the highest permitted by orders under National Security Regulations. They apply to overdrafts repayable on demand and to other loans made by trading banks after the date of the order.

The following table illustrates the trend of interest rates charged on various types of advances by the Commonwealth Bank and the Rural Bank of New South Wales. The rates shown are the maximum ruling in January of each year from 1930 to 1937 and at each subsequent date of change.

Table 716.—Rates of Interest Charged by Commonwealth Bank and Rural Bank of New South Wales.

Per cent. per annum.

	C	ommonwe	ealth Banl	Rural Bank of New South Wales.				
Date.	Over	drafts.		tgage Loans.	0	Rural	Advances	
	General Bank.	Rural Credits.	To 20 years.	21 to 41 years.	Over- drafts.	Long Term Loans.	for Homes Division.	
1930—Jan. 1931—Jan. 1932—Jan. 1933—Jan. 1934—Jan. 1935—Jan. 1936—Jan. 1937—Jan. 1940—July 1943—Sept. 1946—Jan.	65 44 44 44 44 44 44 44 44 44 44 44 44 44	1-12 5 6 5 4 4 3 3 3 3 3 3 3 3	      4	   400 18	66555544444444444444444444444444444444	61/2 61/2 * 5 5 44/4 44/4 44/4 44/4 44/4 44/4 44/	614 614 * 5 5 4434 4434 4414 414	

\* Rates reduced in terms of Interest Reduction Act, 1931.

The rate charged by the General Banking Division of the Commonwealth Bank on overdrafts of local and semi-Governmental authorities has been 4 per cent. since July, 1940, and the rate on advances by the Rural Credits Department carrying a Government guarantee was reduced to 3½ per cent. on 1st January, 1947.

The Commonwealth Bank has made loans since 2nd January, 1946, for housing on crédit foncier terms at an interest rate of 3% per cent., and

<sup>\*</sup> Current at June, 1949.

through the Industrial Finance Department has made advances on over-draft and for fixed terms at 4½ per cent. per annum.

# SAVINGS BANK DEPOSIT RATES.

Variations since 1928 in the rates of interest paid by the Commonwealth Savings Bank of Australia on the minimum monthly balances at the credit of depositors are shown below:—

Table 717.—Commonwealth Savings Bank, Interest on Depositors' Balances.

Rate per cent. per annum.

			<del></del>		per minur				
M	Month of Change.				lances of Depositors,		On Balances of Societies not Operating for Profit.		
				Under £500.	£500 to £1,000.	£1,000 to £1,300.	Up to £2,000.	On excessiover £2,000.	
Current, J	une, 1928		-	$3\frac{1}{2}$	$3\frac{1}{2}$	3	31/2	$3\frac{1}{2}$	
$\mathbf{J}^{c}$	uly, 1928			$3\frac{1}{2}$	$3\frac{1}{2}$	3	4	4	
o	October, 1928			4	$3\frac{1}{2}$	3	4	4	
J.	uly, 1931			3	$2\frac{1}{2}$	2	3	3	
J.	uly, 1932			$2\frac{3}{4}$	$2\frac{1}{4}$	2	$2\frac{3}{4}$	2 <u>s</u>	
N	November, 1932			$2\frac{1}{2}$	2	2	$2\frac{1}{2}$	21.	
J.	une, 1934			$2\frac{1}{4}$	13	13	$2\frac{1}{4}$	21	
J	January, 1935			2	13	13	2	2	
A	April, 1942*			2	11/2	Nil	2	<b>2</b> ·	
s	September, 1944	.*		2	1:1	Nil	2	2:	
C	October, 1944*			2	1:1	Nil	2	11	
Ι	December, 1945	* .		$2^{\cdot}$	1	Nil	2	1	

<sup>\*</sup> Rates fixed in terms of National Security Regulations.

# MORTGAGE INTEREST RATES.

The trend of interest rates charged on loans secured by mortgage since 1935 is indicated in the following table. The rates of interest are the actual (as distinct from the penal) rates recorded in first mortgages registered in the names of mortgagees who were private individuals or private corporations. Where identifiable, renewals and collateral mortgages are omitted, as also are mortgages taken by banks and Governmental agencies.

Table 718	—Interes	st Rate	es on F	irst l	Mortgages.
Weighted	average	rate p	er cent	. per	annum.

Year.	Rural Security.	Urban Security.	Year.	Rural Security.	Urban Security.	Quarter.	Rural Security.	Urban Security.
1934 1935 1936 1937 1938 1939 1940	5·1 4·8 4·9 5·0 5·0 5·2 5·1 4·9	5·3 5·2 5·2 5·4 5·6 5·6 5·5	1942 1943 1944 1945 1946 1947 1948	4·9 4·7 4·4 4·4 4·3 4·3 4·3	5·4 5·0 5·0 4·8 4·5 4·4	1947—Mar. June Sept. Dec. 1948—Mar. June Sept. Dec.	4·4 4·3 4·3 4·3 4·3 4·3 4·3 4·3	4·5 4·5 4·4 4·4 4·4 4·4

Interest on mortgages chargeable by the trading banks is usually stated as being at "prevalent rate," corresponding with the overdraft rates shown in Table 715. Particulars of rates of interest charged by the Rural Banks are shown in Table 716. Advances by the Government of New South Wales, mainly to primary producers, are made usually at lower rates than advances from other sources.

Mortgage interest rates continue to be controlled by Orders made under National Security (Economic Organisation) Regulations.

## OVERSEA EXCHANGE.

National Security Regulations relating to overseas exchange and monetary control were replaced at the end of 1946 by regulations under the Banking Act, 1945. By the regulations provision is made for the control of transactions in foreign exchange and restrictions have been placed upon the transmission of money (including Australian notes and gold) to places outside Australia. Overseas currency is made available to importers for transactions under import licenses. A system of licensing is applied also to exports to ensure that foreign currency arising from the sale of Australian products overseas is placed at the disposal of the Commonwealth Bank; the Bank pays an equivalent amount in Australian currency to the persons entitled thereto.

All gold held in Australia except gold coin to the value of £25, wrought gold and gold held for commercial use, must be delivered to the Commonwealth Bank. The transfer from Australia of securities in any form and dealings in foreign securities are also subject to control by the Commonwealth Bank.

Australia became a member of the International Monetary Fund and International Bank for Reconstruction and Development in August, 1947, its subscription to each institution being fixed at U.S. \$200,000,000 (£A62,034,739). The subscription to the Monetary Fund, paid in full, consisted of gold 240,138 oz. fine, equivalent to \$8,404,843, or £A2,606,961, and the balance in Australian currency. Only twenty per cent. of the subscription to the Bank for Reconstruction and Development had been called to 30th June, 1948; viz., gold 114,286 oz. fine (\$4,000,000 or £A1,240,695), and Australian currency \$36,000,000 (£A11,166,253).

# International Currency Reserves.

The total amount of Australia's reserves of international currency held by all banks at June of each year since 1938, as published by the Common-

wealth Bank, is shown below. Special war-time factors contributed to the large increases in the balances, such as payments for services rendered for other Governments, remittances on account of Allied Forces in Australia, and the operation of strict exchange and import controls. The growth in the past year was due to high prices of exports and an enlarged capital inflow.

Last Monday in June.	£A. mill.	Last Monday in June.	£A mill.	Last Monday in June.	£Amill,
1938 1939 1940 1941	78.4 $55.7$ $71.7$ $89.5$	1942 1943 1944 1945	69.1 $86.8$ $182.5$ $208.3$	1946 1947* 1948*	215·4 198·7 273·5

Table 719.-Australia, Gold and Balances Held Abroad.

# OVERSEAS EXCHANGE RATES.

After the First World War (1914-1918) Australia returned to a gold standard concurrently with Great Britain on 30th April, 1925. The rate of exchange between the currencies of the two countries then moved to parity and this relationship was maintained until Australia's departure from the gold standard late in 1929. The buying rate for £stg100, telegraphic transfer, rose in steps from £A101 in September, 1929, to £A108 10s. on 9th October, 1930, and to £A130 on 28th January, 1931, from which it was reduced to £A125 on 3rd December, 1931. Since then the rate has not varied.

A comparison of the rates of exchange between Australia and a number of important overseas centres in various years from 1929 to 1939 was shown in Table 268 of Year Book No. 50. Subsequent changes in the rates are illustrated below. The rates quoted are the mean of buying and selling rates for telegraphic transfers quoted by the Commonwealth Bank or, if these were not available, by other Australian banks.

Table 720.--Exchange Rates, Australia on Other Centres.

Averages of Daily Rates.

Australia on—	Quoted in—		Average ended	for Year June—		June, 1946.	June, 1947.	June, 1948.	Decem-	
on		1939.*	1946.	1947.	1948.	1010.	10111	1510.	1948.	
London South Africa New Zealand New York Montreal Belgium	£A. to £S.Ā.100 . £A. to £N.Z.100 . \$ to £A \$ to £A	125·25 124·70 100·33 3·78 3·79 111·58	125·25 124·84 100·25 3·22 3·55	125·25 124·88 100·25 3·22 3·22 141·02	125·25 124·88 100·25 3·22 3·22 141·02	125·25 124·88 100·25 3·22 3·54 141·02	125·25 124·88 100·25 3·22 3·22 141·02	125·25 124·88 100·25 3·22 3·22 141·02	125·25 124·88 124·27 3·22 3·22 141·02	
Benmark France Holland Java† Manila	Kroner to £A. Francs to £A. Florins to £A. Guilders to £A. Pesos to £A.	17·90 141·75 6·99 6·98 7·59		15·44 383·24 8·54 8·46 6·48	15·44 516·09 8·54 8·46 6·48	15·44 383·24 8·54  6·49	15·44 383·24 8·54 8·46 6·48	15·44 689·83 8·54 8·46 6·48	15·44 847·90 8·54 8·46 6·48	
Norway Sweden Switzerland Hong Kong India† Singapore	Kroner to £A. Francs to £A. 8 to £A. Rupee to £A.	15.90 15.51 16.68 12.83 10.69 6.86	13.83 10.64	15.97 11.58 13.85 12.78 10.64 6.81	15.97 11.56 13.85 12.77 10.64 6.80	15.97  13.85 12.86 10.64 6.81	15.97 11.56 13.85 12.77 10.64 6.81	15.97 11.56 13.85 12.77 10.64 6.81	15.97 11.56 13.85 12.77 10.64 6.81	

<sup>\*</sup> Average of rates at end of each month. † Selling Quotes only after 1939. ‡ Also Pakistan and Ceylon from January, 1948.

<sup>\*</sup> Last Wednesday in June.

# PRICE OF GOLD.

The Commonwealth Bank fixes the price which it is prepared to pay for gold lodged at the mint in Australia. This price is based on the forward open market price abroad, adjusted to the ruling rate of exchange for telegraphic transfers, less a small allowance for realisation charges. The price of gold in London has been controlled by the Bank of England since September, 1939.

The following table shows the average price per oz. of fine gold and the average value of the sovereign in London and Australia in each of the years ended 30th June, 1929 to 1948. London prices are expressed in sterling and Australian prices in local currency:—

Table 72	1.—Prices	of	Gold	in	London	and	Australia.
----------	-----------	----	------	----	--------	-----	------------

	Lone	don.	Australia.				
Year ended 30th June.	Average	Average Value of	Average pe	r Oz. Fine.	Average Value of		
	Price per Oz. Fine.	Sovereign.	Price.	Premium.	So vereigi		
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1940 1941 1942 1943 1944 1945	Stg. 4 4 11 4 4 11 4 4 11 5 7 7 6 1 7 6 11 8 7 1 1 3 7 0 8 7 0 10 7 0 0 8 4 9 8 8 0 8 8 0 8 8 0 8 8 0 8 8 3 8 12 3	Stg \$ s. d. 1 0 0 0 1 0 0 0 1 5 4 1 8 7 111 0 0 1 13 3 1 13 1 13 1 14 17 1 14 9 7 1 19 1	A £ s. d. 4 4 11 4 6 3 4 19 4 6 11 4 7 9 9 8 2 2 0 8 14 10 8 14 0 8 15 3 8 13 10 9 2 9 10 8 4 10 13 4 10 9 0 10 11 10 10 15 3	Per cent	A s. d. 1 0 0 0 4 1 3 5 1 10 11 1 15 3 1 18 2 1 2 2 1 0 2 2 1 0 2 2 8 7 2 8 0 0 2 8 0 0 2 10 0 0 0 1 10 0 0 0 0 0 0 0 0 0 0		

Stg.-Sterling.

A.—Australian Currency (see exchange rates, page 832.)

\* Unchanged to December, 1948.

The price per oz. of fine gold in Australia was unchanged at £10 9s. from January, 1942, until it rose to £10 10s. in June, 1944; there were further rises to £10 12s. in September, 1944, £10 13s. 6d. in May, 1945, and £10 15s. 3d. in June, 1945. Current Australian gold prices are published in the "Monthly Summary of Business Statistics."

#### INCORPORATED COMPANIES.

The legislation affecting the formation and conduct of companies in New South Wales is contained in the Companies Act, 1936, as amended.

The formation of a company, association, or partnership of more than ten persons in a banking business, or of twenty in any other business trading for profit, is prohibited, unless it is registered under the Companies Act, or incorporated under some other enactment, by royal charter or by letters patent. Seven persons or more may associate to form an incorporated company except that for a proprietary company the minimum number is two.

Companies may be of four kinds according to the liability of members to contribute to capital or to assets in the event of winding-up. They may be limited liability companies with the liability of members limited (1) to the amount unpaid on shares or (2) by guarantee; or they may be

(3) unlimited companies, in which the liability of members is unlimited, or (4) no-liability companies in which calls made on shares are not enforceable against members. No-liability companies may be formed only in connection with mining operations, and shares on which calls are unpaid for twenty-one days are forfeited automatically. Companies with liability limited by shares, not being no-liability companies, may be registered as proprietary companies under conditions which restrict the rights of members to transfer shares, limit membership, and prohibit the sale of shares and raising of loans by public subscription.

The issue of capital by companies is subject to control by the Commonwealth Treasurer in terms of the National Security (Capital Issues) Regulations described on page 804:

Particulars relating to the registration of companies in New South Wales in each year since 1938 are shown below:—

	New R	egistrat	lons—Limit	ed Com	panies.				
	Companies	Companies limited by Shares.					reases of al, Limited.	New No-Liability Companies.	
Year.	Tear.   limited by Guarantee.		Proprietary.		Other.		mpanies,		
	No.	No.	Nominal Capital.	No.	Nominal Capital.	No.	Nominal Amount.	No.	Nominal Capital.
1938 1939 1940 1941 1942 1943	16 27 13 8 19	786 811 539 152 31 30	£000 11,747 12,841 5,861 1,636 310 469	58 34 14 5 1 2	£000 7,309 3,268 484 1,321	105 99 78 44 12 12	£000 9,009 5,977 7,365 3,122 2,369 834	4 2  	£000 12 120 
1944 1945 1946 1947 1948	11 16 26 35 27	51 223 1,535 1,601 1,534	$\begin{array}{r} 1,511 \\ 6,714 \\ 21,926 \\ 34,066 \\ 36,519 \end{array}$	12 14 20 39	$\begin{array}{c} 227 \\ 1,045 \\ 2,477 \\ 2,480 \\ 11,600 \end{array}$	12 63 169 296 296	2,660 2,478 7,216 23,163 30,437	 1 1 4	10 25 260

Table 722.—Company Registrations in New South Wales.

The number of registrations of foreign companies (*i.e.*, those with original registration outside New South Wales) was 66 in 1946, 88 in 1947, and 109 in 1948.

The total number of limited companies which appeared to be in active existence in New South Wales at the end of various years since 1929 was as follows:—

End of Year.	Comp	anies.	End of Year,	Com	Companies.		Companies.	
Lear.	Local.	Foreign.	1 car.	Local.	Foreign.	Year.	Local.	Foreign.
1929 1932 1936 1938 1939	No. 6,044 5,750 7,234 8,204 8,639	No. 935 902 974 1,090 1,123	1940 1941 1942 1943 1944	No. 8,837 8,757 8,613 8,563 8,573	No. 1,145 1,154 1,163 1,175 1,195	1945 1946 1947 1948	No. 8,733 10,235 11,800 13,205	No. 1,220 1,275 1,357 1,462

Table 723.—Companies Operating in New South Wales.

The local companies in 1948 consisted of 1,414 public and 11,481 proprietary companies and 310 associations limited by guarantee not carrying on business for profit. There were also 44 no-liability companies.

### STOCK EXCHANGE INDEX.

The following index of prices of company shares on the Sydney Stock Exchange is based on the ratio of prices to par value of ordinary shares. The prices represent the average values in the respective months, and are based on records of actual sales or, where no sales have taken place, on a valuation determined from previous sales and current quotations. In addition to the indexes for component groups and the total index for 75 companies, an index has been compiled in respect of 34 companies in whose shares there is a considerable volume of business. The indexes are unweighted, the par value of shares being taken as base (100). Adjustments have been made to provide for the effects of changes in the capital structure of the companies.

The prices of shares on the Stock Exchange were controlled in terms of National Security (Economic Organisation) Regulations from March, 1942 until 31st December, 1946.

Table 724.—Stock Exchange Index (Sydney).

Average for year or month.	Manu- facturing and Distribu- tiug Companies.	10 Retail Companies.	8 Public Utility Companies.	5 Pastoral and Finance Goinpanies.	5 Insurance Companies.	Total, 75 Companies.	34 Active Shares included in foregoing.
Year ended June—  1936 1937 1938 1939 1940 1941 1942 1944 1945 1946 1947 1948	262.9	173·4 199·0 188·2 175·3 165·5 163·2 156·8 168·1 192·2 202·7 223·5 277·9 312·6	182·3 179·1 181·8 170·9 140·5 136·7 181·2 132·1 147·9 162·5 181·2 195·7 186·0	148·1 160·8 158·1 122·2 127·0 117·7 119·2 128·7 135·3 146·2 154·4 104·4	274·9 282·1 263·7 258·8 259·6 246·5 233·9 243·9 254·1 261·7 287·3 347·6 403·5	170·7 185·1 188·7 175·6 175·6 166·5 167·7 170·0 184·7 109·2 210·2 240·0 268·6	178·5 194·0 191·1 182·0 184·1 179·9 169·0 186·3 200·2 206·9 226·7 256·0 274·0
Month—  1929—April*  1931—Sept.*  1937—March*  1939—Aug.*	179·3	183·8	129·4	174·1	243·5	174·4	172·6
	72·3	60·2	87·9	75·2	121·3	74·4	77·2
	213·8	203·8	181·0	169·2	281·2	190·4	200·5
	212·6	168·2	156·0	118·2	263·9	174·4	181·9
July August September October November December	280·5 285·7 290·5 289·0 290·0 292·4	239.5 244.6 250.1 251.9 251.8 251.6	190·5 193·6 196·2 196·4 195·9 197·3	161·6 165·1 163·7 159·4 158·0 160·7	306·9 312·2 322·5 322·5 322·5 322·5	222·3 226·2 229·9 229·3 229·1 229·7	$\begin{array}{c} 240.6 \\ 244.5 \\ 247.1 \\ 245.6 \\ 245.7 \\ 247.2 \end{array}$
January February March April May Jule July August September October November December	307 8	289-0	202·9	165·5	343·8	243·8	259·6
	313 0	298-9	195·0	160·3	360·3	246·4	260·4·
	323 2	310-8	194·3	160·4	380·1	252·9	266·7
	325 4	313-6	194·7	168·3	385·5	254·9	269·9
	329 2	314-8	196·9	172·6	391·7	257·1	272·4
	330 4	318-1	194·9	171·0	401·0	258·1	272·1
	327 8	315-1	194·5	167·7	408·8	257·0	204·5
	325 0	304-9	190·4	164·6	406·8	252·6	270·4
	332 1	306-4	187·9	168·8	399·1	253·5	264·1
	341 2	311-6	188·1	173·9	399·1	258·8	270·9
	347 3	318-2	190·7	179·8	399·2	264·4	276·4
	355 4	318-8	189·8	183·4	404·4	268·7	280·4
January February Mareh April May June	361·4	315·5	184·7	191·7	407·8	271.5	283·7
	358·1	311·2	180·5	189·0	404·8	268.6	280·3
	345·3	305·6	179·7	173·7	401·6	260.5	268·4
	350·9	308·6	178·0	176·1	399·7	261.8	272·3
	359·1	315·1	178·4	186·7	408·5	265.9	277·1
	362·7	319·6	177·2	187·6	407·0	267.7	279·4

<sup>\*</sup>The highest point in the Index prior to the depression was in April, 1929; the lowest depression level, in September, 1931; and the highest point in the pre-war period, in March, 1937. War was declared against Germany on 3rd September, 1939.

Current indexes of share prices are published in the "Monthly Summary of Business Statistics."

### CO-OPERATIVE SOCIETIES.

The laws relating to co-operation in New South Wales are embodied in the Co-operation Act, 1923-1948, and additional provisions relating to co-operative building societies are contained in the Housing Act, 1936-1937.

The Co-operation Act is a comprehensive measure, affording wide scope for co-operative development. It authorises co-operative societies to engage in all forms of economic activity except insurance (unless specially authorised by by the Governor) and banking.

Societies may be of various kinds, viz.: (a) rural societies to assist producers in conducting their operations and in marketing products; (b) trading societies to carry on business, trade, or industry; (c) community settlement societies to acquire land and settle or retain persons thereon and to provide any common service or benefits; (d) community advancement societies to provide any community service, e.g., water, gas, electricity, transport, recreation, etc.; (e) building societies—terminating or permanent—to assist members to acquire homes or other property; (f) rural credit societies to make or arrange loans to members for the purpose of assisting rural production; (g) small loans (formerly urban credit) societies to assist members to acquire plant, furniture, etc., or to commence business or trade; (h) investment societies to enable members to combine to secure shares in a company or business or to invest in securities. Societies of the same kind may combine into co-operative associations, and such associations of all kinds may form unions.

Societies are corporate bodies with limited liability except that a rural credit society may be formed with unlimited liability. Adequate provision is made to safeguard the funds and financial interests of the societies. Powers of supervision are vested in the Registrar of Co-operative Societies.

Co-operative effort for production is a prominent feature of the dairying industry, most of the butter factories being organised on a co-operative basis.

Further details regarding the co-operative movement are given in the chapters of this Year Book relating to "Social Condition", "Agriculture" and the "Dairying Industry".

The number of co-operative societies on the register at 30th June, 1947, was 936, including 7 permanent building societies registered under the Building and Co-operative Societies Act of 1901. There were 89 trading, 220 rural, 543 building, 2 investment, 16 small loan, 1 community settlement, and 50 community advancement societies; also 14 associations of co-operative societies and one union of co-operative associations. Of these societies 68 were in liquidation at 30th June, 1947.

# Co-operative Trading and Rural Societies.

The majority of the co-operative trading societies in active operation are consumers' distributive societies, organised on the Rochdale plan of "dividend upon purchase", conducting retail stores. They buy their supplies largely from a wholesale co-operative society with which a considerable

number of them are affiliated. The societies have met with success in the Newcastle and other mining districts, and to a limited extent in other centres where large numbers of industrial workers reside.

Particulars regarding the transactions of the co-operative trading and rural societies in 1938-39 and the last two years are shown below.

Particulars.		r	rading Societ	ies.	Rural Societies.			
		1938–39	. 1945-46.	1946–47.	1938–39.	1945-46.	1946-47.	
Societies (active) Members	No	40,80		63 64,966	123 55,860	135 66,041	184 100,386	
Members Funds—								
Share capital Reserves		€ 591,85 € 422,29		1,113,597 594,222	1,077,787 1,026,739	1,290,302 1,610,497	1,520,910 1,888,162	

1,604,046

3,645,635

325,290

1,707,819

4,218,315

363,699

2,104,526

17,451,032

177,773

2,900,799

24,063,795

271,953

3,409,072

25,184,995

283,765

1,014,153

2,701,131

200,143

£

Total...
Turnover ...

Net Income

Table 725.—Co-operative Trading and Rural Societies.

The number of societies, as shown in the table, does not include societies in liquidation nor new societies from which annual returns were not due.

# Co-operative Building Societies.

Co-operative building societies are classified as (1) permanent, (2) Starr-Bowkett terminating societies and (3) other terminating societies. A summary of the operations of the building societies for which the annual return was made in the year 1946-47 is shown below:—

Table 726 .- Co-operative Building Societies .- Year ended June, 1947.

Particulars.			Permanent Societies.	Starr- Bowkett Societies.	Other Terminating Societies.
Societies Shareholders or Members		No. No.	21 7,297	87 33,379	382 37,684
Assets— Advances on Mortgage Other		£	2,567,786 577,833	1,823,569 625,120	15,278,074 <b>*</b> 281,785
Total Assets	•••	£	3,145,619	2,448,689	15,559,859
Liabilities —				-	
Paid up Capitai Members' Subscriptions Reserve Funds and Surplus	 	£ £	1,469,707 423,008	2,101,983 165,042	3,797,851 505,703
Deposits Advances from Lending Institution Other		£	729,932 522,972	181,664	10,254,587 1,001,718
Total Liabilities		£	3,145,619	2,448,689	15,559,859

<sup>\*</sup> Aggregate amount advanced to members; repayments not deducted.

In Starr-Bowkett building societies loans free of interest are made to members as subscriptions accumulate, the rights of members to appropriation being determined by ballot or by sale. The duration of societies varies, but frequently over 20 years elapse before the last loan is made. When an advance has been made to all members remaining in the society the process of winding-up commences and share capital is repaid as repayments in respect of loans accumulate.

The terminating building societies, other than Starr-Bowkett, obtain funds from banks and other financial institutions and make advances to members as they apply for them. The repayment of the loans obtained by nearly all these societies is guaranteed by the Government of New South Wales. The expansion of the activities of such societies is illustrated below:—

Table 727.—Terminating Building Societies	with	Government	Guarantees.
---	------	------------	-------------

Particulars.		At 31st March—							
		1939.*	1911.*	1947.	1948.	1949.			
Societies	No.	156	194	393	449	528			
Members	No.	18,787	20,959	35,426	39,516	44,917			
Shares	No.	238,502	282,455	566,113	664,503	807,223			
Nominal Share Capital	£	13,020,761	15,208,382	29,614,470	34,096,640	42,416,792			
Funds Available	£	11,364,825	14,200,825	34,606,825	40,171,825	50,789,825			
Loans Approved	No.	12,106	17,543	28,457	34,500	41,178			
Amount	£	8,653,449	13,040,585	23,147,705	29,278,030	37,071,231			
Advances to Members	£	7,505,392	12,372,572	19,083,540	24,130,330	30,274,713			

<sup>\*</sup> At 30th June.

In addition to the societies to which the particulars in the foregoing table relate, there were 59 societies without Government guarantee at 31st March, 1949.

Further details of terminating co-operative building societies are contained in the chapter "Social Condition" of this volume.

## FRIENDLY SOCIETIES.

The affairs of the friendly societies in New South Wales are conducted in accordance with the Friendly Societies Act of 1912 and its amendments. The societies are required to register, and to furnish periodical returns to the Registrar, giving details relating to membership, sickness, mortality, benefits and finances. In this chapter reference is made to the finances of the societies which provide benefits such as medical attendance, sick pay, and funeral donations. Other matters relating to friendly societies, and to miscellaneous societies registered under the Friendly Societies Act, such as dispensaries, medical institutes, and accident societies, are discussed in the chapter entitled "Social Condition."

The affairs of the friendly societies are subject to State supervision and provision has been made for the actuarial certification of tables of contributions, for valuations at least once every five years, the investigation of accounts, and other measures for safeguarding the funds. A society is not entitled to registration unless tables of contribution in respect of sickness and death benefits and policies of endowment are supported by an actuarial certificate.

As a general rule, the moneys received or paid on account of a particular benefit must be kept in a separate account and be used only for the specified purpose.

## ACCUMULATED FUNDS.

The following statement illustrates the growth of the funds of the Friendly Societies between 1911 and 1947; statistics were not compiled for the years 1940 to 1946:—

At,	Sickness	Medical and Management	Other Funds.	All Ft	ınds.
30th June.	Funeral Funds.	Fund,	Other Funds.	Total.	Per Member
	£	£	£	£	£
1911*	1,378,722	78,264	49,852	1,506,838	9.14
1921	2,134,339	194,358	83,065	2,411,762	12.08
1931	3,640,368	261,663	117,209	4,019,240	16.58
1936	4,039,557	336,755	110,191	4,486,503	21.69
1937	4,160,635	351,531	119,335	4,631,501	22.16
1938	4,287,123	360,965	120,970	4,769,058	22.48
1939	4,412,391	368,971	127,101	4,908,463	23.19
1947	5,498,379	484,077	187,077	6,169,533	<b>26·</b> 61

Table 728.-Friendly Societies, Balance of Funds.

At 30th June, 1947 approximately 33 per cent. of accumulated funds were invested in mortgages, 49 per cent. in public securities, and 11 per cent. in buildings and other freehold property. These percentages reflect a marked change in the disposition of investments since 1929, when mortgages represented 80 per cent. of total investments and public securities only 1.5 per cent.

## RECEIPTS AND EXPENDITURE.

The receipts and expenditure of the friendly societies in various years from 1929 to 1947 are shown in the following statement:—

<sup>\*</sup> At 31st December.

	l .									
		Rece	eipts.				Expend	liture.		
Year ended 30th June	Contri- butions.	Interest.	Other.	Total.	Sick Pay.	Funeral Dona- tions,	Medical Atten- dance and Medicine.	Expenses of Manage- ment.	Other.	Total.
į	£	£	£	£	£	£	£	£	£	£
1929	832,187	219,788	66,173	1,118,148	319,787	77,928	343,381	161,300	42,638	945,034
1931	765,113	210,164	49,290	1,024,567	307,979	75,747	298,299	171,820	76,076	929,921
1936	731,637	187,867	94,807	1,014,311	260,745	91,672	285,891	153,636	88,721	880,665
1937	750,764	194,192	45,544	990,500	251,279	86,406	295,600	157,976	54,241	845,502
1938	769,100	202,036	31,884	1,003,020	260,815	87,947	307,417	163,744	45,540	865,463
1939	767,621	208,651	38,264	1,014,536	278,738	89,368	306,029	165,051	35,945	875,131
1947	962,701	224,698	37,260	1,224,659	311,772	108,142	377,399	202,765	52,256	1,052,334
					ll .					

Table 729.—Friendly Societies, Receipts and Expenditure.

Disbursements on account of benefits amounted to £741,096 in 1928-29, £674,135 in 1938-39, and £797,313 in 1946-47. The average cost of medical attendance and medicine per adult member was 30s. 10d. in 1928-29, 32s. 1d. in 1938-39 and 35s. 2d. in 1946-47.

After allowing for inter-fund transfers and payments from one branch to another, expenses of management amounted to £202,765 in 1946-47, representing 17s. 6d. per head of membership, and 21.1 per cent. of contributions and 16.6 per cent. of total income.

# INSURANCE.

Insurance in New South Wales is mainly the province of private organisations. Social benefits, such as those provided by friendly societies, pensions for widows, aged persons, invalids, etc., and unemployment benefits, provided by State or Commonwealth Government, and the Government pension funds are described in the chapter "Social Condition" of this Year Book.

#### Insurance Legislation.

The Commonwealth Government possessed power to legislate in respect of insurance but until 1945 the conduct of insurance business in Australia was governed largely by State laws.

In New South Wales, State legislation regarding insurance was scanty, apart from laws dealing with workers' compensation (described in the chapter "Employment" of this Year Book) and with motor vehicles third-party risks, further reference to which is made on page 850.

A comprehensive Commonwealth measure, the Life Insurance Act, 1945, superseded State enactments as from 20th June, 1945. Under it life insurance business throughout Australia is regulated in ways designed to afford maximum protection to policy holders.

The Act is administered, subject to the Treasurer's direction, by an Insurance Commissioner who has wide powers to investigate the affairs of any company. After investigation he may, subject to a right of appeal to the Court, issue directions to a company or apply to the Court for the appointment of a judicial manager or for an order to wind up the company.

Every life insurance company must register with the Commissioner, must lodge deposits (maximum £50,000) with the Treasurer, must furnish certified statements of accounts, reports of actuarial valuations and statistical returns, and may not use any form of proposal, policy or written matter deemed by the Commissioner to be misleading. Each company must establish one or more statutory funds for the receipt of all moneys relating to its life insurance business and may apply the assets of a fund only for the purpose of the class of life insurance business for which that fund was created. An actuarial investigation of the company's affairs and of each statutory fund must be made at intervals not exceeding five years, observing a prescribed minimum basis of valuation.

A distribution of dividends to shareholders or of new bonuses to policy-holders may not be made unless a surplus is disclosed by the valuation; of any surplus derived from participating policies registered in Australia the allocation for distribution to shareholders may not exceed 25 per cent. of the amount allocated to the holders of those policies.

Rates of premium must be approved by an actuary. Rules govern the assignment or mortgage of policies, the protection of policies against creditors in the event of bankruptcy, and the determination of surrender values and forfeitures. A policy holder is entitled to a paid-up policy if he has paid three years' premiums, and to the surrender value in cash if the policy has been in force for six years. The amount payable on the death of a child under ten years of age is limited. A company must maintain a register of policies in each State in which it operates; a policy-holder may elect to have a policy registered in a State other than that in which he resides. The Act contains provisions authorising the establishment of a Commonwealth Government Insurance Office to conduct life and other classes of insurance business.

## LIFE ASSURANCE OFFICES.

In 1947 there were twenty-one life assurance offices registered under the Life Insurance Act, 1945, and, in addition, life business was transacted by the offices established by the New South Wales and Queensland State Governments, which are not subject to the Commonwealth Act. Of the twenty-three offices, thirteen conducted both ordinary and industrial business, nine of them ordinary business only and one industrial business only. The offices are of Australian origin, excepting one English and one New Zealand office.

The offices transacting business in New South Wales numbered twenty, twelve of them conducting both ordinary and industrial business and eight ordinary business only.

# LIFE ASSURANCE STATISTICS.

The statistics of life assurance up to 1940, as shown in this Year Book, were compiled from returns furnished to the State Government Statistician and those for the years 1942 to 1946 were collected by the Commonwealth Statistician. As from 1947 the statistics have been extracted from returns furnished to the Commonwealth Insurance Commissioner. The returns relate to a period of twelve months ended on the balance date of each office, which, in most instances, falls in September or December.

# LIFE ASSURANCES IN FORCE IN NEW SOUTH WALES.

The sum assured under ordinary and industrial policies in force in New South Wales in 1947 was £345,054,000, this with bonus additions making a total amount of £379,525,000. A comparative statement of the ordinary and industrial business in force is shown below:—

Table 730.—Life	Assurances	in Force in	New	South	Wales.
	(Excluding	Annuities).			

		Ordinary	y Branch.	\\ \\	Industrial Branch.					
Year.	Policies.	Sum Assured,	Bonus Additions.	Annual Premiums.	Policies.	Sum Assured.	Bonus Additions.	Annual Premiums,		
_	No.	£000	£000	£000	No.	£000	£000	£000		
1921	236,973	64,018	8,048	2,155	358,493	11,711	*	731		
1929	283,516	100,130	17,285	3,323	620,027	27,801	720	1,696		
193 <b>1</b>	269,653	97,240	19,231	3,198	576,053	25,490	769	1,518		
1936	339,169	123,384	23,396	4,042	785,467	34,161	1,406	2,044		
1939	421,219	153,272	27,127	5,004	962,499	43,202	1,870	2,591		
1940	438,116	159,144	27,691	5,186	1,010,828	45,548	1,999	2,727		
1942	486,028	174,833	*	5,720	1,123,511	51,883	*	3,079		
1943	510,294	183,799	*	6,092	1,170,071	55,083	*	3,252		
1944	544,475	199,290	*	6,700	1,221,480	59,059	*	3,468		
1945	577,398	215,733	*	7,364	1,265,696	63,041	*	3,673		
1946	632,307	243,419	*	8,472	1,308,385	68,076	*	3,919		
1947	694,738	271,782	32,390	9,435	1,342,030	73,272	2,081	4,114		

<sup>\*</sup> Not available.

Industrial assurances are those upon which premiums are payable at intervals of less than two months and receivable through collectors. Other assurances fall within the category of the ordinary branch.

A broad classification of the business in force in 1947 is shown in the following table. Whole of life assurances are those payable at death only, endowment assurances are payable at the end of a specified period or at death prior to the expiration of the period, and endowments are payable only in case of survival for a specified period.

Table 731.—Life Assurances in Force in New South Wales, 1947.

(Excluding Annuities).

	Ordinary Branch,				Industrial Branch.			
Type of Policy.	Policies.	Sum Assured.	Bonus Addi- tions.	Annual Pre- miunis,	Policies.	Sunı Assured.	Bonus , Addi- tions.	Annual Pre- miums,
Whole-life Endowment Assurance Other Assurances Endownents	No. 190,813 465,274 6,831 31,820	£000. 117,146 140,622 3,348 10,666	£000. 22,695 9,500 7 188	£000. 3,012 5,846 88 489	No. 69,331 1,233,599  39,100	£000. .2,087 69,561 	£000. 71 2,007 	£000 143 3,875 3
Total	694,738	271,782	32,390	9,435	1,342,030	73,272	2,081	4,114

In the ordinary branch 67 per cent. of the policies and 52 per cent. of the total sum assured were represented by endowment assurances, the proportions covered by whole-life being 27 per cent. and 43 per cent. and by endowments 5 per cent. and 4 per cent., respectively. The average sum assured per policy was £614 for whole-life, £302 for endowment assurance and £335 for endowment.

Of the industrial policies, endowment assurances represented 92 per cent. of the total number and 95 per cent. of the total sum assured, and the average sum assured for each type of policy was whole-life £30, endowment assurance £56 and endowment £42.

The development of life assurance in relation to the population and the increase in the average amount per policy is shown in the following table:—

Table 732.-Life Assurance in New South Wales, Per Head and Per Policy.

		er 1,000 of lation.		sured per Population.	Average Sum Assured per Policy.		
10011	Ordinary.	Industrial,	Ordinary.	Industrial.	Ordinary.	Industrial	
1921	No. 111	No. 168	£ s. d.	£ s. d. 5 10 0	£ 270	£ . 33	
1929	112	245	39 11 8	10 19 10	353	45	
1931	105	223	37 14 3	9 17 9	361	44	
1939	152	348	55 7 11	15 12 3	364	45	
1943	178 188	408	64 0 4 68 13 9	19 3 9	360 366	47 48	
$1944 \\ 1945$	188	421 431	68 13 9 73 10 10	$\begin{bmatrix} 20 & 7 & 1 \\ 21 & 9 & 10 \end{bmatrix}$	300 374	50	
1946	213	442	82 3 1	$\begin{bmatrix} 21 & 9 & 10 \\ 22 & 19 & 6 \end{bmatrix}$	385	52	
1947	231	446	90 7 4	$\begin{bmatrix} 24 & 19 & 0 \\ 24 & 7 & 3 \end{bmatrix}$	391	55	

# NEW BUSINESS IN NEW SOUTH WALES.

Particulars of the new life assurance policies, ordinary and industrial, issued in New South Wales in various years since 1929 are shown in the following table. These figures are derived from returns furnished by each life office covering a period of twelve months ended on its balance date and relate substantially to years ended on 30th September and 31st December. Monthly statistics of new policies issued are shown in Table 735.

Table 733.—Life Assurances, New Business in New South Wales (Excluding Annuities).

		Ordinary Branch		Industrial Branch.				
Year,	Policies.	Sum Assured,	Annual Premiums.	Policies.	Sum Assured,	Annual Premiums.		
	No.	£	£	No.	£	£		
1929	26,422	11,650,396	405,031	124,013	6,821,670	405,139		
1931	18,784	7,460,868	263,102	89,736	4,203,452	252,045		
1936	51,073	16,802,436	572,551	158,681	6,892,344	436,237		
1939	50,520	18,179,537	595,366	156,787	7,539,660	471,618		
1940	42,869	14,581,759	492,344	149,103	7,095,873	437,583		
1942	45,766	15,441,838	543,964	122,077	6,583,572	387,863		
1943	43,218	15,746,924	590,965	105,018	6,159,221	358,200		
1944	51,278	21,037,984	844,827	110,560	7,062,191	403,800		
1945	53,927	23,998,758	952,893	109,862	7,512,997	419,662		
1946	81,677	38,077,853	1,402,523	128,266	9,803,114	527,972		
1947	98,149	43,268,628	1,609,648	115,181	10,240,812	482,412		

Single premiums payable in respect of new ordinary policies issued amounted to £124,002 in 1947. Similar information for earlier years is not available.

The volume of new business rose steeply after 1943, the total sum assured under new ordinary and industrial policies issued amounting to £21,906,000 in 1943, £31,512,000 in 1945, £47,881,000 in 1946 and £53,509,000 in 1947. Prior to 1944 the largest amount recorded was £26,061,700 in 1937, comprising new ordinary policies, £18,251,496 and industrial, £7,810,204.

Assurances effected in conjunction with the establishment by employers of staff superannuation schemes have contributed significantly to the recent large increases.

The new policies issued in 1947 comprised the following types:-

Table 734.—Life Assurances, Classification of New Business in New South Wales, 1947, (Excluding Annuities).

		Ordinary	Branch.	Industrial Branch.			
Type of Policy.	Policies.	Sum Assured.	Single Premiums	Annual Premiums	Policies.	Sum Assured.	Annual Premiums
Endowment Assurance Other Assurances	No. 12,813 78,701 2,009 4,626	£000. 9,786 30,447 763 2,273	£000. 6 82  36	£000. 230 1,250 24 106	No. 7,001 107,094  1,086	£000. 348 9,814 	£000. 30 448 
Total	98,149	43,269	124	1,610	115,181	10,241	482

In the ordinary branch the proportions of the total number of policies and total sum assured represented by whole-life assurances were, respectively, 13 per cent. and 23 per cent.; by endowment assurances, 80 per cent. and 70 per cent.; and by endowments, 5 per cent. and 5 per cent. The average amount assured per policy was for whole-life, £764; endowment assurance, £387; and endowment, £491.

Endowment assurances constituted 93 per cent. of the number of policies and 96 per cent. of the sums assured in the industrial branch in 1947, the average amount per policy being £50 for whole-life, £92 for endowment assurance and £72 for endowment.

Monthly statistics of the new life assurances issued in New South Wales have been collected since the beginning of 1947 and these are shown in the following table, together with totals in the years ended 31st December and 30th June.

Table 735.—Life Assurances in New South Wales, New Policies Issued Monthly (Excluding Annuities).

	Ordi	nary.	Indu	Industrial.		Ordin	nary.	Indu	strial.	Total
Period.	Policies.	Sum Assured.	Policies.	Sum Assured.	Total Sum Assured.	Policies.	Sum Assured.	Policies.	Sum Assured.	Sum Assured
	Year 1947.							Year 1948		
Montli— January February March April May June July August September October November December December	No. 4,769 6,836 7,116 6,796 8,103 8,671 9,067 9,151 10,757 7,415 7,730 10,250	£000 1,900 2,834 3,185 2,930 3,411 3,938 4,192 4,288 4,915 3,395 3,422 5,183	No. 5,774 10,841 7,617 5,564 10,369 12,766 10,880 10,197 13,644 10,293 9,998 7,949	£000 492 924 636 503 953 1,161 1,005 942 1,265 941 936 718	£000 2,392 3,758 3,821 3,433 4,364 5,099 5,197 5,230 6,180 4,336 4,358 5,901	No. 4,105 5,915 6,738 8,602 7,793 9,324 8,561 8,115 11,809 6,862 7,804 10,948	£000 1,919 2,809 3,145 3,803 3,810 4,653 4,297 4,033 5,595 3,320 3,055 6,452	No. 4,867 9,819 12,593 8,941 11,314 9,005 10,428 11,688 11,458 11,458 10,546 5,345	£000 462 969 1,163 865 1,080 867 1,011 1,144 1,124 827 1,029 529	£000 2,381 3,778 1,308 4,668 4,896 5,520 5,308 5,177 6,719 4,147 4,684 6,981
Year ended— June December	* 96,661	* 43,593	* 115,892	* 10,476	* 54,069	96,847 96,576	45,540 47,497	119,500 114,482	11,213 11,070	56,753 58,567

<sup>\*</sup> Not available.

## DISCONTINUANCES IN NEW SOUTH WALES.

Causes of discontinuance of policies on the New South Wales register are shown below for the year 1947. The item "transfers" represents net gain or loss resulting from transfers between the New South Wales and other registers. Policies lapsed after having overdue premiums advanced out of the surrender value are recorded as surrenders and not as forfeitures. Reinstatements are deducted from the causes under which the policies were discontinued.

Table 736.—Life Assurance, Discontinuances in New South Wales, 1947, (Excluding Annuities).

Cause of	Or	dinary Bran	ich.	Industrial Branch.			
Discontinuance,	Policies.	Sum Assured.	Annual Premiums.	Policies.	Sum Assured.	Annual Premiums.	
	No.	£	£	No.	£	£	
Death	3,664	1,698,680	70,115	7,808	300,133	20,529	
Maturity	5,583	1,107,232	60,795	30,679	1,385,420	80,447	
Surrender	11,820	4,813,124	164,634	13,594	688,583	43,897	
Forfeiture	12,810	4,397,993	163,229	26,426	2,462,463	131,157	
Transfer	52	319,116	13,632	152*	397*	413*	
Other	47	552,206	47,298	19	5,754	2,815	
Total	33,976	12,888,351	519,703	78,374	4,841,956	278,432	

<sup>\*</sup> Net gain.

#### ANNUITIES IN NEW SOUTH WALES.

In 1947 there were in force in New South Wales 4,029 annuity policies for £419,930 per annum. New annuity policies issued in the year numbered 1,655 for £111,534 per annum and discontinuances aggregated 202 policies for £29,419 per annum. The following dissection in which the number of policies and/or amount assured per annum are indicated, shows the main causes of variation recorded under the head of discontinuances to have been: death 37, £5,352; surrender 159, £10,690; forfeitures £484 (net loss); transfer 1 (net gain), £19,492 (net loss); and other 7, £6,599 (net gain).

## PREMIUMS, CLAIMS, ETC., IN NEW SOUTH WALES.

The compilation of complete revenue accounts in respect of the life assurance business in New South Wales is precluded because it is not practicable to allocate to the various registers maintained by the life offices items such as income from investments, taxation, etc. Returns collected by the Commonwealth Insurance Commissioner, however, show particulars of

premium income and claims for the year 1947 in relation to the business in New South Wales.

Table 737.—Life Assurance, Premiums, Claims, etc. in New South Wales, 1947.

Particulars.		Oı	rdinary.	Industrial.	Total.
Premiums, Assurance—Single Other Annuity— Single Other		9,	£ 124,992 287,620 185,092 137,540	£ 5,364 3,952,853 	£ 130,356 13,240,473 185,092 137,540
Total Premiums		9,	735,244	3,958,217	13,693,461
Claims—Death  Maturity  Surrenders  Annuities  Cash Bonuses		1,	294,454 478,353 645,489 100,826 41,345	289,843 1,612,485 176,614 	2,584,297 3,090,838 822,103 100,826 41,472
. Total Claims, et	e	4,	560,467	2,079,069	6,639,536

# LIFE ASSURANCE REVENUE ACCOUNTS.

The following summary of revenue accounts shows the nature and magnitude of the operations in 1947 of the twenty-one life offices registered under the Life Insurance Act, 1945, together with the two State Government offices. The particulars refer to the business of the offices in New South Wales and elsewhere, except in the case of an English office for which only the Australian business is included. Accident and general insurance business which some offices transact, is omitted, the statement being confined to the statutory life funds maintained in respect of ordinary and industrial business.

Table 738.—Life Assurance, Summary of Revenue Accounts, 1947 (Including business outside New South Wales).

£thousand.

Particulars.	Ordinary Branch.	Industrial Branch.	Particulars.	Ordinary Branch.	Industrial Branch.
Premiums Consideration for Annuities Interest, Dividends, Rents* Other	37,007 1,181 12,384 265	12,354 2,833 11	Claims—Death Maturity Surrenders Annuities Bonuses in Cash Commissions Management Taxes† Staff Superannuation, etc. Shareholders' Dividends Other	8,785 8,119 2,231 373 144 3,208 2,689 160 340 94 317	890 5,161 546  2,054 1,319 88 121 46 73
Total	50,837	15,198	Total	26,460	10,298

<sup>\*</sup>After deducting taxes and rates thereon, viz., Ordinary, £1,204,000; Industrial, £203,000.

<sup>†</sup> Excluding taxes deducted from interest, dividends and rents.

Outgoings as shown in the table exclude transfers to general and investment reserves. Of the premium income totalling £50,542,000 for both ordinary and industrial branches, £36,612,000 or 72 per cent. was derived from business in Australia, whilst the premiums from business in New South Wales amounted to £13,693,000 or 37 per cent. of the total in Australia. The cost of claims, surrenders, annuities and cash bonuses totalled £26,249,000, of which £18,291,000 or 70 per cent. related to Australian business, and for business in New South Wales the amount was £6,640,000, representing 36 per cent. of the Australian total.

# LIFE ASSURANCE BALANCE SHEET.

The following table gives a summary of the balance sheets of the statutory life assurance funds of the twenty-one offices registered under the Life Insurance Act and of the life offices of the New South Wales and Queensland State Governments.

Table 739.—Life Assurance, Ordinary and Industrial Business, Balance Sheets, 1947.

£thou	isand.
Liabilities.	Assets.
Assurance Funds, including Invest- ment and Contingency, etc., Res. Claims, Unpaid	Property, including Furn- iture, Equipment 17,142 Loans on Mortgage 61,146 , Policies 21,373 Other 435
, and the second	S2,954   S2,954
t.	——————————————————————————————————————
Total £454,655	Total £454,655

£thousand

Shareholders' funds and related assets are excluded from the table, as are the liabilities and assets of fire, marine and other classes of general insurance business in which some of the offices engage. The \$\tilde{\psi}\$sets, \$\tilde{\psi}\$454,655,000, were proportionately represented by investments in Government securities, shares, etc., 75.5 per cent., loans on mortgage 18.2 per cent., aproperty 3.8 (per cent., cash and debtors 2.5 (per cent.)

The twenty-one life offices registered under the Life Insurance Act comparise five mutual societies and sixteen companies. The paid-up capital of shareholders in these companies was £2,613,858, exclusive of an English company the returns for which embrace Australian business only.

The total assets held in Australia (including those relating to other classes of business, as well as life insurance business, and to shareholders' funds) of the life offices covered by the preceding table, as disclosed in 1947 included: Property, £12,971,000; loans, £66,552,000 consisting of loans on mortgage £50,196,000, on policies £15,845,000, and other, £511,000;

securities, etc., £268,559,000, comprising Australian Government £207,185,000, other British Governments £565,000, local and semi-Government £48,995,000, debentures £4,290,000, preference shares £1,550,000, ordinary shares £4,236,000, controlled companies £1,030,000 and other £708,000.

## FIRE, MARINE AND GENERAL INSURANCE.

The nature of the general insurances effected in New South Wales is indicated by statistics in Tables 740 to 742 which were compiled from returns furnished to the Bureau of Statistics by insurance companies with offices situated within the State. The annual return of each company relates to the period of twelve months ended on its balancing date between 1st July and 30th June. In 1947-48 there were 146 companies with offices in New South Wales.

The tables contain selected items of statistics conforming substantially to the following definitions and, therefore, are not construable as "profit and loss" statements or "revenue accounts." Premiums represent the full amount receivable in respect of policies issued and renewed in the year, less returns, rebates and bonuses paid or credited to policy holders in the year; they are not adjusted for premiums unearned at the end of the year, consequently the amounts shown differ from "earned premium income" appropriate to the year. Claims include provisions for outstanding claims and represent claims incurred in the year. Other expenses (fire brigades, commission and agents' charges, management and taxation) mainly represent payments in the year.

Table 740.—General Insurances in New South Wales, Premiums and Claims.\*

Group	Class of Insurance.	194	5-46.	1946	<b>-47.</b>	1947	-48.
. Group	orass of mamanee.		Claims.	Premiums.	Claims.	Premiums	Claims.
A { B C {	Fire  Householders' Comprehensive Sprinkler Leakage Loss of Profits  Hailstone  Marine  Motor Vehicle  Compulsory Third Party	6,506 136,114	387 18,371 104,549 182,411 537,691 5,290	331,661 5,861 167,837 57,925	39,427 366,573 845,717 14,094	445,680 6,649 209,974 648,429 1,890,594 1,699,698 48,475	115,033 930 81,118 1,345,609 510,522 1,118,245 32,081
D	Worker's Compensation*	2,508,415	1,840,326	2,883,037	2,033,256		
E	Public Risk Third Party General Property Plate Glass Boiler Livestock Burglary Guarantee Pluvius Aviation All Risks Other	97,596 1,796 74,206 31,099 44,220 163,566 31,214 16,472 40,657 68,377 358,711		112,149 3,542 77,911 37,983 52,747 209,275 33,211 23,364 37,358 87,464 457,941	37,327 1,136 31,217 5,729 16,968 58,445 2,264 14,299 6,173 62,580 177,100	82,347 40,112 55,860 257,433 38,999	
1	Total*	8,735,476	3,986,467	10,433,896	5,182,118	13,355,746	7,441,524

Revised to exclude workers' compensation insurance in coal mining industry.

In the following statement the separate classes of insurance are combined to form five groups as indicated in the first column of Table 740. For each group the amounts of premiums and claims are shown; also a proportion of charges for commission, agents' charges and expenses of management in accordance with an allocation made by the companies. Investment income and taxation charges are not distributed among the groups.

Table 741.—General Insurances Transacted in New South Wales, Premiums, Claims, Expenses, etc., 1945-46 to 1947-48.

			Class of In	surance.*		
Davanya and Town - 3th	A	l B	C	D	E	
Revenue and Expenditure.	Fire, Sprinkler, Loss of Profits, etc.*	Marine,	Motor Vehicles.	Workers' Com- pensation.	Other.	Total.
	Ye	ar 1945–46	3.			
Premlums	£ 3,295,535	£ 741,995	£ 1,261,617	£ 2,508 415	£ 927,914	£ 8,735,47
Interest, Dividends, Rents, etc.		•••	•••			503,40
Total Revenue						9,238,88
Claims Contribution to Fire Brigades Commission and Agents' Charges Management Expenses	850,103 285,133 500,148 610,771	182,411 51,598 117,195	785,527 122,616 226,356	1,840,326 98,677 350,241	328,100 136,787 150,511	3,986,46 285,13 909,82 1,455,07
Taxation—Income Tax, Pay-roll Tax, I	Licence Fee	s and Stan	ip Duty			984,07
Total Expenditure						7,620,57
Premiums	3,588,011	£ 1,153,766	1,676,142	2,883,037	£ 1,132,940	£ 10,433,89
Interest, Dividends, Rents, etc			•••			558,00
Total Revenue						10,991,89
Claims Contribution to Fire Brigades Commission and Agents' Charges Management Expenses	1,132,776 344,320 562,282 736,917	366,5 <b>7</b> 3 9 <b>7</b> ,354 145,663	1,236,275 165,061 289,917	2,033,256 114,657 437,989	413,238  176,324 204,031	5,182,11 344,32 1,115,67 1,814,51
Taxation—Income Tax, Pay-roll Tax,	Licence Fee	s and Star	np Duty			735,49
Total Expenditure					•••	9,192,12
	Ye	ar 1947–48	•			
Premiums	£ 4,852,589	£ 1,390,594	£ 2,290,464	£ 3,426,315	£ 1,395,784	£ 13,355,74
Interest, Dividends, Rents, etc	•••	•••				604,20
Total Revenue						13,959,94
flaims	2,527,200 383,791 774,334 916,921	510,522 108,557 171,330	1,701,604 220,911 362,348	2,160,834 134,242 553,238	541,364 202,156 257,786	7,441,52 383,79 1,440,20 2,261,62
Faxation-Income Tax, Pay-roll Tax, 1		s and Stan	Duty	·		624,46
tunation income ium, iu, ion ium, i						

<sup>\*</sup> Groups as ln Table 740.

<sup>†</sup> Revised to exclude workers' compensation insurance in coal mining industry.

The income from interest, dividends, rents, etc., is derived from investments within the State. Such investments are made from capital funds and reserves accumulated in past years, and these cannot be apportioned equitably over the different States and countries in which the companies operate. The investment income recorded in New South Wales, therefore, does not necessarily represent the amount attributable to general insurance business in New South Wales.

Insurance relating to the liability of employers is compulsory in respect of practically all classes of employees. Details regarding the workers' compensation law and its operation are shown in chapter "Employment" of this Year Book.

The insurance of owners and drivers of motor vehicles against liability resulting from death or bodily injury caused to another person has been compulsory in New South Wales since 1st February, 1943. Only authorised insurers may undertake the compulsory third-party insurance. The form of policy and maximum rates of premium are prescribed. Indemnity provided under the policy is unlimited and it extends to claims made by guest passengers and members of the family of an owner or driver of an insured motor vehicle. Claims for damages in respect of uninsured or unidentified motor vehicles, which cannot be recovered from the owner or driver, are payable from a pool to which authorised insurers are required to contribute in proportion to premium income.

A comparison of premiums receivable in the main classes of general insurance in 1938-39 and the last five years is shown below:—

Table 742.—General Insurances, Premiums in New South Wales. £thousand.

	Class of Insurance.									
Year.	Fire,	Motor Vehicles and Cycles.	Workers' Compensation.	Marine.	Total, All. Classes.					
1938-39 1943-44 1944-45 1945-46 1946-47 1947-48	2,172°° 2,554 , 2,591 2,740 3,025 3,542	1,455. 1,119 1,103. 1,262 1,676 2,290	1,966i 2,466* 2,465* 2,508* 2,883* 3,426*	498 1,429 873 742 1,154 1,391	6,943 8,710* 8,272* 8,735* 10,434* 13,356*					

<sup>\*</sup> Revised to exclude workers' compensation insurance in coal mining industry.

Premiums for marine insurance rose to £2,088,000 in 1942-43 but declined during the period of operation of the Commonwealth Marine War Risks Insurance Board (see page 852), and because of direct procurement by the Commonwealth Government of a substantial proportion of the goods-imported into Australia. They increased again significantly after 1945-46. The post-war increase in premium income has been due in part to rising property and commodity prices.

# GOVERNMENT INSURANCE OFFICE.

The Government Insurance Office of New South Wales commenced business in July, 1926. It was authorised to undertake workers' compensation

insurance for all employers and other classes of general insurance for Government, departments, semi-Governmental, authorities and Government employees and contractors. In November, 1942, its powers were widened to embrace all classes of general and life insurance—Government and non-Governmental.

The Government Insurance Office is conducted on the mutual principle, profit bonuses being paid to policy holders from available surplus funds. Policies issued by the office are guaranteed by the State.

A summary of the general insurance business transacted in 1946-47 and 1947-48; is shown below:—.

Table 743:—Government Insurance Office, General Insurance Branch,
Revenue and Expenditure.

	Ye	ar ende	d 30th J	une, 19	47.	Year ended 30th June, 1948.				
Particulars,	Workers' Compen- sation.		Gen- eral Acci- dent.	Marine	Total.	Workers' Compen- sation.	Fire.	Gen eral Acci- dent	Marine	Total:
	£	£	£	£	£	£	£	£	£	£
Premiums Interest and Other	399,874 25,731	80,361 15,251			718,649 56,062					950,638 62,058
Revenue	425,605	95,612	243,864	9,630	774,711	514,737	129,732	355,666	12,561	1,012,696
Claims Fire Brigade Expenses Taxation	303,900 *3,139 30,518 11,469	8,106 $19,956$	46,918		506,724 *11,245 98,070 21,890	*12,267 35,504	9,917	,268,909 62,416 4,956		579,505 *22,184 127,711 81,364
Expenditure	349,026	57,109	226,290	5,504	637,929	386,491	80,252	336,371	7,650	810,764
Surplus	76,579	38,503	17,574	4,126	136,782	128,246	49,480	19,295	4,911	201,932

<sup>\*</sup> Includes contribution to Workers' Compensation Commission, £3,139 in 1946-47 and £3,637 in 1947-48, and contribution to Silicosis Fund, £8,630 in 1947-48.

Premiums for motor vehicle compulsory third; party insurance represented approximately 60 per cent. of the total premiums of the General Accident Department in 1947-48,

The total profits amounted to £136,782 in 1946-47, and £202,887 in 1947-48, including in the latter year £955 profit on the conversion of stock. These profits were distributed as follows:—Bonuses to policy holders, £65,178 and £95,618, provision for equalisation of bonuses £33,400 and £50,100; hospitals account £21,278 and £26,058, and transfers to reserves £16,926 and £31,111. The allocation to hospitals was made in terms of the Government Insurance (Amendment) Act, 1941, which requires that funds at the close of each year in excess of the amount determined as reasonably required, be paid to the Treasury for use in extending and improving hospital facilities. Such allocations totalled £311,770 to 30th June, 1948.

Assets of the departments transacting general insurance business at 30th June, 1948 amounted to £2,298,787, including Commonwealth securities, £1,936,725, advances to Life Department, £50,000, and balances at State Treasury, £182,115. Accumulated funds in general reserve accounts totalled £653,417, and in bonus equalisation reserve, £171,500.

The life assurance department was established on 16th November, 1942, with funds consisting of £50,000, granted by the State Government, and £50,000 advanced on loan at interest by other departments. Particulars of the operations of the department are shown in the following table:—

Table 744.—Government Insurance Office, Life Assurance Department.

Partic	culars.			1942–43.	1943–44.	1944-45.	1945–46.	1946-47.	1947-48.
Revenue Account Premiums Interest			£	5,661 153	39,803 2,262	75,268 3,467	116,905 5,479	169,619 8,119	210,304 12,785
Total	•••		£	5,814	42,065	78,735	122,384	177,738	223,089
Claims and Sur Agency Expens Management		·	£	32 1,489 1,723	2,923 13,385 5,807	1,804 20,200 7,400	5,002 22,609 9,235	3,607 30,164 11,446	14,920 32,441 14,569
Total	•••	•••	£	3,244	22,115	29,404	36,846	45,217	61,930
Life Assurance Fr New Policies New Policies Sum		 red	£ No. £	27,570 337 156,412	47,519 1,702 938,342	96,851 2,011 1,117,166	182,389 2,207 1,303,444	314,909 3,071 1,758,447	476,069 3,176 1,830,324

<sup>\*</sup> At 30th June.

# INSURANCE AGAINST WAR DAMAGE TO PROPERTY.

The scheme for insurance against war damage to property established by the Commonwealth Government in 1942 was described in previous issues of the Year Book. Insurance contributions to the War Damage Fund totalled £14,781,948, and payment of claims £7,110,162, to 30th June, 1948. After allowing for income from investments, cost of administration, and claims assessed but not paid, the fund had a credit balance of £7,726,917 at 30th June, 1948. This is subject to further liability in respect of unassessed claims, and in 1948-49 a sum of £5,500,000 was appropriated from the balance for the payment of war gratuities to ex-servicemen.

# MARINE WAR RISKS INSURANCE.

The Commonwealth Marine War Risks Insurance Board, constituted under National Security Regulations in February, 1941, ceased to underwrite insurance risks in September, 1946. It was empowered to provide insurance against war risks in respect of Australian ships, British or Allied ships in Australian waters, liabilities of shipowners to crews arising out of capture or detention by the enemy, personal effects of seamen, cargoes of certain goods specified by order of the Federal Treasurer, and goods transported by sea from one Australian port to another. Receipts of the Board to 30th June, 1948 totalled £7,523,494, including net premiums £7,520,899, and payments amounted to £2,847,218, comprising claims £2,713,884 and administration £133,334. The cash balance held at 30th June, 1948 was £4,676,276, which is subject to payment of outstanding claims estimated at £20,000. An appropriation of £4,500,000 was made in 1948-49 for payment of war gratuities.

#### BANKRUPTCY.

The Bankruptcy Act, 1924-1945 of the Commonwealth superseded the bankruptcy laws of the States as from 1st August, 1928. Under the Federal law sequestration orders may be made by the Bankruptcy Court on a

bankruptcy petition presented either by a debtor or by a creditor, provided that the aggregate amount of indebtedness is not less than £50. Upon sequestration the property of the bankrupt vests in an official receiver for division amongst the creditors. Provision is made also for compositions and assignments without sequestration and for deeds of arrangement. Details regarding bankruptcy law are contained in the chapter "Law Courts" of this Year Book.

The following statement shows particulars of the bankruptcies (sequestrations, compositions, assignments, and deeds of arrangement) in New South Wales under the Bankruptcy Act of the Commonwealth in 1938-39 and each of the past six years. The records are inclusive of cases in the Australian Capital Territory which for the purposes of the Act is included in the Bankruptcy district of New South Wales:—

Particulars.			Year o	ended 31st	July		
Laimontais,	1939.	1943.	1944.	1945.	1946.	1947.	1948.
Sequestration Orders— Number Liabilities Assets	277 £ 281,280 £ 109,328	116 15 <b>5</b> ,889 <b>75</b> ,184	69 128,297 45,681	51 49,434 8,255	49 36,866 83,740	86 151,334 27,731	116 205,454 54,196
Orders for Administratio Deceased Debtor Estates— Number Liabilities Assets		13 167,439 162,274	5 11,032 7,854	7 42,922 4,888	2 3,861 2,678	8,181 2,461	6,863 1,273
Liabilities Assets		1 1,382 1,638	1 745 152	 	2,382 873		2,113 691
Deeds of Arrangement— Number Liabilities Assets	217 £ 377,529 £ 318,932	31 49,767 54,525	15 26,775 29,293	23,392 20,646	12 20,828 12,553	15 40,454 45,219	24 54,540 56,792
Total—Number Liabilities Assets	516 £ 685,131 £ 447,403	161 374,477 293,621	90 166,849 82,980	66. 115,748 33,789	65 63,937 99,844	107 199,969 75,411	147 268,970 112,952

Table 745.—Bankruptcies in New South Wales.

## TRANSACTIONS IN REAL ESTATE.

The procedure in regard to land transfers is regulated under the Real Property Act, 1900, and its amendments. The title under this Act, first conferred under the Real Property Act, 1862, is known as "Torrens" title. The main features of the system are transfer of real property by registration of title instead of by deeds, absolute indefeasibility of the title when registered, and protection afforded to owners against possessory claims, as the title under the Act stands good notwithstanding any length of adverse possession. Lands may be placed under the Real Property Act only when the titles are unexceptionable. All lands alienated by the Crown since the commencement of the Act are subject to the provisions of the Real Property Act, but transactions in respect of earlier grants are governed by the Registration of Deeds Act unless the land has been brought under the operation of the Real Property Act.

The area of Crown grants registered under the Real Property Act and the total consideration expressed in grants in each of the past eleven years are shown below, also the area and value of private lands brought under the Act:—

Table 746.-Titles granted under Real Property Act.

Year,	<u>2010   141 </u>	Area (acres).		Value (£).				
	Ordwin Lands:	Private Lands.	Total.	Crown Lands.	Private Lands,	Total.		
uo-omi	<u> – a anarawani</u>	<u> </u>	*** *** ** **		<u>l, ,                                  </u>	1		
1938	989,876	14,739	(1,004,615	-1,406,651 :	1,371,574	2,778,225		
1939	1,153,685	15,871	1,169,556	1,566,130	907,099	2,473,229		
1940	1,103,800	6,619	1,110,419	1,497,520	736,692	2,234,212		
1941	1,064,419	6,737	1,071,156	1,176,884	826,016	2,002,900		
1942	348,441	8,153	356,594	376,355	1,665,907	2,042,262		
1943	154,056	4,356	158,412	188,514	802,831	991,348		
1944	241,307	26,599	267,906	300,627	1,488,117	1,788,744		
1945	204,123	,8,499	212,622	287,116	1,399,963	1,687,079		
1946	218,341	5,133	223,474	310,806	1,661,678	1,972,484		
1947	346,742	6,856	353,598	460,703	1,250,741	1,711,444		
1948	348,559	5,191	353,750	493,141	974,401	1,467,542		

At the close of 1948 land of an aggregate area of 58,844,250 acres was registered under the Act, the declared value as at date of registration being £148,552,018. The great part of this land consists of Crown grants issued since 1863, and it includes 3,031,815 acres of land originally under the Registration of Deeds Act.

The following table shows for certain years since 1929 the amount paid as money consideration on sales of private real estate, that is, of lands absolutely alienated, together with buildings thereon, with titles registered under the statutes shown. Transfers of conditional purchases and of leases from the Crown are excluded.

Table 747.—Real Estate, Conveyances and Transfers. £thousand.

Year.	Conveyances or Transfers.				Conveyances or Transfers.		
	Under Registration of Deeds Act.	Under Real Property (Torrens) Act.	Total.	Year.	Under Registration of Deeds Act.	Under Real Property (Torrens) Act.	Total.
1929	9,500	45,100	54,600	1942.	4,371	17,237	21,608
1932	2,255	9,987	12,242	1943 1944	2,511 3,153	15,031 16,309	17,542 19,462
1938	6(159	31,260	37,419	1945	4,178	24,115	28,293
1939	4,936	27,221	32,157	1946	7,378	43,299	50,677
1940	4,566	26,487	31,053	1947	9,414	47,810	57,224
1941	4,421	28,822	33,243	1948	9,084	50,378	59,462

Monthly statistics of sales of real estate are published in the "Monthly Summary of Business Statistics."

Control of dealings in real estate was instituted by the Commonwealth in February, 1942, the object being to prevent speculation and to stabilise land values. The National Security (Economic Organisation) Regulations, by which the control was applied, were superseded by the Land Sales

Control Act passed by the State Government and operative from 20th September, 1948. Under this Act the purchase or acquisition of land is prohibited in most instances, except with the consent of the Minister. Vacant urban building allotments were exempted from control as from the commencement of State administration.

#### MONEY-LENDERS.

The business of money-lending is regulated by the Money-lenders and Infants Loans Act, 1941-1948. Money-lenders must obtain a licence issued by a court of petty sessions and renewable annually in respect of every address at which they conduct business or have an agency. They must conduct their business only under their own or their firms' names, and at their registered offices. The Act does not apply to licensed pawn-brokers, registered friendly societies, institutions empowered by special Act of Parliament to lend money, or banking and insurance companies. The number of money-lenders' licences in force was 260 at 31st March, 1948.

A money-lender's contract is not enforceable unless it is signed by the borrower and a note of the contract is given to the borrower within a specified time. The note must indicate the date of the making of the loan, the amount of the principal sum, the effective rate of interest charged, and certain other details. The consent of the spouse of a married borrower is required if the loan exceeds £10, unless security is given over business assets such as plant, merchandise, etc. Guarantees for the repayment of loans exceeding £10 must have the consent of a married guarantor's spouse, and a continuing guarantee is ineffective unless executed before an independent legal adviser who certifies that the provisions of the guarantee have been explained to the guarantor and are understood by Restrictions are placed upon advertising by money-lenders and powers are conferred on courts to re-open money-lending transactions, and to afford relief to borrowers where interest or charges are excessive or terms are harsh and unconscionable. Where a bill of sale has been given as security to a money-lender he cannot, without leave of a competent court, seize personal chattels such as household effects, tools of trade or wearing apparel.

## CASH: ORDERS.

Cash order traders are subject to the Money-lenders and Infants Loans Act and are required to register as money-lenders. The provisions of the Act were extended to continue on their expiry after the end of 1946 certain of the controls over cash order trading which the Commonwealth had exercised since 27th March, 1942, under war-time regulations.

The maximum amount for which a cash order may be issued is £20 and this is also the maximum which any single person, or husband and wife together, may owe at any time on one or more cash orders. Under the Commonwealth regulations the maximum was £10 from 27th March, 1942 to 31st December, 1946. The Minister has power to limit the volume of business of any cash order trader.

The premium charged for a cash order may not exceed 9d. per £1 and orders must be repayable within twenty weeks. Those accepting cash orders in exchange for goods must present them for redemption within a month; the maximum rate of discount is 10 per cent. if payment is made within fourteen days after the month of presentation or date of delivery of goods; otherwise it is 5 per cent.

The available statistics of cash order trading in New South Wales are given in the following table. The figures for the years 1936 to 1940 are as reported by the Commonwealth Board of Inquiry into Hire Purchase and Cash Order Systems (1941) and those from 1946 were supplied by the State Department of Justice. Cash order business is subject to considerable seasonal variation.

Calendar Year.	Value.	Quarter Ended	Value.	Quarter Ended	Value.
1936 1937 1938 1939 1940 1946 1947 1948	£ 2,247,938 2,560,978 2,684,414 2,865,831 2,825,416 2,019,990 2,530,287 2,897,286	1946—March June September December 1947—March June	£ 282,356 550,721 453,081 733,832 337,265 692,639	1947—September December 1948—March June September December	£ 585,111 915,272 388,098 824,918 650,869 1,033,401

Table 748.—Cash Orders Issued in New South Wales.

# HIRE-PURCHASE AGREEMENTS.

Hire-purchase agreements in New South Wales are governed comprehensively by the Hire-purchase Agreements Act, 1941-1946, which incorporates certain controls previously exercised under war-time regulations.

On every purchase under such agreements there must be a minimum deposit; for most goods it is 20 per cent. of the purchase price, but in respect of machinery and equipment for primary industries, industrial machinery, motor tractors, gas and electrical appliances, and household appliances operated by other fuels the minimum deposit is 10 per cent.

Agreements must be in writing and must specify certain terms, and the written consent of the purchaser's spouse must be obtained for agreements made by married persons for the purchase of household furniture or effects. Where a vendor re-possesses goods covered by a hire-purchase agreement the total of moneys paid and other consideration provided by the purchaser and the value of the goods at the time of re-possession are set against the purchase price; any excess over the purchase price is recoverable by the purchaser and any deficiency by the vendor. Under certain conditions the purchaser may secure the return of goods re-possessed. Provision is made for the re-opening of agreements on the application of purchaser or guarantor to a competent court.

## MORTGAGES OF REALTY AND PERSONALTY.

Mortgages other than those regulated by the Merchant Shipping Act may be registered at the Registrar-General's Office, but the number of unregistered mortgages of which records are not obtainable is large.

Real estate mortgages are registered under the Registration of Deeds Act or the Real Property Act, according to the title of the property at the date of mortgage. The consideration stated in the document generally represents the principal owing, but in some cases it stands for the limit within which clients of banks and of other lending institutions are entitled to draw.

Liens on wool, mortgages on live stock, and liens on growing crops are registered under a special Act. Mortgages on live stock are current till discharge, and liens on wool mature at the end of each season, terminating without formal discharge. The duration of liens on agricultural and horticultural produce may not exceed one year.

Mortgages on personalty (other than ships and shipping appliances), wool, live stock and growing crops are registered at the office of the Registrar-General. The registration of a bill of sale must be renewed every five years, and the records are open to the inspection of the public. Information is not readily available to show the total amount of advances made annually on bills of sale.

Mortgages of registered British vessels are arranged under the Imperial Merchant Shipping Act of 1894.

Under National Security (Capital Issues) Regulations the issue of any securities or mortgage or charge on property is subject to control by the Commonwealth Treasurer as described on page 804.

Particulars of the mortgages of real estate, crops, wool, and live stock in 1929 and 1932 and each of the last eleven years are shown below.

Mortgages	of Real Estate.	Mortgages on Crops, Wool, and Live Stock.					
	Considers	_	Number.	_	Considera-		
Number, Considera- tion.		Crops.	Wool.	Live Stock.	tion,		
	£				£		
50,841	48,420,657	7,211	3,709	4,481	6,451,596		
14,557	8,642,026	10,346	4,773	5,578	8,474,237		
35,341	26,966,988	4,238	4,571	4,517	6,201,060		
31,225	22,443,703	4,662	4,564	4,530	5,979,670		
25,298	16,497,222		4,804	4,107	5,886,844		
25,704		4,735	4,581	3,910	5,489,488		
13,514		4,019	3,816	2,391	4,517,753		
					3,692,181		
					2,764,557		
					3,064,512		
					3,226,514		
43,033			1,862	3,262	4,010,371		
44,625	31,464,024	989	1,866	3,148	4,480,085		
	50,841 14,557 35,341 31,225 25,298 25,704 13,514 10,689 11,812 17,420 33,548	Kumber.         £           50,841         48,420,657           14,557         8,642,026           35,341         26,966,988           31,225         22,443,703           25,298         16,497,222           25,704         15,631,316           13,514         8,007,229           10,689         5,756,174           11,812         6,865,766           17,420         9,750,605           33,548         21,373,572           43,033         25,991,524	$ \begin{array}{ c c c c c c } \hline \textbf{Number.} & \textbf{Consideration.} \\ \hline \hline & \textbf{£} \\ \hline 50,841 & 48,420,657 & 7,211 \\ 14,557 & 8,642,026 & 10,346 \\ 35,341 & 26,966,988 & 4,238 \\ 31,225 & 22,443,703 & 4,662 \\ 25,298 & 16,497,222 & 3,923 \\ 25,704 & 15,631,316 & 4,735 \\ 13,514 & 8,007,229 & 4,019 \\ 10,689 & 5,756,174 & 3,197 \\ 11,812 & 6,865,766 & 2,414 \\ 17,420 & 9,750,605 & 2,132 \\ 33,548 & 21,373,572 & 1,558 \\ 43,033 & 25,991,524 & 1,797 \\ \hline \end{array} $	$ \begin{array}{ c c c c c c c c } \hline \textbf{Number.} & & & & & & & & & & & & \\ \hline \textbf{Number.} & & & & & & & & & & & & & \\ \hline \textbf{So,841} & & 48,420,657 & & 7,211 & & 3,709 \\ 14,557 & 8,642,026 & 10,346 & 4,773 \\ 35,341 & 26,966,988 & 4,238 & 4,571 \\ 31,225 & 22,443,703 & 4,662 & 4,564 \\ 25,298 & 16,497,222 & 3,923 & 4,804 \\ 25,704 & 15,631,316 & 4,735 & 4,581 \\ 13,514 & 8,007,229 & 4,019 & 3,816 \\ 10,689 & 5,756,174 & 3,197 & 3,005 \\ 11,812 & 6,865,766 & 2,414 & 2,993 \\ 17,420 & 9,750,605 & 2,132 & 2,230 \\ 33,548 & 21,373,572 & 1,558 & 1,978 \\ 43,033 & 25,991,524 & 1,797 & 1,862 \\ \hline \end{array} $	$ \begin{array}{ c c c c c c c c } \hline \textbf{Number.} & \hline \textbf{Consideration.} & \hline & \textbf{Number.} \\ \hline & & & & & & & & & & & & & \\ \hline & & & &$		

Table 749.-Mortgages Registered.

The amounts shown under the heading "Consideration" include only the cases in which a specific amount is stated in the deeds, whether the amount was actually advanced or not. In many mortgages the amount is emitted and it is probable that the totals shown in the table are understated. Complete records of discharges and foreclosures are not available.

The amount of mortgage registrations as shown in Table 749 comprises first and second mortgages and the registration of collateral securities in respect of subsisting mortgages. A distribution under these headings of mortgages registered during 1939 and each of the last five years is shown below.

Table 750.—Mortgages of Real Estate.

Mortgages of Rea	1.	Year ended 30th June.							
Estate.	1939.	1944.	1945.	1946.	1947.	1948.			
First Mortgages— Urban Securities Rural Unspecified	14,742 4,433 1,235	2,908 1,724 128	3,012 2,853 109	7,818 3,232 365	14,831 4,431 867	17,353 04;383 2,636			
Total First Collaterals Second and Other	20,410 2,659 1,999	4,760 973 359	5,974 1,167 470	11,415 1,881 854	20,129 3,987 930	24,372 5,498 1,054			
Total	25,068	6,092	7,611	14,150	25,046	30,924			

The chief sources of the funds invested on the security of real estate are indicated by the following table in which the first mortgages are grouped according to certain classes of mortgagess, viz., "Government," including State and Federal departments; "banks," including private trading banks, the Commonwealth Bank and Commonwealth Savings Bank and the Rural Bank; "institutions," embracing all other incorporated companies and bodies such as pastoral finance companies, trustee companies, assurance societies, friendly societies and building societies, etc.; and private and other investors.

Table 751:-First Mortgages of Real Estate, Classification of Mortgagees.

Year ended 30th June.	Government.	Banks. *	Institutions.	Private and Other.	Total.
	£000	£000	£000	£000	£000
1939	1,730	1,578	12,087	5,015	20,410
1940	1,111	1,201 .	7,888	4,572	14,772
1941	.,838	788	5.425	3,785	10,836
1942	730	944	4,585	3,319	9,578
1943	438	647	1,636	1,766	4,487
1944	476	1,043	1,528	1,713	4,760
1945	537	1,551	1,694	2,192	5,974
1946	669	2,788	4,431	3,527	11,415
1947	1,402	4,973	8,415	5,339	20,129
1948	2,335	5.464	11.867	4,706	24,372

<sup>\*</sup> These do not represent the actual amount lent, as many of the mortgages are fluctuating overdrafts, the amount of which is not stated.

## /Moratorium, 1930.

The Moratorium Act, 1930 (as amended) was passed to afford protection to mortgagors adversely affected by the economic depression. A brief account of the restrictions imposed upon the rights of mortgages was given at page 339 of Year Book No. 50; these apply to mortgages executed before or after the commencement of the moratorium, unless specially

The trend of interest rates on loans secured by the mortgage of real estate is shown in Table 718.

excluded: by agreement in the prescribed form. The term of the moratorium has been extended from time to time; under existing legislation attiwill expire in 1951.

### ESTATES OF DECEASED PERSONS.

The following table shows the number of estates and the value as assessed for probate duty in New South Wales in each year since 1937, including intestate and other estates administered by the Public Trustee:—

Year ended 30th June.	Estates.	Amount.	Year ended 30th June.	Estates.	Amount.	Year ended 30th June.	Estates.	Amount.
1937 1938 1939 1940	No. 9,420 9,904 10,668 10,828	£ 23,194,706 25,776,575 26,202,317 26,598,763	1941 1942 1943 1944	No. 11,438 11,588 12,479 13,590	£ 24,782,013 26,158,401 27,286,958 28,351,563	1945 1946 1947 1948	No. 13,321 13,411 14,500 14,912	£ 29,199,113 29,955,967 32,293,933 40,895,855

Table 752.—Estates of Deceased Persons.

In accordance with the provisions of the Stamp Duties Act the estates are deemed to include all the property of the deceased persons which is situated in New South Wales, including property which, within three years prior to death, was transferred as a gift, or vested in a private company or trust in consideration of shares or other interest, and moneys payable under life assurance policies, etc. In the case of deceased persons domiciled in New South Wales at death, the estates include also personal property outside New South Wales.

An indication of the proportionate distribution of wealth may be gained from an analysis of the value of the estates of deceased persons, and in the following statement the estates on which probate was granted during the ten years ended 30th June, 1948, have been graded according to value:—

Table 753.—Estates of Deceased Persons, Ten Years ended June, 1948.

Classified according to Value.

Value of	Tetai			Number of Deceased	Value of Estates of	Proportion in each Group.		
Tarab or				Persons leaving Property.	Deceased Persons.	Number.	Value	
Under £1,001		•••	•	82,621	£ 33,657,015	Per cent. 65·19	Per cent. 11.54	
£1,001 to £5,000				31,958	72,317,406	25.22	24.79	
£5,001 to £12,000				7,742	58,876,958	6.11	20.18	
£12,001 to £25,000				2,937	49,908,662	2.31	17.11	
£25,001 to £50,000		•••		1,060	36,351,142	0.84	12.46	
Over £50,000	•••		•••	417	40,613,700	0.33	13.92	
Total	•••		•••	126,735	291,724,883	100.00	100.00	

The average value per estate during the period was £2,302, but of the property-owners who died 65 per cent. possessed less than £1,000, the total value of their property being 11.5 per cent. of the aggregate. More than 43 per cent. of the property devised was contained in 3.5 per cent. of the estates.

# LOCAL GOVERNMENT

The existing system of local government in New South Wales was established by Acts passed in 1905 and 1906, and a consolidating law, the Local Government Act, 1919, with subsequent amendments and comprehensive ordinances, constitutes the present-day charter of local government in the State.

The City of Sydney was first constituted by statute in 1842, and its civic affairs were governed by a special Act until 1st January, 1949. At this date the Sydney Corporation Act was repealed and the City of Sydney became subject to the general provisions of the Local Government Act.

There are a number of supplementary statutes relating to water supply, sewerage, gas and electricity services, and main roads, as well as a Valuation of Land Act.

#### LOCAL GOVERNMENT BODIES.

Local government extends over the whole of the Eastern and Central land divisions of New South Wales, comprising almost three-fifths of its total area. The sparsely populated Western Division contains six municipalities and part of another municipality, but the remainder of the division is not incorporated. The area and population of these districts are shown in the chapter "Population" of this Year Book.

There are two main kinds of local government areas, viz., municipalities and shires. The municipality, the earlier form of incorporation, is usually a centre of population, smaller in extent than a shire. The shires are for the most part country areas embracing tracts of rural lands as well as one or more towns or villages.

There were 193 municipalities when shires, numbering 134, were first incorporated in 1906. The numbers varied as new areas were constituted and existing areas were amalgamated from time to time, and at the end of 1930 there were 181 municipalities and 138 shires, a net decrease of 8 in the total number. More recently policy has favoured the consolidation of local government units and the total decreased by 23 between 1930 and 1940 and by a further 50 to 1st January, 1949. At this date there were 114 municipalities and 132 shires.

The changes in local government areas chiefly responsible for the reduction in numbers noted above were: in 1938, the formation of the City of Greater Newcastle by the union of the City of Newcastle, ten suburban municipalities and parts of two shires; in 1947, the constitution of the City of Greater Wollongong and the City of Blue Mountains, the former embracing the Municipalities of the City of Wollongong and North

Illawarra and the Shires of Bulli and Central Illawarra, and the latter the Municipalities of Katoomba and Blackheath and the Shire of Blue Mountains; in 1948, the creation of the Shoalhaven Shire by uniting the Municipalities of Berry, Broughton Vale, Nowra, Shoalhaven South, and Ulladulla and the Shires of Cambewarra and Clyde; and as from 1st January, 1949, the constitution of 17 municipalities as a result of amalgamations involving 43 municipalities and one shire in the County of Cumberland, as described below.

The principal groups of local government bodies at 1st January, 1949, were as follows:—

The City of Sydney, embracing a little over 11 square miles containing the principal commercial parts of the metropolis and abutting on Sydney Cove and Darling Harbour. From the beginning of 1949 the city boundaries were extended to incorporate eight former suburban municipalities.

The City of Greater Newcastle, 38 square miles in area.

Municipalities (excluding the cities of Sydney and Greater Newcastle), of which 26 are suburbs of Sydney and 86 are in the country. The suburban municipalities cover an area of 234 square miles, and the country municipalities, which include most of the principal towns of the State, 2,471 square miles.

Shires (132 in number, with an area of 181,271 square miles) consist mainly of smaller urban areas and extensive rural lands, but include somelarge towns not incorporated as municipalities. The shires range in area-from 101 square miles (Blacktown) to 5,883 square miles (Lachlan).

County Councils, of which there are 24, are combinations of municipalities and shires for the administration of certain specified local services of common benefit.

# AMALGAMATION OF AREAS IN COUNTY OF CUMBERLAND.

The Local Government (Areas) Act was passed in September, 1948, with the object of strengthening the organisation of local government areas within the County of Cumberland by the amalgamation, as from 1st January, 1949, of certain of those areas to form larger local government units. Prior to 1949 there were 60 municipalities (including the Municipality of Camden partly so situated) and six shires within the County of Cumberland. The numbers were reduced to 34 municipalities and five shires as a result of the amalgamations. Twenty-two of the existing areas (17 municipalities and five shires) were unaltered by the new groupings, which merged 43 municipalities and a shire into 17 municipalities.

Below are shown the amalgamations brought about by the Act. The names of the new united areas appear in *italics*, followed by names of the old constituent areas. All of the areas are municipalities with the exception of the Nepean Shire which is indicated. The approximate area of each in square miles is stated in parenthesis:—

City of Sydney (11.19): City of Sydney (5.03), Alexandria (1.64), Darlington (0.09), Erskineville (0.29), Glebe (0.81), Newtown (0.75), Paddington (0.66), Redfern (0.63), Waterloo (1.29).

City of Parramatta (17.30): City of Parramatta (3.56), Granville (6.31), Dundas (4.25), Ermington and Rydalmere (3.18).

Auburn (12.22): Auburn (4.05), Lidcombe (8.17),

Botany (6:86): Botany (3.39), Mascot (3:47).

Burwood (2.80): Burwood (1.73), Enfield—Central and East Wards (1.07).

Camden (79.56): Camden (17.17), Nepean Shire-C Riding (62.39).

Campbelltown (120.38): Campbelltown (100.82), Ingleburn (19.56).

Fairfield (37.20): Cabramatta and Canley Vale (12.24), Fairfield (24.96).

Leichhardt (3.87): Annandale (0.54), Balmain (1.53), Leichhardt (1.80).

Liverpool (120.92): Liverpool (40.93), Nepean Shire—B Riding (79.99).

Marrickville (5.70): Marrickville (2.96), Petersham (1.33), St. Peters (1.41).

Penrith (151.79): Castlereagh (51.44), Penrith (8.80), St. Mary's (60.43), Nepean Shire—A Riding (31.12).

Rockdale (10.96): Bexley (2.99), Rockdale (7.97).

Ryde (15.50): Eastwood (4.61), Ryde (10.89).

Strathfield (5.41): Strathfield (3.87), Enfield—West Ward (1.54).

Windsor (56.64): Richmond (20.88), Windsor (35.76).

Woollahra (4.19): Vaucluse (1.25), Woollahra (2.94).

### SYSTEM OF LOCAL GOVERNMENT.

Each municipality and shire is governed by a council elected for a term usually of three years. By reason of the amalgamation of areas, however, the term of councils due to expire in December, 1947 was extended in respect of Uralla Shire to September, 1948, the City of Greater Wollongong to October, 1948, and the City of Blue Mountains and areas in the County of Cumberland to December, 1948. The term of office of these councils, together with other councils elected in December, 1947, will expire in December, 1950.

The Council of the City of Sydney is composed of thirty aldermen, the number having been increased from twenty as from 1st January, 1949, when the area of the municipality was extended to embrace eight former suburbs, whilst the Council of Greater Newcastle consists of twenty-one aldermen. A provision of the Local Government Act restricting other municipal councils to not less than nine nor more than fifteen aldermen was repealed in 1948. These numbers continue to prevail, however, except in ten of the reconstituted municipalities in the County of Cumberland in which the aldermen number from sixteen to twenty-four.

Shire councils must consist of not less than six nor more than nine councillors, but in special cases the Governor may fix a greater number. There is one such case, with twelve councillors.

Each municipal council elects annually a mayor, and each shire council a president, from amongst its members.

The right to be enrolled as an elector in a municipality or a shire extends to adult British subjects qualified as owners or rate-paying lessees of ratable land, or as occupiers of land.

The qualification as occupier is held by persons who have been continuously for three months in occupation of ratable land (a) by virtue of a miners' right or business licence under the Mining Act, or (b) as direct tenant of the owners or rate-paying lessees where the yearly value of the land is not less than £5. If not enrolled under either of these qualifications, a person is entitled to enrolment as occupier in a ward or riding if he is enrolled on the Parliamentary electoral roll and his place of living as there stated is in the ward or riding.

Persons may be enrolled and may vote in respect of each ward or riding in which they are qualified as owners or as rate-paying lessees, but not more than once in respect of the same ward or riding. A person qualified as owner or as rate-paying lessee in a ward or riding who is qualified also as an occupier in another ward or riding of the same municipality or shire may not be enrolled under both qualifications. A person qualified as occupier in more than one ward or riding may be enrolled in one only.

Measures to make voting at local government elections compulsory were introduced in 1947. Councils are empowered to institute proceedings for the enforcement of a penalty of not less than 10s, nor more than £2 against any elector who, without sufficient reason, fails to record a vote.

Unless disqualified by the Local Government Act, any person qualified to vote is qualified for a civic office.

Particulars of the local government elections in New South Wales held in 1947 and 1948 are shown on page 897.

Provision was made in 1948 for the creation of local districts in municipalities, and the appointment therein of district committees to which the council may delegate powers and vote funds for the control of specified local works, parks, cemeteries, etc. Powers to create districts and appoint committees were given to the seventeen united municipalities constituted in the County of Cumberland on 1st January, 1949, and may be granted to other municipalities upon proclamation by the Governor. A district committee consists partly of aldermen appointed by the council and partly of elected representatives. With the council's approval, a district committee may co-opt other members, who may vote at meetings, but the number of co-opted members may not exceed 20 per cent. of the total membership.

In the shires, urban areas may be established upon proclamation by the Governor if the majority of the electors in the locality favour the project. In such cases the council of the shire exercises within each urban area the powers of the council of a municipality. Urban committees may be elected to exercise within the urban areas certain powers of the council, and to expend money raised by a local rate levied by the council upon the request of the urban committee. Councills of the shire may not seek election to an urban committee. In March, 1948 there were 31 such committees.

Provision is made for joint action by local governing bodies in regard to undertakings of magnitude or those which benefit more than one area. For such purposes county councils may be constituted, or joint committees may be arranged under the ordinances.

In recent years county councils have become an important feature of local government in New South Wales, the number as at the end of the year increasing from four in 1930 to nine in 1940 and twenty-three in 1948. At 31st March, 1949, there were twenty-seven county councils; of these thirteen were formed to conduct electricity undertakings, three to provide water supply services, one for both electricity and water supply, one for both electricity and the establishment of public aviation stations, seven for the eradication of noxious weeds, and two for purposes of town planning. The Blue Mountains County Council, constituted in July, 1944, with power to conduct electricity, gas, water and sewerage undertakings, transport services, and tourist activities, and to erect dwellings, shops and other buildings for sale or lease, was dissolved in September, 1947, when the constituent areas were merged to form the Municipality of the City of Blue Mountains.

In some cases boards or trusts have been constituted under special Acts to conduct operations which are regarded usually as belonging to the sphere of local government. A brief description of their activities is given later.

### TOWN AND COUNTRY PLANNING.

Legislation providing the basis for an active and co-ordinated system of town planning was enacted in 1945. Municipal and shire councils, singly or in groups, aided by qualified advisors, may undertake the preparation of plans and must do so when directed by the Minister. A Town and Country Planning Committee of eight members has been appointed to advise the Minister and may assist councils. Plans prepared by councils must be referred to the Committee for report and may not be put into operation until approved by the Minister. Councils may impose a betterment charge on ratable land equal to 80 per cent. of the increase in its value by reason of a town planning scheme.

The Cumberland County Council and the Northumberland County Council have been formed to prepare general plans to govern the planning and developmental activities of their constituent local governing areas. The former embraces wholly or in part, as from 1st January, 1949, thirty-four municipalities and six shires, and the latter comprises Greater Newcastle, Maitland and Cessnock Municipalities and four surrounding shires.

## STATISTICS OF LOCAL GOVERNMENT.

Statistics of Local Government bodies are compiled in the Bureau of Statistics and Economics from statements of accounts and returns furnished by the local councils. These accounts and returns are kept in prescribed form and relate to the year ended 31st December.

As a rule, summarised statistics become available about sixteen months after the end of the year to which the accounts relate, but during the war it was necessary to suspend much of the compilation. Complete results, therefore, are not available in respect of the years 1941 to 1943.

### EXTENT OF LOCAL GOVERNMENT.

The aggregate extent of the local government areas in New South Wales is about 184,000 square miles, or nearly 60 per cent. of the total area of the State.

The area, population and value of ratable property in the incorporated areas as at 31st December, 1946 were as stated below:—

Table 754.—Municipalities and Shires, Area, Population and Value of Ratable Property, 1946.

Local Areas,	Area.	Population.	Unimproved Capital Value.	Improved Capital Value.	Assessed Annual Value, †
	acres.	No.	£ 000	£ 000	£ 000
City of Sydney	3,220	95,925	51,788	182,682	8,221
Suburban Municipalities	151,547	1,375,113	109,804	371,665	29,950
. Total, Metropolitan	154,767	1,471,038	161,592	554,347	38,171
City of Greater Newcastle	24,238	127,138	9,398	32,325	2,609
Country— Municipalities	1,126,370	547,784	29,392	112,704	9,259
Shires	116,471,060	816,769	150,623	344,200‡	§
'Total Country	117,597,430	1,364,553	180,015	456,904‡	§
Total Municipalities and Shires	117,776,435	2,962,729	351,005	1,043,576‡	§

<sup>\*</sup> At Census 30th June, 1947. † Excluding non-ratable properties (see page 868), ‡ Estimated. § Not available.

The area of the shires as shown above is exclusive of 28 square miles of Federal Territory at Jervis Bay, and the Australian Capital Territory, containing an area of 911 square miles.

Many shires do not assess improved capital value or assessed annual value for rating purposes, and the improved capital value of ratable lands within such shires is estimated (by reference to various data) at approximately twice the unimproved capital value.

A general summary of the finances of municipalities, shires and county councils in 1946 is shown in the following table. Explanations and other details of the finances are shown later, viz., revenue accounts, pages 875 to 889, and loan accounts, pages 891 to 893.

Table 755:-Local Government, N.S.W., Summary of Finances, 1946.

Table 755.—			Veri		oipalities and	Shires.		T
:Bartlou	lars,		1	Sydney and Suburbs,	Greater Newcastle.	Country.	County Councils.	Total,
		-		£	£	£	£	£
Ordinary Services—				*				
Revenue	•••	•••	•••	5,055,706	884,927	5,116,048	57,563	10,562,205
Expenditure from-	-		1	•				
Revenue		•••		5,272,046	354,321	5,477,347	43,536	11,095,211
Loans			•••	317,927	73,729	253,437	1,794	646,887
			i					
Trading Undertakings	<u>—</u>			4				
Revenue—								
Electricity	•••	•••	•••	183,166	759,674	2,381,012	5,267,284	8,591,136
Gas	•••			•••		216,394		216,394
Abattoirs	•••	•••	•••	•••	460,637	57,215		517,852
ide Works		•••	•••			2,636		2,636
				183,166	1,220,311	2,657,257	5,267,284	9,328,018
Water Supply			•••			545,023	158,220	703,243
Esewerage				***		281,229	15,680	296,909
'Total				183,166	1,220,311	3,483,509	5,441,184	10,328,170
Expenditure—								
Electricity, Gas, 6	tc.			173,424	1,164,171	2,450,317	5,206,252	8,994,164
Water and Sewer	age	•••	<b>.</b>			'726,'934	125,753	852,687
Capital Expenditure	from							
Loan Funds				19,453	14,882	598,553	328,117	961,005
Other Funds				24,289	87,820	546,303	591,045	1,249,407
						<del></del>		
Net Long-term Indebt	edness	s‡—						
Ordinary Services  Trading Undertakin				7,603,332 '46/545	648,625 423,562	.2,031,729 7;144,013	1,650 14,158,804	10,285,336

<sup>&#</sup>x27;including Grafton and South Grafton Water Board. † Excludes contributions to County Councils by constituent municipalities and shires, £52,039, which is duplicated in preceding columns, † Comprises loans, repayable Government advances and time-payment debts. Net debt is principal outstanding at 31st December, less accumulated sinking fund,

#### VALUATION OF PROPERTY IN LOCAL AREAS.

Local governing bodies obtain a large amount of revenue from the taxation which they are empowered to levy upon unimproved or improved values of land, principally from an annual levy on unimproved capital value.

The valuations are made at intervals not exceeding three years. The valuations of the City of Sydney are made by a City Valuer who is a salaried officer of the City Council. The Valuer-General, appointed in terms of the Valuation of Land Act, 1916, assesses values within the other municipalities, the shires situated wholly or partly within the county of Cumberland and the Blue Mountains Shire. In other shires the council may decide whether the valuation is to be made by the Valuer-General or by its own valuers.

At the end of 1946 the valuations in force in 104 municipalities and 46 shires were made by the Valuer-General, and in 48 municipalities and 89 shires by valuers appointed by the councils. In two shires the valuations were made partly by the Valuer-General and partly by the council's valuers.

In municipalities the valuation must show the unimproved capital value, the improved capital value, and the assessed annual value of ratable property. In the shires the law requires the valuation of the unimproved capital value only and the determination of the improved capital value and the assessed annual value is optional, except in urban areas, in which the assessed annual value must be determined. The Valuer-General usually determines improved values and assessed annual values for all lands in shires within his jurisdiction.

The unimproved capital value is defined as the amount for which the fee-simple estate in land could be sold under such reasonable conditions as a bona-fide seller would require assuming that the actual improvements had not been made. This basis of valuation has been applied, as from 1949, to Crown lands leased for pastoral or agricultural purposes; previously the unimproved capital value of such lands for rating purposes was determined on the basis of annual rental payable to the Crown (see page 347, Official Year Book, No. 50).

Alternatively a council may direct that the unimproved capital value of mines be ascertained upon the basis of output as indicated at page 482 of the 1941-42 and 1942-43 edition of the Year Book.

The improved capital value is the amount for which the fee-simple estate of the land, with all improvements and buildings thereon, could be sold.

The assessed annual value is nine-tenths of the fair average rental of land, with improvements thereon, but must not be less than 5 per cent. of the improved capital value.

All lands are ratable except the following, viz., lands belonging to the Commonwealth Government; lands belonging to the State Government and statutory bodies, unless leased for private purposes or used in connection with a State industrial undertaking; lands vested in the Crown or public body or trustees and used for public cemeteries, commons, reserves or free libraries; lands vested in and used by the University of Sydney or any of its colleges; lands belonging to and used for public hospitals, benevolent institutions or charities; lands belonging to and used by religious bodies for public worship, religious teaching or training, or

solely for the residence of the official heads or elergymen; lands belonging to and used for schools registered under the Bursary Endowment Act or certified under the Public Instruction Act, including playgrounds and residences occupied by caretakers, servants and teachers.

Where water is supplied or sewerage or drainage services are rendered, a charge or fee may be imposed in respect of properties thus exempted from rating. The underground mains of the gas and hydraulic power companies are ratable, and in respect of some of its properties the Commonwealth Government makes a contribution to councils' funds in lieu of rates.

In the following table are shown the aggregate valuations used for assessing rates on ratable property and the value of improvements in local government areas in the year 1946. Where the improved capital value of country shires is not recorded it is estimated that, in the aggregate, the value of improvements is approximately equal to the unimproved value.

Table 756.—Municipalities and Shires, Ratable Property, Unimproved Value, and Value of Improvements, 1946.

District		Unimprov Ratab	ed Value of le Land.	Value of Improvements on Ratable Land.		
Division,		Total.	Average Per acre.	Total.	Average Per acre.	
		£000	£ s.	£000	£ s.	
City of Sydney		51,788	16,083 4	130,894	40,650 9	
Suburban Municipalities		109,804	724 11	261,861	1,727 18	
Total Metropolitan		161,592	1,044 2	392,755	2,537 14	
City of Greater Newcastle		9,398	387 14	22,927	945 18	
Country—						
Municipalities		29,392	26 2	83,312	73 19	
Shires		150,623	1 6	193,577*	1 13*	
Total Incorporated Areas	3 <b></b>	351,005	2 19	692,571	5 18	

<sup>\*</sup> Estimated.

Lands leased from the Crown and assessed on a capitalised rental basis are included above at such capitalised value.

The unincorporated portion of the Western Division contains about 80,000,000 acres, which are for the most part pastoral or agricultural lands held under lease from the Crown at annual rentals. The unimproved capital value of these leaseholds assessed at twenty times the annual rent payable to the Crown would not exceed £3,000,000.

A comparative summary of the unimproved and improved capital values and the assessed annual value of ratable property, excluding lands coming within the exemptions noted above, is shown in the following statement:—

Table 75.7.—Municipalities, and Shires, Valuations of Ratable Property. £thousand:

	Me	etropolitan Ai	ea.		Coun	try.	,	
At 31st December,	City of Sydney;	Suburban Municipal- ities,	Total Metro- politan.	City of Greater, Newcastle.	Municipal-	Shires.	Total.	
		Unimi	PROVED CA	PITAL VAL	UE.			
1921	35,887	57,291	93:178	6,040	20,965	128,273	248,456	
1931	56,961	118,250	175,211	9,972	30,814	162,740	378,737	
1939	47,766	98,655	146,421	8,356	27,377	143,882	326,036	
1944	50,294	107,939	158,233	8,932	28,686	148,891	344,742	
1945	50,286	108,792	159,078	8,943	28,903	149,554	346,478	
1946	51,788	109,804	161,592	9,398	29,392	150,623	351,005	
1947†	51,652	111,481	163,133	9,435	33,033	152,565	358,166	
1948 †	51,438	115,792	167,230	9,666	34,223	158,281	369,400	
		Impr	OVED CAPI	TAL VALU	Е			
1921	99,647	156,849	256,496	15,450	59,115	*	*	
1931	192,194	334,391	526,585	27,817	103,736	*	*	
1939	155,776	300,724	456,500	25,371	97,629	*	*	
1944	174,178	356,392	530,570	30,764	108,658	*	*	
1945	174,972	363,751	538,723	30,723	109,775	*	*	
1946	182,682	371,665	554,347	32,325	112,704	*	*	
1947†	182,497	377,849	560,346	32,937	128,877	*	*	
$1948^{+}$	182,402	400,188	582,590	34,448	136,289	*	*	
		Asse	ssed Ann	UAL VALUE	g.			
1921	4.484	11,038	15,522	982	4,373	*	*,	
1931	8,253	25,690	33,943	2,099	8,178	*	*	
1939	7,010	23,149	30,159	2,058	7,697	*	*	
1944	7,884	28,933	36,817	2,525	8,898	*	*	
1945	7,874	29,458	37,332	2,519	9,012	*	*	
1946	8,221	29,950	38,171	2,609	9,259	*	*	
1947†	8,212	30,319	38,531	2,645	10,338	*	*	
1948†	8,208	31,526	39,734	2,741	10,834	*	*	

<sup>\*</sup> Not available. † Subject to revision.

Valuations are made usually at triennial intervals, and the values shown above do not indicate the annual changes in the value of real property, but rather the trend over a longer period.

The decline after 1931 was due in part to the exclusion from valuation lists of a large number of Crown and other properties which were exempted from rating in 1932. Since 1942 movements in the valuations have been regulated largely by the system of land sales control exercised by the Commonwealth Government under National Security Regulations until September, 1948, and then by the State Government.

The ratio of assessed annual value to improved capital value in 1948 was 4.5 per cent. in the City of Sydney, 7.9 per cent. in the suburbs, 8.0 per

cent. in Newcastle and 7.9 per cent. in country municipalities. As the assessed annual value is nine-tenths of the actual annual value, the proportions per cent. of annual value to improved value were 5 per cent., 8.8 per cent., 8.9 per cent., and 8.8 per cent., respectively.

In the City of Sydney the aggregate improved capital value of properties is derived by capitalising the fair average rental at 5 per cent. For this reason the ratio of the assessed annual to the capital values of city properties is lower than the ratios for properties in suburban and country municipalities.

#### RATING BY LOCAL GOVERNING BODIES.

The City of Sydney, the municipalities and shires operating under the Local Government Act, and special boards constituted to administer water, sewerage and drainage works levy rates within the areas served by them. The amount of rates levied by the councils and the boards during the years 1944 to 1948 is shown in Tables 651 and 652 of this Year Book, where local rating is considered conjointly with other forms of taxation imposed in the State.

Levies by councils include rates for general, special and local purposes, for the payment of interest and instalments of principal on loans and contributions to the Government on account of main roads. The following table shows the total amount of such rates levied by the City of Sydney and other municipalities and the shires in various years since 1921 according to the purposes for which the rates were levied; i.e., ordinary services, trading, and water and sewerage undertakings. In the rates for ordinary services are included rates levied for the purposes of the general fund, and special and local rates imposed in relation to functions which are similar to those of the general fund; e.g., roads, health, street lighting, etc.

Table 758.—Municipalities, Shires and County Councils, Rates Levied.

Year.	1	Rates Levied.								
	Ordinary Services	Electricity Fund.	Gas Works Fund.	Water Supply Fund.	Sewerage Fund.	Total.				
	£	£	£	£	£	£				
1921	3,464,565	23,535	4,698	117,077	36,305	3,646,1				
1931	5,815,792	86,326	4,631	257,536	81,955	6,246,2				
1936	4,969,623	47,732	2,526	266,595	109,786	5,396,2				
-1939	5,558,528	35,147	2,469	301,492	173.189	6,070,8				
1940	5,731,173	34,584	2,373	315,634	189,842	6,273,6				
1941	5,796,255	33,030	2,866	318,675	203,097	6,353,9				
1942	5,864,778	38,045	2,193	327,728	207,388	6,440,1				
1943	5,902;497	38,430	2,277	334,431	207,807	6,485,4				
1944	5,914,529	39,734	2.233	332,237	208,981	6,497,7				
1945	6,063,698	37,786	2,204	340,307	214,985	6,658,9				
1946	6,742,581	32,734	1,852	366,169	224,970	7,368,9				
1947	7,217,224	44,993	2,653	402,279	246,208	7,913,8				

The amount of rates levied in various groups of local areas, viz., the City of Sydney, the suburban and country municipalities and country councils is shown in later tables.

### CITY OF SYDNEY-RATING.

The Sydney Corporation Act prescribes that the City Council must levy in each year a general rate of not less than one penny in the £1 on the unimproved capital value. The Council may levy also a city rate not exceeding 2s. in the £1 on the assessed annual value. The limit of rating is fixed by the amount which would be yielded by a rate of 3d. in the £1 on the unimproved capital value and a rate of 2s. in the £1 on the assessed annual value. Where a city rate is not levied, the maximum rate is 6d. in the £1 on the unimproved capital value.

The following table shows the rates struck and the total amounts levied by the City Council in various years since 1921.

Year.	Rate per £ on U.C.V.	Yield.	Year,	Rate per £ on U.C.V.	Yield.
	d.	£		d.	£
1921	5	750,742	1943	$4\frac{27}{32}$	1,012,730
1931*	33	890,697	1944	$4\frac{27}{32}$	1,011,982
1936*	41/2	856,438	1945	$4\frac{27}{32}$	1,010,590
1939	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	958,652	1946	5½	1,182,955
1940	$4\frac{27}{32}$	1,014,084	1947	5 <del>1</del>	1,177,454
1941	$4\frac{2}{3}\frac{7}{2}$	1,013,181	1948	$5\frac{1}{2}$	1,176,125
1942	$4\frac{27}{32}$	1,012,495			

Table 759.—City of Sydney, Rates Levied.

The City Fund rate levied in the year 1949 was 6d, in the £1 on the unimproved capital value.

# RATING UNDER LOCAL GOVERNMENT ACT.

Suburban and country municipalities and shires may levy rates of four kinds, viz., general, special, local, and loan rates, and some of them may be required to levy special rates in respect of main roads.

Certain limitations as to minimum general rates and maximum amounts which may be levied in a municipality or shire are imposed by the Local Government Act. These are described in the 1939-40 issue of the Year Book on page 533.

The general rate in municipalities has been levied on the unimproved capital value since 1908, and, with few minor exceptions, the unimproved capital value forms the basis on which special, local and loan rates are levied. In shires the rates are levied upon the unimproved capital value except in a few cases where a small special rate has been imposed on the improved value.

<sup>\*</sup> Excludes special rates for contributious to Government funds: per £1 on U.C.V., Harbour Bridge  $\frac{1}{2}$ d. in 1931 and  $\frac{7}{6}$ d. in 1936, Main Roads  $\frac{1}{2}$ d. respectively: yield, Harbour Bridge £118,888 in 1931 and £42,278 in 1936, Main Roads £59,273 and £41,436.

The following table shows for various years since 1921 the amount of rates levied for all purposes in the municipalities, shires and county councils operating under the Local Government Act.

Table 760.—Municipalities, Shires and County Councils (Excluding City of Sydney), Rates Levied.

		Oro	linary Serv	Ices.			g, Water werage.	
Year.	Suburbs	City of	Country.			Municip-	County	Total.
	of Sydney.	Greater Newcastle.	Municip- alities.	Shires.	Total.	alities and Shires.	Councils.	
-								
	£	£	£	£	£	£	£	£
<b>19</b> 21	1,187,648	113,107	428,380	984,688	2,713,823	176,305	5,310	2,895,438
<b>1</b> 931	2,488,047	198,066	701,163	1,359,658	4,746,934	424,816	5,632	5,177,382
1936	1,992,763	170,522	588,545	1,277,441	4,029,271	420,362	6,277	4,455,910
1939	2,226,108	189,012	721,416	1,463,340	4,599,876	503,690	8,607	5,112,173
1940	2,291,235	195,664	738,191	1,491,999	4,717,089	533,768	8,665	5,259,522
<b>1</b> 941	2,329,078	195,926	751,315	1,506,755	4,783,074	546,797	10,871	5,340,742
1942	2,379,570	195,518	763,398	1,513,797	4,852,283	562,814	12,540	5,427,637
1943	2,430,787	204,542	758,621	1,495,817	4,889,767	568,360	14,585	5,472,712
1944	2,357,807	238,999	778,452	1,527,289	4,902,547	566,811	16,374	5,485,732
1945	2,410,640	241,691	825,522	1,575,255	5,053,108	532,303	62,979	5,648,390
1946	2,615,568	262,439	904,673	1,776,946	5,559,626	549,870	75,855	6,185,351
1947	2,726,464	275,616	981,371	2,056,319	6,039,770	609,051	87,082	6,735,903

The rates for ordinary services consist of general rates and special, local and loan rates, other than those imposed for the purposes of trading, water and sewerage undertakings. General rates are levied on all ratable lands within a municipal or shire area, but other rates, imposed to meet special or local needs, frequently apply to only portion of an area.

In 1946 the general rates amounted to £2,394,390 or 92 per cent. of the total rates for ordinary services in the suburbs of Sydney, £252,667 or 96 per cent. in Newcastle, £773,745 or 86 per cent. in country municipalities and £1,475,449 or 83 per cent. in the shires.

The following table shows the average rate levied per £1 of unimproved capital value for ordinary services in groups of municipalities and shires at intervals since 1908. These averages are based upon the aggregate unimproved value of ratable land within each group and the amount of rates levied—whether they were general over the whole municipality or shire or applied only to part thereof. Rates levied for trading, water and sewerage funds are excluded.

Table 761.—Municipalities and Shires (excluding City of Sydney); Average Rate Levied for Ordinary Services per £1 of Unimproved Capital Value.

	Suburbs	Greater	Cour	itry.	All Fore-		Suburbs	Greater	Cour	ntry.	All Fore-
Year.	of Sydney.	New- castle.	Munici- palities.	Shires.	going Areas	Year.	of Sydney.	New- castle.	Munici- palities.	Shires.	going Areas,
	d.	d.	d.	d.	d.		d,	d.	d.	d.	d.
1908	3.34	2.88	2.66	1.08	1.76	1941	5.33	5.47	6.39	2.46	3.98
1921	4.98	4.49	4.90	1.84	3.06	1942	5.36	5.43	6;45	2.29	3.91
1931	5.05	4.77	5:46	2.01	3.54	1943	5.43	5.48	6:40	2;42	4.01
1936	5.29	5.55	5.97	2.20	3.71	1944,	5.24	6.42	6.51	2.46	4.00
1939	5.42	5.43	6.32	2.44	3.97	1945.	5.32	6.49	6:85	2.53	4.09
1940	5.33	5.47	6.17	2.47	3.96	1946	5.72	6.70	7.39	2.83	4.46

The amount of rates levied, as shown in Table 760, represents the amount taken to account by councils as revenue, after deductions from current assessments in respect of reductions of valuations on appeal and amounts written off as irrecoverable. Generally most of the rates are collected in the year of levy, but there was a large accumulation of arrears between 1929 and 1934. Though the amount has since decreased steadily, as shown by the following table, the arrears at the end of 1946 were equivalent to 25 per cent. of the rates levied in that year.

Table 762.—Municipalities, Shires and County Councils (excluding City of Sydney); Overdue Rates and Extra Charges.

		City of		Country.		То	tal.
At 31st December.	Suburbs of Sydney.	City of Greater Newcastle.	Munici- palities;	Shires.	County Councils.	Ordinary Services,	Trading, Water and Sewerage.
	£	£.	£	£	£	£	<u> </u>
1921	113,342	7,261	136,888	101,287	538	35	9,316
1929	218,935	18,776	222,711	271,375	376	735	2,173
1934	1,052,823	68,845	662,114	834,804	1,533	2,620	0,119
1939	704,976	40,311	633,965	824,696	<b>2,056</b>	1,942,063	263,941
1944	511,234	19,963	576,791	745,054	3,982	1,620,036	236,988
1945	451,023.	17,739	<b>526,546</b>	684,369	38,693	1,501,849	216,521
1946	395,667	17,223	478,540	620,662	35,946	1;351;274	196,764
		,					

For purposes of comparison, the amounts in country municipalities, shires and county councils should be combined because there have been amalgamations of areas with consequent transfer of overdue rates and charges as between these groups.

# RATING FOR MAIN ROADS.

In terms of the Main Roads Act the councils of municipalities and shires, except the City of Sydney which was exempted at the end of the year 1937, may be required to contribute towards; the cost of main roads which are under the control of the Department of Main Roads. For the purpose of the contributions the councils in the metropolitan road district levy a rate and pay the proceeds to the Department. The contribution by the various councils is calculated at a uniform rate on the unimproved capital value of ratable property in the areas, as fixed by the Department of Main Roads. The rate may not exceed ½d. in the £1 on ratable property and the rate on farming lands may be reduced to one-half of the rate on other lands. During the years 1925 to 1932 the ordinary rate was ½d. in the £1 and the rate on farming lands was ¼d., and these were reduced in 1933 to  $\frac{7}{16}$ d. and  $\frac{7}{32}$ d., respectively.

Contributions by country councils are based upon the amount actually expended on main roads and are allocated to the individual councils according to the benefit each derives from the road works. The maximum contribution by a country council in any year is the sum which would be produced by a rate of ½d, in the £1 on the unimproved capital value of ratable lands.

Revenue to meet these contributions is derived by councils either by the levy of a special rate or by provision in the general rate and is included in the particulars of rates shown in preceding pages. The contributions for main roads totalling £225,262 in 1945 and £227,739 in 1946 included only small amounts in respect of country councils.

# REVENUE FINANCES OF LOCAL GOVERNING BODIES.

The accounts of municipal, shire and county councils in New South Wales are on an income and expenditure basis, and show the income accrued and expenditure incurred during the period to which they relate.

The form of accounts to be used by all councils, except the City of Sydney and the Sydney County Council, is prescribed under the Local Government Act. In each area there must be (a) a general fund, to which must be credited all moneys receivable in respect of the general rate, loans raised for any general purpose and loan rates levied in respect thereof, and moneys receivable in respect of any matter not appertaining to another fund; (b) a special fund for each special rate levied; (c) a local fund for each local rate levied; and (d) a separate trading fund for each trading undertaking conducted by the council. The resources of the general fund may be applied to any general purposes throughout the area, such as administration, health, roads, parks, etc., and the payment of interest and principal of loans, but the resources of a special or a local fund may be expended only on the special purpose or in the specified area in respect of which the rate is levied.

The rates and other revenue of the City of Sydney are paid into and its expenses are defrayed out of the City Fund, in terms of the Sydney Corporation Act. Separate accounts are kept, in respect of public markets and resumptions of land, but these are subsidiary to the City Fund and are incorporated in it. Conditions governing the accounts of the Sydney County Council are contained in the Gas and Electricity Act.

#### ORDINARY SERVICES REVENUE ACCOUNTS.

The functions of local government embraced by the term "Ordinary Services" are those which come within the scope of the City Fund of the Municipal Council of Sydney and the general fund of the councils under the Local Government Act, including special and local funds relating to works and services of a character similar to those covered by the general fund. The trading, water and sewerage funds are excluded, particulars of these being shown in Tables 768 to 777.

A summary of the revenue and expenditure from revenue on account of ordinary services in the years 1936 to 1940 and in 1944 to 1946 is shown below:—

Table 763.—Municipalities and Shires, Ordinary Services, Revenue and Expenditure from Revenue.

	Metro	politan.	Cit— .e	Cour	ntry.	Total,
Year.	City of Sydney.	Suburban Municipal- ities.	City of Greater Newcastle.	Municipal- ities.	Shires.	New South Wales.
			Revenue (£.	).		
1936	1,300,317	3,619,509	514,135	1,802,412	4,017,744	11,254,117
1937	1,312,221	3,245,813	429,928	1,543,267	4,008,471	10,539,700
1938	1,331,433	3,186,743	349,378	1,640,892	4,148,963	10,657,409
1939	1,318,047	3,392,192	368,328	1,593,499	4,005,625	10,677,691
1940	1,373,218	3,298,061	370,373	1,432,158	3,795,060	10,268,870
1944	1,426,554	2,917,972	349,571	1,282,316	3,038,738	9,015,151
1945	1,480,262	3,017,207	347,608	1,329,085	3,077,570	9,251,732
1946	1,658,561	3,397,145	384,927	1,476,891	3,639,157	10,556,681
		Expendit	JRE FROM RI	EVENUE. (£).		
1936	1,360,739	3 662,181	505,600	1,826,137	3,999,574	11,354,231
1937	1,349,739	3,325,736	417,899	1,582,256	4,016,820	10,692,450
1938	1,316,313	3,294,869	417,022	1,639,586	4,122,483	10,790,273
1939	1,344,448	3,400,955	384,634	1,566,528	3,959,150	10,655,715
1940	1,343,699	3,279,119	384,754	1,407,488	3,754,052	10,169,112
1944	1,340,516	2,798,123	360,721	1,304,844	3,151,087	8,955,291
1945	1,330,360	2,965,925	347,008	1,350,955	3,260,347	9,254,595
1946	1,575 413	3,696,633	354,321	1,554,764	3,922,583	11,103,714

### ORDINARY SERVICES REVENUE.

Rates form the largest item of revenue in respect of ordinary services and (with interest on overdue rates) represented 76 per cent. of the revenue of the councils, excluding receipts from Government, and 64 per cent. of the total revenue during 1946.

The chief items of ordinary services revenue in the years 1936 to 1940, and in 1944 to 1946, are shown below.

Table 764.-Municipalities and Shires, Ordinary Services Revenue.

		Revenue l	Raised by C	ouncils.		Amounts	
Year.	Rates and Interest on Overdue Rates.	Sanitary and Garbage,	Contribu- tions to Works.	Property (Rents, Charges).	Other.	Received from Govern- ment,	Total Revenue.
,							
	£	£	£	£	£	£	£
1936	5,088,782	458,365	224,280	298,250	531,403	4,653,037	11,254,117
1937	5,198,219	454,107	327,293	283,710	574,333	3,702,038	10,539,700
1938	5,410,665	455,871	339,927	315,804	622,834	3,512,308	10,657,409
1939	5,661,128	462,270	304,584	317,309	572,218	3,360,182	10,677,693
1940	5,832,598	463,883	230,591	334,390	649,905	2,757,503	10,268,870
1944	5,989,175	577,003	111,522	389,740	622,983	1,324,728	9,015,15
1945	6,127,732	649,086	121,466	379,791	687,871	1,285,786	9,251,732
1946	6,799,071	670,426	293,351	426,503	865,886	1,501,444	10,556,68

Particulars of ordinary services revenue in 1945 and 1946 are shown in greater detail in Table 765.

Until 1939 the councils received large sums from the Government for expenditure on unemployment relief works and as contributions towards the cost of extensive programmes of loan works. Government grants for these purposes and for the construction and maintenance of main roads then declined with the diversion of resources to war activities.

Receipts from the Government in 1939 included £1,371,526 obtained from the Main Roads Department and the amount was £900,714 in 1945 and £1,146,634 in 1946. Of these disbursements for main roads in these years, the shires received £1,115,344 in 1939, £793,204 in 1945, and £1,025,880 in 1946.

In the metropolitan area and Newcastle amounts received from the Government represented only 14 per cent. in 1939, and 2.2 per cent. in 1946, of the total revenue from all sources. In country municipalities the proportions were 30 per cent. and 6 per cent., and in the shires 54 per cent. and 35 per cent. respectively. In the aggregate Government payments to councils represented 31 per cent. of their revenue in 1939 and 14 per cent. in 1946.

Table 765.—Municipalities and Shires, Ordinary Services Revenue.

	Metro	politan.		Cou	ntry.	
Revenue.	City of Sydney.	Suburban Munici- palities.	City of Greater Newcastle	Munici- palities.	Shires.	Total.
	YEA	r 1945 (£.)				
General Rates Loan, Local and Special Rates Extra Charges on Overdue Rates	1,010,590 1,066	2,192,858 217,782 19,007	241,691 	699,758 125,764 19,146	1,323,696 251,559 23,836	5,468,59 <b>3</b> 595,105 64,034
Total Rates and Extra Charges	1,011,656	2,429,647	242,670	844,668	1,599,091	6,127,732
Miscellaneous Licence Fees—Charges for Gas, Electric, Hydraulie Mains etc	29,411	34,420	4,165	18,088	23,593	109,677
Sales and Charges for Services, etc.— Contributions to Works Sanitary and Garbage Services Parks, Reserves, Baths and Beaches Public Markets Libraries Council Property	123,312 2,395 183,113	53;425 141,240 73,923  45,686	6,595 6,628 2,374  56,187	17,924 200,179 36,731 22,181 3,010 38,876	22,772 213,529 22,666 3,746 1,117 55,929	121,466 649,086 143,764 149,239 6,522 379,791
Other	10,109	119,199	10,453	52,888	86,020	1 789 597
Total Sales and Charges	435,259	433,473	82,237	371,789	405,779	1,728,537
Total Revenue Raised by Councils	1,476,326	2,897,540	329,072	1,234,545	2,028,463	7,965,946
Government Grants— Endowment Main Roads Dept Subsidy for Payment of Interest and		46,583	6,038	54,889	177,338 793,204	177,338 900,714
Principal on Loans Other	3,936	$10,562 \\ 62,522$	2,113 10,385	4,045 35,606	5,683 72,882	22,403 185,331
Total Government Grants	3,936	119,667	18,536	94,540	1,049,107	1,285,786
Total Revenue—Ordinary Services	1,480,262	3,017,207	347,608	1,329,085	3,077,570	9,251,732
	YEA1	R 1946 (£.).				
General Rates	1,182,955 1,125	2,394,390 221,178 18,148	252,667 9,772 703	773,745 130,928 15,142	1,475,449 301,497 21,372	6,079,206 663,375 56,490
Total Rates and Extra Charges	1,184,080	2,633,716	263,142	919,815	1,798,318	6,799,071
Miscellaneons Licence Fees—Charges for Gas, Electric, Hydraulic Mains, etc	34,138	46,903	4,658	24,586	31,802	142,087
Sales and Charges for Services, etc.— Contributions to Works Sanltary and Garbage Services Parks, Reserves, Baths and Beaches Public Markets Libraries Conucil Property Other	26,263 66,962	171,044 151,623 94,987  704 59,519 142,950	9,747 7,367 3,785  57,510 17,871	38,555 209,836 44,080 28,477 6,619 44,782 69,651	47,742 234,638 30,658 4,003 1,563 69,887 130,319	293,851 670,426 184,500 154,594 11,367 426,503 373,338
Total Sales and Charges	436,262	620,777	96,230	442,000	518,810	2,114,079
Total Revenue Raised by Conncils				1,386,401	2,348,930	9,055,237
Government Grants— Endowment Main Roads Dept Subsidy for Payment of Interest and		51,273	6,247	63,234	179,912 1,025,880	179,912 1,146,634
Other	4,081	8,723 35,753	1,884 12,766	$3,730 \\ 23,526$	4,936 79,499	19,273 155,625
Total Government Grants	4,081	95,749	20,897	90,490	1,290,227	1,501,444
Total Revenue—Ordinary Services	1,658,561	3,397,145	384,927	1,476,891	3,639,157	10,556,681

# ORDINARY SERVICES EXPENDITURE.

Particulars of expenditure on ordinary services, as shown in this chapter, are not presented in the same form as in accounts furnished by the councils subject to administration in terms of the Local Government Act (i.e., all councils except the City of Sydney).

The councils' statements are composite in character and show in combination expenditure from both revenue and loans. In this chapter expenditure from each source is shown separately—expenditure from revenue in Tables 766 and 767 and expenditure from loans in Tables 780 and 781. In the dissection of the accounts a degree of approximation was necessary in some instances, but the final results may be regarded as reliable statements of the expenditure by the local governing bodies on ordinary or general services.

A summary of the annual expenditure from revenue on ordinary services as shown in the following table, is divided into two parts, viz., (i) Gross Expenditure, being expenditure from revenue derived from all sources, i.e., revenue raised by the councils and Government grants towards the cost of councils' services and for main roads, unemployment relief and national works undertaken by councils for the Government; (ii) Net Expenditure, which represents expenditure from councils' own revenue; it has been ascertained by deducting from Gross Expenditure the amounts received from the Government as shown in Table 764.

Table 766.—Municipalities and Shires; Ordinary Services, Gross and Net Expenditure from Revenue.

		Gross E	cpenditure.*		Net Expenditure.*				
Year.		Debt !	Services.	Total					
	Administra- tion, Works and Services.	Interest.	Provision for Debt Redemption.	Gross Expenditure.	Administra- tion, Works and Services.	Interest and Debt Redemption,	Total Net Expenditure		
	£	£	£	£	£	£	£		
1936	9,633,387	835,617	885,227	11,354,231	5,075,717	1,625,477	6,701,194		
1937	8,901,161	814,517	976,772	10,692,450	5,327,325	1,663,087	6,990,412		
1938	8,794,729	877,590	1,117,954	10,790,273	5,479,657	1,798,308	7,277,965		
1939	8,628,976	891,339	1,135,400	10,655,715	5,467,908	1,827,625	7,295,533		
1940	8,089,496	887,358	1,192,258	10,169,112	5,496,508	1,915,101	7,411,609		
1944	7,226,747	$715,\!125$	1,013,419	8,955,291	5,945,565	1,684,998	7,630,563		
1945	7,624,206	667,249	963,140	9,254,595	6,365,896	1,602,913	7,968,809		
1946	9,505,489	640,215	958,010	11,103,714	8,028,620	1,573,650	9,602,270		

<sup>·</sup> See explanation in context preceding table.

Expenditure on interest relates to amounts payable on overdrafts, fixed loans, deferred or time payment debts, repayable Government advances and other liabilities. In the accounts of the City of Sydney, the charge is ascertained after deducting from the total amount payable, interest earnings on a considerable body of investments not being part of normal sinking funds.

Amounts shown as provision for debt redemption (i.e., loans, repayable Government advances and deferred or time payment debts) do not embrace all moneys devoted to such purpose. For instance, earnings on sinking

<sup>\*13487-5</sup> 

Table 767.—Municipalities and Shires; Ordinary Services; Gross Expenditure from Revenue.

·	Metro	politan.	City	Cou	ntry.	
Expenditure,	City of Sydney:	Suburbs of Sydney.	Greater New- castle.	Munici- palities,	Shires.	Totalı
	YEA	R 1945.				
Administration Works—Roads, Streets, Bridges, etc. Street Lighting Sanitary and Garbage Parks, Reserves, Baths and Beaches Health Services Public Markets Libravies Moxious Animals and Weeds Fire Prevention Donations, Hospitals, Public Bodies, etc. Council Property, incl. New Plant, etc. Contributions to Main Roads Dept. Other  Total Works and Services Less Depreciation	£ 84,026 126,521 32,615 147,802 60,063 26,76 69,127 13,616 22,734 1,000 93,628 103,946 781,854	£ 205,243 854,256 176,700 324,210 208,465 70,053 7,844 8,089 1,614 83,556 19,515 148,976 197,573 114,126 2,420,820 48,580 2,377,290	23,841 86,135- 21,249 31,614 31,259 6,604  7,989 2,314 16,036 18,894 240,329 5,663 240,666	\$ 130,396 452,612 80,465 194,724 122,487 38,097 18,085 12,081 4,116 19,239 9,827 88,185 8,187 70,742 1,249,223 44,011 1,205,212	£ 280,816' 2,099,168 67,028' 207,639: 57,365 41,946 4,474 4,425 2,940 24,434 14,302 8,618 142,424 19,522 116,798 3,019,184	\$ 723,822 \$,618,692 \$78,057 905,989 479,639 183,476 91,886 38,360 11,629 30,164 147,820 41,274 489,240 225,262 424,506 7,89,825 7,624,206
Debt Charges— Interest on Loans, etc., and Overdrafts Repayment of Loans, etc., including Contributions to Sinking Funds	405,672 142,834	127,607 461,028	28,085 78,257	36,937 108,806	68,948 172,215	667,249 963,140
Total Debt Charges	548,506	588,635	106,342	145,743	241,163	1,630,389
Total Expenditure from Revenue	1,330,360	2,965,925	347,008	1,350,955	3,260,347	9,254,595

## YEAR 1946.

Works—Roads, Streets, Bridges, etc.       230,142       1,284,234       83,150       522,085       2,513,148       4,         Street Lighting         34,284       188,106       21,948       84,081       68,493         Sanitary and Garbage         154,652       361,056       28,615       206,284       226,347         Parks, Reserves, Baths and Beaches        83,438       291,348       33,523       167,243       76,587	£ 815,791 ,632,759 391,912 976,854 642,139 224,462
Works—Roads, Streets, Bridges, etc.       230,142       1,284,234       83,150       522,085       2,513,148       4,         Street Lighting         34,284       183,106       21,048       84,081       68,493         Sanitary and Garbage         154,652       361,056       28,615       206,284       226,347         Parks, Reserves, Baths and Beaches        83,438       291,348       33,523       167,243       76,587	,632,759 391,912 976,854 642,139 224,462
Works—Roads, Streets, Bridges, etc.     230,142     1,284,234     83,150     522,085     2,513,148     4, 81       Street Lighting        34,284     188,106     21,048     84,081     68,493       Sanitary and Garbage       154,652     361,056     28,615     206,284     226,347       Parks, Reserves, Baths and Beaches      83,438     291,348     33,523     167,243     76,587	391,912 976,854 642,139 224,462
Street Lighting      34,284     188,106     21,948     84,981     68,493       Sanitary and Garbage      154,552     361,056     28,615     206,284     226,347       Parks, Reserves, Baths and Beaches      83,438     291,348     33,523     167,243     76,587	391,912 976,854 642,139 224,462
Sanitary and Garbage 154,552 361,056 28,615 206,284 226,347 Parks, Reserves, Baths and Beaches 83,438 291,348 33,523 157,243 76,587	642,139 224,462
Parks, Reserves, Baths and Beaches 83,438   291,348   33,523   157,243   76,587	224,462
Health Services 31.809   92.055   9.169   43.693   47.736	
	104,445
Libraries 15,773   18,908   694   28,949   7,800	72,124
Housing 9,859 2,380 2,189	14,428
Noxlous Animals and Weeds 2,356 4,508 27,696	$34,560^{\circ}$
	182,002
Donations, Hospitals, Public Bodies, etc.   22,054   17,074   1,120   9,473   7,049	56,770
	795,444
	227,739
,, to Cumberland County	
Council 14,689 31,328 1,053 2,877	49,947
Other 103,545   140,857   23,953   76,166   122,001	466,522
Total Works and Services 1,035,234 3,186,706 253,787 1,458,787 3,753,384 9,	687,898
Less Depreciation 47,858 5,388 44,020 85,143	182,409
1,035,234 3,138,848 248,399 1,414,767 3,668,241 9,	505,489
1,000,000 210,000 2111,101 0,000,011 0,	,000,100
Debt Charges—	
Interest on Loans, etc., and Overdrafts 396,953 112,684 26,996 36,353 67,229	640,215
Repayment of Loans, etc., including	,
Contributions to Sinking Funds 143,226 445,101 78,926 103,644 187,113	958,010
Total Debt Charges 540,179 557,785 105,922 139,997 254,342 1	598,225
Total Debt Charges 540,179 557,785 105,922 139,997 254,342 1	,000,440
Total Expenditure from Revenue 1,575,413   3,696,683   354,321   1,554,764   3,922,583   11	,103,714

fund investments in the City of Sydney are credited direct to sinking fund accounts and proceeds of the sale of valuable resumption residues are invested and held for redemption purposes apart from the revenue account. A complete statement of amounts provided for debt redemption from all sources is shown in Table 785.

Councils receive relatively small grants from the Government in respect of interest and repayment of loans raised by councils for main roads and for supplementing Government expenditure on relief work. Such grants amounted to £27,476 in 1945 and £24,575 in 1946.

The net outgo on debt service borne by the councils, including provision for redemption, represented 20 per cent. of the total net expenditure on ordinary services in 1945, and 16.4 per cent. in 1946. In 1946 the ratio was 34 per cent. in the City of Sydney, 31 per cent. in Greater Newcastle, 15 per cent. in the suburbs of Sydney, 9 per cent. in country municipalities and 10 per cent. in shires.

Particulars of gross expenditure on ordinary services in 1945 and 1946, are shown in Table 767. A similar statement regarding net expenditure has not been compiled because complete details are not available as to the objects on which moneys received from the Government were expended. A charge made for depreciation and included in the individual items of expenditure is deducted as a single amount from total expenditure on works and services. This is done in order to remove duplication which arises from the inclusion in expenditure of (1) purchase of assets from revenue and depreciation of those assets, (2) repayment of loans expended on the purchase of assets and depreciation of the assets.

#### FINANCES OF TRADING UNDERTAKINGS.

In 1946 undertakings providing electricity, water and sewerage services were conducted by municipal, shire and county councils, ice works were operated by a municipality and a shire, and gas works and abattoirs by municipalities only.

# ELECTRICITY TRADING FUNDS.

In New South Wales many of the establishments for the supply of electricity for public and private use are conducted by municipal and shire councils and county councils formed by groups of municipalities and shires for this purpose. A number of the larger councils and some situated in remote parts of the State have works for the generation as well as the distribution of electricity; other councils purchase supplies in bulk and distribute them to consumers.

At the end of 1946 electricity services were provided by 81 municipalities, 42 shires and 9 county councils. Of these, 20 municipalities, 10 shires and 2 county councils operated generating plants, 57 municipalities, 32 shires and 5 county councils distributed current purchased in bulk, and 4 municipalities and 2 county councils generated a quantity of electricity but purchased substantial supplies from other sources.

The largest undertaking is that of the Sydney County Council, which in 1946 distributed electricity direct to consumers in the city and thirty-three suburban municipalities. It also supplied electricity in bulk to the local councils of nine municipalities and four shires for distribution in their respective localities, and to a private company for distribution within a municipality and a shire.

A statement of the revenue and expenditure of the electricity concerns of the local governing authorities in 1945 and 1946 is shown below:—

Table 768.—Local Government, N.S.W., Electricity Works; Revenue Accounts.

		Year	1945.		l	Year	r 1946.	
Particulars.	Munici- palities.	Shires,	County Councils.	Total.	Munici- palities.	Shires.	County Councils,	Total.
				REVE	NUE (£.).			·
Meter Reuts, Instal-	2,179,873	495,667	4,776,953	7,452,493	2,343,210	571,821	5,140,082	8,055,113
lations, etc Government Grants Loan Rates	240,956 11,256 10,773	57,488 6,516 27,013	98,610 4,109 	397,054 21,881 37,786	293,829 4,929 6,602	74,116 3,213 26,132	123,950 3,252	491,895 11,394 32,734
Total Revenue	2,442,858	586,684	4,879,672	7,909,214	2,648,570	675,282	5,267,284	8,591,136
				EXPEN	DITURE (£).			
Generation, Purchase, Distribution, etc. Interest	2,169,734	488,743 16,608	3,995,897 827,617	6,654,374 886,346	2,421,098 43,349	586,977 18,132	4,387,568 818,684	7,395,643 880,215
Total Expenditure	2,211,855	505,351	4,823,514	7,540,720	2,464,447	605,159	5,206,252	8,275,858
Surplus	231,003	81,333	56,158	368,494	184,123	70,123	61.032	315.278

The Sydney County Council with revenue amounting to £4,462,956 and expenditure to £4,461,181 accounted for more than one-half the revenue in 1946 and was followed by the City of Newcastle (revenue £759,674 and expenditure £709,277), St. George County Council (£304,901 and £271,200) and Clarence River County Council (£213,070 and £199,274).

Provision for depreciation and obsolescence of assets is included in the expenditure and in 1946 amounted to £192,424 in the municipalities, £56,851 in the shires, £1,006,402 in the county councils and £1,255,677 for all councils.

The government grants as shown in the revenue are usually made to promote the extension of electricity in rural areas and in some instances take the form of an annual subsidy towards the interest and repayment charges on loans.

The electricity undertakings of the councils expend large sums annually in the replacement, improvement and extension of plant and equipment and in the repayment of capital indebtedness, for which purposes funds are obtained from loans, moneys reserved to provide for depreciation and trading surpluses. A dissection of these capital transactions in 1945 and 1946 is as follows:—

Table 769.—Local Government, N.S.W., Electricity Works; Capital Expenditure and Debt Repayment.

_		Year	1945.	_		Year	1946.	
Particulars.	Munici- palities.	Shires.	County Councils.	Total.	Munici- palities.	Shires.	County Councils.	Total.
Capital Expenditure—from Loans, etc Other	£ 63,889 247,189	£ 33,911 66,812	£ 150,868 893,575	£ 248,668 1,207,576	£ 224,184 356,351	£ 200,929 122,925	£ 223,529 543,745	£ 654,642 1,023,021
Total	311,078	100,723	1,044,443	1,456,244	580,535	329,854	767,274	1,677,663
Provision for Debt Redemption	98,155	46,770	446,747*	591,672	100,238	42,227	472,131*	614,596

<sup>\*</sup>Includes in respect of Sydney County Council, interest on Sinking Fund investments £161,622 in 1945 and £172,034 in 1946.

The growth of the combined municipal, shire and county councils electricity enterprises is illustrated by the following table which shows the number of councils engaged and a summary of their revenue accounts at intervals between 1921 and 1946.

Table 770.—Local Government, N.S.W., Electricity Works; Revenue Accounts.

***	No. of	Ex-		Trading			
Year.	Councils.	penditure.	Sales.	Loan Rates.	Other.	Total.	Surplus.
1921	35	£ 1,171,064	£ 1,109,548	£ 24,435	£ 53,175	£ 1,187,158	£ 16,094
1931	111	3,751,004	3,502,547	86,385	146,407	3,735,339	()15,665
1936	113	4,135,728	4,233,520	47,732	160,224	4,441,476	305,748
1937	118	4,528,825	4,601,029	44,851	187,387	4,833,267	304,442
1938	121	4,922,637	4,972,361	46,769	249,372	5,268,502	345,865
1939	122	5,338,943	5,362,395	35,147	293,041	5,690,583	351,640
1944	125	7,249,390	7,216,133	39,734	369,944	7,625,811	376,421
1945	125	7,540,720	7,452,493	37,786	418,935	7,909,214	368,494
1946	132	8,275,858	8,055,113	32,734	503,289	8,591,136	315,278

(-) Deficiency.

The quantity of electricity generated by the local government undertakings in 1946 was 1,231,483,000 units representing approximately 40 per cent. of the total output of all generating stations in New South Wales. In addition the councils purchased electricity which increased their supplies by a net amount of 479,207,000 units.

The following table shows the electricity generated, purchased and sold by the various groups of councils in 1945 and 1946:—

Table 771.—Local Government, N.S.W.; Electricity Generated, Purchased and Sold.

Year 1945. Year 1946. Council. Generated. Purchased. Sold. Generated, Purchased. Sold. County Councils-Sydney St. George 901,978 43,352 29,314 24,954 1,016,912 1,139,416 60,634 12,109 52,038 32,563 52,055 27,507 7,475 54,151 35,155 7,663 Clarence River 33 Other 20,640 33,423 403,077 Municipalities 49,478 2,399 393,604 353,912 97,804 73,847 2.934 595,732 1,568,723 Gross Total 1,111,607 506,382 1,443,549 1,231,483 116,525 116,525 Less purchases between councils 93,128 93,128 479,207 1,452,198 Net Total ... 1,111,607 413,254 1,350,421 1,231,483

Thousand kWh.

"The following summary of the balance sheets of the electricity underactakings of municipal, shire and county councils shows the extent of capital coinvestment and loan debt outstanding at 31st; December, 1946:—

Table 7.72.—Local Government, N.S.W., Electricity Works; Balance Sheets, 1946.

		Municip	ælities.	ľ	Co	unty Cour	icils.	
Particulars.	_	Greater New- castle,	Other.	Shires,	Sydney.	St. George.	Other.	ा <b>£lotal.</b>
			Liabi	LITIES (£.).				
Capital Debt	,	262,150	··: 851,989	627,986	15,855,788	157,799	1,274,820	19,030,541
Ovendrafts			190,590	.92,438	4,825		69,056	1356,909
Oreditors, etc.	::-	.85,944	189,214	88,190	1,144,217	36,096	65,419	,.1,609,080
Total Liabilities		348,094	1,231,798	808,614	17,004,830	193,895	1,409,304	20,996,530
		,	<b>A</b> SI	SETS (£.).				
Land, Plant, etc		1,114,860	3,175,051	1,434,698	16,094,766	583,054	1,474,045	23,876,474
Debtors		79,122	379,375	135,805	590,793	28,893	91,936	1,305,924
Gash and Investments—								
Trading Accounts		68,488	<b>3</b> 32;646	61,814	1,183,684	47,862	99,494	1,794,188
Trauming Accounts						44.000	05.000	5,123,627
Reserve Accounts		95,050	79,140	84,862	4,721,947	46,800	95,828	0,120,027
•		95,050 9,859	79,140 85,336	84,862 115,967	4,721,947	46,800 8,000	95,828 64,222	
Reserve Accounts		,	· '		, ,	8,000	64,222	283,384

The capital indebtedness comprises debenture loans £19,009,252, repayable advances from State Government, £5,125, time payment debts, £14,989 and loans from other funds of the councils, £1,175. This capital indebtedness was offset by sinking funds for debt redemption totalling £4,521,019 included in assets.

The surplus funds of the Sydney County Council included the following reserves: General, £200,906, Sinking Fund, £4,475,542, and Insurance Fund, £282,077. The value of plant, etc., included capitalised charges for loan discounts and flotation expenses, £160,414, which are written off by annual charges to revenue. The capital cost of land, plant, etc., with stores on hand, amounted to £27,184,555, being reduced to £16,094,766 by the deduction of depreciation reserve, £11,089,789.

# GASWORKS TRADING FUNDS.

The supply of coal gas for lighting and heating in New South Wales as mainly the province of private companies.

The gasworks operated by municipal councils are situated in country towns; they numbered 21 in 1921, 18 in 1939, 19 in 1945, and 21 in 1946. A summary of their revenue accounts in various years since 1921 is shown below:—

Table 773.—Local Government, N.S.W.; Gasworks Revenue Accounts.

	,						
Year ended 31st December.	Expendi- ture.	Ва	les.	Loan Rates,	Other.	Total.	Surplus or 'Déficiency (—)
		Gas.	Residuals.				
	£	£	£	£	£	£	£
.1921	.(145,261	135,629	12,534	4,698	4,646	157,507	12,246
.1931	106,317	90/332	.13,419	4.631	3,376	111,758	5,441
1936	89,181	71,549	12,954	2,526	4,298	91,327	2,146
1937	92,087	71,522	13,959	2,864	8,699	97,044	4,957
.1938	:95,708	74,106	14,388	2,401	3,049	93,944	() 1,764
1939	197,316	75,075	13,681	2,469	5,028	96,253	() 1,063
1944	186,350	137,872	35,871	2,233	11,742	187,718	1,368
1945	194,358	141,415	31,263	2,204	17,780	192,662	() 1,696
.1946	,211,247	156,335	33,923	1,852	24,284	216,394	5,147
				,	,	,	

"Other" revenue includes grants from electricity trading funds and Government grants; the former grants amounted to £7,404 in 1945 and £6,719 in 1946, and the latter to £250 in 1945. The charges included in expenditure for depreciation of assets amounted to £19,133 in 1945 and £18,672 in 1946, and for interest on loans, overdrafts, etc., to £3,269 and £3,384 in the respective years.

The gas manufactured measured 497,358,000 cubic feet in 1945 and 2519,796,000 cubic feet in 1946, and sales of gas were 384,716,000 and 4400,190,000 cubic feet, respectively. The average price realised per 1,000 cubic feet of gas sold was 7s. 4d. in 1945 and 7s. 10d. in 1946.

The balance sheets of the municipal gasworks trading undertakings at 31st December, 1946, are summarised in the following statement:—

Table 774.—Local Government, N.S.W.; Gasworks Balance Sheets, 1946.

Liabilit	ies.	l	Assets.				
Capital Debt Sundry creditors, etc.		£ 131,209 40,650	Buildings, land, stock, plant, etc. 407,197  Debtors 29,604  Cash and Investments—				
Overdrafts	•••	40,576	Trading Accounts 4,666				
Total Liabilities		212,435	Reserve Accounts 11,143				
Excess of Assets	•••	282,847	Loan Accounts 42,672				
Total	•••	£495,282	Total £495,282				

The capital debt comprised debenture loans £108,950, repayable advances from the Government £1,878 and loans from other funds £20,381.

Capital expenditure on the acquisition and improvement of assets amounted to £27,470 in 1945 and £55,124 in 1946, including £6,866 and £23,348, respectively, from loan funds. Repayments of capital debt totalled £4,171 in 1945 and £5,453 in 1946.

# WATER SUPPLY AND SEWERAGE FUNDS.

The water supply and sewerage systems of the metropolitan and Newcastle districts and Broken Hill are administered by statutory boards, representative of the State Government and the local councils, and several water storage systems are under direct Government control. The larger systems are described on page 898 et seq. The Grafton and South Grafton Water Board administers water supply services within the municipalities of Grafton and South Grafton. Other domestic water supply and sewerage works in New South Wales, except those associated with irrigation schemes, are vested in municipal, shire and county councils.

Until 1935 the water and sewerage works, as a general rule, were constructed by the State, and transferred on completion to the local councils, which were required to repay the capital cost, with interest, over periods fixed in relation to the durability of the works. Since 1935 the construction of new works has, in many instances, been undertaken by the councils from loans raised for the purpose, with the State bearing portion of the capital cost. On many of the loans raised by the councils the State pays part of the annual charges.

Arrangements between the State Government and councils for the repayment of the cost of works constructed by the State were modified by the Country Towns Water Supply and Sewerage (Debts) Act, 1937, which expired on 30th June, 1940. It provided for writing off part of the indebtedness to the State, and authorised the councils to raise loans to repay the remainder. The sum of £806,656 was written off and £3,279,388 was accepted by the State in full settlement of the debts, amounting in the aggregate to £4,086,044.

At 31st December, 1946, country water supply services were conducted or were under construction by seventy-three municipalities, forty-two shires and five county councils, and country sewerage services by fifty-one municipalities, ten shires and one county council.

The following table summarises the revenue accounts of the undertakings for the years 1945 and 1946:—

Table 775.—Local Government, N.S.W., Water and Sewerage; Revenue Accounts.

_											
_			_		Year	1945.		Year 1946.			
Particulars.			Munici- palities,	Shires.	County Councils.	Total.	Munici- palities.	Shires,	County Councils.	Total.	
					WAT	er Supp	LY (£.).		·		
Revenue- Rates	- <u>.</u>			233,336	57,376	49,595	340,307	239,709	63,944	62,516	366,169
Water	Sales		•••	137,690	33,924	33,965	205,579	133,831	33,043	34,644	201,518
Govern	ment (	rants?	•••	45,597	7,947	42,631	96,175	41,209	13,770	54,522	109,501
Other	•••	•••	•	15,175	4,394	5,870	25,439	15,174	4,343	6,538	26,055
	Fotal	•••		431,798	103,641	132,061	667,500	429,923	115,100	158,220	703,243
Expendit	пь		•	373,027	97,990	98,200	569,217	381,237	94,699	110,889	586,825
Surplus				58,771	5,651	33,861	98,283	48,686	20,401	47,331	116,418
	,				Sew	ERAGE (£.)	).				
Revenue-	_			404.084	40.500	10.001			- 0 0 - 0	10.000	004.050
Rates Governi	 			185,071 26,476	16,530 4.810	13,384	214,985	194,759 25,904	16,872 7,634	13,339 1,243	224,970 34,781
Other	 			26,690	1,945	1,073 1,178	32,359 29,813	32,150	3,910	1,098	37,158
2	[otal			238,237	23,285	15,635	277,157	252,813	28,416	15,680	296,909
Expenditu	ıre			220,596	20,319	13,193	254,108	228,004	22,994	14,864	265,862
Surplus				17,641	2,966	2,442	23,049	24,809	5,422	816	31,047

<sup>\*</sup> Including Grafton and South Grafton Water Board.

Expenditure relates to management and working expenses, depreciation and interest. In water supply works the charge for depreciation was £65,734 in 1945 and £55,002 in 1946 and interest amounted to £175,271 and £178,243, respectively. For sewerage works the charges in the respective years were £26,616 and £25,695 for depreciation, and £109,223 and £112,033 for interest.

Particulars of capital expenditure from loan, depreciation and surplus funds, and of redemptions of capital indebtedness during 1945 and 1946 are shown below:—

'Table 776.—Local' Government, "N.S.W., "Water and Sewerage; Capital Expenditure and Debt Repayment.

		Year 1945.				Year 1946.			
Particulars.	Munici- palities.	Shires.	County Councils:	Total.	Munici- palities.	Shires.	County Councils.	Total.	
	<u>·                                      </u>	· WA	rer Suppi	Y .(£.).					
Capital Expenditure— From Loans	25,378	70,865,	-88,936	185,179	125,148	31,960	104,588	261,696	
Other	. 66,603	7,951	29,703	104,257	74,698	, 24,994	46,281	145,973	
Total	91,981	78,816	68,639	239,436	199,846	56,954	150,869	407,669	
Provision for Deb	1	:10,726	14,689	70,057	42,006	11,956	15,892	169)851	
			SEWERAG	E (£.).	, , , ,				
Capital Expenditure— From Loans	. 5,041	2,562		7,603	15,242	858		16,100	
Other	. 13,195	719	205	14,119	. 28,455	6,085	1,019	85,659	
Total	18,296	3,281	205	21,722	43,697	6,943	1,019	51,659	
Provision for Del Redemption .	1 00 010	4,055	2,329	(36,402	30,987	2,805	2,408	86,200	

<sup>\*</sup>Including Grafton and South Grafton Water Board.

The capital debts of the water supply undertakings aggregated £4,394,088 at 31st December, 1946, viz., municipalities £2,538,076, shires £635,215 and county councils £1,220,797. An amount of £2,615,589 for sewerage works consisted of £2,252,621 owing by the municipalities, £194,058 by the shires and £168,910 by the county councils. The combined capital debt of the water and sewerage works was represented by debenture loans, £6,398,049, Government advances, £583,129, time payment debts, £1,628 and debts to other funds, £26,871.

### ABATTOIR TRADING FUNDS.

The Local Government Act authorises the councils of municipalities and shires, other than those in areas under the jurisdiction of the Meat Industry Act (see page 659) to conduct abattoirs. This power was exercised by only five municipalities at the end of 1946. At Newcastle the abattoirs have been controlled by the municipal council since 1939; previously they were conducted by an independent board.

A statement of the revenue and expenditure of the municipal abattoirs in 1945 and 1946 is shown below—

Table 777-Local Government, N.S.W., Abattoirs Revenue A	accounts.
---	-----------

			Year . 1945.		.Year 1946,			
Municipality.		Revenue.	Expenditure.	Surplus.	Revenue.	Expenditure.	Surplus.	
Albury	•••	£ 4,853	£ 4,165	£ ,688	£ 7,200	£ :4,102	£ ,3,098	
Broken Hill		5,508	5,062	446	6,661	6,466	195	
Maitland		27,226	27,366	() 140	.33,778	29,094	4,684	
Newcastle	•	488,967	461,301	27,666	460,637	454,894	5,743	
Tamworth	•••	8,412	9,456	() 1,044	. 9,576	9,431	145	
Total	<b>.</b>	-534,966	:507;350	27,616	517,852	503,987	13,865	

The expenditure includes charges for interest, £6,288 in 1945 and £7,056 in 1946, and depreciation of assets, £11,793 and £12,071.

Capital expenditure amounted to £30,292 in 1945 and £18,223 in 1946, of which £25,476 and £13,613, respectively, was financed from loans. Redemptions of capital indebtedness totalled £11,430 in 1945 and £15,409 in 1946.

Assets valued at £511,860 at 31st December, 1946, included premises, plant, stores, £367,592, and exceeded liabilities by £272,840. The excess of assets in the Newcastle abattoirs was £242,366.

The liabilities included capital indebtedness; viz., loans, £186,231 and amounts owing to other funds, £4,900.

# ICE WORKS TRADING FUNDS.

Ice works are conducted by the Moree Municipality and Boorowa Shire. In 1945 the revenue of these undertakings was £1,513 and expenditure £2,428, whilst in 1946 revenue amounted to £2,636 and expenditure to £3,072. Capital expenditure on assets in the respective years was £1,470 and £74, the former figure including £900 from loan moneys.

At 31st December, 1946, capital debt amounting to £2,496 comprised loans, £1,672 and indebtedness to other funds, £824.

# FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT.

The central Government of the State affords financial assistance to the local governing bodies by supplementing general revenues and contributing to the cost of specified works and services. Assistance to general revenues is paid in the form of endowment to shires; also to certain municipalities in respect of portions of their areas which, prior to incorporation in the municipalities, were constituted as shires or formed part of a shire.

The individual areas participate in endowment according to an apportionment made by the Government in every third year. The matters to be taken into account in making the apportionment are specified in the Local Government Act, e.g., the necessity for developing new districts, the extent to which the council and the people of the areas concerned undertake to share in the development by constructing works or paying local rates, the rate levied and its relation to the maximum rate.

The amount of endowment distributable annually was £177,500 from 1937 to 1945 and it was fixed at £179,750 for the years 1946 to 1951.

In addition to endowment, grants by the State are made to municipalities and shires for specific purposes. Large sums have been paid to councils which act as construction authorities or agents for the State in such matters as maintenance and construction of main roads and unemployment relief works.

In regard to measures for the relief of unemployment, assistance has been given to the councils in terms of the Local Government (Further Amendment) Act, 1935, to enable them to undertake the construction of works and the provision of services which otherwise would be beyond their financial resources. By the Act the Treasurer was authorised, until 30th June, 1940, to make agreements with the councils for State contributions towards interest and sinking fund charges in respect of loans raised by them and to make advances to supplement loans raised by councils.

Moneys paid to local governing bodies for any of the abovementioned purposes are included in the following statement of funds provided by the State or Commonwealth Government and expended by councils at intervals between 1921 and 1946.

Table 778.—Local	Covernment	NSW	Receipte from	Control	Government.*

Year.	Sydney and Suburbs.	Newcastle.	Country Munici- palities.	Shires,	County Councils.	Totaļ.
	£	£	£	£	£	£
1921	29,344	2,030	25,864	331,173		388,43
1931	197,604	11,276	142,900	828,828		1,180,60
1936	1,135,263	268,853	902,063	2,399,043	800	4,706,0
1937	682,418	146,792	678,434	2,349,583	926	3,858,1
1938	543,475	69,120	907,288	2,439,849	1,962	3,961,69
1939	631,278	96,723	768,009	2.244.106	5,832	3,745,9
1940	480,145	82,828	462,458	1,961,944	6.964	2,994,3
1944	133,080	23,429	174,031	1.083,558	20,630	1,434,72
1945	129,249	18,536	172,473	1,068,380	48,552	1,437,19
1946	100,292	20,897	165,070	1,314,844	61,868	1,662,9

<sup>\*</sup> Including amounts to be disbursed by councils as agents for the Government.

A classification of moneys paid by the Government to local governing bodies, showing broadly the objects of expenditure, is given in the next table. Unemployment relief moneys form the largest constituent of those classified as other ordinary services up to 1940. A large proportion of such moneys was spent on road works and smaller sums on parks, baths, beaches and other services. Payments to water supply and sewerage funds include substantial contributions towards the capital cost of new works.

Ordinary Services, Trading Funds. Vear. Total. Electricity, Gas and Abattoirs. Water Main Endowment. Other. Roads. and Sewerage. 149,533 1,028,486 312 2,277 1,180,608 1931 1,064,365 3,439,597 47,1521936 149,875 5,033 4,706,022 1937 175,425 1,313,912 2,213,627 2,949 152,240 3,858,153 177,950 438,307 1938 1,380,348 1,954,384 10,705 3,98,,694 1939 177,500 1,371,526 1,811,156 18,761 367,005 3,745,948 29,158 1940 177,000 1,779,662 801,519 207,000 2,994,339

Table 779.—Local Government, N.S.W., Receipts from State Government\*;
Objects.

267,114

208,473

177,749

18,880

22,131

14,394

90,501

128,534

144,282

1,434,728

1.437,190

1,662,971

880,045

900,714

1,146,634

1944

1945

1946

178,188

177,338

179,912

#### LOAN FINANCES OF LOCAL GOVERNING BODIES.

Long term borrowing by local governing bodies in New South Wales is classified for statistical purposes under three headings: (i) Loans, i.e., amounts raised by the sale of debentures and inscribed stock to private individuals and financial institutions, mostly banks and life assurance societies; (ii) Government Advances, comprising repayable advances in cash and the cost of works and services performed or materials supplied by the State for which councils are liable; and (iii) Time Payment Debts, known also as deferred payment debts, relating generally to plant and property acquired by hire purchase and sometimes to work performed under terms of extended payment.

# Borrowing Powers.

The Sydney Corporation Act authorises the Council of the City of Sydney, with the Governor's approval, to raise loans in Australia or any other country by the issue of debentures or inscribed stock secured upon the corporate rates and revenues of the Council from whatever source arising. The currency of a loan, including renewals thereof, may not exceed 50 years in the aggregate and repayment may be made by equal yearly or half-yearly instalments of principal and interest or through the operation of a sinking fund established on the basis of 3 per cent. per annum compound interest. The council may not exceed by way of overdraft an amount equal to one-half of the revenue, as certified by the Auditor-General, of the fund to which the overdraft relates.

Loans obtained by the councils of other municipalities and of shires are raised usually under the Local Government Act, 1919, and its amendments.

In respect of municipal loans, the Local Government Act prescribes that a council may not borrow any moneys which, with existing loans, will cause the total indebtedness to exceed 20 per cent. of the unimproved value of ratable land in the area. It is provided, however, that certain loans expended on reproductive works may be excluded in calculating the limit.

Loans under the Local Government Act may be raised by four methods, viz., limited overdraft, and renewal, ordinary, or special loans as described

<sup>\*</sup> Including amounts paid to councils for disbursement as agents for the Government.

on page 552 of the 1939-40 issue of the Year Book. The Gövernor's approval of a loan is required in all instances with the exception of limited overdrafts.

Renewal, ordinary, or special loans under the Local Government Act are secured, firstly upon the income of the fund to which the loans belong; and, secondly, upon the income of the council arising from any source.

Unless the loans are repayable by instalments at intervals of one year or less, there must be a sinking fund for loan repayment in every fund in respect of which a renewal, ordinary, or special loan has been raised, and in each year the council must transfer to the sinking fund a sum not less than the amounts which were stated in its applications for the approval of the loans.

Councils may enter into time payment contracts to pay for purchases or works by instalments spread over a period of years.

County councils may raise loans if expressly authorised under the powers delegated by constituent councils. They are not subject to the limitation of borrowing imposed on municipalities and shires.

The Treasurer is empowered on the recommendation of the Minister to guarantee the repayment of loans raised by the municipalities situated within the Western Division (and also the municipalities of Balranald and Nyngan) and by county councils engaged in the supply of water or electricity services. Two loans raised by the Sutherland Shire Council in London are guaranteed under special Act. At 30th June, 1948, the amount of guaranteed loans outstanding was £736,446.

## LOAN EXPENDITURE.

The following table shows particulars of the expenditure by local governing bodies in 1945 and 1946 from the proceeds of loans raised by the sale of debentures and inscribed stock, repayable Government advances and time payment debts. Expenditure from inter-fund loans is omitted, though included in particulars shown in previous tables relating to trading funds.

Table 780.—	Local	Government,	N.S.W.,	Loan	Expenditure.
-------------	-------	-------------	---------	------	--------------

		Year	1945.		Year 1946.				
Object.	Loan Expenditure.		Govern-		Loan Exp	penditure.	Govern- ment		
	Munici- palities and Shire.	County Councils.	Advances and Time Payment Debts.	Total.	Munici- palities and Shire.	County Councils,	Advances and Time Payment Debts.		
Ordinary Services-	£	£	£		£	£	£	£	
Roads, Bridges, etc	42,973		720	43,693	249,775	***	750	250,525	
Parks, Baths, etc	53,165		7,400	60,565	20,079		1,600	21,679	
Public Markets	2,540			2,540	10,733		500	11,233	
Housing	4,695			4,695	107,232			107,232	
Advances for Homes	i		l l		22,587	• • •		22,587	
Plant and Property	28;414		4,661	33,075	203,868	1,154	16,886	221,908	
Other			1,936	1,936	9,959		1,764	11,723	
	131,787		14,717	146,504	624,233	1,154	21,500	646,887	
Trading Undertakings—	,		,	- 20,012	,	,	· .	•	
Electricity	96,969	150,868	733	248,570	421,556	222,943	9,393	653,892	
Gas:	3,894		l	3,894	18,080		168	18,248	
Water	93,588	38,936	1,111	133,635	148,735	104,588	5,829	259,152	
Sewerage	5,396		1,3650	6,761	12,361		3,739	16,100	
Abattoles	25,476			25,476	13,613.	• • • •		13,613	
Ice Works	900			900			•••	•••	
Total:	358,010	189,804	17,926	565:740	1,238,578	328,685	40,629.	1,607,892	

<sup>\*</sup> Includes Grafton and South Grafton Water Board:

The expenditure from repayable Government advances amounted to £3,429 in 1945 and £11,692 in 1946, whilst time payment debts incurred amounted to £14,497 and £28,937 in the respective years.

The distribution of: "Ordinary Services" expenditure as shown in the table is approximate. Only new expenditure on works and services is included, repayments of old loans, Government advances or time payment debts from borrowed funds being excluded.

The loan, etc., expenditure of the local governing bodies in New South Wales in various years since 1929 is shown below.

Table 781.—Local Government, N.S.W., Loan Expenditure. £thousand.

				isana.			
,		Municip	palities and	Shires:		]	
***	Metro	politan.	Greater	Cour	ıtry.	County	m . 1
Year.	City of Sydney.	lity of ydney. Suburbs.		Muni- cipalities.	Shires.	Councils.	Total.
	,	-	Loan Ex	PENDITURE.		·	
1929 1931 1936	1,235 185 106	885 516 244	238 25 36	222 75 136	294 624 159	2,556 58 33	5,430 921 714
1937 1938 1939	138 118 158	808 651 383	156 140 171	717 1,054 763	686 690 568	469 478 1,114	2,974 3,131 3,157
1940 1944 1945 1946	127 8 60 2	364 15 39 335	142 80 58 89	547 239 87 438	318 30 114 375	1,218 84 190 328	2,716 456 548 1,567
	E	 XPENDITUR	E FROM G	OVERNMEN'	r Advanc	DES.	i 
1936 1937 1938		50 29: 10	7 	223 27 11	41 12 5	•••	321 68 26
1939 1940 1944 1945		4 7 		11 6 1 3	14  10 1	10  13	39 13 <sup>1</sup> 24 <sup>2</sup>
1946	•••		•••	5	6.	"1	12
		Тіме Р	AYMENT I	DEBTS CONT	TRACTED.		
1936 1937 1938 1939		15 18 9 1	2	4 12° 13 15	30 29 47 44	 14: 15	51 59' 89' 75
1940 1944 1945 1946		9 5 7		9 29 2	37 4 6 20		57 38 15 29

<sup>\*</sup> Exclusive of Electricity Undertaking (now Sydney County Council).

<sup>†</sup> Includes the Sydney County Council and the Grafton and South Grafton Water Board.

#### LOAN AND OTHER LONG-TERM INDEBTEDNESS.

At 31st December, 1946, the gross loan debt on account of debentures and inscribed stock issued by local governing bodies in New South Wales totalled £42,058,772, against which were held sinking funds balances of £10,881,576. The net loan debt therefore amounted to £31,177,196, and this, with amounts owing for repayable Government advances, £809,457 and time payment debts £71,607, represented a total net long-term indebtedness of £32,058,260.

Table 782.—Local Governme	nt, N.S.W.,	Long-term	Debt,	1946.
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			Loan Debt.		Govern-	Tit	
Local Bodies.		Gross Amount.	Less Sinking Fund.	Net Amount.	ment Advances.	Time Payment Debts,	Total. (net Debt).
Municipalities—		£	£	£	£	£	£
Sydney, City		10,857,116	6,056,470	4,800,646		•••	4,800,646
Suburbs		2,767,435	1,039	2,766,396	66,791	16,044	2,849,231
Newcastle, City		1,063,274		1,063,274	3,845	5,068	1,072,187
Country	•••	6,136,231	21,368	6,114,863	461,128	17,481	6,593,472
		20,824,056	6,078,877	14,745,179	531,764	38,593	15,315,536
Shires		2,636,970	283,680	2,353,290	196,049	32,931	2,582,270
		23,461,026	6,362,557	17,098,469	727,813	71,524	17,897,806
County Councils*		18,597,746	4,519,019	14,078,727	81,644	83	14,160,454
Total		42,058,772	10,881,576	31,177,196	809,457	71,607	32,058,260

<sup>\*</sup> Includes Grafton and South Grafton Water Board

The gross loan debt at 31st December, 1946, consisted of £A33,263,368 owing in Australia, £stg7,116,600 owing in London and \$8,170,000 owing in New York. Throughout these tables the Australian and London loans have been included in Australian and sterling currencies, respectively, and the New York loan has been converted at the rate of \$4.8665 to the £1. The London loans were owing by the City of Sydney £1,811,600, Sutherland Shire £305,000, and Sydney County Council £5,000,000, and the New York loan by Sydney County Council.

Practically all the loan debts owing by councils under the Local Government Act are repayable by half-yearly instalments. Consequently their accumulated sinking funds are small. On the other hand, most of the loans of the City of Sydney and Sydney County Council were floated for fixed terms with provision for sinking funds. Therefore the accumulated sinking funds of these two bodies are large. At the end of 1946 they were equivalent to 56 per cent. and 28 per cent. of the respective loan debts.

The following table shows the net loan debt under the several groups of councils at the end of various years since 1921; also the balances owing for repayable Government advances and time payment debts since 1936.

Table 783.—Local Government, N.S.W., Net Long-term Debt. £thousand.

At 31st December.	Metrop	olitan.	Oltre of	Coun	try,	County Councils.†	Net Amount of Loans	
Docomoci,	City of Sydney.*	Suburbs.	City of Greater Newcastle.	Municipali- ties.	Shires.	Councies.	Outstand- ing.	
			NET LOAD	N DEBT.				
1921	4,389	1,253	226	507	83	3,510	9,968	
1931	8,095	5,836	1,000	1,724	1,410	13,323	31,388	
1936	7,329	4,557	831	1.246	1,210	12,392	27,568	
1937	7,066	5,091	940	2,051	1,916	12,579	29,643	
1938	6.854	5,167	958	5,371	2,536	12,928	33,814	
1939	6,725	5,068	1,232	6,345	2,978	13,732	36,080	
1940	6,839	4,904	1.296	6,863	3,056	14,618	37,576	
1942	6,111	4,017	1,200	6,643	2,786	14,291	35,048	
1943	5,737	3,526	1,150	6,464	2,541	14,035	33,453	
1944	5,735	3,074	1.087	6,382	2,360	13,730	32,368	
1945	4,972	2,647	1,051	5,703	2,004	14,253	30,630	
1946	4,801	2,766	1,063	6,115	2,353	14,079	31,17	
	, , , , ,	,		',				
		Go	VERNMENT	Advances.				
1098	] .	277	90	4 798	aro	70	K 01	
1936	<u> </u>	377	80	4,726	658	70		
1937		374	71	4,668	683	70 130	5,92	
$1937 \\ 1938$		$\begin{array}{c} 374 \\ 320 \end{array}$	71 64	4,668 1,636	683 595	130	5,920 2,61	
1937 1938 1939		374 320 283	71 64 54	4,668 1,636 1,110	683 595 393	130 <sub>10</sub>	5,926 2,614 1,856	
1937 1938 1939 1940		374 320 283 241	71 64 54 44	4,668 1,636 1,110 697	683 595 393 320	130  10 9	5,926 2,616 1,856 1,31	
1937 1938 1939 1940 1942		374 320 283 241 160	71 64 54 44 26	4,668 1,636 1,110 697 641	683- 595 393 320 268	130  10 9 14	5,926 2,616 1,856 1,311 1,109	
1937 1938 1939 1940 1942 1943		374 320 283 241 160 123	71 64 54 44 26 20	4,668 1,636 1,110 697 641 607	683- 595 393 320 268 220	130  10 9 14 15	5,926 2,614 1,856 1,311 1,109	
1937 1938 1939 1940 1942 1943 1944		374 320 283 241 160 123 101	71 64 54 44 26 20	4,668 1,636 1,110 697 641 607 577	683- 595 393 320 268 220 236	130  10 9 14 15 23	5,926 2,614 1,856 1,311 1,109 986 956	
1937 1938 1939 1940 1942 1943 1944 1945		374 320 283 241 160 123 101 81	71 64 54 44 26 20 13	4,668 1,636 1,110 697 641 607 577 489	683- 595 393 320 268 220 236 199	130  10 9 14 15 23 82	5,926 2,618 1,856 1,313 1,109 986 956 858	
1937 1938 1939 1940 1942 1943 1944		374 320 283 241 160 123 101	71 64 54 44 26 20	4,668 1,636 1,110 697 641 607 577	683- 595 393 320 268 220 236	130  10 9 14 15 23	5,926 2,618 1,856 1,313 1,109 986 956 858	
1937 1938 1939 1940 1942 1943 1944 1945		374 320 283 241 160 123 101 81 67	71 64 54 44 26 20 13 8	4,668 1,636 1,110 697 641 607 577 489	683- 595 393 320 268 220 236 199	130  10 9 14 15 23 82	5,911 5,926 2,614 1,855 1,311 1,100 986 956 858 808	
1937 1938 1939 1940 1942 1943 1944 1945 1946		374 320 283 241 160 123 101 81 67	71 64 54 44 26 20 13 8 4	4,668 1,636 1,110 697 641 607 577 489 461	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81	5,92 2,61 1,85 1,31 1,10 98 95 85	
1937 1938 1939 1940 1942 1943 1944 1945 1946		374 320 283 241 160 123 101 81 67	71 64 54 44 26 20 13 8 4	4,668 1,636 1,110 697 641 607 577 489 461	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81	5,92 2,61 1,85 1,31 1,10 988 95 859	
1937 1938 1939 1940 1942 1943 1944 1945 1946		374 320 283 241 160 123 101 81 67	71 64 54 44 26 20 13 8 4	4,668 1,636 1,110 697 641 607 577 489 461  ENT DEBTS.	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81	5,92 2,61 1,85 1,31 1,11 98 95 859 809	
1937 1938 1939 1940 1942 1943 1944 1945 1946		374 320 283 241 160 123 101 81 67 Tr	71 64 54 44 26 20 13 8 4	4,668 1,636 1,110 697 641 607 577 489 461	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81	5,92 2,61 1,85 1,31 1,10 98 95 85 80 234 200 234	
1937 1938 1939 1940 1942 1943 1944 1945 1946		374 320 283 241 160 123 101 81 67 Tr	71 64 54 44 26 20 13 8 4 4 EME PAYME	4,668 1,636 1,110 697 641 607 577 489 461  ONT DEBTS.  47 36 36 36 30	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81	5,92 2,61 1,85 1,31 1,10 98 95 80 234 220 234 222	
1937 1938 1939 1940 1942 1943 1944 1945 1946		374 320 283 241 160 123 101 81 67 Tr	71 64 54 44 26 20 13 8 4 4 MME PAYME	4,668 1,636 1,110 697 641 607 577 489 461  ENT DEBTS. 47 36 36 36 30 39	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81 10 9 18 20 17	5,92 2,61 1,85 1,31 1,10 98 95 85 80 23 20 23 22 22 23	
1937 1938 1939 1940 1942 1943 1944 1945 1946 1936 1937 1938 1939 1940 1942		374 320 283 241 160 123 101 81 67 The second of the second	71 64 54 44 26 20 13 8 4 4 MME PAYME 3 2 1 1 1	4,668 1,636 1,110 697 641 607 577 489 461  ENT DEBTS. 47 36 36 30 39 16	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81 10 9 18 20 17 10	5,92 2,61 1,85 1,31 1,10 98 95 85 80 23 20 23 22: 22:	
1937 1938 1939 1940 1942 1943 1944 1945 1946 1936 1937 1938 1939 1940 1942 1943		374 320 283 241 160 123 101 81 67 Tr	71 64 54 44 26 20 13 8 4 4 20 13 13 11 11 10 8	4,668 1,636 1,110 697 641 607 577 489 461  ENT DEBTS. 47 36 36 30 39 16 15	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81 10 9 18 20 17 10 7	5,92 2,61 1,85 1,31 1,10 98 95 859 809 234 220 234 221 231 102	
1937 1938 1939 1940 1942 1943 1944 1945 1946 1937 1938 1939 1940 1942 1943 1944		374 320 283 241 160 123 101 81 67 The second of the second	71 64 54 44 26 20 13 8 4 4 ME PAYME 3 2 1 1 1 10 8 7	4,668 1,636 1,110 697 641 607 577 489 461 30 36 36 36 30 39 16 15 20	683- 595 393 320 268 220 236 199 196 62 58 87 94 111 29 26 20	130  10 9 14 15 23 82 81 10 9 18 20 17 10 7 5	5,924 2,614 1,854 1,101 1,101 988 955 856 809 234 220 234 221 221 231 221 238 125 125	
1937 1938 1939 1940 1942 1943 1944 1945 1946 1936 1937 1938 1939 1940 1942 1943		374 320 283 241 160 123 101 81 67 Tr	71 64 54 44 26 20 13 8 4 4 20 13 13 11 11 10 8	4,668 1,636 1,110 697 641 607 577 489 461  ENT DEBTS. 47 36 36 30 39 16 15	683- 595 393 320 268 220 236 199 196	130  10 9 14 15 23 82 81 10 9 18 20 17 10 7	5,926 2,618 1,856 1,313 1,109 986 956 858	

<sup>\*</sup> Exclusive of Loans of Electricity Undertaking (now Sydney County Council).

.Includes the Sydney County Council and the Grafton and South Grafton Water Board.

Between 1936 and 1940 councils were carrying out extensive loan works programmes, but part of the increase in the net loan liability related to loans raised to repay debt to the Government for water and sewerage works. The principal outstanding in respect of such loans was £3,194,827

**<sup>\*13487--6</sup>** 

at the end of 1939. During the war years little was spent on public works and repayments of loans greatly exceeded new raisings.

The met long-term indebtedness at the end of 1946 was distributed as follows: +Electricity works, £14,508,347 (45 per cent.); abattoirs, £186,231; gasworks, £107,743; water supply, £4,384,359 (14 per cent.); sewerage, £2,583,748 (8 per cent.); ice works, £2,496; and general works such as roads, bridges, buildings, parks and reserves, baths, plant, property, etc., £10,285,336 (32 per cent.).

The following comparative table shows the amount of indebtedness under each of these headings since 1936:—

Table 784.—Local Government, N.S.W., Net Long-term Debt According to Services.

	£thousand.											
*At 31st O	Ordinary Services.	Electricity Fund.	Gas Fund.	Abattoir Fund.	Water Supply Fund.	Sewerage Fund.	(Total.					
	NET LOAN DEBT.											
1936 1937 1938 1939 1940 1942 1943 1944 1945 1946	13,683 14,780 15,272 15,403 15,343 13,208 12,060 11,304 9,837 10,011	13,723 13,974 14,251 15,249 16,118 15,372 14,908 14,612 14,345 14,488	27 24 22 21 21 34 29 56 52 106	 98 100 103 126 148 173 187	60 434 2,288 2,907 3,377 -3,725 3,755 3,708 3,719 3,887	72 430 1,981 2,402 2,617 -2,606 2,575 2,540 2,502 2,496	"27,565 29,642 33,814 36,080 37,576 35,048 38,453 32,368 \$30,630 \$31,177					
		Go	V.ERNM ENT	Advances	3.							
1936 1937 1938 1939 1940 1942 1943 1944 1945	1,043 1,056 951 730 625 430 347 310 257 219	19 17 16 15 13 11 10 7 6 5	2 1 1 1 2 2 2 2 2 2		3,307 3,329 1,357 878 575 577 538 545 509 497	1,540 1,523 290 226 97 89 88 86 85 86	5,911 5,926 2,615 1,850 1,311 1,109 985 3,950 3,859 809					
		T	ике Рауми	ent Debts.	Ī							
1936 1937 1938 1939 1940 1942 1943 1944 1945	214 186, 197 190 195 196 84 64 52	21, 19, 30, 25, (21) 12, 9		1	3 5 8 4 8 7 7 7 7 5 9 1	 2  1013***  1	235 2208 234 223 237 125 101 283 465					

<sup>\*</sup>Includes Iceworks Trading Funds £1,737 in 1945, and £2,496 in 1946, not shown separately

#### REDEMPTION OF DEBT.

Amounts applied in each year to the redemption of loans, as shown in the following table, include direct repayments to lenders where loans, etc., are repayable by yearly or half-yearly instalments and, where loans are of fixed term, credits to sinking funds in the form of contributions from revenue account and interest earnings on accumulated investments which are generally credited direct to sinking fund accounts. Repayments of loans from sinking funds and from renewal or conversion loans are not included.

Table 785.-Local Government, N.S.W., Redemption of Long-term Debt.

		Provis		Repay-					
Year.	Metro	politan.		Coun	try.		Repay- ment of Other	Total.	
	City of Sydney.	Suburban M'cipalities	City of Newcastle.	M'cipalities	Shires.	County Councils.	Debt.*		
	£	£	£	£	£	£	£	£	
1936	139,519	405,569	60,761	131,247	108,943	664,827	266,717	1,777,583	
1937	470,498	447,626	67,586	141,098	135,850	267,786	255,429	1,704,882	
1938	267,553	503,988	81,075	172,865	174,387	281,901	252,011	1,733,780	
1939	310,201	509,227	88,996	204,671	208,957	305,846	232,265	1,860,163	
1940	349,259	525,353	108,479	229,399	233,532	297,979	203,114	1,947,115	
1944	305,183	448,650	105,692	233,245	229,837	458,455	127,342	1,908,40	
1945	312,508	435,373	111,131	204,937	214,037	458,235	103,334	1,839,555	
1946	319,008	428,366	116,950	209,325	224,202	487,090	81,780	1,866,721	

<sup>\*</sup> Government Advances and Time Payment Debts (e.g., £59,685 and £22,095, respectively, in 1946).

Fluctuations in the amounts shown as repayments in the City of Sydney are due to the inclusion of special items, viz., the proceeds of sales of resumed property when invested for repayment of loans at maturity, and transfers to revenue account of surplus sinking fund accumulations in respect of matured loans.

The Sydney County Council has in some years expended cash accumulated in trading operations in the retirement of substantial amounts of debentures, occasioning fluctuations in repayments by county councils.

#### MUNICIPAL AND SHIRE ELECTIONS.

The local government electoral system in New South Wales is described on page 863.

The ordinary triennial elections of 84 municipal and 127 shire councils were held on 6th December, 1947. In respect of the remaining councils elections were postponed by reason of the amalgamation of areas shortly before this date, or the peuding amalgamation of areas. For these councils elections on the basis of the new united areas were held in 1948; viz., Uralla Shire on 4th September, City of Greater Wollongong on 9th October, areas in the County of Cumberland (34 municipalities and 5 shires) and City of Blue Mountains on 4th December.

<sup>\*13487--7</sup> 

Information relating to the election of 120 municipal and 133 shire councils on the foregoing dates in 1947 and 1948 is contained in the following table:—

Table 786.—Municipal and Shire Elections, 1947 and 1948.

*		Municip	palities.	, , , , ,			
Particulars.	Metropo	litan Area.	City of		Shires.	Total.	
	City of Sydney.	Suburban.	Greater New- castle.	Country.			
Electors Enrolled———————————————————————————————————	No. 18,501 143,997	No. '304',972 707,322	No. 31,423 63,211	No. 147,326 251,022	No. 252,996 307,357	No. 755,218 1,472,909	
Total Electors	162,498	1,012,294	94,634	398,348	560,353	2,228,127	
Aldermen or Councillors— Elected after Contest Returned Unopposed Vacant Seats	30	327 34		839 57 	590 340 2	1,81 <b>3</b> 431 2	
'Total in Full Councils	30	361	21	896	938	2,246	
Contested Elections— Seats Candidates Electors Enrolled Electors who Voted— Formally Informally	30 114 162,498 115,088 6,896	327 807 930,824 633,607 49,900	57 94,634 67,334	839 1,589 390,785 265,650 21,946	596 1,198 434,426 272,528 13,597	1,813 3,765 2,013,167 1,354,207 98,240	
Total Voters	121,984	683,507	73,235	287,596	286,125	1,452,447	
Proportion of—	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	
Ratepayers to Electors Enrolled Voters to Electors Formal to Total Votes	11·4 75·1 94·3	$30.1 \\ 73.4 \\ 92.7$	33·2 77·4 91·9	$37.0 \\ 73.6 \\ 92.4$	45·1 65·9 95·2	33·9 72·1 93·2	

The elections were held for 253 councils. In the election of 141 councils all seats were contested and in 17 (6 country municipalities and 11 shires) all candidates were returned unopposed. Those for which some but not all seats were contested numbered 95, consisting of 8 suburban and 3 country municipalities and 84 shires. No candidate offered for one seat on each of two shire councils.

#### METROPOLITAN WATER SUPPLY AND SEWERAGE.

The Metropolitan Water, Sewerage and Drainage Board controls the water supply and sewerage services in the County of Cumberland. The Board's jurisdiction extends to a large district outside the County of

Cumberland and embraces a strip of territory extending along the South Coast beyond Wollongong to Lake Illawarra.

The Board is composed of seven members. Two members, the president and vice-president, are appointed by the Governor for a period of five years, and five members are, elected by the aldermen and councillors of local areas concerned to hold office for four years. For the purposes of the elections, the municipalities and shires have been grouped into five constituencies and one member is elected by each group.

The catchment areas of the Sydney water supply are the Negean 347, square miles, Woronora 29 square miles, and Warragamba 3,383, square miles. The water storage capacity of the system is 125,144 million gallons. There are 92 service reservoirs in the area reticulated, with a total capacity of 537,100,000 gallons.

The following table shows particulars of services administered by the Board in various years since 1921:—

	-	Water	Supply.	Sewe				
Year ended 30th June.		T43 -6	Consu	mption.		T	Length of Stormwater Drains.	
	Premises Supplied:	Length of Mains.	During Year	Daily Average.	Premises Connected.	Length of Sewers.	Digins.	
	No.	miles.	million gallons	million gallons.	No.	miles.	miles.	
1921	221,886	*	17,701	48.5	148,923	1,197	64	
1931	308,657 $368,700$		30,803 $27,643$	84·4 75:7	204,772	1,871 2,705	76 88	
1941 1943	374,717	4,541·7: 4,582·8	30,530	83.6	270,887	2,705	88:1	
1944.	375,285	4,589.7.	36,245	99.0	280,737	2,756	89,	
1945	374,660†	4,615.0	41,107	112.6	281,957†	2,760	93	
1946	378,277	4,656 8	44,487)	121.7'	283,364†	2;780	99	
1947	387,980†	4,743.3	47,874	131.2	287,098†	2,805,	$\frac{147}{120}$	
1948	400, <u>6</u> 15† <sub>1</sub>	4,817.2	44,682	122.1	291,069†	2,829,	129,	

Table 787:- Metropolitan Water and Sewerage Board Services.

General rates for water and sewerage are levied on the assessed annual value of the premises. The rate for water was 9½d. in the £1 from 1934/35 to 1947-48 and 9½d. in 1948-49. For sewerage the rate of 8¾d; in: the £1 from 1934-35 was increased to 9½d; in 1947/48; then to 9¾d; in 1948-49.

The charge for water supplied by meter for gardens, livestock, and trade purposes was 1s. 2d. per thousand gallons from 1933-34 until increased to 1s. 6d. in 1948-49. Water is supplied without a meter to areas, mostly small gardens, not exceeding 1:000 square feet for a special fee which was increased from 8s. to 10s. per annum in 1948-49.

Stormwater drainage rates are fixed in each area, so as to yield the revenue required to meet expenses, interest and sinking fund charges, or the Board may arrange that the council of the area pay from its general fund a sum equivalent to the proceeds of a rate. The maximum rate is 3d. per £1 on the assessed annual value.

<sup>\*</sup> Comparable figures not available.

<sup>†</sup> Improved properties for which service is available. Records: revised in 1945.

The capital debt of the Board at 30th June, 1948, amounted to £51,185,094, against which were balances in loan repayment sinking fund totalling £2.014,526.

Table 788.—Metropolitan	Water, Sewerage	e and Drainage	Board,
Capital De	bt at 30th June,	1948.	

Particulars.		Water.	Sewerage.	Drainage.	Total.
Due to State Government—  Loan Funds  Special Advances	•••	£ 8,936,157 3,440,485	£ 3,694,074 1,562,678	£	£ 12,630,231 5,003,163*
Total to State		12,376,642	5,256,752	•••	17,633,394
Loans raised by Board  Less Sinking Fund	•	19,844,335 1,097,782	12,772,323 851,398	935,042 65,346	33,551,700 2,014,526
Net Loan Debt		18,746,553	11,920,925	869,696	31,537,174
Total Net Capital Debt	•••	31,123,195	17,177,677	869,696	49,170,568

<sup>\*</sup> Includes unemployment relief loans, £528,111.

The Board is required to pay interest on its debt to the State, also a proportion of exchange and sinking fund charges payable on the public debt of the State. The rates of interest on unemployment relief loans are from 3 to 4 per cent. and on other loans and advances from the State  $3\frac{1}{2}$  per cent.

The Board, with the approval of the Governor, may raise its own loans, but the debt so incurred in respect of any of its services must not exceed 20 per cent. of the unimproved value of the lands ratable for that service. A sinking fund provision of 10s. per cent. is required in respect of such loans.

The authority to raise loans was granted in 1925, but the Board's first loan was not floated until July, 1928. In the intervening years the Treasury advanced moneys for the construction of works, and these advances, amounting to £6,495,000, were to be repaid by annual instalments of £324,750 over a period of twenty years from 1st January, 1930. The amount outstanding at 30th June, 1938, was £5,196,000. Then it was arranged that repayment should be spread over 40 years and be made from revenue by annual instalments of £243,314 including principal and interest.

At 30th June, 1946, the amounts outstanding in respect of loans floated by the Board included £A2,500,000 at 4 per cent. outstanding in London, and £1,237,850 (dollars converted at \$4,8665 to £1) at 5½ per cent. outstanding in New York. An amount of £29,813,850 was outstanding in Australia, nominal rates of interest being as follows:—

P	er	cei	nt.	Amount.	Pe	r ce	nt.	Amount.	Per	г се	nt.	Amount.
:	ε	в.	d.	£	£	8.	d.	£	£	s.	d.	£
	3	4	0	1,500,000	3	12	6	1,850,000	4	7	6	1,000,000
:	3	5	0	3,544,300	3	15	0	999,700	4	9	1	500,000
;	3	6	3	1,750,000	4	0	0	5,120,000	4	10	0	1,500,000
1	3	7	6	1,998,700	4	<b>2</b>	6	1,000,000	4	16	10	900,000
	3	8	9	1,451,400	4	3	9	824,750				
*.	3 ]	11	3	1,000,000	4	5	0	4,875,000	T	'ota	.1	29,813,850

New loans (excluding conversions) floated in Australia in 1946-47 amounted to £2,500,000, of which £1,500,000 bears interest at £3 6s. 3d. per cent. and £1,000,000 at £3 5s. per cent. In 1947-48 new flotations in Australia consisted of £1,500,000 at £3 4s. per cent. and £1,215,000 at £3 5s. per cent. All were long dated maturities, with currency from 15 to 20 years.

The following statement shows particulars of the financial transactions relating to the services controlled by the Metropolitan Board in various years since 1920-21:—

Table 789.-Metropolitan Water, Sewerage and Drainage Board Finances.

		_										
Year ended 30th June.	Capital Indebtedness,	Gross Revenue.	Working Expenses and Man- agement.	Net Revenue.	Interest on Capital,	Ex- change.	Debt Re- demp- tion.	Surplus.				
WATER SUPPLY (£.).												
1921 1931 1939 1941 1943 1944 1946 1946 1947	10,323,252 23,381,090 26,690,265 26,633,092 28,148,084 28,469,359 28,307,128 28,767,586 30,091,515 32,220,977	855,751 1,672,954 1,815,089 1,968,542 2,090,832 2,189,676 2,276,922 2,376,692 2,506,085 2,562,670	347,298 456,474 603,276 713,488 760,005 816,923 907,837 982,010 1,090,618 1,123,517	508,453 1,216,480 1,211,813 1,255,054 1,330,827 1,372,753 1,369,085 1,394,682 1,415,467 1,439,153	473,890 1,062,981 974,982 1,035,604 1,061,732 1,070,305 1,053,283 1,069,116 1,091,373 1,137,978	93,921 64,449 70,965 67,727 68,202 67,684 66,074 65,141 60,301	58,010 149,954 167,076 191,881 203,174 235,304 254,065 241,675 240,069	34,563 1,568 22,428 (-)18,591 9.487 31,072 12,814 5,427 17,278 805				
			SE	WERAGE (£.)	).							
1921* 1931 1939 1941 1943 1944 1945 1946 1947 1948	7,329,632 14,440,475 16,018,586 17,276,689 17,307,729 17,243,266 17,165,633 17,466,989 17,771,447 18,029,075	615,615 979,389 1,067,755 1,194,262 1,341,693 1,370,968 1,379,075 1,398,300 1,446,285 1,554,141	229,441 247,896 340,236 388,688 493,290 523,898 533,969 551,953 615,771 689,004	386,174 731,493 727,519 805,574 848,403 847,070 845,106 846,347 829,514 865,137	341,675 694,576 612,854 655,195 685,905 683,346 672,644 674,856 683,411 688,317	63,944 32,165 36,695 39,315 39,506 39,212 38,529 38,135 36,111	39,674 85,726 93,436 112,117 115,843 142,484 131,297 124,847 130,287	44,499 (-)66,700 (-) 3,226 20,248 11,066 8,375 (-) 9,234 1,665 ()16,879 10,422				
			Di	RAINAGE (£.)	).							
1931 1939 1941 1943 1944 1946 1946 1947 1948	699,450 1,060,890 865,652 863,263 862,256 860,903 899,805 923,693 935,042	51,745 43,850 48,981 71,699 73,996 75,300 77,175 80,202 81,975	11,516 13,910 14,612 18,644 24,751 25,633 27,146 32,624 34,799	40,229 29,940 34,369 53,055 49,245 49,667 50,029 47,578 47,176	33,880 41,389 43,922 36,664 36,538 35,976 36,409 37,275 37,348	2,624 1,869 2,655 2,279 2,279 2,272 2,272 2,272 2,272 2,271	1,872 5,884 6,386 4,870 4,929 7,651 7,670 7,831 5,580	1,853 ()19,202 ()18,594 9,242 5,499 3,768 3,678 200 1,977				

<sup>\*</sup> Includes particulars of Drainage Branch.

The working expenses shown in the table include charges made annually for the renewal of works. Such charges amounted in both 1945-46 and 1946-47 to £274,182, and to £264,182 in 1947-48, including in each year £23,456 written-off expenditure on renewals from loan funds which had been temporarily capitalised. The balance of the charges was transferred to renewals reserve account, which received additional credits totalling £29,783 in the three years, mainly from revenue surpluses. Actual expenditure on renewals amounted to £37,643 in 1945-46, £78,380 in 1946-47 and £107,832 in 1947-48, and the balance held in renewals reserve was £1,324,266 at 30th June, 1948.

#### THE HUNTER DISTRICT WATER SUPPLY AND SEWERAGE.

The first water supply works of the Lower Hunter were constructed by the Government under the provisions of the Country Towns Water Supply and Sewerage Act of 1880. In 1892, control of the works was transferred to the Hunter District Water Board.

Water is obtained mainly from a dam of 5,000 million gallons capacity on the Chichester River and the catchment area is 76 square miles. This supply is supplemented by water extracted from sandbeds lying to the north of the Hunter River estuary. The source of water is rainfall on the sandbeds, which are about 50 square miles in extent. A continuous yield of 15 million gallons per day is expected from an area of 30 square miles being, worked at present.

The sewerage scheme for the Hunter district has its outfall at Merewether, Gulf, some distance south from Newcastle. The districts served are Greater Newcastle, Maitland and Cessnock municipalities and Lake Macquarie, Shire.

Particulars relating to the water supply and sewerage services of the Board at intervals since 1921 are shown below:—

Table	790.—Hunter,	District Wate	r. and Sewerage,	Particulars: of	Services.

	Water	Sewerage			
		Consum	ption.	ļ	
Premises Supplied:	Length of Mains,	During Year.	Daily Average,	Properties Connected.	Length, of Sower.
No.	miles.	Million gallons.		No.	miles.
25,874. 42,631	468 861	1,711 2,905	4·7 8·0	12,218 21,471	148 200
52,121	1,041	5,933	16.3	34,989	554 572
53,546.	1,070	6,413	17.6	36,802	572 575
55,914	1,134	6,900	18.9	39,075	579 586 : 596
	No. 25,874. 42,631 51,082 52,121 52,320 53,546 54,489	Premises Supplied: Length of Mains.  No. miles.  25,874. 468 42,631 861 51,082 1,022 52,121 1,041 52,320 1,055 53,546 1,070 54,489 1,098 55,914 1,134	Premises Supplied: Length of Mains. During Year.  No. miles: Million g  25,874. 468 1,711  51,082 1,022 4,510  52,121 1,041 5,933  52,320 1,055 5,791  53,546 1,070 6,413  54,489 1,098 6,413  55,914 1,134 6,900	Consumption.   Premises Supplied.   Length of Mains.   During Year.   Daily Average.	Consumption.   Properties.   Consumption.   Properties.   Connected.

The Hunter District Water Board consists of seven members. The president and vice-president are appointed by the Governor for a maximum period of seven years, and five members are elected by the councils of constituent municipalities and shires to hold office for four years.

The net capital debt of the Board at 30th June, 1948, was £7,093,975, viz, owing to the State Government, £3,118,005 and loans raised by the Board, £3,975,970. The gross amount owing in respect of loans was £4,118,000, but this was offset by £142,030 held in sinking fund for repayment.

The Board is authorised, with the Governor's approval, to obtain bank overdrafts and to raise loans, locally or overseas, for the construction of additional works, the renewal of loans and the repayment of indebtedness; to the State or any financial institution. The State Government will guarantee loans raised by the Board and the Board must establish sinking; funds to provide for their repayment in accordance with the terms of their Governor's; approval.

Water and sewerage rates are levied on the assessed annual value. In the years 1936-37 to 1947-48 the rates were: water 12d. and sewerage 15d. in the £1 on ratable premises; water 9d. and sewerage 12d. in the £1, with a minimum of 5s., on ratable vacant lands. Unless fixed by special.

agreement the charge for water by meter is 1s. 3d. per 1,000 gallons. A stormwater drainage rate of 3d. in the £1 is levied on the assessed annual value of areas drained.

The Board is required to pay interest and sinking fund charges on its loans, and to pay interest on its debt to the State at the rate of 3½ per cent. together with a proportion of the exchange and sinking fund charges payable on the public debt of the State.

\*Rarticulars of the finances of the Hunter District Water Board in various years since 1920-21 are shown in the following table:—

Table 791.—Hunter District Water, Sewerage and Drainage, Finances.

						_	
Year ended 30th June.	Capital Debt.	Gross Revenue.	Working Expenses and Manage- ment.	Interest on Loan Capital.	Exchange.	Sinking Fund.	Surplus.
,	·	· · · · ·	WATER S	UPPLY (£.).			
1921 1931 1939 1941 1944 1945 1946	1,472,074 2,847,998 2,969,881 3,554,207 4,136,886 4,235,703 4,363,202 4,551,502	116,320 235,325 246,845 266,601 312,340 311,202 313,459 333,165	59,895 77,706 104,084 123,308 148,890 157,765 127,939 144,455	35,556 144,720 105,201 96,815 137,619 148,350 155,831 157,984	15,578 13,275 11,271 11,236 11,131 10,734 10,524	8,117 13,407 15,300 24,057 25,443 26,567 27,455	20,869 (—) 10,796 10,878 19,907 (—) 9,462 (—) 31,487 (—) 7,612 (—) 7,253
1948	4,757,073	355,528	159,912	162,895	9,336	29,547	() 6,162
			SEWER	AGE (£.).			
1921 1931 1939 1941 1944 1945 1946 1947 1948	590,790 1,234,476 1,481,185 2,023,707 2,233,755 2,251,003 2,302,257 2,349,106 2,398,127	32,164 91,158 123,544 144,792 185,680 190,088 189,739 194,952 200,725	16,007 37,630 56,070 74,854 98,194 97,676 79,422 86,700 93;211	25,328 34,886 54,943 46,920 85,004 85,609 86,782 88,166 89,745	9,756 6,620 4,049 4,035 3,997 3,855 3,779 3,353	5,083 6,522 8,628 12,421 12,795 13,188 13,483 14,125	(—) 9,171 3,803 (—) 611 10,341 (—) 13,974 (—) 9,989 6,492 2,824 291
		S	STORMWATER	DRAINAGE (	£.).		
1931 1939 1941 1944 1945 1946 1947	634,326 123,814 114,097 115,679 121,278 129,258 138,156 139,668	15,343 17,473 19,217 19,195 19,375 20,073 20,719	7,466 10,837 9,101 9,556 4,693 4,976 4,535	7,207 5,208 5,208 5,295 5,595 5,187 4,774	939 524 521 516 497 485 427	957 588 738 801 869 902 971	 (—) 1,226 316 3,649 3,027 7,721 8,523 10,012

Working expenses include amounts transferred from revenue to the renewals reserve account. The Board was separated from the State finances in 1938 and transfers between 1938-39 and 1944-45 totalled £333,520; no transfers were made in the last three years, and at 30th June, 1948 the renewals reserve account had a credit of £323,331.

#### FIRE BRIGADES.

A Board of Fire Commissioners, constituted under the Fire Brigades Act, controls the public services for the prevention and extinguishing of fires. Its jurisdiction extends over the City of Sydney and suburban municipalities, Greater Newcastle, Broken Hill, and other municipalities, and shires in respect of towns contained in them. The Board consists of a president, appointed by the Governor for a term of five years, and seven members, elected for a term of three years, viz., one by the councils of the Sydney and suburban municipalities and shires, one by the councils of the other incorporated areas to which the Act applies, three elected by the fire insurance companies, one by the members of volunteer fire brigades. and one by the permanent firemen.

In each year the Board makes an estimate of the amount proposed to be expended in the various fire districts during the ensuing year, and of this sum the councils of the municipalities and shires concerned contribute onefourth, the insurance companies one-half, and the Government one-fourth. Payments by the insurance companies are based on the amount of premiums payable in respect of fire risks within each district.

The Board establishes and maintains permanent fire brigades and authorises the constitution of volunteer brigades, which are subsidised out of the funds. In the metropolitan districts in 1947 the fire brigades comprised 934 officers and permanent firemen whose services are wholly at the Board's disposal and 268 volunteers. The country brigades consisted of 107 officers and permanent firemen and 1,687 volunteers. There is also a reserve corps.

The following table shows the revenue account of the Board of Fire Commissioners for the year 1947:—

Table 792.—Fire Brigades, Revenue Account, 1947.

Revenue.	Expenditure.
Subsidy from Government 185,048 Subsidy from Municipalities and Shires 185,048 Subsidy from Fire Insurance Companies and Firms 370,096 Other 15,687	Administration 20,024  Firemen including Volunteers— Salaries 513,153 Superannuation 32,771  Equipment and Property Charges 34,557 Maintenance and General 151,869
Total Revenue £755,879	Total Expenditure £752,374

In the Sydney Fire district contributions by municipalities and shires in 1947 represented 7s. 5½d. per £100 of assessed annual value of the ratable land, and contributions from insurance companies and firms who insured goods with companies not registered in New South Wales represented 19.29 per cent. of the premiums.

The liabilities of the Board at the end of 1947 consisted of loan debt £111,500, accrued interest thereon £1,530, and bank overdraft £39,433; assets included land and buildings £458,430, fire appliances £390,794, and stocks on hand £94,232.

### SOCIAL CONDITION

The health and social well-being of the people of New South Wales are safeguarded and promoted by services provided by the Commonwealth and State Governments and by private organisations.

Every adult citizen is enfranchised and has equal legal status. Education is compulsory and in State schools is free. Conditions of employment, including wages and hours of work, are regulated under the industrial arbitration systems of the Commonwealth and the State. Insurance of workers against injury in the course of employment is compulsory. Standards of quality and purity of food and of hygiene in its distribution are prescribed. Both Governments afford financial assistance to homebuilders and under a joint agreement have undertaken the construction of dwellings. Conditions of tenancy are governed by State laws. Gambling, and the manufacture and sale of deleterious drugs and intoxicating liquors, are also controlled by the State.

Age, invalid and widows' pensions, war and service pensions, child endowment, and unemployment and sickness benefits are provided by the Commonwealth Government, which also pays hospital and certain other benefits for the treatment and prevention of sickness. Under State laws, allowances are paid for widows' children. There are State laws safeguarding the welfare of children. The State and religious bodies maintain institutions for needy and neglected children, aged and infirm persons and the mentally afflicted. Public hospitals, friendly societies and a number of private charitable, educational and health organisations are subsidised by the State; all mental hospitals except one, and several public hospitals are owned and controlled by the State.

Am outline of the public health services is given in the chapter, "Public Health."

#### STATUS OF WOMEN.

In New South Wales, women have the right to exercise the franchise and may be elected to either House of the State and Commonwealth Parliaments or to the council of any shire or municipality. A woman may become a judge, magistrate, barrister, solicitor, or conveyancer, and many women have been appointed justices of the peace, and some have been admitted to the legal profession. Women are eligible for all degrees at the University of Sydney, but are not usually ordained as ministers of religion. The State Jury Act, 1912-47, provides for voluntary enrolment of women as jurors from a date to be proclaimed.

About one-fifth of the members of registered trade unions of employees are women, though there are few unions composed entirely of women. The employment of women in factories and shops is regulated by the Factories and Shops Act.

Rates of wages payable to women in industry are determined under the industrial arbitration systems described elsewhere in this Year Book. Matters which may be determined by the industrial tribunals include claims that the same wage be paid to men and women performing the same work, or producing the same return of profit or value to their employer. The basic wage for women is generally about 54 per cent. of the rate for men,

and in some industries the rates of wages awarded to women range from 75 per cent. to 100 per cent. of the rates payable to men employed in similar work. Margins for skill, etc., added to the basic rate, are usually the same for men and women doing the same class of work.

A legal age of marriage has not been defined; the average age at which women marry is about 24 years. The consent of a parent or guardian or, in the absence of such consent, of a court or magistrate is necessary to validate the marriage of minors. The wife of a British subject is deemed to be a British subject throughout Australia. A woman who was a British subject resident in Australia at the time of her marriage to an alien may, while in Australia, retain her British nationality.

Under the Married Women's Property Act, 1901, a married woman is capable of holding, acquiring, or disposing of any real or personal property as her separate property in the same manner as if she were a femme sole. Her property is not liable for her husband's debts, and her earnings in any occupation apart from her husband's are her own. A wife, however, has no legal share of her husband's income, nor in any property acquired by their joint efforts after marriage, but the husband is liable for all necessary expenses of his wife and children. In matters relating to the guardianship of children, the mother has similar powers to those possessed by the father.

#### Religion.

In New South Wales there is no established church, and freedom of worship is accorded to all religious denominations. When the census is taken in Australia, there is no legal obligation to answer the question as to religion. A classification of the population according to religion, as recorded at the censuses of 1933 and 1947, is shown below; those not stating religion represented 12.4 and 11.1 per cent. of the total population at the respective censuses:—

Table 793.—Religion of the Population—N.S.W.—Census, 1933 and 1947.

Religion.	Number of	Persons.	Proportion Per Cent. of Total stating Religion.		
acongion.		1933.	1947.	1933.	1947.
Christian— Church of England Catholic, Roman (a) Catholic (a) Fresbyterian Methodist Baptist Congregational Salvation Army Church of Christ Other Christian		1,143,493 489,163 66,943 257,522 203,042 29,981 20,274 9,610 8,658 54,203	1,293,964 268,496 408,497 262,166 246,876 34,935 19,331 10,871 10,269 66,768	49.63 24.14 11.18 8.81 1.30 .88 .42 .38 2.35	48·78 25·52 9·88 9·31 1·32 ·73 ·41 ·39 2·52
Total Christian		2,282,889	2,622,168	99.09	98.86
Non-Christian— Hebrew Other Indefinite, No Religion No reply		10,305 1,823 8,796 297,034	13,194 1,409 15,537 332,530	.45 .08 .38	.50 *05 *59
Total Population		2,600,847	2,984,838	•••	

#### SOCIAL WELFARE SERVICES.

Social welfare services of the State Government include the services concerned with industrial hygiene, industrial training and employment, and the social aid service under the control of the Minister for Labour and Industry and Social Welfare, as well as the child welfare services administered by the Minister for Education.

State systems of family allowances and widows' pensions have been replaced in recent years by Commonwealth systems, though the State supplements widows' pensions by providing allowances for their children. Age pensions, invalid pensions, war pensions, maternity allowances, unemployment, sickness and hospital benefits are provided by the Commonwealth Government. These schemes, with the exception of war pensions and hospital benefits, are administered by the Commonwealth Department of Social Services.

The Commonwealth Government has entered into reciprocal agreements with other countries in relation to pensions and other social benefits.

# GOVERNMENTAL EXPENDITURE ON HEALTH AND SOCIAL AMELIORATION IN NEW SOUTH WALES.

The expenditure from revenue by State and Commonwealth Governments on health, charitable relief, family allowances, pensions for the aged and invalid, widows' pensions and other social services in New South Wales is shown below. The expenditure upon public health, details of which are given in Table 829, is subject to the reservations noted in connection with that table, and the statement excludes costs of administration of Commonwealth pensions, etc. Expenditure from loans (and capital charges upon such loans) for works connected with ameliorative objects is also excluded.

State expenditure on health increased from £2,268,286 in the pre-war year to £6,671,829 in 1947-48; the principal items related to hospitals on which expenditure was £1,970,345 and £5,957,565 in the respective years. On the other hand, State expenditure classified under the heading, "Social Amelioration," fell from £5,222,773 to £1,609,790. This decline was due partly to improvement in employment; expenditure on unemployment relief (sustenance and work) declined from £2,028,415 to £188,005. Moreover, State schemes of family allowances and widows' pensions were superseded by Commonwealth systems. The State expended £1,363,833 on family allowances and £630,321 on widows' pensions in 1938-39, but only £145,928 in supplementing Commonwealth widows' pensions in 1947-48, when the Commonwealth paid £7,602,692 in child endowment and £1,583,089 in widows' pensions in New South Wales. The higher cost of Commonwealth child endowment is due mainly to two factors, viz., (a) wider scope of benefit—Commonwealth endowment is paid irrespective of family income, whereas family allowances formerly paid by the State Government were subject to a means test (at basic wage standard), and (b) higher rate per endowed child—the Commonwealth rate was increased from 5s. a week (the maximum rate under the State system) to 7s. 6d. in June, 1945, and to 10s. in November, 1948. Rates of age and invalid pensions were raised in July, 1945, July, 1947, and October, 1948.

Table 794.—Government Expenditure on Public Health and Social Amelioration in New South Wales.\*

·					
Expenditure from Revenue on-	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.
PUBLIC HEALTH (see Table 829)— State	£ 2,268,286 167,710	£ 3,840,646 983,453	£ 4,454,515 981,808	£ 4,872,827 2,627,874	£ 6,671,829 2,728,709
Total in New South Wales	2,435,996	4,824,099	5,436,323	7,500,701	9,400,538
SOCIAL AMELIORATION State—					
Relief of destitute, blind, aged, etc.  Maintenance of deserted wives.	430,369	558,368	521,461	573,079	683,136
widows, children Widows' pensions Legal aid Care of aboriginals Unemployment relief Food relief Family allowances Administration Housing Contribution to miners' pensions Workers' Compensation (Broken Hill) Total, State Commonwealth—	350,278 630,321 3,446 76,454 608,579 1,419,836 1,363,838 264,550 23,168  51,939	248,382 154,388 6,831 52,894 203,268  84,763 50,898 80,000 46,304 1,486,240	238,238 148,977 7,560 51,738 915 192,315  65,370 8,054 80,000 66,925 1,381,553	271,260 149,125 9,220 57,588 3,004 217,353 70,577 10,612 80,000 45,277	299,808 146,928 11,374 68,672 714 187,291  71,246 13,282 80,000 48,639
Age, invalid pensions  Funeral benefits  Child endowment  Widows' pensions  Unemployment, sickness and special benefits	6,414,899 	8,993,577 60,788 4,699,888 1,200,589	11,225,455 72,711 7,076,691 1,295,240 475,216	12,276,711 84,062 7,727,859 1,355,302 437,695	15,061,067 76,816 7,602,692 1,583,089 377,920
Total, Commonwealth	6,414,899	14,954,842	20,145,313	21,881,629	24,701,584
Total in New South Wales	11,637,672	16,441,082	21,526,866	23,368,784	26,311,374
TOTAL, PUBLIC HEALTH AND SOCIAL AMELIORATION State	7,491,059	5,326,886	5,836,068	6,359,982	8,281,619
Commonwealth	6,582,609	15,938,295	21,127,121	24,509,503	27,430,293
Total in New South Wales	14,073,668	21,265,181	26,963,189	30,869,485	35,711,912
Amount per head of population— State Commonwealth	£ s. d. 2 14 9 2 7 11	£ s. d. 1 16 9 5 9 3	£ s. d. 1 19 9 7 3 4	£ s. d. 2 2 11 8 4 6	£ s. d. 2 15 1 9 1 5
Total in New South Wales	5 2 8	7 6 0	9 3 1	10 7 5	11 I6 6

<sup>\*</sup> Including Australian Capital Territory in respect of expenditure by the Commonwealth.

Expenditure by the State Government on health and social amelioration, as shown above, was £8,281,619 in 1947-48, as compared with £7,491,059 in 1938-39; Commonwealth expenditure in New South Wales was £27,430,293 in 1947-48 as compared with £6,582,609 in the earlier year.

#### NATIONAL WELFARE FUND (COMMONWEALTH).

The National Welfare Fund was established by the Commonwealth as from 1st July, 1943, to be applied towards the cost of health services, unemployment and sickness benefits, family allowances and other welfare and social services.

The National Welfare Fund Act, 1943, appropriated from the Commonwealth Consolidated Revenue Fund in 1943-44 and 1944-45 amounts representing 25 per cent. of income tax collections from individuals (other than

companies), up to a maximum of £30,000,000 per annum. Subsequent appropriations provided under an amending Act of 1945 are as follows:—

- (a) In 1945-46, £35,000,000 (£15,000,000 from July to December, 1945, and £20,000,000 from January to June, 1946); in 1946-47, £51,000,000; in each year thereafter, the amount of social services contribution payable in the year; and
- (b) In 1945-46 and subsequent years, a sum equivalent to payroll tax collections.

The Fund also receives interest on investments of its credit balances.

Social services contribution has been levied on incomes of individual taxpayers, in combination with income tax, as from January, 1946. The sums of £20,000,000 and £51,000,000, transferred to the National Welfare Fund between January, 1946 and June, 1947, were not actual collections of the contribution in this period, but estimated amounts which the Commissioner of Taxation was required, in terms of the Social Services Contribution Assessment Act, 1945, to treat as social services contribution. Payroll tax, which is payable by employers, was introduced on 1st July, 1941.

Particulars of receipts and total amount of benefits paid from the Fund in New South Wales and elsewhere in each year since it was constituted are shown below:—

	Rec	eipts.	Benefits	Credit Balance at 30th June.	
Year.	Transfers from Revenue.	Interest on Investments.	Paid.		
	£	£	£	£	
1943-44	27,889,572		2,364,174	25,525,398	
1944-45	30,000,000	255,000	2,706,793	53,073,605	
1945-46	46,499,243	502,383	53,161,609	46,913,622	
1946-47	64,646,736	455,641	62,021,726	49,994,273	
1947 - 48	88,042,612	503,351	68,612,684	69,927,552	

In 1943-44 and 1944-45, benefits paid from the National Welfare Fund in New South Wales and elsewhere consisted of maternity allowances and funeral benefits in respect of age and invalid pensioners only, but as from 1st July, 1945, all Commonwealth social service payments were met from the Fund. Particulars of disbursements from the Fund from 1945-46 are shown in the following statement.

Table 796.—National Welfare Fund—Benefits Paid in Australia.

Year.	Age and Invalid Pensions and Funeral Benefits.	Widows' Pensions.	Maternity Allowances.	Child Endowment.	Employment and Sickness Benefits	Hospital and Tuberculosis Benefits.
1945–46 1946–47 1947–48	£ 27,146,898 29,626,022 36,735,983	£ 3,247,334 3,366,288 3,904,086	£ 2,492,495 3,026,459 2,854,018	£ 18,019,178 19,862,933 19,425,518	£ 1,144,412 1,650,125 1,217,474	£ 1,111,292 4,489,899 4,475,605

STATE SOCIAL AID SERVICE.

As a means of preventing and relieving distress arising from poverty or unemployment the Government of New South Wales established a Social Aid Service towards the end of 1937 with the aim not only of relieving the persons concerned, but, as far as practicable, of improving their health and living conditions and their fitness for employment.

Social welfare bureaux are maintained in the metropolis, Newcastle and the northern and southern coalfields, and welfare officers supervise social aid in the various districts with the assistance of departmental medical officers and welfare nurses. The bureaux were conducted in conjunction with the State employment exchanges until March, 1942, when the work of the exchanges was taken over by the Commonwealth.

As a result of war-time expansion in employment, there was a gradual decrease in the operations of the Social Aid Service. In 1941 the Commonwealth began to extend the scope of social benefits such as age and invalid pensions and maternity allowances and to provide assistance for widows, dependent children and persons in need owing to sickness or unemployment. Consequently, the activities of the State relief organisation in recent years have been limited, for the most part, to the assistance of persons not eligible for Commonwealth benefit.

Since January, 1943, persons eligible for food relief from the State Social Aid Service have received eash payments, usually at fortnightly intervals, on a scale graduated according to the size of the family being maintained. They also receive eash for additional milk, viz., a pint per day for mothers (before and after childbirth) and for each child under seven years of age.

Supplementary special foods (milk, eggs and green vegetables) are provided for persons certified as being in need of them, with special diets for indigent invalids or sick persons. These are distributed by means of orders sent direct to suppliers from whom recipients of aid obtain their requirements—the method used for distribution of all food relief prior to the introduction of cash payments.

As a general condition precedent to the issue of social aid, the applicant is required to sign a declaration that his income during the fortnight preceding application did not exceed a certain limit. The scales of benefit and income limits have been varied from time to time; particulars of those in operation from 1st August, 1939, until 7th November, 1946, were published in the Year Book, 1941-42 and 1942-43.

The scale of cash benefits was amended in November, 1946, to provide benefits similar to those payable under the Commonwealth Unemployment and Sickness Benefits Scheme. Particulars of the amended scale are as follows:—

Table 797.—Food Relief—Scale of Cash Payments—New South Wales, from November, 1946.\*

Family Unit.	Allowable Income.	Maximum Rate of Benefit.	Family Unit.	Allowable Income.	Maximum Rate of Benefit.
	Per fo	rtnight.			rtnight.
Unmarried person-	s.	s.	Adult man or woman	s. 40	s. 50
16 and under 17 years	10	30	Adult man or woman and one or more dependent		20
17 and under 18 years	20	30	children Man and spouse	40 40	60 90
18 and under 21 years	30	40	Man and spouse and one or more dependent children.	40	100

<sup>\*</sup> Current June, 1949.

Benefit at maximum rate is paid where income does not exceed "allowable income", and the amount is reduced by 2s. per fortnight for every 2s. of income in excess of the allowable income shown above. Under former scales, benefit was paid at the full rate appropriate for the family concerned if income did not exceed the "permissible income" according to current scale, and persons with higher income were ineligible for benefit. When the new scale was introduced in November, 1946, no reduction was made in cases where benefit was being paid at higher rate under the former scale.

Persons in receipt of pensions and allowances under the age, invalid, widows or (war) service pension schemes are not eligible for cash benefits from the Social Aid Service.

The number of persons receiving benefit under the food relief scheme decreased sharply after 1940, falling below 6,000 in 1944, and gradually, though irregularly, during the last five years, to only 4,100 in June, 1948. The following statement shows the number of beneficiaries—recipients and dependents—in the last fortnightly period of issue in June of each year since 1939:—

Recipients and Dependants.	June.	Recipients and Dependants.	June.	Recipients and Dependants.
71,615	1941	38,561	1945	6,532
82,343	1942	16,106	1946	5,471
94,033	1943	8,400	1947	5,177
95,382	1944	5,803	1948	4,100
	71,615 82,343 94,033	71,615 June.  71,615 1941  82,343 1942  94,033 1943	and Dependants.     June.     and Dependants.       71,615     1941     38,561       82,343     1942     16,106       94,033     1943     8,400	and Dependants.     June.     and Dependants.       71,615     1941     38,561     1945       82,343     1942     16,106     1946       94,033     1943     8,400     1947

Table 798 .- Food Relief Recipients.

#### UNEMPLOYMENT AND SICKNESS BENEFITS.

The scheme of unemployment and sickness benefits provided by the Commonwealth in terms of the Unemployment and Sickness Benefits Act, 1944, came into operation on 1st July, 1945, and is financed from the National Welfare Fund. The benefits are for persons, except pensioners, between the ages of 16 and 65 years (or in the case of women, 60 years) who have resided in Australia for 12 months immediately prior to the date of claim.

For unemployment benefit it must be shown that unemployment is not due to participation in a strike, and that the claimant is able and willing to undertake, and has endeavoured to obtain, suitable work.

Requirements for sickness benefit are temporary incapacity for work by reason of sickness or accident and the loss thereby of wages or other income up to the amount of benefit claimed.

Benefit is payable from the seventh day after the claimant becomes unemployed or incapacitated, or from the date of application, whichever is the later. A means test is imposed and benefit is reduced by the amount of income in excess of the limit shown below. The value of the claimant's property is disregarded in assessing means, and the following items are not included as income, viz., sickness pay from an approved

friendly society up to £1 per week, payments for dependent children, maternity allowances, hospital benefits and payments under the Tuberculosis Act. The rates of benefit (current in June, 1949) are as follows:—

		Income per w		Ben per	efit week.
Single person—		s.	d.	s.	d.
Age 16 and under 17 ye	rears	5	0	15	0
17 " " 18	,,	10	0	15	0
18 ,, ,, 21	,,	15	0	20	0
Other persons		20	0	25	0

Additional benefit in the case of a married person is 20s. a week for his spouse and 5s. for one dependent child under 16 years of age (child endowment is payable for dependent children, except one, in the family). A married woman is not entitled to benefit if her husband can maintain her.

Special benefit may be granted to persons not qualified for unemployment or sickness benefit, who by reason of age, disability or domestic circumstances, are unable to earn a sufficient livelihood for themselves and their dependants.

Particulars of claims admitted, beneficiaries and payments in New South Wales (and the Australian Capital Territory) since inception of the scheme are shown below:—

Table 799.—Commonwealth Unemployment, Sickness, and Special Benefits in New South Wales.\*

Year ended	Cla	ims Admitt	ed.	Receiving	Benefit at 3	Oth June.	Amount of Benefits	Average Duration of Benefit
30th June.	Males,	Females.	Total.	Males.	Females.	Total.	Paid.	W eks.
			UNEMPLO	YMENT B	ENEFITS.			
1946	38,592	10,197	48,789	1,203	95	1,298	275,205	2.88
1947	12,297	407	12,704	1,350	50	1,400	172,141	6.88
1948	3,234	282	3,516	298	41	339	60,499	10.60
1949	2,092	165	2,257	248	35	283	23,279	5.90
-			Siokn	ESS BENE	FITS.			
1946	11,822	2,435	14,257	2,063	438	2,501	198,943	6.95
1947	15,798	3,725	19,523	2,797	825	3,622	258,782	8.28
1948	20,006	5,999	26.005	2,855	939	3,794	302,987	7.68
1949	19,927	5,917	25,844	3,448	1,083	4,531	302,298	7.40
			SPEC	DIAL BENE	FITS.			
1946	87	61	148	9	39	48	1,068	5.89
1947	336	72	408	54	68	122	6,772	8.20
1948	1,082	320	1,402	290	211	501	14,434	7.08
1949	7,252	1,171	8,423	1,150	346	1,496	53,925	4.60
				TOTAL.				
1946	50,501	12,693	63,194	0.75	572	9 9 4 7	475,216	3.68
1940 $1947$	28,431	4,204	32,635	3,275 4,201	943	3,847 5,144	437,695	
1948	24,322	6,601	30,923	3,443	1,191	4,634	377,920	
1949	29,271	7,253	36,524	4,846	1,191	6,310		
	0,071			<del>''</del>	tal Territors		11 0.0,002	

<sup>\*</sup> Including Australian Capital Territory.

#### THE DEPARTMENT OF CHILD WELFARE.

The care of children under the supervision of the State is a function of the Department of Child Welfare in terms of the Child Welfare Act, 1939. The Director of Child Welfare is the permanent head of the Department and there is an Advisory Council to advise the Minister upon matters relevant to the welfare of children.

Social workers for the Department are trained in child welfare work at the University and by means of courses of study specially arranged for them. The Child Welfare Act provides for the care and maintenance of State wards, the assistance of children of necessitous parents, the supervision of children in foster homes and in institutions, and the protection of children from ill-treatment and neglect. It prevents their employment in dangerous occupations and regulates their employment in public performances and in street trading, and governs the adoption of children. Special courts, called Children's Courts, are maintained to deal with offences committed by or against children and to adjudicate in regard to affiliation proceedings.

Other Acts having special reference to the welfare of children are the Deserted Wives and Children Act, 1901-1939, described below, and the Guardianship of Infants Act, 1934, by which, in legal disputes as to guardianship, the mother is accorded equal rights with the father.

The use of tobacco by juveniles and the supply of intoxicating liquor to them are prohibited by the Juvenile Smoking Suppression Act and the Liquor Act, respectively. A period of compulsory school attendance, viz., from 6 to 15 years of age, is prescribed by the Public Instruction Act.

#### STATE WARDS.

In terms of the Child Welfare Act, children may be admitted to control as State wards upon application by parents or other guardians where the conditions of home life are unsatisfactory or the children are orphaned or deserted. Neglected or uncontrollable or delinquent children may be admitted by order of the Children's Courts.

The Minister for Education is the guardian of State wards. His guardianship terminates usually at 18 years, but in certain cases supervision may continue until the age of 21 years.

Where practicable, State wards are placed with approved foster parents to be maintained under normal conditions of home life. Allowances are paid to the foster parents, and medical, dental and other special expenses, such as equipment for school or employment, are met by the Department. The allowances may be continued beyond normal school-leaving age to enable backward children to remain at school, and those with special scholastic ability to complete courses at secondary school or technical college or University; they may also be continued in cases of ill-health or physical disability. Departmental inspectors exercise supervision over wards placed with foster parents.

Earnings of wards placed in employment after they leave school may be supplemented by the Department.

The Department of Child Welfare maintains depots for State wards pending placement with foster parents or transfer; homes where boys are trained in farm work and girls in domestic science; and homes for subnormal children, for sick or invalid wards, for babies and for pre-natal and post-natal care of mothers. The establishments for State wards in 1947-48 consisted of thirteen hostels and homes, and two training schools.

For mentally deficient children who are educable, the Department of Education also provides special classes at some State schools and conducts a residential school at Glenfield.

#### CHILDREN IN FOSTER HOMES.

Children may be placed by their guardians in foster homes or institutions conducted by religious bodies and other organisations in preference to being boarded out as State wards. Under certain conditions, the Minister is authorised to pay to charitable institutions, in respect of the children, allowances similar to those paid to foster parents of State wards. Allowances may be paid to institutions which were in existence when the Child Welfare Act commenced in December, 1939, for the number of immates in excess of the average number during the period of two years immediately before that date.

Any place used for the reception of one or more children under 7 years of age apart from their parents must be licensed, and the children must be registered with the Director of the Child Welfare Department.

The reception of children in foster homes, other than the foster homes of State wards and institutions controlled or open to inspection by the State, is subject to general regulation in terms of the Child Welfare Act.

It is prescribed that no person without an order of a Children's Court, may receive a child under 7 years of age to be maintained apart from its mother or other parent in consideration of the payment of money otherwise than by way of periodical instalments. Moreover, no such instalment may be paid for more than four weeks in advance, nor exceed the sum of 50s. per week.

In 1947-48 the number of institutions licensed under this section of the Child Welfare Act was 104, and at the end of the year the number of inmates under 7 years of age was 1,694. In the same year, the number of private foster homes licensed was 251, and the number of children registered was 333; during the year, 49 children were discharged to their parents, 63 were removed from State supervision for other reasons, and 221 remained in the foster homes at the end of the year.

#### Relief of Children of Necessitous Parents.

An important activity of the Child Welfare Department relates to the maintenance of the children of necessitous parents in their own homes. Allowances for the purpose are paid to the mother or father who is widowed or deserted or whose spouse is incapacitated, in gaol or an age pensioner. Relief in this form is granted also for the children or adopted children of single women. As a general rule payment ceases when the child reaches school leaving age, but, in certain circumstances, it may be continued until the child is 18 years of age.

In the year ended June, 1948, contributions amounting to £163,337 were paid by the Department to 2,932 mothers for the support of 7,329 children.

#### Adoption of Children.

Legal provision is contained in the Child Welfare Act for the permanent adoption of children upon order of the Supreme Court in its equity jurisdiction. Application to the Court may be made by adopting parents or by the Minister for Education on their behalf. If over 12 years of age, the child's consent to adoption is necessary, unless the Court dispenses with it owing to special circumstances.

An order of adoption terminates all rights and liabilities between the child and his natural parents, except the right to inherit property by reason of kinship. An adopted child takes the surname of his adopting parent in substitution for his own surname; orders of adoption are registered by the Registrar-General.

The number of children adopted was 1,332 in 1944-45, 1,190 in 1945-46, 1,641 in 1946-47, and 1,291 in 1947-48.

#### DELINQUENT CHILDREN.

Cases of juvenile offenders under the age of 18 years are dealt with in the Children's Courts by magistrates with special qualifications for the treatment of delinquent children. No child under the age of 8 years is held responsible for an offence, and the sentence of death may not be pronounced or recorded against a person under the age of 18 years.

Children committed to institutions may be detained in custody until the expiration of the period specified by the Court, or until reaching the age of 18 years. Committal to an institution is a final resort, and many of the children brought before the courts are released after admonition, or on probation. The Child Welfare Department exercises control of delinquent children committed to State institutions and supervises those released on probation.

There are four shelters and hostels for the reception and temporary detention of delinquent children, as well as farm homes for delinquent boys at Mittagong, Muswellbrook and Gosford and training schools for girls at Parramatta and Thornleigh. There is a special school for truants at Burradoo, and a special institution at Tamworth for those who have failed to respond to the rehabilitation training at other training schools.

Statistics of the Children's Courts, Sydney, are shown on page 1101 of this volume.

#### DESERTED CHILDREN.

In cases of desertion of wife or of legitimate children, the husband or father may be ordered, in terms of the Deserted Wives and Children Act, to pay periodical contributions for their support. In cases relating to ex-nuptial children, the father may be ordered, under the Child Welfare Act, to pay the expenses incidental to birth and periodical contributions for maintenance. Mothers may be required to contribute towards the support of their children in certain cases.

A wife who has been deserted by her husband, without just cause, for a period of six months, is eligible to apply for widow's pension in terms of the (Commonwealth) Social Services Consolidation Act, 1947.

Legislation provides for reciprocity in respect of orders for maintenance between New South Wales and other parts of the British Commonwealth. The following statement shows the number of applications for maintenance of wife or child dealt with in the Courts of Petty Sessions and the Children's Court during the years 1941 to 1948:—

Table 800.-Wife and Child Desertion-Applications for Maintenance Orders.

	Year.	Maintenanc	e of Wife.	Maintenance	of Child.	For Expenses incidental to Birth of ex-nuptial Child.		
	Year,	Total Cases.	Orders Made.	Total Cases.	Orders Made.	Total Cases.	Orders Made.	
	1941	2,434	1,394	536	416	135	83	
;	1941	1,999	1,091	456	333	116	87	
1	1942	1,953	1,108	500	376	110	100	
,	1943			798				
		2,438	1,402		591	84	56	
, i	1945	2,548	1,469	892	681	96	70	
	1946	3,823	2,217	1,334	1,018	95	64	
ŗ	1947	3,243	1.772	1,136	900	104	72	
	1948	2,840	1,569	1,025	771	131	80	

For disobedience of or non-compliance with the orders, offenders may be fined, or they may be committed to prison, and from the value of their work while in prison the cost of their upkeep may be deducted and the balance applied to the satisfaction of the orders.

#### CHILDREN UNDER STATE SUPERVISION.

The number of children under the supervision of the Child Welfare Department in December, 1931, and in June, 1939, and certain later years is shown below:—

Table 801.—Children under State Supervision.\*

Classification.	1931.	1939.	1941.	1945.	1946.	1947.	1948.
State wards—							
Boarded out, adopted or	E 054	9 649	9 071	2,312	9 141	2,006	1,965
apprenticed	5,054	3,643	3,271		2,141		709
In depots, homes or hostels	230	333	376	460	576	626	109
Juvenile offenders in State				2.40			٠.,
institutions or shelters	1,009	679	537	643	594	588	584
Children boarded out with			ļ				
own mothers		9,787	8,539	6,410	6,318	7,263	7,329
In licensed foster homes and							
institutions	1,191	1,207	1,128	1,382	1,615	1,841	1,915
						10.004	10 700
Total	18,668	15,649	13,851	11,207	11,244	12,324	12,502

<sup>\*</sup> Excludes children on probation from children's courts or delinquent institutions (2,180 at 30th June, 1948).

These figures do not include the children on probation from the Children's Courts or institutions, nor children licensed for street trading, or for employment in theatres or public entertainments.

The number of State wards at 30th June, 1948, was 2,674, viz., 1,415 boys and 1,259 girls. Of these, 709 were in depots, homes or hostels, 1,529 were boarded out and supported by the Government, 330 were adopted or boarded out without subsidy, and 106 were apprenticed.

The decline of 1,302 in the number of State wards and the reduction of 2,458 in the number of children boarded out with their own mothers

between June, 1939, and June, 1948, may be attributed to improved economic conditions and to the extension of other social services during that interval.

The annual expenditure of the Child Welfare Department during the past eight years is shown below:—

							_	
Year ended June.	Boarding out.	Payments for Children in their own Homes.	Institu- tions, Homes, Hostels, etc.	Salaries.	Miscel- laneous.	Total Expendi- ture.	Contribu- tions by Parents and other Revenue.	Net Expendi- ture.
	£	£	£	£	£	£	£	£
1941	72,406	221,895	44,423	102,381	13,986	<b>4</b> 55,091	27,386	427,705
1942	67,294	200,153	45,952	104,410	13,294	431,103	28,669	402,434
1943	60,363	157,892	58,947	102,451	13,153	392,806	32,174	360,632
1944	56,616	143,259	67,832	111,008	15,156	393,871	44,760	349,111
1945	50,799	144,216	89,799	123,300	18,077	426,191	39,910	386,281
1946	46,283	139,216	88,964	141,035	19,867	435,365	43,417	391,948
1947	43,511	156,411	82,405	174,912	24,014	481,253	33,800	447,453
1948	45,824	163,079	95,821	206,809	26,439	537,972	42,989	494,983
				1				

Table 802.—Child Welfare Department—Expenditure.

## INSTITUTIONS AND SOCIETIES FOR SOCIAL AMELIORATION.

The State maintains three homes for the aged and infirm—two for men and one for women. The institutions are also used for the treatment of chronic ailments. They contain special wards for persons suffering from cancer, tuberculosis, and venereal disease, and a hospital for infectious diseases is attached to the institution at Lidcombe.

The average number resident in the State homes during the year 1947 was 2,188. Per inmate, the average cost was £142 7s. 6d.; receipts from various sources represented £30 9s. 11d., and the net cost to the State was £111 17s. 7d. In the hospitals attached to the institutions 3,782 cases of illness were treated during 1948—males 3,447 and females 335—and at the end of the year 1,181 patients remained under treatment.

A number of societies are engaged in charitable relief; some conduct institutions such as homes for children and the aged; others supply casual aid for indigent persons, help for discharged prisoners, shipwreck relief, etc. In many suburbs and country towns, benevolent societies are active in the relief of local distress.

Charitable societies, as a general rule, must be registered under the Charitable Collections  $\Lambda$ ct, 1934-1941; it is not lawful for any person to make an appeal for support for any charity unless the charity is registered, or is exempted from registration, under the  $\Lambda$ ct.

Registered charities must be administered by a responsible committee or other body consisting of not less than three persons; proper books of account must be kept, and the accounts are subject to audit and inspection as prescribed. Charities failing to observe the provisions of the Act may be de-registered.

#### Welfare of Mothers and Children.

The welfare of mothers and children is provided for by the State and Commonwealth Governments and by private organisations such as the Royal Society for the Welfare of Mothers and Babies, the Day Nursery and Nursery Schools Association, the Kindergarten Union of New South Wales, the Bush Nursing Association, the Far West Children's Health Scheme and the New South Wales Society for Crippled Children. The activities of the latter and the provision of baby health centres and school medical services by the State, and of maternity allowances by the Commonwealth, are described in the chapters "Public Health" and "Education".

#### FAMILY ALLOWANCES.

#### STATE SYSTEM OF FAMILY ALLOWANCES.

Family allowances for children under school leaving age in New South Wales were paid by the State Government from 23rd July, 1927, until the commencement of Commonwealth child endowment on 1st July, 1941.

The grant of allowance was subject to a means test. The maximum rate of endowment was 5s. per week per endowable child, and the amount was reduced where the family income exceeded the living wage plus £13 per annum for each endowable child. From December, 1929, one child in each family was excluded from endowment.

Particulars regarding the number of claims granted and amount of endowment paid in each year were published in the 1940-41 and earlier issues of the Year Book.

#### COMMONWEALTH SYSTEM OF FAMILY ALLOWANCES.

The Commonwealth system of child endowment commenced on 1st July, 1941. Allowances are payable irrespective of the amount of family income for children (including ex-nuptial children) under sixteen years of age (except one in the family), as well as for children under sixteen years who are immates of approved charitable institutions. Endowment may be paid in respect of a child of an alien father if the child was born in Australia or the mother is a British subject, or if the child is likely to zemain permanently in Australia.

At the inception of the scheme, the rate of endowment was 5s. per week per endowable child. It was increased on 26th June, 1945, to 7s. 6d., and on 9th November, 1948, to 10s. per week.

As a general rule, endowment is paid to the mother. To qualify for endowment, claimants and children must be resident in Australia at date of claim and, if not Australian born, must have resided in Australia for twelve months immediately preceding claim, except in cases where the Director-General of Social Services is satisfied that the claimant and child are likely to remain permanently in Australia. Endowment may be granted to aboriginals unless they are nomadic, or the children concerned are dependent upon the State or Commonwealth Government for support.

Child endowment has been payable from the National Welfare Fund since 1st July, 1945, and a sum equivalent to collections of payroll tax in Australia is paid to the fund in each year. This tax was introduced on 1st July, 1941, simultaneously with commencement of Commonwealth child endowment.

Particulars of Commonwealth child endowment paid in New South Wales in each year since 1941-42 are shown below:—

Table 803.-Commonwealth Child Endowment in New South Wales.\*

		Family	Claims at	30th June,		Approve tions at 3	d Institu- 30th June.	Endowment	
Year ended June.	Claims	Number of Endowed Children.		Annual L	iability.		Endowed	paid in N.S.W.* during year.	
	in Force.	Total.	Per Claim,	Total. Per Claim.		Number.	Children.		
				£	£			£	
1942	192,558	356,460	1.851	4,633,980	24.063	67	3,820	4,472,837	
1943	194,168	354,883	1.828	4,613,479	23.760	96	5,065	4,580,228	
1944	198,651	359,373	1.809	4,671,849	23.518	96	5,324	4,861,657	
1945	205,472	365,436	1.779	7,126,002	34.679	106	5,357	4,699,888	
1946	211,946	375,395	1.771	7,320,202	34.538	107	5,776	7,076,691	
1947	222,668	390,915	1.756	7,622,842	34.233	114	5,776	7,727,859	
1948	233,826	407,368	1.742	7,943,676	33.975	115	5,815	7,602,692	
1949	247,027	426,991	1.729	11,101,766	44.942	115	<b>5,4</b> 66	9,313,460	

<sup>\*</sup> Including Australian Capital Territory.

The annual liability and the amount paid for child endowment have increased since 1943-44 mainly because of the increase in the rate of endowment from 5s. to 10s. In that interval the number of endowed children increased by 19 per cent.

In the following statement, endowed families in New South Wales and the Australian Capital Territory in June, 1942 to 1948, are classified according to the number of children under 16 years of age and the number of endowable children in the family. Families with less than two

children under 16 years of age are not endowable and are not included in the statement:—

Table 804.—Commonwealth Child Endowment—Family Groups in New South Wales.\*

	Children under in the Family.		Num	ber of Ende	owed Fami	lies at 30th	June.	
Total.	Endowed.	1942.	1943.	1944.	1945.	1946.	1947.	1948,
2 3 4 5 6 7 8 9 10 11 12 13	1 2 3 4 5 6 7 8 9 10 11	102,062 49,426 22,452 10,245 4,893 2,176 896 293 84 25 5	104,608 49,539 22,104 9,977 4,547 2,092 908 256 92 38 6 1	108,374 50,394 22,246 9,787 4,575 2,029 867 256 80 35 7	114,553 51,708 21,931 9,711 4,334 2,025 849 233 87 32 8	118,132 53,966 22,549 9,816 4,264 2,004 842 227 107 28 9	125,027 57,038 23,052 10,009 4,423 1,876 857 264 95 15	132,294 59,880 23,924 10,182 4,328 1,931 890 256 113 17 9
Total Fan	nilies	192,558	194,168	198,651	205,472	211,946	222,668	233,826
Children under In endowed t Endowed .		549,018 356,460	549,051 354,883	558,024 359,373	570,908 <b>36</b> 5,436	587,341 375,395	613,583 390,915	641,194 407,368

Including Australian Capital Territory.

In July, 1942, there were two, three or four children under age 16 years (including the unendowable child) in 173,940 or 90.3 per cent. of the endowed families, and five or more such children in 18,618 families or 9.7 per cent. In June, 1948, there were 216,098 families or 92.4 per cent., and 17,728 families or 7.6 per cent. in the respective groups.

#### STATE WIDOWS' PENSIONS—CHILDREN'S ALLOWANCES.

A pension scheme for widows and their dependent children was initiated by the Government of New South Wales on 26th March, 1926. The Commonwealth began to pay widows' pensions on 30th June, 1942, and since that date payments under the State scheme have been limited to supplementary allowances for children of widows in receipt of Commonwealth pension (see page 941). These allowances represent generally the excess of pension in terms of the State Act over Commonwealth pension, which arises from the fact that the Commonwealth scheme provides additional pension in respect only of the first child in the family (i.e., the child not eligible for child endowment).

Eligibility for pension (or children's allowances) requires domicile of the widow and children in New South Wales at date of husband's death, and residence in the State at date of application for pension, and during the previous three years.

Since commencement of the Commonwealth scheme, payments have been made only to widows with dependent children under age 15 years (or in

special circumstances 16 years), who are not in receipt of any other pension or allowance amounting to more than that payable under the State Act, and who with their children, individually or collectively, do not own property exceeding £1,000 in value—apart from their dwelling, furniture and other personal effects.

Since 1st July, 1942, pension has been assessed at the maximum weekly rate (current in June, 1949) of 25s. for the widow and 10s. for each eligible child, if the widow's income does not exceed £39 per annum; otherwise it is reduced by £1 per annum for each £1 of income in excess of £39.

A widow's income is deemed to include any pension or allowance under any other Act (but not Commonwealth child endowment nor pension under the coal and oil shale mine workers' scheme); earnings of the widow or her children under school-leaving age from personal effort; 5 per cent. of any real or personal property of the widow or her children which produces less than 5 per cent. per annum, except the house in which they reside and the furniture and personal effects therein; any payment for the children's maintenance or education from any estate, etc., and, except in special circumstances, 25 per cent. of the earnings of unmarried children over school-leaving age residing with her. Sick pay or funeral benefits from any society, or insurance benefit on property damaged or destroyed, or contributions of children not residing with the widow, are not assessed as income.

The average number of widows' pensions paid by the State in the year ended 30th June, 1942 (the year preceding the introduction of the Commonwealth scheme), was 6,624 per fortnight and the amount was £568,247.

In June, 1948, allowances were payable by the State to 3,895 widows in respect of approximately 7,800 children; payments during the year 1947-48 amounted to £145,928.

Particulars regarding payments under the widows' pensions scheme of New South Wales during each year since 1942-43 are shown below:—

Year.	Widows receiving Children's Allow- ances at 30th June.	Payments in Year ended 30th June.	Year.	Widows receiving Children's Allow- ances at 30th June,	Payments in Year ended 30th June.
		£			
1942–43	4,604	177,026	1945–46	3,972	148,977
1943–44	4,312	167,217	1946-47	3,997	149,125
19 <del>44-4</del> 5	3,964	154,398	1947–48	3,895	145,928

Table 805 .- Widows' Pensions, N.S.W .- Allowances for Children.

#### FRIENDLY SOCIETIES.

Friendly societies may be divided into two classes, viz., friendly societies proper, and miscellaneous societies which are within the scope of friendly societies legislation, though their benefits differ somewhat from those of ordinary friendly societies.

The benefits assured by the societies proper usually consist of medical attendance and medicine for a member and his family, with sick pay for the member, and funeral allowances for the member and his wife. The sickness benefit in the largest societies is 21s. per week during the first six months of illness and then is reduced at six-monthly intervals, so that it is 15s. for the second, 5s. or 10s. for the third, and 5s. for the fourth period, and a rate of 2s. 6d. per week is paid during the remainder of illness, that is, after the first two years.

The funeral benefits range usually from £10 to £40 at death of the member, according to the period of membership, and a contingent benefit of £10 or £15 is payable on death of his wife. In several societies, members may assure for sums up to £100, and in two of them it is possible to assure for £200, the maximum allowed by law. A separate benefit for widows of members—usually £10—may be assured in most of the societies for a stated contribution.

The rates of contribution for sick pay and funeral donations vary according to the rates of benefit, the average contribution being about 5d. per week for sick pay and 2½d. per week for funeral benefits. The usual contribution for medical benefit is 12s. per quarter in the metropolitan district and 14s. in the country.

At 30th June, 1948, there were 53 societies, including 22 miscellaneous; 16 possessed branches and 15 were classed as single societies. Membership consisted of 193,619 men, 19,804 women, and 15,538 juveniles, i.e., a total of 228,961. The number of members entitled to benefits was approximately 220,000.

Information regarding receipts and expenditure of friendly societies and the accumulated assets is shown in the chapter "Private Finance".

#### MISCELLANEOUS FRIENDLY SOCIETIES.

In addition to the friendly societies proper, there were at 30th June, 1948, twenty-two miscellaneous societies registered under the Friendly Societies Act. These organisations are medical institutions or dispensaries for the supply of medicine and, in some cases, medical attendance, to those members of contributing branches of the ordinary friendly societies whose names have been placed on their lists.

#### STATE SUBVENTION TO FRIENDLY SOCIETIES.

Since 1908, the State has paid an annual subvention to the friendly societies to enable them to pay sickness benefits for extended periods, and to relieve aged members of the necessity of paying contributions.

Currently, the amount of subvention which may be claimed in each year is a sum equal to the amount of contributions for sickness, funeral and medical benefits in respect of men over 65 years of age and women over 60 years as follows:—(a) those who were members at 30th June, 1932, and at the date of application for subvention had been members for a continuous period of 15 years; and (b) widows or widowed mothers of deceased members who were members at 30th June, 1932, and who had been members for 15 years continuously; (c) widows and widowed mothers in respect of whom subvention was being paid at 30th June, 1932. A proportion of each year's subvention in respect of medical benefits is advanced to the societies at quarterly intervals pending determination of the annual claims.

The total amount paid by the State in respect of subvention claims to 30th June, 1948, was approximately £2,289,300. The annual amounts paid to the societies compare as follows:—

Year.	Amount.	Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£		£
1927 - 28	67,306	1939 - 40	79,458	1942 - 43	89,800	1945-46	101,662
1937 - 38	72,886	1940-41	82,668	1943-44	93,218	1946-47	106,309
1938-39	76,117	1941-42	86,423	1944 – 45	97,566	1947-48	108,885

#### COMMUNITY ADVANCEMENT AND SETTLEMENT SOCIETIES.

The Co-operation Act, 1923-1947, provides, inter alia, for the formation of community advancement societies and community settlement societies. Community advancement societies may be formed to provide any community service or benefit, e.g., to supply water, gas, and electricity, to establish factories, to purchase machinery for members, to buy land, purchase or erect dwellings for sale or rental to members, to maintain buildings for education, recreation, etc.

Community settlement societies may be formed for the purpose of acquiring land in order to settle or retain people thereon, and providing any community service.

Up to 30th June, 1947, eighty-six community advancement societies had been registered under the Act, and there were fifty-two societies in active operation at that date. Most of these societies were formed with the object of erecting and maintaining public halls or for establishing recreation or social clubs. Seven community settlement societies have been registered, but only one was on the register at 30th June, 1947.

#### PARKS, RECREATION RESERVES, AND COMMONS.

Under the Public Parks Act, the Governor may appoint trustees of any lands proclaimed for the purposes of public recreation, convenience, health or enjoyment. The trustees are empowered to frame by-laws regarding the use of the land by the public and for the protection of shrubs, trees, etc. The largest such area is Kosciusko State Park, comprising more than 1,250,000 acres set apart in 1944. It embraces Crown lands in the Kosciusko highlands extending about 100 miles northward from the Victorian border to the Australian Capital Territory. The National Park (34,392 acres) and Kuring-gai Chase (38,263 acres) are situated on the southern and northern borders of Sydney respectively. These parks are described briefly on page 5 of this volume.

The public parks and recreation reserves which are not committed to special trustees are controlled by municipal and shire councils. All the towns of importance possess extensive parks and recreation reserves.

There are over 14,000 acres of public parks and reserves in metropolitan municipalities.

The Zoological Gardens at Taronga Park, on the northern side of the Harbour, were opened in 1916. The area is about 50 acres. The natural formation has been retained as far as practicable, with the object of displaying the animals in natural surroundings. An aquarium has been built within the gardens. In 1947-48, admissions numbered 660,961 to the

grounds and 231,122 to the aquarium, and the revenue of the Trust was £59,767.

Surrounding many country towns there exist considerable areas of land reserved as commons, on which stock owned by the townsfolk may be depastured. The use of these lands is regulated by local authorities. Nominal fees are usually charged to defray the cost of supervision and maintenance. Many of these commons are reserved permanently, but a large number are only temporary.

#### WELFARE OF ABORIGINALS.

The protection of the aboriginal natives of New South Wales is the function of the Aborigines Welfare Board, of which the Under Secretary of the Chief Secretary's Department is chairman. There are ten other members comprising the Superintendent of Aborigines Welfare, officers of the Departments of Education and Public Health, a police officer, experts in agriculture, sociology or anthropology, two members appointed by the Minister, and, since 5th July, 1945, two members representing the aboriginal race, one a full blood and the other a full blood or having an admixture of aboriginal blood.

The Board exercises general supervision over matters affecting the welfare of the aboriginals, manages the reserves set apart for them, and provides for the custody and maintenance of aboriginal children.

It is the policy of the Board to encourage the assimilation of the betterclass aboriginals, particularly those of lighter caste, into the general community. Under the Aborigines Protection Act, as amended in 1943, the Board may issue to any person of aboriginal blood a certificate exempting him from the provisions of the Act and conferring full rights of citizenship. The children of parents to whom certificates of exemption have been issued may attend the public schools. In 1947-48, forty-four exemption certificates were issued and three were cancelled.

The Board maintains a number of Aboriginal Stations and Reserves in various parts of the State. Each station is administered by a resident manager, and is an aboriginal community settlement with a rent-free home for each family, a school, a ration store and a recreation hall. Every family on the station is expected to provide for its own needs, and ablebodied men are required to seek employment; the sick, aged and indigent may receive free food, clothing and medical attention. Aboriginal reserves do not have the same facilities as stations and are usually supervised by the local police.

Children committed to the Board's control may be boarded out with foster parents or in approved charitable institutions, or may be placed in suitable employment. There is a training home for girls at Cootamundra, and a home for boys at Kinchela on the Macleay River; at 30th June, 1948, the enrolment at these homes was 37 and 32, respectively. A home for young children is maintained at Bomaderry by the United Aborigines' Mission, with assistance from the State.

Age, invalid and widows' pensions are not payable to persons with a preponderance of aboriginal blood or to aboriginals of any caste resident on the Board's stations or reserves. Other social service benefits, including maternity allowances and child endowment, are payable to caste aboriginals

resident on stations and reserves, but in many cases these allowances are administered by the Board.

The following table shows particulars of the aboriginal stations and reserves and of the Board's expenditure in the last six years. Expenditure by the Department of Education on the education of aboriginal children in special schools (£14,545 in 1947-48) is not included.

Table 806.—Aborigines Welfare Board—Stations and Reserves, Exemption Certificates and Expenditure.

	Abo	riginal Sta	tions.	Abor	riginal Res	erves.	Exemp-	Expenditure during Year ended 30th June.	
At 30th June.	Number.	Resident Aborig- inals.	Aboriginals Receiving Rations.	Reserves.	Resident Aborig- inals.	Aborig- inals Receiving Rations.	tion Certifi- cates Granted, †	From Revenue.	From Loans (New Bldgs. etc.).
								£	£
1943	19	2,561	502	82	1,997	182		47,212	959
1944	19	2,654	450	32	1,634	148		49,522	
1945	19	2,605	452	32	1,763	200	34	52,894	499
1946	19	2,520	408	32	2,068	149	38	51,738	149
1947	18	2,530	373	32	2,048	159	43	57,588	5,270
1948	18	2,484	379	32	2,151	204	44	68,672	60,874

<sup>\*</sup> Included in "resident aboriginals."

Particulars of the aboriginal population of New South Wales are given on page 195 of this volume.

#### PUBLIC ENTERTAINMENTS.

THEATRES AND PUBLIC HALLS, ETC.

Buildings in which public meetings (other than meetings for religious worship) or public entertainments are held must be licensed under the Theatres and Public Halls Act. A license may be refused if proper provision is not made for public safety, health and convenience, or if the site or building is unsuitable for the purpose of public meeting or entertainment. Plans of buildings intended to be used as theatres and public halls must be approved by the Chief Secretary before erection is begun.

Cinematograph films are subject to censorship before exhibition in New South Wales. The Commonwealth Customs authorities review the films imported from oversea countries. State officials review the films made in Australia, and may take action in terms of the Theatres and Public Halls Act in respect of imported films.

#### HORSE AND GREYHOUND RACING.

Horse and greyhound racing are popular in New South Wales. Racing is controlled by the Chief Secretary in terms of the Gaming and Betting Act, the Australian Jockey Club Act, and certain other Acts as amended by the Racing (Amendment) Act, 1948.

<sup>†</sup> Year ended 30th June.

Since 1st January, 1945, licenses have been issued only for racecourses of non-proprietary associations, the metropolitan courses of former proprietary companies having been acquired by law by the Sydney Turf Club. There are three classes of licenses for race meetings, viz., for horse racing, for trotting, and for greyhound racing. After 1st January, 1950, only one class of license may be held by an association, except that approval may be given for the issue of licenses for horse racing and trotting in respect of meetings on racecourses situated beyond 65 miles radius of Sydney and 40 miles of Newcastle. Courses for greyhound racing may not exceed two in the metropolitan area and one in any country town.

The Racing (Amendment) Act of 1948 authorises night trotting races (inaugurated in Sydney in October, 1949) and betting thereat, and the appointment of a Board to control greyhound racing. It also continued in operation the limitation upon the number of race meetings imposed from 2nd January, 1942, by Order under National Security Regulations in respect of racecourses within 75 miles of Sydney and 40 miles of Newcastle. Under the Racing (Amendment) Act, 1949, race meetings within 50 miles of Sydney and 40 miles of Newcastle are restricted to Saturdays and public holidays, but trotting or greyhound racing may be held on any night of the week except Sunday.

Betting or wagering is prohibited in connection with any sports except horse, pony, trotting and greyhound races on licensed racecourses, and greyhound coursing on grounds approved by the Chief Secretary. Racing clubs may be required to instal totalisators on their racecourses and to use them at every race meeting.

The following statement shows the amount of totalisator investments and of bookmaker's turnover (estimated on the basis of tax collected on the total amount of bets made):—

Year ended June.	Totalisator Investments.	Bookmakers' Turnover (approximate).	Year ended June.	Totalisator Investments.	Bookmakers' Turnover (approximate).
	£	£		£	£
1937	1,370,379	11,554,300	1943	2,377,102	14,772,600
1938	1,471,292	17,312,100	1944	4,663,710	28,503,000
1939	1,731,436	21,378,800	1945 '	5,802,788	36,492,800
1940	1,908,066	19,533,400	1946	7,482,819	51,594,400
1941	2,222,545	19,774,800	1947	7,224,274	55,380,800
1842	1,961,947	16,473,800	1948	8,543,920	65,739,200
	Ι.				

Table 807.—Totalisator Investments and Bookmakers' Turnover.

A tax, 15 per cent, of gross revenue, has been levied since 1st January, 1938, on clubs which conduct greyhound racing in the metropolitan district. The tax amounted to £3,852 in the year 1943-44, to £6,882 in 1944-45, to £8,358 in 1945-46, to £15,426 in 1946-47, and to £24,161 in 1947-48.

Particulars relating to taxes in connection with racing are shown in the chapter "Public Finance."

TAXATION OF PUBLIC ENTERTAINMENTS.

Commonwealth Entertainments Tax.

Entertainments tax was levied by the Commonwealth from January, 1917, to October, 1933, and reimposed at higher rates from 1st October, 1942, when, under the uniform tax plan, the State ceased to tax entertainments (see volume No. 50, page 886).

The tax is payable on admissions for which the charge is 1s. or more. The tax is 3d. where the payment for admission is 1s., increases by 2d. for each additional 6d. or part thereof to 19d. where payment for admission is between 4s. 6d. and 5s., and then increases by 3d. per 6d. or part thereof. Admissions to entertainments in which all the performers are actually present and performing, e.g., stage play, ballet, musical performance, lecture, circus, are taxed at rates approximately 25 per cent. less than the general rates, with admissions up to 1s. 3d. free of tax. Games or sports in which human beings are the sole participants (not including dancing, or skating, unless solely for competitive purposes) conducted by a society, institution or committee not established or carried on for profit, were included in the lower tax rate group from 16th February, 1949.

A special scale of rates is applied in respect of separate charges of not less than 1s. for refreshments served at such entertainments as dances, card parties and skating.

Particulars of taxable admissions and tax in respect of entertainments in New South Wales from 1st October, 1942, to 30th June, 1948, are shown below:—

Table 808.—Commonwealth Entertainments Tax—Admissions and Collections in New South Wales.

37	Taxed	at Lower	Rate.		Г	axed at H	ligher Ra	te.		
Year ended June.	led   p		Pictures.	Racing.	Dancing, Skating.	Sport.	Miscel- laneous.	Period- ical Tickets.	Total.	
			TA	XABLE A1	OMISSIONS	. (thousa	nds.)			
1943* 1944 1945 1946 1947 1948	1,242 1,881 1,834 1,554 1,572 1,302		12 16 33 30 45	39,964 56,951 62,825 61,505 59,104 <b>5</b> 7,209	1,301 2,368 2,544 3,164 3,426 3,938	2,770 5,365 4,579 4,367 3,493 3,932	794 1,736 2,043 3,023 3,397 2,869		$\begin{bmatrix} 54\\ 35\\ 111\\ 152\\ 31\\ 29 \end{bmatrix}$	47,414 70,149 75,149 75,235 72,798 70,969
				TAX PA	ID. (£ tl	ousand.)				
1943* 1944 1945 1946 1947 1948	50·3 81·4 85·0 73·6 78·1 86·2	$3.5 \ 10.2 \ 15.4 \ 21.1 \ 32 \ 33$		956·4 1,402·9 1,558·3 1,540·6 1,481·3 1,438·1	81·3 168·0 184·5 237·1 266·0 300·0	108-6 197-7 196-0 190-1 151-4 157-0	20·9 43·3 53·0 86·2 112·9 94·5	23·3 34·3 52·8 45·4 52		1,252·0 1,943·0 2,157·1 2,210·5 2,175·0 2,162·4

<sup>\* 1</sup>st October, 1942, to 30th June, 1943.

#### STATE LOTTERIES.

State lotteries are conducted in New South Wales in terms of the State Lotteries Act, 1930. The Act is administered by a director, and the lotteries are conducted on the cash-prize system. From the proceeds of

the sale of tickets in each lottery a sum is apportioned for prizes and the balance is payable to Consolidated Revenue. The first lottery was drawn on 20th August, 1931, and special lotteries, with larger prizes and dearer tickets, were inaugurated in July, 1947.

Up to 30th June, 1948, the number of lotteries filled was 1,708, including 23 special lotteries filled in 1947-48. Subscriptions to these amounted to £45,931,247, the prizes to £28,636,134, and the excess of subscriptions over prizes was £17,295,113. Administrative expenses and preliminary charges such as salaries, office equipment and alterations to buildings, amounted to £1,068,863. Minor receipts were £2,240, and the net amount credited to Consolidated Revenue Fund was £16,228,690.

Particulars regarding the lotteries filled in each of the last eleven years are shown below:—

Year	Number of		ar.	Adminis-		
ended June.	Tickets sold during Year.	Number.	Subscriptions.	Prizes Allotted.	Excess of Subscriptions over Prizes.	trative Expenses.
1938	9 569 046	85	£ 2,231,250	£ 1,385,500	£ 845,750	£ 53,592
1939	8,563,946 9,090,027	91	2,388,750	1,483,310	905,440	55,674
1940	8,723,201	87	2,283,750	1,418,100	865,650	55,647
1941	8,325,827	84	2,205,000	1,369,205	835,795	52,044
1942	8,272,305	82	2,152,500	1,336,605	815,895	53,912
1943	9,462,883	95	2,493,750	1,548,500	945,250	52,126
1944	12,145,959	121	3,176,250	1,972,320	1,203,930	64,240
1945	13,488,907	135	3,543,750	2,200,505	1,343,245	67,49
1946	14,564,966	146	3,832,500	2,379,800	1,452,700	72,989
1947	16,166,185	161	4,230,000	2,628,050	1,601,950	87,46
1948	18,693,717	187*	5,660,000	3,607,300	2,052,700	112,15

Table 809.—State Lotteries.

#### REGULATION OF LIQUOR TRADE.

The sale of intoxicating liquor is subject to regulation by the State Government in terms of the Liquor Act, 1912, as subsequently amended. Substantial amendments in respect of trading hours, registration of clubs, supply of liquor to restaurants and canteens, and the standard of accommodation in hotels, were enacted in 1946.

For purposes of administration, the State is divided into 104 Licensing districts, including the metropolitan district, with which Liverpool, Ryde and Parramatta districts were amalgamated on 1st April, 1947.

A Licensing Court in each district is constituted by three magistrates for the control of licensed premises and the determination of applications for new licenses. This Bench of three magistrates also constitutes the Licenses Reduction Board, first appointed in 1920 to reduce the number of publicans' (and, later, wine) licenses. The amending Act of 1946 provided for the reconstitution of the Court and Board, on a day to be proclaimed. The Court as reconstituted will consist of a District Court Judge and two other persons, each being a licensing magistrate in office immediately prior to the proclaimed date, or a stipendiary magistrate or person eligible for appointment as stipendiary magistrate.

<sup>\*</sup> Including 23 special lotteries.

# LIQUOR LICENSES.

The sale of intoxicating liquor in New South Wales, except by persons holding a license, is prohibited. The kinds of liquor licenses and permits issued, the authorities they confer, and the fees for new licenses and permits, and for annual renewal thereof (current in December, 1948) are shown in the following statement:—

Table 810.—Liquor Licenses and Permits.

Kind of License	Authority conferred by	Fce for Licen	se or Permit.
or Permit.	License or Permit.	New.	Annual Renewal.
Publican's Licensc	Sale of liquor on premises (liotel) specified in license.	As assessed by Court; maximum, £500*	5 per cent. of expendi- ture on liquor in preceding calendar year.*†
Club Certificate of Registration.	Sale of liquor on club premises under prescribed conditions,	Not exceeding £1 per member at date of application; maxi- mum, £500.	5 per cent. of expendi- ture on liquor in preceding calendar year.
Hotels and Clubs— Permit to supply liquor with meals.	Supply of liquor with meals, 6 p.nl. to 9 p.nn., by licensee or club.	Assessed on sliding scale relative to fee for license or certificate.	As for new permit.
Australian Wine License;	Sale of wine, cider or perry made from Australian fruit, not containing more than 35 per cent. proof spirit, in quantities up to 2 gallous.	As assessed by Court; maximum, £50.	2 per cent. of expenditure on liquor in preceding calendar year.
Packet License §	Sale of liquor on slips to passengers during voy- ages.	As assessed by Court; maximum, £20.	2 per cent. of expendi- ture on liquor in preceding calendar year.
Booth or Stand License	To holder of publican's license or to non-pro- prietary association for sale of liquor on a partic- ular day or days at sports, agricultural shows, etc.	£2 per day.	
Spirit Merchant's License	Sale on specified premises of either (a) malted liquor or (b) liquor other than malted in quantities of not less than 2 gallons.	Metropolitan district, £30; other districts, £20,	2 per cent. of cost price of liquor sold to un- licensed persons iu preceding caleadar year—minimum as for new license.
Brewer's license	To trade as brewer and sell liquor made in quantities of not less than 2 gallons of the same kind.	Metropolitan district, £50; other districts, £25.	As for new license.
Restaurant Permit	Supply of light Australian wines and malted liquors with meals between noon and 2-30 p.m., and bet- ween 6 p.m. and 8-30 p.m.	£30	5 per cent. of expendi- ture on liquor in preceding calendar year.
Railway Refreshment			
Rooms— License	Issued by Governor for sale of liquor at refreshment rooms at railway stations.	As for publican's license	As for publican's license.
Permit	rooms at rankwy stations, Issued by Railway Com- missioner for sale of Australian wines at re- freshment rooms at rail- way stations.	Exempt.	Exempted, but in practice fee assessed as for Australian Wine License.
Liquor with meals on trains.	Liquor (Amendment) Act, supply liquor to passenger	1946, authorises Commiss s to be consumed with me	sioner for Railways to als on State Railways.
Canteens at Construction Camps, etc.	Issued by Minister on recom canteens at construction conditions determined by	camps or works of a pul	ourt for sale of liquor in blic nature, subject to

<sup>\*</sup> Owner of hotel liable for two-fifths of license fee, but if his share exceeds one-third of the rent, the Board may approve refund of the whole or part of the excess, † Exclusive of liquor sold to persons hiensed to sell liquor, † Licenses may permit or not permit of consumption on the premites. § Not available for ships plying only within Sydney Harbour.

The Liquor (Amendment) Act, 1946, authorises councils of local government areas to conduct community hotels. A council may establish a community hotel by purchase of existing licensed premises, or, if that is impracticable, a petition may be presented to the Governor and a new license applied for in respect of premises owned by the council. The profits of a community hotel must be applied towards a public purpose, e.g., hospital, library, facilities for recreation, health or welfare. A petition and application by the Stroud Shire to establish a community hotel at Forster was granted in 1948.

Conditions under which the Licensing Court may approve applications for removal of publicans' Australian wine or spirit merchants' licenses from one place to another in New South Wales were amended in 1946 with a view to their more equitable distribution throughout the State.

The Court may not make an order of removal unless satisfied that it is in the interests of the public in the neighbourhood of the proposed new site, and not detrimental to public interests in the area from which the liceuse is to be removed. A liceuse may not be removed from any other district to the Metropolitan or Newcastle district. Moreover, the Court must refuse an order of removal of a publican's liceuse in the Metropolitan or Newcastle district to a new site in the same district, if it is satisfied that public interest would be better served by removal to a site in some other part of the district.

# Number of Liquor Licenses.

By action of the Licenses Reduction Board, publicans' licenses were reduced from 2,539 in 1920 to 2,028 in 1943, and Australian wine licenses from 441 in 1922 to 347 in 1943. There was no change in these numbers between 1943 and June, 1949.

Compensation was paid from the Compensation Fund (into which were paid annual levies collected from licensees and owners between 1920 and 1926) in respect of licenses terminated by order of or surrender to the Board, as indicated on page 890 of the Year Book No. 50. The compensation awarded amounted to £891,970, comprising £828,140 in respect of 497 publicans' licenses and £63,890 to 78 holders of Australian wine licenses. The sum of £250,000 was transferred to the State Consolidated Revenue Fund in 1933-34, and after meeting administrative expenses, the net balance of the fund at 30th June, 1948, was £228,187.

Registered clubs in New South Wales were limited in number to 85 (the number existing in March, 1906) until 1st April, 1947, when provisions for additional registrations were brought into operation. Apart from returned servicemen's clubs, the maximum number of clubs which may be registered in the Metropolitan Licensing District (including Liverpool, Parramatta and Ryde) is one club for every four hotels, less twenty, and in Wollongong Licensing District, the number as at 1st April, 1947, plus three. In other licensing districts the maximum is one club for every six hotels or one club where there are less than six hotels—but not less than the number of clubs existing on 1st April, 1947. In addition, returned servicemen's clubs to a maximum number of twenty in the Metropolitan District and one in each extra-metropolitan electoral district may be registered, provided that application for registration was made before 1st October, 1947. The maximum number of clubs which may be registered

in the State under the new provisions of the law is 414. A club is not eligible for registration unless it is a non-proprietary club with at least 60 members, if situated within a radius of 15 miles of the General Post Office, Sydney, or 30 members if in any other locality.

The number of licenses for the sale of intoxicating liquor current in 1929, 1939, and the last six years is shown below:—

T	icenses	S.		1929,	1939.	1943.	1944.	1945.	1946.	1947.	1948.
Publicans'				2,142 80	2,038 84	2,028 85	2,028 85	2,028 85	2,028 85	2,028 253	2,028 337
Railway Refres	hment			ł	1					ľ	
General Liqu	or .			35	43	43	43	43	43	43	43
Wine				19	11	12	12	12	12	12	12
Booth or Stand	÷ .			3,057	2,255	1,179	1,910	2,156	2,504	3,115	3,047
Packet				8	4	1	1	l i	1	1 i	2
Australian Win				363	348	347	347	347	347	347	347
Spirit Merchant	s .	·· ·		255	237	230	230	234	295	365	408
Brewers'				9	6	6	6	6	6	6	6
Permits to supp		10T		ĺ			ļ				
with meals in		_				J					
Hotels and		*		164	249	129	150	135	186	312	260
Restaurant	s		• • • • • • • • • • • • • • • • • • • •	•••			•••	***	25	58	74

Table 811.-Liquor Licenses at 31st December.

There was little change in the number of licenses current in the years 1939 to 1945 (apart from booth or stand licenses, which are temporary only). By order under the National Security Act issued on 28th April, 1945, application for a new license (other than booth or stand license) was prohibited, and action was stayed in respect of applications pending at that date. Since the order was repealed on 13th September, 1946, many applications for spirit merchants' licenses have been granted; these licenses increased by 61 in 1946, 70 in 1947 and 43 in 1948. The increases in club licenses and in permits to supply liquor with meals in 1947 and 1948, reflect the new legislation of 1946. The maximum number of clubs has been licensed in the metropolitan district, but some further club licenses are issuable in a number of country districts.

The following statement shows the amount expended by licensees in the purchase of liquor in each year from 1923:—

Year.	Purchases by Licensees.	Year.	Purchases by Licensees.	Year.	Purchases by Licensees.	Year.	Purchases by Licensees.
	£		£		£		£
1923	8,372,124	1930	7,717,587	1937	8,531,795	1944	14,580,724
1924	8,782,060	1931	6,169,172	1938	9,359,378	1945	15,448,641
1925	9,217,493	1932	6,064,659	1939	9,793,965	1946	21,060,306
1926	9,736,678	1933	6,123,185	1940	11,034,142	1947	23,956,649
1927	10,111,795	1934	6,701,668	1941	12,384,714	1948	24,991,770
1928	10,260,317	1935	7,311,350	1942	13,210,413		
1929	10,410,456	1936	7,802,495	1943	14,569,529		

Table 812 .- Purchases of Liquor by Licensees.

The amount expended in each calendar year, as shown above, is the basis of the fees for the renewal of various classes of licenses as from

<sup>\*</sup> Number issued during the year.

1st July of the following year. The amount of fees assessed in 1939 and the last seven years is shown below:—

License.		1939.	1943.	1944.	1945.	1946.	1947.	1948.	1949,
Fees assessed on pu	ır-	£	£	£	£	£	£	£	£
Dublinone		421,647	585,776	637,744	638,055	673,635	915,878	1,027,506	1,032,962
Club		4,000	5,059	5,675	5,817	6,955	25,646	45,213	59,831
Restaurant Permit							885	2,143	2,986
Railway Refreshment		1,674	3,556	3,813	3,889	4,013	3,848	3,493	2,921
Packet		17	3	3	5	5	2	4	23
Australian Wine	•••	4,868	7,997	8,823	9,756	9,678	13,183	14,757	17,232
Spirit Merchants'		10,473	16,614	21,470	20,532	22,322	37,005	40,186	45,138
New licenses		118	35	23	11	1,750	14,113	5,285	1,625
Other fees—							ļ		
Brewers'	•	250	250	250	250	250	250	250	250
Booth or Stand		5,326	2,412	3,892	4,550	5,395	6,914	6,814	6,896
Permits to supply liqu with meals	or	1,288	922	804	849	1,120	1,839	1,918	2,164

Table 813.-Liquor Licenses-Fees Assessed.

# Licensed Premises-Trading Hours.

Licensed premises may not be opened for the sale of liquor on any Sunday, Good Friday or Christmas Day or other day proclaimed by the Governor, or upon the day of any general election of members of the Legislative Assembly of New South Wales or of the Commonwealth Parliament.

The hours of liquor trading in hotels were prescribed by the Liquor Act (or the Licensing Act), as follows:—6 a.m. to 11 p.m. from 1881 to 1916, 6 a.m. to 6 p.m. from 1916 to 1946, and 10 a.m. to 6 p.m. since 1946. The hours during which liquor may be supplied with meals in hotels, clubs and restaurants are shown in Table 810.

Restrictions on hours, in terms of the Liquor Act, do not apply to the sale of liquor to bona fide travellers or immates of hotels and registered clubs, but liquor may not be sold at the bar of licensed premises except during prescribed hours. Special restrictions were imposed on liquor trading hours during the war.

Particulars of referendums on the question of the closing hour for licensed premises and registered clubs taken on 10th June, 1916, and 15th February, 1947, are given ou page 894 of the Official Year Book No. 50.

# CONSUMPTION OF INTOXICANTS.

The particulars of quantity in the next table were recorded by the Licenses Reduction Board as the quantity of spirits, wines and beers purchased by holders of liquor licenses for retailing to the public, together with the quantity sold direct to the public by wholesale wine and spirit merchants.

Year.	Quan	tity Purcl	hased.	Estimated Expenditure by the Public	Year.	Quan	tity Pure	Estimated Expenditure by the Public	
rear.	Beer.	Wine.	Spirits.	on Intoxicants.	1641.	Beer. V		Spirits.	on Intoxicants,
	Tho	usand gal	lons.	£000	. –	Tho	usand gal	lons.	£000
1929†	28,137	1,534	1,325	17,440	1939	35,379	1,640	884	16,620
1930	22,512	1,386	789	12,370	1940	37,904	1,765	883	18,230
1931	18,912	1,261	686	10,800	1941	38,073	2,056	821	20,970
1932	18,042	1,271	610	10,380	1942	35,904	2,582	731	22,230
1933	18,925	1,473	617	10,500	1943	32,948	2,504	726	24,430
1934	$\cdot 21,573$	1,560	717	11,490	1944	33,056	2,464	714	24,500
1935	23,764	1,619	761	12,530	1945	33,542	2,361	869	26,000
1936	26,218	1,642	786	13,320	1946	43,532	2,815	1,551	34,760
1937	28,881	1,664	824	14,520	1947	52,027	3,582	1,230	38,960
1938	34,249	1,623	848	15,870	1948	47,403	4,391	1,696	40,530

Table 814.—Intoxicants—Consumption and Expenditure in N.S.W.

The figures in the table represent approximately the consumption of intoxicating liquor in New South Wales exclusive of military canteens, etc., not supplied by licensees under the Licenses Reduction Board. It is difficult to estimate the retail expenditure on intoxicating liquor, because it is sold at varying prices not only in different localities, but in hotels in the same district and in the different bars of the same hotel; the figures exclude military canteens, etc., which were not supplied by licensees.

The supply of liquor in Australia was controlled under National Security Regulations from March, 1942, to 26th March, 1946, as regards beer and to 1st November, 1946, in respect of spirits. During this period supplies for hotels, etc., decreased because of the heavy allocations to Australian and Allied services' canteens. The consumption of beer in 1941, viz., 38 million gallons, was a record to that date. After a temporary decline during the war, it increased steeply in 1946, and in 1947 it reached the record figure of 52 million gallons; in 1948 there was a decline of 9 per cent., mainly owing to an extended industrial dispute in breweries.

Since the war, the consumption of wine and spirits has expanded rapidly; in 1948 the consumption of wine was almost three times that in 1939, while the consumption of spirits was about double the 1939 figure.

The increase in the estimated expenditure by the public on intoxicants between 1939 and 1943 was due largely to increased taxation. For instance, excise duty on beer was raised from 1s. 9d. per gallon to 2s. in September, 1939, to 2s. 9d. in November, 1940, to 3s. in October, 1941, and to 4s. 7d. in September, 1942. Customs and excise duties on spirits were also increased during this period by up to 28s. 6d. per proof gallon; details of excise duties are shown on page 537 of this volume. The duties were not varied between September, 1942, and June, 1949.

Practically the whole of the beer and the wine and a large proportion of the spirits consumed in the State, are of Australian origin. Information as to the operations of breweries in New South Wales is published on page 118 of this Year Book.

<sup>\*</sup> Liquid, not proof, gallons.

<sup>†</sup> Average of three years, 1927 to 1929.

#### DRUNKENNESS.

Persons apprehended by the police for drunkenness in public places may be charged in the Courts of Petty Sessions. It is the practice to release such persons before trial if they deposit as bail an amount equal to the usual penalty imposed. If they do not appear for trial the deposits are forfeited, and further action is not taken.

The number of convictions for drunkenness (including cases of forfeiture of bail) was fairly constant at less than 35,000 in the years 1940 to 1944 inclusive. A steep rise occurred in later years, and the number in 1948 was higher by 48,063 than in 1944. However, as the extent to which offenders are apprehended is not known and may have varied, inferences from the figures as to changes in the incidence of drunkenness may not be justified. Moreover, the figures should not be compared with similar figures of other States or countries without regard to administrative practice and the method of compiling the statistics.

The following statement shows particulars of the cases of drunkenness and convictions in various years since 1929; the figures for the war years relate to civilians.

Particulars.	1929,	1939.	1943.	1944.	1945.	1946.	1947.	1948.
Persons charged*—  Males  Females	31,321 2,498	30,128 2,344	31,936 2,993	31,427 3,149	39,882 3,700	57,936 4,275	63,449 4,076	78,907 3,993
Total	33,819	32,472	34,929	34,576	43,582	62,211	67,525	82,900
Discharged, Charge With- drawn, etc Convictions— After Trial Bail Forfeited	683 21,099 12,037	67 17,293 15,112	23 10,587 24,319	9,090 25,472	9,366 84,195	91 11,666 50,454	201 12,372 54,952	275 15,030 67,595
Total Convictions Males ,, ,, Females	30,689 2,447	30,066 2,339	31,917 2,989	31,414 3,148	39,862 3,699	57,854 4,266	63,256 4,068	78,653 3,972
Total	33,136	32,405	34,906	34,562	43,561	62,120	67,324	82,625
Per 1,000 of Population— Charges Convictions	13·51 13·24	11·81 11·78	12·20 12·20	11·98 11·98	14·94 14·93	21·12 21·09	22·62 22·55	27·36 27·27

Table 815.—Drunkenness—Cases and Convictions.

In addition to cases of drunkenness to which the foregoing table relates, convictions on the charge of driving a motor vehicle while under the influence of intoxicating liquor or drug numbered 486 in 1944, 658 in 1945, 1,394 in 1946, 1,368 in 1947, and 1,886 in 1948.

#### TREATMENT OF INEBRIATES.

An inebriate convicted of an offence of which drunkenness is a factor, or, in certain cases, a contributing cause, may be required to enter into recognisances and to report periodically to the police for a period of not less than twelve months; or he may be placed in a State institution.

<sup>\*</sup> Counted each time charged.

For the care and treatment of inebriates other than those convicted of an offence, State institutions may be established under the control of the Inspector-General of Mental Hospitals. Judges, magistrates and the Master-in-Lunacy may order that an inebriate be bound over to abstain, or that he be placed in a State or licensed institution or under the care of an attendant controlled by the Master-in-Lunacy, or of a guardian, for a period not exceeding twelve months. An inebriate may enter voluntarily into recognisances to abstain.

Inebriates are detained in some of the State Mental Hospitals, and the number under the supervision of the Inspector-General of Mental Hospitals at 30th June, 1948, was 170, viz., 118 men and 52 women. The number admitted for the first time in the year 1947-48 was 170, including 48 women.

# LICENSES FOR VARIOUS OCCUPATIONS.

Partly as a means of raising revenue, and partly to ensure a certain amount of supervision over persons who follow callings which bring them into contact with the general public or are carried on under special conditions, licenses must be obtained by auctioneers, stock and station agents, real estate agents, business agents, pawn-brokers, hawkers, pedlars, collectors, second-hand dealers, fishermen, and persons who sell tobacco, conduct billiard and bagatelle tables or engage in Sunday trading.

No person may purchase, carry or have in his possession a pistol unless he holds a license under the Pistol Act, 1927-1946. A separate license is required for each pistol. Licenses may not be issued to persons under 18 years of age.

For pawnbrokers' licenses an annual fee of £10 is payable. The hours for receiving pledges are limited, with certain exceptions, to those between 8 a.m. and 6 p.m., but a restriction is not placed on the rate of interest charged.

#### LICENSING OF AUCTIONEERS AND AGENTS.

Auctioneers, stock and station agents and real estate agents must be licensed under the Auctioneers, Stock and Station and Real Estate Agents Act, 1941-1946. Registration is also required in the case of real estate salesmen employed by real estate agents or by real estate dealers (persons not licensed as real estate agents whose sole or principal business is the selling, as owner, of land in allotments).

Auctioneers' licenses are classified as (1) general licenses available for all parts of New South Wales (annual fee £15), (2) country licenses for all districts outside the counties of Cumberland and Northumberland (fee £5 annually), (3) district licenses for the police district outside the Metropolitan area for which the license is taken out (fee £2 annually) and (4) primary products licenses for the market in the metropolitan police district which is specified in the license. In the metropolitan district, an auctioneer must take out a general license unless he has a primary products license and acts as auctioneer only for selling firewood, coal, coke, fish or a product within the meaning of the Primary Products Act.

An auctioneer's license may not be granted to a licensed pawnbroker. Provision has been made for reciprocity in granting general licenses to auctioneers resident in reciprocating States of Australia, and general

country and district licenses to those resident in the Australian Capital Territory.

The fee for a stock and station or real estate agent's license is £1. A corporation carrying on business as auctioneer, stock and station agent or real estate agent, must take out a license on its own behalf (fee £5), as well as a license for each employee in charge of an office or branch.

The licenses must be renewed annually. Upon the grant of each application for a license or renewal, the licensee pays, in addition to the license fee, a fee not exceeding £1 which is placed in a special account for expenses of administration.

Licensees are also required to contribute to a fidelity guarantee fund established under the Act to reimburse persons who suffer loss by reason of theft or fraudulent misapplication of their property by a licensee. The maximum reimbursement payable from the fund in respect of any one licensee was increased from £500 to £2,000, as from 1st July, 1946.

Particulars regarding licenses issued in each year are shown below:-

Table 816.—Auctioneers, Stock and Station and Real Estate Agents— Licenses issued and Fidelity Guarantee Fund.

Particulars.		1942–43.	1943-44.	1944-45.	1945-46.	1946-47.	194748.
Licenses issued—		No.	No.	No.	No.	No.	No.
Auctioneers— General		169	177	196	232	296	321
Country	•••	131	146	185	214	260	302
District	•••	830	849	898	1,060	1,222	1,167
Primary Products		25	20	17	1,000	20	19
Total, Auctioneers' Licenses		1.155	1,192	1,296	1,521	1,798	1,809
Total, Auctioneers Licenses	•••	1,155	1,102	1,490	1,041	1,780	1,009
Stock and Station Agents		1,157	1,217	1,305	1,575	1,765	1,854
Real Estate Agents		1,993	2,017	2,120	2,402	2,599	2,661
Corporations		139	134	139	139	156	162
Individual Licensees (including employ	ees of	_					
corporations)		2,681	2,716	2,729	3,158	3,731	3,821
Real Estate Salesmeu—Certificates of re	gistra-	,		,	,		
tion issued	•••	109	86	88	99	119	124
Fidelity Guarantee Fund—		£	£	£	£	£	£
Contributious during year	• • • •	7,479	7,237	2,379	3,246	4,251	4,125
Balance at 30th June		17,109	24,230	26,708	29,738	32,143	35,793

Business agents who deal with or negotiate the sale or purchase of various classes of businesses are required to take out a license under the Business Agents Act, 1935-1941. The agents are required to provide a fidelity bond in respect of trust moneys received by them in the course of business.

# **PENSIONS**

In New South Wales statutory pensions are provided for aged persons, permanent invalids, widows, members of the Forces suffering disability due to war service, the dependants of war pensioners and of members of the Forces who died on war service, and coal and oil shale miners. Provision is also made for superannuation in the Government services and for certain employees of local governing bodies. Numerous private companies and firms have made arrangements for the superannuation of employees.

# AGE AND INVALID PENSIONS.

Old-age pensions (known as age pensions from July, 1947) were paid by the Government of New South Wales from August, 1901, and invalid pensions from January, 1908, until the Commonwealth Government commenced to pay pensions, viz., old-age pensions for men and women at age 65 years (or 60 years if permanently incapacitated) from 1st July, 1909, and old-age pensions for women at age 60 years and invalid pensions from December, 1910. Allowances for wives and children of invalid and permanently incapacitated or blind pensioners, and funeral benefits for pensioners were introduced in July, 1943. The payment of these pensions, allowances, and benefits is regulated under the Social Services Consolidation Act, 1947.

Payment of age and invalid pensions in Australia is subject to age and residence qualifications and a means test. For age pensions, women must be 60 years and men 65 years of age, and must have resided in Australia continuously for twenty years (disregarding occasional absences up to one-tenth of the total period, absence on war service, etc.). Invalid pensions are payable to persons above the age of 21 years (or 16 years if not adequately maintained by parents) not receiving age pensions, who have had five years' continuous residence in and have become incapacitated or blind in Australia, or during temporary absence from Australia; pensions are also payable to persons whose incapacity or blindness occurred before arrival in Australia provided that they were brought to Australia when less than three years old, or have resided here for twenty years.

Invalid pensioners or claimants for invalid pension may be required to undergo vocational training or treatment for physical rehabilitation as a condition of grant or continuation of pension. Such persons receive invalid pension during training or treatment.

An age or invalid pension is not granted to persons having property of net value exceeding £750 or an income (other than the pension) exceeding £188 10s. per annum, except that the income of a permanently blind person and his spouse may be up to £305 10s. per annum. These property and income conditions applied from October, 1948; changes effected on earlier dates relating to property are indicated in earlier editions (see No. 50, page 850), and those in respect of income are shown in Table 817 on the next page.

In computing the value of the property of a claimant or pensioner for the purpose of the means test, his home, furniture and personal effects and certain other classes of property are disregarded.

In assessing income, the following are excluded: benefits from friendly societies, sick pay from trade unions, food relief from the State, maternity allowances, child endowment, hospital benefits, payments under the Tuberculosis Act, and gifts and allowances from parents or children. The value of board and lodging received is computed at a maximum of £32 10s. per annum (12s. 6d. per week), and income is deemed to be reduced by £26 for each child under 16 years of age, less any payment, such as child endowment, received.

The maximum rate of pension is 42s. 6d. per week (£110 10s. per annum). Except in the case of permanently blind persons, the annual rate is reduced by the amount of income (other than pension) in excess of £78, as well as by £1 for every complete £10 of property in excess of £100 but not exceeding £450, and by £2 for every £10 in excess of £450. Since September, 1923, a higher income limit has been prescribed in the case of permanently blind persons. From April, 1944, to August, 1946, the rate of such pensions was reduced by the amount of income of the pensioner and spouse, apart from pension, in excess of £260 per annum; between August, 1946, and October, 1948, by the excess over £279 10s.; and since that date, by the excess over £305 10s. per annum. There are also special provisions relating to the aggregate rate of pension in respect of persons who are both invalid and war or service pensioners.

The rates of age and invalid pension were varied automatically with retail price index numbers compiled by the Commonwealth Statistician, from October, 1933 to September, 1937, and from December, 1940 to August, 1943. Adjustment by this method was suspended in November, 1943, and subsequent alterations were made by legislation. Changes, since 1901, in the maximum rate of pensions and prescribed limits of income are shown in the following table:—

		mum Pension.	Limit of Income (including			mum Pension.	Limit of Income (including
Date.	Per week.	Per annum.	pension) per annum, *	Date.	Per week.	Per annum.	pension) per annum,
1901, Aug 1916, Oct. 1920, Jan 1923, Sept. 1925, Oct. 1931, July 1932, Oct. 1933, Oct. 1935, July 1936, Sept. 1937, Sept.	$\begin{array}{c} \text{s. d.} \\ 10 & 0 \\ 12 & 6 \\ 15 & 0 \\ 17 & 6 \\ 20 & 0 \\ 17 & 6 \\ 20 & 0 \\ 17 & 6 \\ 17 & 6 \\ 18 & 0 \\ 19 & 0 \\ 20 & 0 \\ \end{array}$	£ s. 26 0 32 10 39 0 45 10 52 0 45 10 52 0 45 10 46 10 45 10 46 16 49 8 52 0	£ s. 52 0 58 10 65 0 78 0 84 10 78 0 71 10 78 0 79 6 81 18 84 10	1940, Dec. 1941, April Dec. 1942, April 0 Cct. 1943, Jan. April Aug. 1945, July 1946, Aug. 1947, July 1948, Oct.†	s. d. 21 0 21 6 23 6 25 0 25 6 26 0 26 6 27 0 32 6 32 6 32 6 32 6	£ s. 54 12 55 18 61 2 65 0 66 6 67 12 68 18 70 4 84 10 97 10 110 10	\$ s. 87 2 88 8 93 12 97 10 98 16 100 2 101 8 102 14 117 0 136 10 149 10 188 10

Table 817.—Age and Invalid Pensions—Rates.

Pensions were paid from 12th October, 1916, to inmates of approved benevolent asylums, who were in receipt of pension before admittance, and from 13th September, 1923, to all eligible inmates. The maximum rate of pension paid to such inmates was 6s. a week in 1937, and it was

<sup>\*</sup> For permanently blind persons a higher limit applied throughout from September, 1923 (see text above table).

<sup>†</sup> Rate current in June, 1949.

increased gradually, by half the amount of increases in full pensions, to 9s. 6d. in August, 1943. Subsequently it was increased to 11s. 6d. in July, 1945, to 13s. in July, 1947, and to 15s. in October, 1948.

Under certain circumstances, allowances were paid to the benevolent asylums in respect of pensioner inmates. It is prescribed by the Social Services Consolidation Act, 1947, that any balance of an inmate's pension in excess of that payable to the inmate shall be paid to the institution for his upkeep.

Particulars of pensioners in benevolent asylums and of wives and children's allowances are not included in the following table, but are shown later (see Tables 820 and 819).

Table 818.—Age and Invalid Pensions in New South Wales.\*

							202-11 11 a	
'Year ended 30th June.	New Claims.	Wale	current in I	June.	Pensio 30th	Rate of n as at June.	Estimated Annual Liability as at 30th June.	Estimated Annual Liability per head of Population as at 30th
		Males.	Females.	Total.	Maximum.	Average.	0	June.
	1	<u>.                                    </u>	<u>'</u>	<u>.</u> 	<u> </u>		· 	<del></del>
	No.	No.	No.	No.	s. d.	s. d.	£	s. d.
				AGE PEN	sions.			
	1 700	10.000	10.000	20.000		^ -		
1912	4,763	13,639	16,029	29,668	10 0	9 7	734,526	8 5
1921	5,727	16,033	23,004	39,037	15 0	14 1	1,428,258	13 7
1931	12,814	28,003	37,029	65,032	20 0	19 1	3,225,872	25 2
1932	11,625	30,098	39,769	69,867	17 6	16 6	2,996,266	23 2
1938	11,004	36,801	47,861	84,662	20 0	19  3	4,242,290	31 1
1939	11,611	37,633	49,792	87,425	20 0	19 3	4,375,852	31 9
1940†	11,930	43,325	64,840	108,165†	20 0	19 <b>3</b>	5,417,022	38 11
1941	11,160	43,619	66,411	110,030	21 6	20   9	5,930,704	42 4
1942	11,326	43,235	67,229	110,464	25 0	24 2	6,941,194	49 5
1943	10,351	41,466	66,815	108,281	26 6	25 - 7	7,190,976	50 4
1944	7,463	38,876	65,538	104,414	27 0	26 0	7,049,172	48 10
1945	8,905	37,748	65,681	103,429	27 0	25 <b>3</b>	6,795,048	46 8
1946	15,386	39,752	68,933	108,685	32 6	31 4	8,865,714	60 3
1947	19,805	42,886	76,350	119,236	32 6	31 4	9,707,386	65 0
1948	15,919	43,640	80,123	123,763	37 6	35 11	11,549,157	76 4
1949	20,179	48,194	83,747	131,941	42 6	40 1	13,736,928	88 <b>3</b>
	·		In	VALID PE	nsions.		•	
	Ī							
1912	1,784	2,549	2,278	4,827	10 0	9 9	121,836	1 5
1921	3,278	7,016	8,371	15,387	15 0	14 9	588,588	5 7
1931	6,383	12,148	15,948	28,096	20 0	19 6	1,425,996	11 1
1932	6,025	13,025	16,930	29,955	17 6	17 0	1,326,988	10 3
1938	7,139	17,184	23,384	40,568	20 0	19 5	2,045,082	15 0
1939	7,087	17,630	24,257	41,887	20 0	19 5	2,110,238	15 4
1940†	7,352	11,731	14,875	26,606†		19 6	1,350,934	9 8
1941	6,874	11,938	15,310	27,248	21 6	21  0	1,491,334	10 8
1942	6,221	12,251	15,967	28,218	25 0	24 6	1,800,370	12 9
1943	4,849	11,382	15,419	26,801	26 6	26 O	1,813,292	12 8
1944	4,845	11,597	14,637	26,234	27 0	26 6	1,805,596	12 6
1945	5,292	13,117	12,858	25,975	27 0	26 5	1,784,796	12 3
1946	6,168	14,446	13,809	28,255	32 6	31 9	2,333,916	15 10
1947	7,341	15,978	14,512	30,490	32 6	31 9	2,515,240	16 10
1948	6,405	17,595	15,515	33,110	37 6	36 6	3,142,378	20 9
1949	6,674	19,426	16,095	35,521	42 6	41 2	3,802,481	24 5
	ı		ı	I	1	1	1	1

<sup>\*</sup> Including Australian Capital Territory.

At 30th June, 1949, the number of pensioners in public benevolent asylums in New South Wales was 1,559, and the annual liability for their pensions was £60,801.

Allowances for wives of invalid pensioners and of permanently incapacitated and blind age pensioners were introduced in July, 1943. The maximum annual rate of allowance was increased from £39 to £52 in Jūly, 1947, and to £62 8s. from 30th June, 1949. It was subject to reduction by the amount of the wife's income (apart from allowance) in excess of £32 10s. to July, 1947, then of £52 to October, 1948, and of £78 from that date. It was further reduced by £1 for every complete £10 of her property in excess of £50 to July, 1947, and from that date to October, 1948, by £1 for every £10 in excess of £50 up to £400, and by £2 for every complete £10 of the remainder of the property; in October, 1948, these limits of £50 and £400 were raised to £100 and £450 respectively. Where pensioners in this group have one or more dependent children under 16 years of age, a child's allowance was paid at the rate of £13 per annum up to 30th June, 1949, and of £23 8s, as from that date.

Funeral benefit, payable in respect of deceased age or invalid pensioners since July, 1943, is the cost of the funeral (excluding payment from a contributory funeral benefit fund, except a friendly society fund) or £10, whichever is the less. The majority of claims are admitted at the maximum rate.

The following statement shows particulars of wives and children's allowances current at 30th June, and of funeral benefits paid in New South Wales in each year since 1944:—

Table 819.—Age	and Invalid	Pensions,	N.S.W.*—Wives	and	Children's
	Allowances	s and Fun	eral Benefits.		

Year	Allowances for	Wives and Childr	Funeral Benefits,			
ended 80th June.	Wives.	Children.	Annual Liability.	Claims Granted.	Amount Paid.	
1944 1945 1946 1947 1948	No. 3,289 3,811 4,171 4,627 5,218 5.593	No. 2,057 2,400 2,648 2,933 3,323 3,189	£ 151,112 174,356 189,852 209,092 300,092 408,200	No. 4,004 6,379 7,362 8,346 8,057 10,781	£ 37,828 60,788 72,711 84,062 76,816 109,711	

<sup>\*</sup> Including Australian Capital Territory.

The total amount of pensions, allowances and funeral benefits paid in Australia under the age and invalid pension scheme was £29,626,022 in 1946-47, £36,735,983 in 1947-48, and £41,946,659 in 1948-49. The amount paid in New South Wales and Australian Capital Territory was £12,360,773 in 1946-47, £15,137,883 in 1947-48, and £17,598,817 in 1948-49. Details regarding pensioners and annual payments since 1938-39 are shown in Table 820.

The number of pensioners in New South Wales and Australian Capital Territory, as at 30th June, increased from 130,620 in 1939 to a peak of 139,953 in 1942; during the next three years the number dropped to prewar level. There has been a marked increase since 1944-45 as a result of retirements from war-time employment, the changing age composition of the population and the modification of income and property restrictions.

Table 820.—Age and Invalid Pensions, N.S.W.\*—Pensioners and Annual Cost.

	1	Pensioners a	t 30th June			Payments du	ring Year.	
Year ended 30th June.	Age.	Invalid.	Inmates of Benev- olent Asylums,	Total.	To Pensioners (inc. Wives' and Children's Allowances).	To Institu- tions for Mainten- ance of Pensioners.	Funeral Benefits.	Total.
					£	£	£	£
1939	87,425	41,887	1,308	130,620	6,359,796	55,103		6,414,899
1940	108,165†	26,206†	1,282	135,653	6,569,027	58,691		6,627,718
1941	110,030	27,248	1,397	138,675	6,989,602	64,430	•••	7,054,032
1942	110,464	28,218	1,271	139,953	7,818,746	46,769		7,865,515
1943	108,281	26,801	1,635	136,717	9,182,598	66,996		9,249,594
1944	104,414	26,234	1,282	131,930	8,806,395	60,304	37,828	8,904,527
1945	103,429	25,975	1,316	130,720	8,929,796	63,781	60,788	9,054,365
1946	108,685	28,255	1,415	138,355	11,136,851	88,604	72,711	11,298,166
1947	119,236	30,490	1,515	151,241	12,241,410	35,301	84,062	12,360,773
1948	123,763	33,110	1,558	158, <b>43</b> 1	15,024,427	36,640	76,816	15,137,883
1949	131,941	35,521	1,559	169,021	17,441,988	47,118	109,711	17,598,817

<sup>\*</sup> Including Australian Capital Territory.

# Widows' Pensions.

Prior to the introduction of widows' pensions by the Commonwealth Government as from 30th June, 1942, a scheme of pensions for widows and their dependent children provided by the State Government had been in operation. The Commonwealth scheme provides for the widow and one dependent child, and allowances continue to be paid under the State scheme in respect of a widow's other dependent children. Particulars of the State scheme are given on page 920.

# Widows' Pensions-Commonwealth Scheme.

The Commonwealth commenced to pay widows' pensions on 30th June, 1942.

The term "widow" is defined as including a woman who, though not legally married to him, was maintained by a man as his wife for at least three years immediately prior to his death; a wife deserted by her husband for not less than six months; a divorced woman who has not remarried; a woman whose husband is in a hospital for the insane; and a woman whose husband is in prison and has been so for at least six months.

Eligibility for widows' pension is subject to a means test, and requires residence in Australia at date of claim and for five years immediately

<sup>†</sup> See note † under Table 818.

prior to that date. Pensions may be granted under certain circumstances to aboriginal women. Aliens, except those who were British subjects prior to marriage, are not eligible.

In computing a claimant's income for the purpose of the means test, the value of benefits, such as child endowment, hospital and friendly society benefits, and State food relief, is excluded, and the value of free board and lodging is assessed at not more than 12s. 6d. a week. Moreover, income as assessed for pension is deemed to be reduced by 5s. a week in respect of one dependent child and by 10s. a week for each such child in excess of one, less the amount of any payment (e.g., child endowment) she receives for the children. In the case of a deserted wife or divorced woman, any amount in excess of 15s. a week received from the husband for maintenance of a child is included as income.

In valuing property owned by a widow, the value of her permanent home, furniture and personal effects, war gratuity and certain other property is disregarded.

Dependent children are those under 16 years of age under custody, care and control of the widow or being maintained by her. (Child endowment is paid for such children, except one, in the family.) Any child adopted after widowhood (or desertion, etc.), is not taken into account unless maintained by the widow as a member of her family on 5th June, 1942.

"Widows" eligible for pension are classified into four groups with varying qualifications (in June, 1949) as follows; provision for Class D dated from July, 1947:—

	Class A.	Class B.	Class D.	Class C.
Classification	All ages, maintaining one or more children (excl. Class D).	50 or more years, not maintaining children.	Wives of impris- oned men, if main- talning children, or if over 50 years.	Necessitous, under 50 years, not maintaining children.
Property limit— Full pension payable No pension payable	£1,000 Over £1,000	£109 Over £750	£109 Over £750	
Income limit*— Full pension payable No pension payable	£78 p.a. £210 10s. p.a.	£78 p.a. £174 4s. p.a.	£78 p.a. £174 48. p.a.	

<sup>\*</sup> Excluding value of the "widow's" pension, child endowment, etc.

The maximum rates of pension payable since inception of the scheme were varied on various dates as shown below:—

	June, 1942.	Oct., 1942.	Jan., 1943.	April, 1943.	Aug., 1943.	Oct., 1945.	July, 1947.	Oct., 1948.*
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Class A.	 30 0	30 6	31 0	31 6	32 0	37 6	42 6	47 6
Class B,	 25 0	25 6	26 0	26 6	27 0	•••	32 0	<b>37</b> 0
Class C.	 25 0	25 6	26 0	26 6	27 0	32 6	37 6	42 6
Class D.	 •••						32 0	37 0
			* Unchang	ed to June	1949			

The pension of a Class A widow may be continued whilst she has a dependent child up to 18 years attending full time at school or university. Pension is payable in respect of a widow in Class C for not more than six months following the husband's death. Pensioners in Classes B and D who are not less than 50 years of age and who are inmates of an approved benevolent asylum are paid so much of their pensions as does not exceed 11s. a week and the balance is paid to the institution for their maintenance.

Particulars of Commonwealth widows' pensions paid in New South Wales (and the Australian Capital Territory) are shown below:—

Table 821.—Commonwealth Widows' Pensions in New South Wales.\*

	Pensions Current at 30th June.								
Year ended 30th June.			Clas	Class B.		Class C.		Total Widows Receiving Pension.	
	Number.	Average Weekly Rate.	Number.	Average Weekly Rate,	Number.	Weekly Rate,	Number.	Average Weekly Rate.	the Year.
1943 1944 1945 1946 1947 1948 1949	7,519 7,344 6,924 7,096 7,456 7,764 7,751	s. d. 30 3 30 10 30 9 36 2 36 2 40 8 45 8	7,439 8,990 10,051 10,218 9,055 9,374 9,537	s. d. 24 7 25 3 25 3 25 2 25 5 30 1 35 3	40 46 47 41 61 51 61	s. d. 26 6 27 0 27 0 32 6 32 6 37 6 42 6	14,998 16,380 17,022 17,355 16,572 17,233† 17,402†	s. d. 27 5 27 9 27 6 29 8 30 3 34 10 39 11	£ 949,283 1,147,544 1,200,589 7,295,240 1,355,302 1,583,089 1,761,978

<sup>\*</sup>Including Australian Capital Territory. † Including Class D, viz.—53 pensions at 37s. per week in 1949.

The decline in the number of widows' pensions during 1946-47 was due mainly to transfers to age pensions of widows in Class B who were aged at least 60 years. The rate of age pensions is higher than the rate payable to widows in this group.

#### WAR AND SERVICE PENSIONS.

War pensions are provided by the Commonwealth in terms of the Australian Soldiers' Repatriation Act, 1920-1947. The provisions of the Act relating to pensions were extended in 1940 to the Forces of the recent war. In 1943 the rates of pension were substantially increased, conditions regarding eligibility were modified, and the scope of benefits was widened. Certain pension rates were increased again in July, 1947.

War pensions are payable to ex-members of the Naval, Military and Air Forces who are incapacitated, wholly or in part, as the result of service in a theatre of war, and to dependants of war pensioners and members who died on war service. Pensions may be paid under certain circumstances in respect of members of the Forces who served only in Australia.

In cases of disability the rate of pension is determined according to the extent of the disability. Rates of full pension (current in June, 1949) range from £5 to £6 16s. 0d. per fortnight, according to rate of service pay, plus £2 4s. 0d. for the pensioner's wife and 18s. for each child under 16 years of age. Those temporarily, i.e., for at least three months, unable to earn on account of a war service disability may receive a supplementary pension of £2 8s. 0d. if married, or £1 10s. if single. The pension for the totally blind, totally and permanently incapacitated and certain pulmonary tuberculosis cases is £10 2s. 0d. per fortnight, plus an attendant's allowance of £2 8s. 0d. for those deemed to require such service. For disability by amputation or loss of vision of an eye, pension at assessed rate for the extent of incapacity suffered is supplemented by amounts ranging from 9s. 0d. to £4 12s. 0d. per fortnight.

The rate of pension for the widow of a member whose death resulted from war service ranges from £5 10s. 0d. to £7 6s. 0d. per fortnight, according to service rate of pay, and the rates for his children under 16 years of age are £1 15s. 0d. for the first and £1 5s. 0d. for each other child. The rate for orphaned children is £1 15s. 0d. up to 14 years of age, and £2 from that age to 16 years.

Pension is payable to the widowed mother of a member, if she was widowed prior to or within three years after his death, provided that he had not been married and his death is attributed to war service. The rate ranges from £2 10s. 0d. to £6 16s. 0d. a fortnight, according to service rate of pay. Particulars of war pensions are given in Table 822.

Service pensions (as distinct from war pensions) for certain classes of ex-members of the Forces were introduced in January, 1936. These pensions are subject to a means test but are not conditional upon disabilities arising from war service. Those eligible are men who have served in a theatre of war and women who have served abroad who are above the age of 60 years and 55 years respectively, or are permanently unemployable, and ex-service men and women suffering from pulmonary tuberculosis, irrespective of age or sphere of service. Pension is also payable for the wife and children up to four in number of permanently unemployable and tubercular service pensioners. Pensioners in the tubercular group may receive invalid as well as service pension.

Particulars of war and service pensions in New South Wales are shown below:—

	Table 0	22.— W ai	and Der	vice i en:	510115 111 1	16M DOUL	it Wales.	
		Number of	Pensions. †		Average	Pension per	week. †	
Year		Дере	ndants.			Deper	ndants.	Amount Paid
ended June,	Members of Forces.	Of Incapaci- tated Members.	Of Deceased Members.	Members of Forecs.	Of Incapaci- tated Members.	Of Deceased Members.	during Year.	
	No.	No.	No.	No.	s. d.	s. d.	s. d.	£
			W	AR PENSION	rs.			
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1948— '14 War '39 War	25,924 25,671 25,474 25,938 28,518 32,596 40,381 53,744 59,148 60,464	46,701 43,310 40,236 38,039 39,022 42,515 51,465 68,305 75,756 79,709	8,691 8,366 8,391 9,169 10,465 12,072 13,174 16,540 16,855 16,813	81,316 77,347 74,101 78,146 78,005 87,183 105,020 138,589 151,759 156,986	20 9 20 8 20 8 20 6 24 0 23 2 21 2 18 7 18 8 19 9	5 4 5 7 5 8 5 10 7 0 6 10 6 2 5 4 5 3 5 4	25 4 26 0 26 10 26 11 33 3 33 9 34 2 34 3 34 8 37 5	2,674,462 2,618,564 2,560,477 2,576,241 2,807,870 3,661,182 4,088,399 4,874,706 5,663,529 5,984,610
			SEI	RVICE PENSI	ions.			
1939 1941 1943 1945 1946 1947 1948	2,333 2,780 2,874 2,814 3,069 3,603 3,994	1,539 1,645 1,491 1,205 1,134 1,153 1,223		3,872 4,425 4,365 4,019 4,203 4,756 5,217	16 3 17 8 22 2 22 9 27 11 28 11 33 3	8 8 10 4 13 10 16 2 18 0 19 3 19 6		118,443 162,935 218,173 199,535 253,274 275,949 446,404

Table 822,-War and Service Pensions in New South Wales.\*

The total amount paid by the Commonwealth in 1947-48 was £17,500,885, viz., war pensions £16,262,773 and service pensions £1,238,112.

Pensions for Coal and Oil Shale Mine Workers.

A pension scheme for coal and oil shale mine workers in New South Wales is administered under the Coal and Oil Shale Mine Workers (Pensions) Act, 1941-48.

<sup>\*</sup> Including Australian Capital Territory. † At 30th June.

In December, 1947, the Act was amended to provide that coal and oil shale mine workers compensated under the Workers' Compensation Act for partial incapacity due to inhalation of dust should receive additional payments as compensation subsidy; the amount of subsidy payments must be sufficient to increase the worker's income from compensation and other sources to the equivalent of the rate of compensation for total incapacity. Persons receiving compensation subsidy must be registered for employment with the Commonwealth Employment Service, and for rehabilitation with the Joint Coal Board. Compensation subsidies and administrative costs are met from the Coal and Oil Shale Workers' Compensation Subsidy Fund from contributions payable by the mine owners in amounts fixed year by year by the Pensions Tribunal. In the period 5th November, 1947, to 30th June, 1948, contributions to the Fund totalled £27,320; payments of compensation subsidy were £14,075, and administrative costs, £735; £3,250 was carried to reserve, and at 30th June, 1948, the accumulated funds were £9,260.

The pension scheme relates to persons employed in coal and shale mines in New South Wales, or so employed at any time since 1st January, 1928; to persons permanently incapacitated during such employment prior to the commencement of the Act; to persons employed in transporting coal or shale from mine to point of delivery by the owner; to elected officials of industrial organisations of coal and oil shale mine workers; and (since June, 1942), to managers, colliery engineers, electricians and clerks employed by mine owners in or about a mine.

Subject to certain qualifications as to residence in the State and period of employment, the workers are entitled to pension upon compulsory retirement at the age of sixty-five years in the case of managers, colliery engineers, and clerks, and at the age of sixty years in other cases. (Compulsory retirement of coal mine workers, as prescribed by the Act, was suspended during the war period.) Others eligible are mine workers partially or wholly incapacitated in the course of their employment subsequent to 1st February, 1930, and those permanently incapacitated subsequent to 1st January, 1920, who had been engaged in the industry for at least twenty years. Upon the death of a pensioner or mine worker, pension is payable to his widow or, under certain circumstances, to one female dependant.

The weekly rate of pension (as increased from 2nd May, 1948, and current in June, 1949) is £2 12s. 6d. for mine workers, or £2 for widows. In addition, allowances are payable for dependants, viz., £1 17s. 6d. for wife or one female dependant over 16 years of age and 8s. 6d. each for children (or in some cases, dependent brothers and sisters). The maximum amount of pension and allowances is £5 10s. 6d. per week.

Where mine workers or dependants are entitled to receive invalid, age or widow's pension or child endowment, such amounts, as well as earnings of men under 60 years of age permanently incapacitated for mine work, are deducted from pension and allowances. Benefit is reducible also where compensation is payable in terms of the Workers' Compensation. Act, or damages are recovered from the employer. If a pensioner, or any dependant for whom he may receive allowance, engages in employment, his pension, including allowances, is reduced by any excess of average earnings of the pensioner and dependants over £2 10s a week, except that where the average weekly earnings of a dependant exceed the allowance payable for him, they are deemed to be the amount of allowance only.

Two funds have been established, viz., the Coal Mine Workers' Pension Fund and the Oil Shale Mine Workers' Pension Fund. They are administered by the Pensions Tribunal, which consists of a chairman and four members, viz., one representative each of owners of coal mines, owners of oil shale mines, and of unions of employees in each of the industries. The chairman of the Joint Coal Board, constituted under the Coal Industry Act, 1946, is chairman of the Tribunal. At meetings of the Tribunal, only the chairman and the two members representing the industry concerned are entitled to vote on questions solely connected with either coal or oil shale mining; on questions of a general nature, all five members may vote.

Each pension fund consists of contributions by the Government of New South Wales, and the mine workers and mine owners concerned. The Pensions Tribunal estimates the amount required by the funds in each year for payment of pensions and other charges and for provision of a reserve as determined by the Governor. The Government contributes one-fourth of the estimated amount or £80,000, whichever is the less, and the balance is paid by the mine workers and owners in proportions fixed by the Act.

Particulars of income and expenditure of these funds in the years ended 30th June since their inception are as follows:—

Table 823.—Coal and Oil Shale Mine Workers' Pension Funds—Income and Expenditure.

				LAP	endituie.	•			
-					Year	ended 30th	June.		
Partic	culars	i.	1941-42.*	1942–43.	1943–44.	1944-45.	1945-46.	1946–47.	1947–48.
			£	£	£	£	£	£	£
				I	NCOME.			_	
Contribution State Tre Mine Own Mine Wo Interest Total	easui ners	у	56,250 150,932 66,838 27 274,047	80,000 249,137 114,119 1,445 444,701	80,000 236,371 109,331 2,469 428,171	80,000 258,934 122,682 1,821 463,437	80,000 287,105 144,345 2,282 513,732	80,000 295,173 149,232 5,304 529,709	80,000 419,632 158,287 10,501 668,420
-			<u> </u>	Expr	ENDITURE.				
Pensions Administrat Provision Debts	for	 Bad	2,500	390,749 9,750 2	428,287 9,037	474,592 8,865	397,233 8,098 2,500	394,376 8,963 2,500	466,592 10,436 2,500
		ensions Iminis-  Re-	154,009 48,500	400,501 72,500	437,324 17,500	483,457 62,500	407,831 78,000	405,839 77,500	479,528 90,075
Total			202,509	473,001	454,824	545,957	485,831	483,339	569,603
Surplus iency		defic-	71,538	(—)28,300	()26,653	(—)82,520	27,901	46,370	98,817

<sup>\* 31</sup>st October, 1941, to 30th June, 1942.

PENSIONS.

Oil shale mine workers now (June, 1949) contribute at the rate of 3s. and coal mine workers at 4s. per week, subject to certain concessions during sickness or injury and for apprentices and juniors. Mine owners are required to contribute 3½ times the amount contributed by the workers of the mine. Changes in the rates and bases of contribution prior to 1st July, 1947, are indicated on page 56 of the Official Year Book No. 50.

Assets of the combined pension funds at 30th June, 1948, amounted to £572,929, viz., Investments—Government and municipal securities £425,000, cash £53,137, equipment £548, and sundry debtors £94,244. Liabilities consisted of sundry creditors £10,772, special reserves amounted to £443,750 and balance of revenue account was £107,152.

### GOVERNMENT SERVICE PENSIONS.

### State Government Service Pensions.

The pension funds for employees of the State Government of New South Wales are the State Superannuation Fund, the Police Superannuation and Reward Fund, and the Government Railways Superannuation Fund. These funds are maintained partly by deductions from officers' salaries and partly by grants from the public revenue.

The State Superannuation Fund for employees of the Government of New South Wales and certain governmental bodies commenced on 1st July, 1919. Originally, the fund was based upon regular compulsory contributions in equal proportions by the employing authorities and the employees, except that the cost of certain concessions in respect of officers above 30 years of age when the scheme commenced were to be met by the State Treasurer by instalments spread over a number of years. Important changes in the basis of the fund were made as from 1st July, 1929, and again in 1944, as described on page 857 of the Official Year Book No. 50.

By the amending Act of 1944, the State Superannuation Board is required to pay the amount of £1,232,069 (with interest thereon) by progressively decreasing annual instalments ending in 1953; this amount represents the balance outstanding at 30th June, 1943, of the sum of £3,832,060 of Crown contributions which, by legislation of 1929, the Board had been required to repay by 1948. The State Treasurer is to pay the sum of £3,832,000 to the fund by annual instalments of not less than £80,000, with the proviso that the amount so paid, with interest thereon, may be available for application in the future toward reducing the liability of the Government as defined in 1930.

The original principle of regular contributions by the Crown was restored in respect of additional units of pension of existing contributors and all units by new contributors as from 1st July, 1944.

Contributions by the Rural Bank, the Metropolitan and Hunter District Water, Sewerage and Drainage Boards, the Fire Commissioners, and the Commonwealth Savings Bank (in respect of former employees of the Government Savings Bank of New South Wales) continued throughout as under the original Act.

Contribution by permanent employees is compulsory, though since April, 1944, a satisfactory medical report has been a condition of acceptance of new contributors to the Fund. Unless the employee's service is terminated sooner, pension is payable and contributions cease at age 60 years or at age 55 years in the case of women who have contributed for retirement at this age.

An amending Act of 1948 raised the value of the pension unit from £26 to £32 10s, per annum as from 1st April, 1948, without additional cost per unit to the employee. The pension scale was extended from a maximum of twelve units to twenty-six units as from 1st July, 1948, thereby raising the upper limit of pension from £312 to £845 per annum. The lowest limit remained at two units. Intermediate limits were on a sliding scale according to salary.

One-half of the amount of pension of a deceased male is paid to his widow (ceasing if she remarries), and orphan pension is paid at £26 per annum for each child up to 16 years of age. The rate of orphan pension was increased from £13 to £26 per annum in April, 1944, and the cost of the increase is paid by the employer. In the case of women contributors, pension is payable in respect of the contributor only.

Refunds are made to personal representatives in respect of contributions paid by women and unmarried men who die before retirement. Similar refunds are also made in respect of widowers, subject to deduction of the value of orphan benefit for his children.

The following statement shows the scales of contributions for additional units of pension taken up by existing contributors, and for all units taken up by new contributors, as from 1st July, 1944; the original scales are illustrated in Table 749 of the 50th edition of the Year Book. The rates shown below were current in June, 1949.

Table 824.—State Superannuation Fund—Contributions	bу	Employees—
Four-weekly.		

	Age of Employee next Birthday (Years).								
Particulars.	16	19	24	34	44	54	59		
Men—	s. d.	s. d.	s. d.	s. d.	s. d.	£ s. d.	£ s. d.		
First £65 p.a. to man; or £32 10s. p.a. to widow, and £26 p.a. for each child under 16 years Subsequent increments of £65	5 2	6 2	7 10	13 2	24 0	3 12 0	22 16 2		
p.a. to man; £32 10s. p.a. to widow Women—	4 10	5 8	7 4	12 4	23 2	3 10 8	22 10 2		
Each £65 p.a. on retirement— At age 55 years 60 years	5 8 4 2	6 10 5 0	$\begin{smallmatrix}9&6\\6&10\end{smallmatrix}$	17 8 11 10	$\begin{array}{c c}40 & 2\\23 & 0\end{array}$	25 14 0 3 11 2	22 14 8		

Pensions for the police are paid from the Police Superannuation and Reward Fund, to which the police contribute at the rate of 4 per cent. of salary while in the service and 3 per cent. of pension when superannuated. Penalties imposed on members of the police force, penalties and damages awarded to the police as prosecutors, and the proceeds of the sale of unclaimed goods are paid to the fund. Contribution by employers is paid from the Road Transport and Traffic Fund in respect of police engaged in traffic duties, and the balance required to meet claims is appropriated annually from the Consolidated Revenue Fund.

Police pensions are graduated according to length of service and the rate of salary at date of retirement. The pension for men who entered the police service after 1906 and have served for 20 years or longer is one-fortieth of salary at retirement for every year of service up to a

maximum of three-quarters of such salary. Normal retiring age is 60 years, but members may be retained in the force until age 65 years. Gratuities may be paid to or on behalf of dependants of police who die while in the service.

The Government Railways Superannuation Fund was established in October, 1910, for employees in the State railway and tramway services. Employees contribute at the rate of 1½ per cent. of wages or salary, and the railway and tramway funds provide all that is necessary beyond such contributions. The amount of pension payable is one-sixtieth of the average annual salary during term of service, multiplied by the number of years of service; the maximum pension is two-thirds of the average salary.

Particulars of contributors and current pensions of the State Superannuation Fund and the Police and Railways Superannuation Funds at 30th June, 1944 to 1948 are summarized below:—

Table 825.—Government Service Pension Funds—Contributors and Pensions.

				Pensions	Current.		
At 30th June.	Contribu-	Offic	cers.	<u> </u>		To	otal.
John June.	1016.	Men.	Women.	Widows.	Children,	Number.	Amount per annuu
		STA	te Superani	NUATION FUN	ED.		£
1944 1945 1946 1947 1948	24,221 23,970 22,812 22,902 23,655	2,746 2,845 2,941 3,053 3,147	1,221 1,295 1,351 1,417 1,466	2,432 2,557 2,657 2,692 2,768	328 359 384 385 393	6,727 7,056 7,333 7,547 7,774	606,289 646,437 680,665 714,632 940,929
		Police Sui	PERANNUATIO	n and Rewa	ARD FUND.		
1944 1945 1946 1947 1948	3,483 3,382 3,747 3,869 4,111	889 933 948 1,029 1,066		84 80 83 88 88	2 2 2 4 4	975 1,015 1,033 1,121 1,154	* * * *
		Government	r Railways	SUPERANNUA	TION FUND.	•	
1944 1945 1946 1947 1948	53,170 53,371 52,820 53,574 64,375	8,9				7,418 8,424 9,536 10,448 10,863	786,463 941,116 1,119,275 1,271,242 1,353,590

<sup>\*</sup> Not available.

Contributors to the State Superannuation Fund as at 30th June, 1948, numbered 23,655, consisting of 17,465 men and 3,122 women contributing for retirement at age 60 years, and 3,068 women contributing for retirement at age 55 years. The contributory pensions in force numbered 7,434, including those in abeyance because the officers concerned had not yet retired though they had attained maturity age.

Non-contributory pensions are also payable in respect of officers who were over the age of 60 years when the Superannuation Act was brought into operation. The number current at 30th June, 1948, was 340; the beneficiaries were 62 retired officers, 277 widows, and 1 child. Of these

pensions, 260 amounting to £16,888 per annum were payable from Consolidated Revenue Fund, and 80 aggregating £5,717 per annum from funds of corporate bodies.

In addition to the pensions of which particulars are shown above, public service pensions were payable under the Civil Service Act, 1884, to 145 retired officers and to widows of 18 deceased officers at 30th June, 1948. The annual amount of these pensions was £47,671, including £848 payable by the Government of New South Wales and £5,777 by the Commonwealth to 27 retired officers who had been transferred from State to Commonwealth Service.

Special provision is made by the Government of New South Wales for pensions to judges and certain other officers; the amount paid from Consolidated Revenue Fund was £24,330 in 1946-47 and £20,472 in 1947-48.

Accumulated funds of the State Superannuation Fund amounted to £18,913,570 at 30th June, 1948, and the liability in respect of employers' contributions which are being repaid to the State Treasury was £410,690. Investments amounted to £18,618,971, including Commonwealth Government securities £6,900,947, securities guaranteed by the Government of New South Wales (other than loans to county councils) £4,505,739, securities of local governing bodies (including county councils) £6,919,284, and loans to co-operative building societies £293,001.

Particulars of the receipts and expenditure of the superannuation funds in the years ended 30th June, 1944 to 1948, are shown in the following statement:—

Table 826.—Government Service Superannuation Funds—Receipts and Expenditure.

			Receipt	ts.			Expen	diture.	
Year ended June.	Contributions.						Gratui-		Total
o une.	Em- ployees.	Em- ployers.	Interest.	Other.	Total Receipts.	Pensions.	ties and Refunds.	Other.	Expen- diture.
	£	£	£	£	£	£	£	£	£
			STATE S	UPERANN	UATION FU	ND.			
1944 1945 1946 1947 1948	502,807 516,254 528,215 609,507 691,608	540,841 574,498 626,592 753,961 1,067,887	613,946 628,584 642,978 658,767 684,161	96,741 4 1,807 4,093	1,657,655 1,816,077 1,797,789 2,024,042 2,447,749	554,019 596,488 639,950 678,417 756,429	51,904 66,271 225,469 146,522 96,570	62,726 54,362 46,121 40,407 36,995	668,649 717,121 911,540 865,346 889,994
		Por	ICE SUPER	ANNUATI	on and Ri	EWARD FU	ND.		
1944 1945 1946 1947 1948	53,277 51,660 53,714 62,852 73,579	221,000 236,000 282,215 220,742 325,278		70,546 75,826 52,708 59,535 59,473	344,823 363,486 388,637 343,129 458,330	339,974 348,502 359,401 370,342 394,879	10,190 14,118 17,474 13,467 29,780	647 854 1,102 1,342 1,440	350,811 363,474 377,977 385,151 426,099
		Gove	RNMENT F	RAILWAYS	SUPERANI	UATION F	UND.		
1944 1945 1946 1947 1948	280,700 279,992 282,652 312,889 366,819	537,164 650,776 776,136 1,036,566 1,031,333		9,071 9,519 10,340 8,548 4,496		753,366 857,949 1,009,521 1,233,085 1,313,145	69,165 79,654 106,650 121,579 84,262	4,016 2,765 2,700 3,093 3,185	826,547 940,368 1,118,871 1,857,757 1,400,592

PENSIONS.

The expenditure of the State Superannuation Fund does not include the non-contributory pensions, which are paid from Consolidated Revenue Fund, or funds of corporate bodies. Administrative expenses (included above with "other" expenditure) increased from £13,121 in 1943-44 and £15,359 in 1946-47 to £17,987 in 1947-48.

Employer contributions to the Police Superannuation and Reward Fund included payments from the Road Transport and Traffic Fund, viz., £29,615 in 1943-44 and 1945-46, £29,625 in 1944-45, £37,242 in 1946-47, and £53,278 in 1947-48; the balance in each year was paid from Consolidated Revenue.

The total subsidy paid from public revenues to the Railways Superannuation Fund up to 30th June, 1948, was £9,622,534, of which £402,650 had been provided from Consolidated Revenue, £7,114,689 from the Government Railways Fund, and £2,105,195 from the Road Transport and Tramways Funds. Since the inception of the fund, 20,448 superannuation allowances have been approved, 9,207 retired officers have died, 343 have been re-employed, and 35 allowances have been written off.

## Commonwealth Superannuation Fund.

The Superannuation Fund for employees of the Commonwealth was commenced in November, 1922. Contributions by employees are deducted from their salaries during service, and contributions by the Commonwealth as employer are paid when the officers retire on pension. Each employee contributes for a number of units, according to his salary, at a rate appropriate to his age when commencing to contribute for the units.

Concessions as to the number of units to be taken and the rate of contribution were made in respect of officers aged 30 years or over at the commencement of the scheme. Married women are not eligible to become contributors and women contributors who marry are deemed to have resigned. Employees are not admitted as new contributors unless a medical practitioner certifies that they are of sound health and free from physical defects.

Employees may contribute for retirement at age 60 or 65 years. Pension is payable when the contributor retires on or after attaining retiring age or, in cases of invalidity or incapacity, at an earlier age. Benefit for the widow of a contributor or pensioner is half the pension to which her husband was entitled. Orphan benefit in respect of children under 16 years of age is £13 per anum or, where the children lose both parents, £26.

In the event of retrenchment after more than ten years' service, a contributor is entitled to receive a lump sum or pension which is the actuarial equivalent of contributions paid by him and an appropriate amount to represent employer contributions. Where service is terminated by resignation, discharge or dismissal, the contributor receives a refund of the contributions paid by him.

In 1937 a Provident Account was created as part of the Superannuation Fund for the benefit of employees ineligible to contribute to the fund owing to physical disability or failure to pass the prescribed medical examination. Certain employees may elect to contribute to either Superannuation Fund or Provident Account, viz., those whose contribution for the first two units of pension would be at a rate exceeding the rate prescribed for age 45 years and would exceed the rate of contribution to the fund, which is equivalent to 5 per cent. of salary.

Benefit from the Provident Account on retirement or on retrenchment after service of ten years or more is a sum equal to twice the amount contributed, with compound interest thereon at the rate of 3 per cent. per annum, but not less than an amount equal to six months' salary. On the death before retirement of a male contributor to the account, benefit is paid to his widow, or, if he is not survived by a widow, his children under 16 years of age. Upon resignation, dismissal or discharge, a contributor receives an amount equal to his contributions with compound interest at 3 per cent. Similar benefit is payable to personal representatives upon the death of a contributor without dependants.

In June, 1947, the value of the pension unit was raised from £26 to £32 10s., without increase in the scale of contributions by employees. Existing pensions were increased by 25 per cent. Certain addition to pension on actual retirement is prescribed in respect of employees who have contributed for retirement at age 60 years, but continue in the service of the Commonwealth after that age. Payments from the Provident Account, as from June, 1947, were increased by 25 per cent. and, subject to certain conditions, a retrospective adjustment was made in the case of contributors to the account who had already retired. The pension scale was extended from 16 to 26 units (£845) and provision was made for payment of Commonwealth subsidy to the fund if the average interest yield on its investments fall below 3¾ per cent, in any year.

At 30th June, 1948, contributors to the Commonwealth Superannuation Fund numbered 49,789 and contributors to the Provident Account 4,977; the number of pensions in force was 10,786. In the year 1947-48, contributions to the Superannuation Fund amounted to £1,357,572, and interest to £554,439; the amount of pensions paid was £1,392,901, viz., £346,586 from the Superannuation Account and £1,046,315 from Consolidated Revenue Fund; refunds of contributions were £178,586. Contributions to the Provident Account amounted to £97,040 and benefits paid to £53,046, including £39,139 paid from the Consolidated Revenue Fund; refunds of contributions were £5,253.

## Defence Forces Retiring Benefits.

The Defence Forces Retirement Benefits Act, 1948, came into operation on 2nd July, 1948, replacing the existing provisions for retirement benefits for members of the permanent Navy, Army, and Air Force, with a uniform and improved scheme of retirement benefits. It is administered by the Defence Forces Retirement Benefits Board, consisting of a representative of each of the three Services, the President of the Commonwealth Superannuation Board (chairman), the Commonwealth Actuary, and a representative of the Treasury.

The scheme follows, as nearly as practicable, the provisions of the Superannuation Act applicable to the Commonwealth Public Service, but makes provision for compensation for the earlier ages at which members of the armed services are retired, and ensures that all members on long-term engagements are covered for death or invalidity during their service, with pensions for widows and dependent children should the member die during his service or after retirement. Special provisions are made for payment of gratuities to personnel whose service falls short of the qualifying period for pension, and the amount of gratuity is greater if the ex-member agrees to serve on the reserve.

PENSIONS.

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Contributions are paid into and benefits are met from the Defence Forces Retirement Benefits Fund. The rates of contribution by members are the same as those of the Commonwealth public service to the Superannuation Fund (see page 951), and are related to the member's rank and daily rate of pay, but because of the earlier ages of retirement from the forces, the Government contributes a greater proportion of the costs of benefits than under the public service superannuation scheme. Rates of pension after 20 years' service range from £95 per annum for an Able Seaman, Private or Aircraftsman, 1st Class, and £200 per annum for a Lieutenant (Army) or Flying Officer to £845 per annum for a Vice- or Rear-Admiral, Lieutenant-General, or Air Marshal. Pensions of members other than officers are increased by amounts of £6 to £8 per annum for each year of service in excess of 20 years. On retirement, officers who have had 15 but less than 20 years' service are entitled to pensions at a reduced rate; those with ten but less than 15 years' service are entitled to a refund of their contributions plus a gratuity equal to 1½ times the amount of those contributions, and those with less than 10 years' service, to a refund of their contributions.

## Local Government Services—Superannuation.

A superannuation scheme for permanent employees of municipalities and shires was brought into operation in April, 1928, in terms of the Local Government (Superannuation) Act, 1927. Inspectors of Stock, attached to Pastures Protection Boards, have been brought within its scope. It provides for compulsory endowment insurance with approved societies. The policies mature at age 65 or previous death, and the premiums are payable by the councils and the employees at prescribed rates. There is also a provident fund formed by contributions from councils and employees for those who are debarred from insurance on account of age or other circumstances. The scale of compulsory cover ranges from £200 to £1,000 according to age and salary.

The following statement shows the number of employees covered by the assurance and the provident fund provisions, with particulars of the assurance cover (including premiums) intact and the accumulated funds of the provident account at 31st March of each of the last five years:—

Table 827.—Local Government Superannuation—Assurances and Provident Fund.

		Assurances,		Provident Fund.			
At 31st March.	Employees Covered.	Assurances (including Premiums) Intact.	Average Assurance Cover per Employee,	Contributors.	Accumulated Funds.	Average Funds per Contributor.	
1944 1945 1946 1947 1948	No. 6,070 6,158 6,356 7,103 8,005	£ 3,879,500 3,959,876 4,149,791 4,574,695 5,321,787	£ 639 643 653 644 664	No. 1,493 1,725 1,929 2,709 3,217	£ 121,430 148,757 161,777 183,964 240,809	£ 83 86 83 68 74	

During the year ended 31st March, 1948, death and retirement benefit payments under the two schemes amounted to £99,111, comprising 49 death benefits, £18,669, and 787 retirement benefits, £80,442. In the twenty years since inception of the schemes, benefits totalling £906,210 were paid, made

up of £259,757 for 549 death benefits, and £646,453 to 5,114 employees upon cessation of employment. Brief details for the year and the twenty years ended 31st March, 1948, are appended:—

Table 828.—Local Government Superannuation—Death and Retirement Benefits.

Year ended	Death 1	Benefits.	Retiremen	t Benefits.	Total Benefits,		
31st March.	Number.	Amount.	Number.	Amount.	Number.	Amount.	
		£		£		£	
		Assur	ANCE BENEFITS	SCHEME.			
1948 1919–48	29 376	17,587 225,987	348 2,640	32,843 258,264	377 3,016	50,430 484,251	
		PROVIDEN	T FUND BENEF	ITS SCHEME,			
1948 1919–48	20 173	1,082 33,770	439 2,474	47,599 388,189	459 2,647	48,681 421,959	

# PUBLIC HEALTH

Health services in New South Wales are administered by Commonwealth, State and local government authorities. There are State Government institutions and public and private hospitals for the treatment of sickness, State and private institutions for the mentally afflicted, and repatriation hospitals for ex-service personnel who suffer war-caused injuries or illness. In recent years the Commonwealth Government has provided general hospital benefits, and given financial assistance to State Governments to improve the control and treatment of tuberculosis.

In local areas, municipal and shire councils administer ordinances under the Local Government Act as to hygiene and sanitation. There is compulsory notification of infectious diseases, and the Commonwealth maintains a strict system of quarantine to prevent the introduction of diseases from beyond Australia. The Pure Foods Act prescribes standards for the quality and purity of food products, and the manufacture and supply of poisons and drugs is regulated under a licensing system. Medical practitioners, pharmacists, etc., must be registered before engaging in their professions.

## DEPARTMENTS OF HEALTH-STATE AND COMMONWEALTH.

The Department of Public Health of New South Wales is organised in two branches, one directed by the Board of Health and the other by the Director-General of Public Health. The Board is the central executive and administrative authority. It consists of ten members (including four legally qualified medical practitioners), all being nominated by the Government; the Director-General, who is one of the medical practitioners and a permanent salaried officer of the Government, is ex officio President. The Board acts in an advisory capacity towards the Minister for Health and the Government, and exercises general supervision in regard to public health matters. The Director-General controls the State medical services and the State institutions for the treatment of the sick and infirm.

In the Department there are divisions for maternal and baby welfare, social hygiene, tuberculosis, industrial hygiene, laboratories, sanitation, and pure food, each in charge of a specially qualified officer.

Public hospital services are supervised by the Hospitals Commission under the presidency of the Minister for Health, and there is a school medical service.

The Commonwealth Department of Health administers quarantine services and conducts research into matters affecting public hygiene. It controls the Australian Institute of Anatomy at Cauberra, serum laboratories, an X-ray and radium laboratory in Victoria, and health laboratories in various localities throughout the Commonwealth, and in association with the University of Sydney, it conducts the School of Public Health and Tropical Medicine at the University.

The National Health and Medical Research Council of Australia coordinates the work of the Commonwealth and the various State health services; it consists of the principal Government health officers in Australia. The Council advises the Commonwealth and State Governments on health questions generally, and devises measures for co-operation and for uniformity in health legislation and administration.

Medical research in Australia is conducted in association with international research organisations. Annual Cancer Conferences were initiated in 1928, and radium for research and treatment has been acquired by the Commonwealth.

The Medical Research Endowment Fund was established by the Commonwealth in 1937 to promote medical research. It is administered by the National Health and Medical Research Council.

## NATIONAL HEALTH SERVICE.

Provision for the establishment of a national health service has been made by the Commonwealth Government by the National Health Service Act, 1948. Under this Act, the Government may establish a medical benefit scheme under which it would pay to participating medical practitioners a proportion of their patients' fees.

The Director-General of Health is to administer the provisions of the Act, subject to the direction of the Minister. He may delegate his powers in certain respects and may establish advisory committees to serve as links between the professions and the administration. He is to arrange for the provision of prescribed medical and dental services, including consultative, specialist, ophthalmic, therapeutic and nursing, as well as general practitioner services, and is to prepare and publish a list of medical practitioners and dentists to be recognised as specialists or consultants.

The Act authorises the Director-General to arrange for the establishment of hospitals, laboratories, health ceutres and clinics; for training and research (including payments to universities) in medicine, dentistry and nursing; for the encouragement of group practice by medical and dental practitioners; and for the dissemination of information relating to health and the prevention of disease. He may arrange for the manufacture, by the Commonwealth or otherwise, of medical and dental supplies, appliances and equipment, including visual and hearing aids. Arrangements may be made with the States to provide health services and premises and equipment with financial assistance from the Commonwealth, or for the latter to take over State and other services.

The costs of the national health service, other than those of a capital nature and administrative expenses, are to be met from the National Welfare Fund.

Up to 30th June, 1949, the scheme had not been put into effect, and no expenditure had been debited to the National Welfare Fund.

## GOVERNMENT EXPENDITURE ON HEALTH AND HOSPITALS, ETC.

The expenditure from revenue by State and Commonwealth Governments on health and related services in New South Wales is shown below. The statement does not include the expenditure of the Commonwealth in administration of its health services and upon medical treatment of ex-service personnel in repatriation hospitals, etc. It also excludes expenditure from and capital charges on loans, e.g., on works such as hospital buildings.

Payments by the Commonwealth to the State for public hospital benefits (see page 964) are classified as Commonwealth expenditure.

Table 829.—Government Expenditure on Public Health in New South Wales.\*

Expenditure from Revenue.	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.
BY STATE ON-	£.	£	£	£	£
Government hospitals, Subsidies to hospitals, etc	1,160,640	2,252,386	2,760,670	2,934,945†	4,489,003†
Mental hospitals and like institutions	809,705	975,759	1,049,004	1,212,721	1,468,562
Baby health centres and maternity homes etc	70,476	95,821	99,368	95,436	105,228
Inspection of food, dairies, etc	18,007	22,438	37,257	26,451	28,121
Medical examination and health of school children	1 . 37,540	101,363	118,258	130,415	149,035
Administration, medical services, etc	. 171,395	308,473	297,031	363,001	327,044
Hospitals (from profits of Government Insurance Office)	t	25,638	54,727	70,676	61,962
Silicosis Commission, etc	. 523	37,017	20,000	20,000	20,000
Encouragement of National Fitness		21,751	18,200	19,182	22,874
Total	2,268,286	3,840,646	4,454,515	4,872,827†	6,671,820
BY COMMONWEALTH ON-					
Matermity allowances	167,710	983,453	966,967	1,154,674	1,089,449
Hospital and Tuberculosis benefits			14,841	1,473,200	1,639,260
Total	167,710	983,453	981,808	2,627,874	2,728,709
Grand Total in New South Wales *	2,435,996	4,824,099	5,436,323	7,500,701	9,400,538
Expenditure per head of population in New South Wales	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.

<sup>\*</sup> Including Australian Capital Territory in respect of expenditure by the Commonwealth.

The table reveals that in 1947-48, governmental expenditure in the interests of public health was three and a half times as great as in 1938-39. State Government expenditure has mounted notwithstanding the marked

<sup>†</sup> Exclusive of £1,058,000 in 1946-47 and £1,210,000 in 1947-48 advanced by Commonwealth under Hospital Benefits Act (see page 964); these amounts are included in expenditure by the Commonwealth.

increase in the amount provided by the Commonwealth for health services. The latter has arisen partly from the new objects (hospital benefit, etc.), and partly from the removal of the means test and an increase in rates in respect of maternity allowances in July, 1943.

The expenditure of the State is mainly from the Consolidated Revenue Fund, but since 1942-43 an annual allocation has been made from the profits of the Government Insurance Office for the improvement and extension of hospital facilities. The Commonwealth expenditure shown in the table is met from the National Welfare Fund, particulars regarding which are given on page 908 of this volume.

### NATIONAL FITNESS.

A movement for the advancement of national fitness, particularly the fitness of young persons, is fostered in New South Wales by the activities of a State Council for Physical Fitness under the presidency of the Minister for Education. Similar bodies have been formed in the other Australian States, and there is a Commonwealth body which allocates Commonwealth grants for the encouragement of the movement.

## TREATMENT OF SICKNESS.

Institutions for the treatment of sickness and disease are private hospitals, which are owned by private persons and conducted as business enterprises; public hospitals, which are maintained by the State, or by the people resident in the districts in which the hospitals are located, with the assistance of subsidy from the public funds, or by charitable organisations; repatriation hospitals, maintained by the Commonwealth for the treatment of ex-service personnel in certain circumstances; special hospitals, State and private, for the treatment of mental and nervous ailments; and a State lazaret.

The State exercises a measure of supervision over the practice of professional persons engaged in the treatment of sickness and disease. Medical practitioners, deutists, pharmacists, optometrists and, since November, 1946, physiotherapists are required to register with a board established for each profession under statutory authority.

The number of registered medical practitioners, dentists, pharmacists and optometrists at the end of various years since 1929 is shown below:—

Table 830.—Medical Practitioners, Dentists, Pharmacists and Optometrists on Register at 31st December.

Year,	Medical Prac- titioners.	Dentists.	Pharma- cists.	Optom- etrists.	Year.	Medical Prac- titioners.	Dentists.	Pharma- cists.	Optom- etrists.
1929	3,124	1,416	1,843	*	1943	4,003	1,431	1,877	549
1932	3,179	1,415	1,889	645	1944	4,101	1,452	1,872	548
1939	3,598	1,495	2,281	598	1945	4,207	1,445	1,892	554
1940	3,558	1,483	2,327	583	1946	4,335	1,483	1,981	551
1941	3,744	1,455	2,383	557	1947	4,589	1,470	2,027	543
1942	3,899	1,447	2,231	554	1948	4,691	1,479	2,058	538
	1	1		'	II.		'	' .	

<sup>\*</sup> Not registered.

The number of physiotherapists on the register at 31st December was 420 in 1947 and 461 in 1948.

Medical practitioners registered at 31st December, 1948, numbered 4,691, of whom 3,317 were resident in New South Wales, viz., 2,407 in Sydney and suburbs and 910 in country districts.

In December, 1948, a number of persons (other than pharmacists) were licensed to deal in or manufacture drugs, etc., as follows: 340 to deal in poisons, 28 to manufacture and distribute opium and other dangerous drugs, and 95 to distribute such drugs.

Nurses are required to register in terms of the Nurses Registration Act, 1924, and amendments. Four classes of nurses may be registered, viz., general, mental, midwifery and infauts'. In the case of midwifery nurses, registration must be renewed annually.

Information is not available as to the actual number of registered nurses, as many are registered under more than one classification. Moreover, provision is not made for recording all exits by reason of death, departure from New South Wales or other causes, and many who are registered are no longer engaged in nursing. The number of new registrations of the various classes of nurses in each year 1938 to 1948 is shown below:—

Year.	General.	Mid- wifery.	Mental.	Infants'.	Year.	General.	Mid- wifery.	Mental.	Infants'.
1938	753	311	61	6	1944	736	382	69	7
1939	794	305	72	9	1945	888	399	78	1
1940	770	279	70	10	1946	974	372	62	
1941	792	307	63	4	1947	1,053	611	58	2
1942	888	309	43	7	1948	1,116	618	57	11
1943	780	325	67	8					

Table 831.—Nurses—New Registrations During Year.

New registrations in any year include some nurses who were registered under another classification in an earlier year.

For the treatment of sickness and accident in sparsely populated districts, the Government subsidises medical practitioners with a view to encouraging them to practise in outlying bush settlements. Subsidies amounted to £13,347 in 1946-47 and to £16,328 in 1947-48.

Aerial medical services, subsidised by the Commonwealth and State, are provided at a number of inland centres in Australia including Broken Hill (see page 577), and two organisations, the Bush Nursing Association and the Country Women's Association, make provision for nurses in country localities and maintain cottage homes in a number of remote localities. The District Nursing Association engages nurses to visit the sick, gratuitously if needed, in the metropolitan district.

The Australian Red Cross Society conducts a number of convalescent homes, sanatoria, etc., in New South Wales. In recent years it has organised a blood transfusion service which has contributed greatly to the saving of life in casualty cases and in other emergencies. It was organised in March, 1941, as part of the National Emergency Organisation, and functioned during the war in the supply of blood in the South-West Pacific

Area for Australian and Allied forces and for local civilian needs. Since the cessation of hostilities, the service has been available to civilian hospitals and medical practitioners. No charge is made for blood supplied by the service.

From March, 1941 to May, 1949, donations of blood at the Sydney Centre numbered approximately 324,000; at 31st May, 1949, over 23,000 persons were voluntarily enrolled as active blood donors, excluding about 9,000 donors enrolled with 111 emergency blood donor panels in country centres in the State.

The St. John Ambulance Brigade (New South Wales District) was established in 1903. It is a voluntary and unpaid organisation which provides first aid services on sports grounds, at pleasure resorts, places of entertainment, public gatherings, and in emergencies generally. Inclusive of the nursing division, members numbered 3,013 at 31st December, 1948. The Brigade treated 159,397 persons for accidents, etc., in 1948.

The State Government assists a number of these organisations financially; grants provided in 1947-48 included £2,000 to the Bush Nursing Association ,£6,000 to the Red Cross Society for sanatoria, and £500 to the St. John Ambulance Brigade.

Ambulance transport services for sick and injured persons are controlled by a Board, incorporated in 1919. The Board delimits certain districts for administrative purposes, and in each district a committee is elected annually by the contributors to its funds. The Board receives an annual grant, as appropriated from Consolidated Revenue, for the services; the amount was £55,000 in 1947-48. The number of cases transported and the mileage travelled in recent years were as follows: 325,649 cases, 3,753,333 miles in 1946-47, and 337,849 cases, 4,011,433 miles in 1947-48.

#### HOSPITAL SERVICES.

#### PRIVATE HOSPITALS.

In New South Wales a private hospital may be conducted only under license issued annually in accordance with the Private Hospitals Act, which prescribes that every private hospital must be under the direct control of a person approved by the Board of Health. Licensees are required to comply with regulations as to structure, management and inspection.

The classification of the private hospitals in New South Wales and their accommodation, according to the nature of the cases received, are shown in the following statement:—

		Number of	Hospitals.		Number of Beds.				
At 31st December.	Medical, Surgical, and Lying-in,	Medical and Surgical,	Lying- in.	Total.	Medical, Surgical, and Lying-in.	Medical and Surgical,	Lying- in.	Total.	
1939	258	51	228	537	3,286	989	979	5,254	
1944	187	50	151	388	2,467	1,000	736	4,203	
1945	178	52	134	364	2,438	1,005	663	4,106	
1946	173	55	120	348	2,391	1,036	599	4,026	
1947	154	62	94	310	2,192	1,076	506	3,774	

Table 832.—Private Hospitals—Number and Accommodation.

The number of private hospitals has declined in each year since 1939, when there were 537 with 5,254 beds, viz., 203 with 2,939 beds in Sydney, and 334 containing 2,315 beds in other localities. In 1947 there were 141 private hospitals with 2,520 beds in Sydney and 169 with 1,254 beds in other districts.

#### Public Hospitals.

Institutions for the care of the sick are classed as public hospitals, unless they are owned and maintained entirely by private persons. Some are maintained wholly by the State, viz., a convalescent hospital in the metropolitan area, the Sanatorium for Consumptives at Waterfall, the David Berry Hospital at Berry, and the hospitals attached to the homes for the infirm (see page 917). Hospitals conducted by the Commonwealth Department of Repatriation are not classified as public hospitals.

Some of the public hospitals are under the ægis of religious denominations, and are conducted by religious communities who own the establishments or by committees nominated by subscribers.

The Public Hospitals Act, 1929-1943, provides for the systematic organisation of the public hospital services. The Act is administered by the Hospitals Commission, as reconstituted in terms of an amending Act passed in December, 1943. It consists of three full-time members, including the chairman, appointed by the Governor for a term of seven years and, remunerated by annual salary.

The public hospitals and organisations which provide district and bush nursing services and aerial medical services are classified in two main groups, according to the schedules of the Public Hospitals Act. One group, termed the "incorporated hospitals," consists entirely of suburban and country hospitals incorporated by the Act. The second group, known as "separate institutions," includes the large general hospitals in or around the metropolis; the hospitals of the Benevolent Society of New South Wales and the Australian Red Cross Society; the hospitals for children, tubercular cases, convalescents or incurables; the dental hospital; the hospitals conducted by religious organisations; and the Australian Aerial Medical Services (New South Wales section).

Each incorporated hospital is managed by a board of between nine and twelve directors appointed by the Government. At a few of these hospitals, which conduct contribution schemes for outpatients, between five and seven of the directors are elected triennially.

The Hospitals Commission determines which hospitals shall be subsidised, and the amount of subsidy to be paid to each institution; it also has power to establish new hospitals and to close down or amalgamate existing hospitals.

Prior to the introduction of the Hospital Benefits Scheme (see page 964), public hospitals were required to provide treatment, medicines, etc., for necessitous persons, but other patients might be charged a reasonable sum for hospital services, and such sum was recoverable in the courts of law. While the Hospital Benefits Agreement with the Commonwealth is in force, the public hospitals concerned may not charge fees for treatment of qualified persons in public wards, and charges in non-public wards must be reduced by the amount of benefit.

If authorised by the Commission, portion of a public hospital may be set aside for paying patients, who may contract for private or intermediate accommodation. At 30th June, 1949, the number of beds in public hospitals included 14,142 in public wards, 1,131 for private and 2,564 for intermediate patients.

Special facilities for dental treatment are provided at the Dental Hospital, Sydney, and at other public hospitals in Sydney and Newcastle, and by dental clinics which are transported by train through country districts.

Particulars relating to the accommodation provided in hospitals under the supervision of the Hospitals Commission and the number of patients treated are shown below:—

Table 833.-Public Hospitals-Accommodation and Patients.

Year ended		Beds	Patients tr Hos <sub>l</sub>		Out-Patients.		
June.	Hospitals.	Available.	Bables born.	Other,	Number.	Attendances.	
1939	208	14,246	13,218	237,326	605,700	1,772,299	
1940	210	14,972	15,089	249,854	595,325	1,819,984	
1941	209	15,688	17,530	264,509	618,199	1,895,581	
1942	213	16,111	20,169	258,592	587,976	1,778,545	
1943	212	16,112	21,254	270,215	590,554	1,764,512	
1944	214	16,820	24,937	280,372	598,489	1,823,422	
1945	218	16,953	28,600	295,671	635,960	1,985,196	
1946	223	17,340	30,587	294,586	678,408	2,048,737	
1947	227	17,235	36,745	298,031	735,249	2,132,878	
1948	238	17,680	38,855	317,475	823,084	<b>2,365,</b> 877	
1949	254	17,837	41,890	338,234	865,803	2,375,145	

In addition to the accommodation provided by public hospitals to which the foregoing particulars relate, beds in the State hospitals, viz., those at the homes for the infirm (see page 917), the Waterfall Sanatorium and auxiliary hospital at Randwick, and the David Berry Hospital, numbered 2,069 in 1946 and 2,038 in 1947. The average number of beds occupied per day in these institutions was 1,729 and 1,570, and the number of patients treated was 5,023 and 5,027 in the respective years.

## Income and Expenditure of Public Hospitals.

Particulars relating to the income and expenditure for maintenance of the public hospitals during the eleven years ended June, 1949, are shown below. Income and expenditure of State institutions are not included:—

Table 834.-Public Hospitals-Income and Expenditure.

		anie	654.——I u	Dife 110spi	ta18-	-11100	ine an	U. 1	rpenditui	
					Inco	me for M	[aintenar	ice.		
	Year ended June.		State Ald for Mainten- ance.	for tlons Cainten and		Patients' Fees.		atic bu-	. Other.	Total Income for Maintenance,
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949	040 041 042 043 044 045 046 047		£ 1,029,774 1,035,753 1,140,345 1,347,777 1,363,013 1,453,117 1,728,897 2,083,694 3,764,996* 5,391,839* 6,700,222*	£ 163,869 183,583 197,802 192,943 193,439 238,887 241,931 233,778 223,702 176,809 146,627	£ 578,343 657,972 813,641 841,987 986,302 1,106,779 1,200,768 1,236,655 946,222 1,133,863 1,387,067		£ 363,788 375,886 393,677 466,281 525,982 586,214 630,747 623,114		£ 80,42; 88,38( 103,82; 102,22; 135,738 120,38; 122,22; 139,19( 135,83; 173,768	3 2,341,580 7 2,649,292 5 2,951,213 3 3,204,474 7 3,924,560 0 4,316,431 0 5,070,759 6 6,876,279
				:	Maintenance Expenditure.					
			Salaries and Wages.	and Drugs, F		Fuel, Expe		B	enewals and tenova- tions.	Total.
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949			£ 1,196,490 1,284,726 1,373,252 1,519,322 1,723,329 1,977,347 2,189,375 2,510,800 3,068,642 4,278,501 5,328,182	758,8 804,9 880,1 949,7 1,049,7 1,210,2 1,354,4 1,506,5	£ 718,539 758,832 804,954 880,178 949,743 1,049,763 1,210,241 1,354,457 1,506,534 1,873,111 2,329,986		£ 276,535 299,122 315,257 319,057 346,249 372,362 400,482 407,219 475,812 540,179 627,153		£ 91,190 89,259 105,489 123,655 136,228 171,147 173,872 186,948 213,511 236,568 300,270	£ 2,282,754 2,431,939 2,598,962 2,842,212 3,155,549 3,570,619 3,973,970 4,459,424 5,264,499 6,928,359 8,585,591

<sup>\*</sup> Including Commonwealth Hospital Benefits disbursed by the State.

The amounts shown above are exclusive of loan receipts and loan expenditure.

#### REPATRIATION HOSPITALS.

In accordance with provisions of the Australian Soldiers' Repatriation Act, 1920-47, free medical and surgical treatment is provided by the Repatriation Commission for ex-service personnel in respect of disabilities accepted as attributable to or aggravated by war service. Any member of the forces suffering from pulmonary tuberculosis, irrespective of whether he served or did not serve in a theatre of war and irrespective of the origin of the disease, is entitled to medical treatment. In certain circumstances, specified dependants of ex-service personnel are eligible for similar treatment.

The hospitals conducted in New South Wales by the Repatriation Commission are the Repatriation General Hospital at Concord, the Prince of Wales Auxiliary Hospital at Randwick, and the Lady Davidson Home at Turramurra. In addition, there is a Repatriation Block at the Callan Park Mental Hospital. The Repatriation General Hospital is a modern multiple-story structure, supplemented by pavilion wards. It was built during the war (1939-45) and used as the 113th Australian General Hospital by the Army and was transferred to the complete administrative control of the Commission on 17th March, 1947. Out-patients as well as in-patients are treated at the repatriation hospitals.

The Commission's local medical officer scheme, operated with the cooperation of the British Medical Association, enables ex-service personnel to be treated by the doctor chosen by them from an area panel, thereby avoiding the loss of working time and inconvenience of attendance at outpatients' clinics. For treatment of a nature which cannot be provided by a local medical officer, clinics have been established to provide heat-ray therapy, massage, etc., and for consultation with specialist medical officers.

#### HOSPITAL BENEFITS.

### Hospital Contribution Funds.

The Hospitals Contribution Fund of New South Wales provides certain hospital benefits on a contributory basis in respect of treatment in public and licensed private hospitals.

The fund originated in 1932 as the Metropolitan Hospitals Contribution Fund as a joint scheme for hospitals in the metropolitan district. Systematic contribution schemes were also organised in connection with a number of country hospitals. In view of the introduction of the Commonwealth hospital benefits scheme (see below), the country funds were terminated on 30th June, 1946, and the scope of the Metropolitan Fund was extended to cover the whole State.

The rate of contribution to the Fund is 6d. per week for the contributor and his wife and children under 17 years of age, or 3d. for single minors, single women or widows. The maximum period of benefit in any twelve months is 70 days. Under certain conditions, members may contribute at double rates for higher benefit available to persons under 65 years of age. Persons over age 65 years are not admitted as new members.

Details regarding the operations of the Fund during the ten years ended June, 1939 to 1948, are shown in the following statement:—

Year ended 30th June.	Benefits Granted to Con- tributors.	Income.	Payments to Hospitals and Claimants.	Adminis- trative Expenses.	Year ended 30th June,	Benefits Granted to Con- tributors.	Income.	Payments to Hospitals and Claimants.	Adminis- trative Expenses.
1939 1940 1941 1942 1943	No. 50,561 55,065 58,808 60,095 64,694	£ 288,211 320,324 331,554 364,181 386,720	£ 252,579 272,514 298,247 300,621 338,808	£ 28,133 30,530 31,840 37,198 42,292	1944 1945 1946 1947 1948	No. 74,490 81,846 82,827 88,145 89,985	£ 422,156 440,549 452,898 520,542 529,198	£ 377,230 414,665 427,992 394,325 441,761	£ 44,431 46,190 49,576 61,960 64,807

Table 835.—Hospitals Contribution Fund of New South Wales.\*

<sup>\*</sup> Metropolitan Hospitals Contribution Fund to 30th June, 1946.

# Commonwealth Hospital Benefits.

In terms of the Hospital Benefits Act, 1945, passed by the Commonwealth Parliament in October, 1945, persons ordinarily resident in Australia at time of admission to a public or approved private hospital are eligible for hospital benefit. As from 1st July, 1946, the benefit was extended, under certain conditions, to Australian residents temporarily abroad and their dependants.

Benefit in respect of patients in public hospitals, including State hospitals, is provided under agreement between the Commonwealth and the State. In New South Wales the agreement and its amendment in 1948-49 were authorised by the Hospitals Benefits Agreement Acts, 1946 and 1949. From 1st July, 1946, the Commonwealth made payments to the State in respect of beds occupied by qualified persons in public hospitals at the rate of 6s. per day per occupied bed. The amended agreement increased the rate to 8s. per day as from 1st July, 1948. The State undertook that patients in public wards would receive free treatment, without the application of a means test, and that charges payable by patients in non-public wards would be reduced by an amount equivalent to the rate of payment by the Commonwealth.

Under the original agreement, charges payable by qualified patients in private hospitals or the intermediate and private wards of public hospitals were not to be increased above the rates current at 1st September, 1945, without approval of the Commonwealth. Charges in public hospitals were doubled from 1st January, 1948, with the concurrence of the Commonwealth, and many private hospitals have had individual applications for increases approved. As previously, no charge is payable by qualified patients in public wards of public hospitals.

Under the benefits scheme for patients in public hospitals in New South Wales the State received from the Commonwealth, in terms of the agreement, tentative advances for maintenance and capital expenditure amounting to £1,340,000 in 1946-47 and £1,330,000 in 1947-48. The aggregate amount of £2,670,000 was distributed as follows:—

- (a) Consolidated Revenue Fund of New South Wales, £2,268,000;
- (b) Trust Fund for subsequent capital expenditure, £391,706 (no expenditure had been made from the Fund to 30th June, 1948); and
- (c) Special Deposits Account, £10,294 (this amount is the unallocated balance pending finalisation of claims for 1947-48).

The greater part of the amount paid into the Consolidated Revenue Fund of New South Wales is used by the State Government to supplement moneys made available to the Hospitals Commission of New South Wales for subsidies to public hospitals to assist in meeting maintenance expenses. The amount of the annual subsidy paid to each public hospital is determined by the Commission.

Benefit is provided by the Commonwealth in respect of patients in approved private hospitals in accordance with regulations under the Hospital Benefits Act. The amount of benefit (current in June, 1949) at the rate of 8s. per day (6s. per day prior to 1st November, 1948) is deducted from the accounts rendered to patients and is paid to the proprietors by the Commonwealth Department of Health. Approval or renewal of approval of a private hospital may be granted by the Commonwealth Minister for Health, upon application by the proprietor, for a period not exceeding a year, and may be revoked at any time.

Benefits commenced in approved private hospitals on 18th February, 1946. The proportion of registered private hospitals approved under the scheme has increased each year; approximately 95 per cent. of the total number of private hospitals were participating at 30th June, 1948. Payments by the Commonwealth to private hospitals in New South Wales amounted to £14,841 in 1945-46, £124,983 in 1946-47, and £266,580 in 1947-48.

### MEDICAL BENEFITS FUND.

A scheme of medical benefits, the Medical Benefits Fund of New South Wales Limited, sponsored by the British Medical Association, was initiated in August, 1947.

Benefits are provided for contributors and eligible dependants in respect of the cost of treatment by registered medical practitioners in private practice. Persons over 65 years of age are not admitted as contributors, and membership ceases at age 65 years unless the member has contributed for five consecutive years before attaining that age. The weekly rate of contribution is 1s. for single persons under 21 years of age; 1s. 6d. for unmarried adults and widowed persons without dependants; and 3s. for widowed persons with dependants and for married persons. Dependants are husband or wife and children under 17 years of age.

Benefits include payments towards fees for general practitioner services up to £15 15s. for any person in a year, at the rate of 7s. 6d. for each attendance, or, if in a consultative capacity, £1 1s. or £1 11s. 6d. per consultation. Benefits are also provided for specialist services, surgical treatment, obstetric treatment, physiotherapy, diagnostic services and anaesthetists' fees.

Administrative work for the collection of contributions and payment of benefits is undertaken by the Hospitals Contribution Fund of New South Wales described above.

# PHARMACEUTICAL BENEFITS.

Legislation was passed by the Commonwealth Parliament in 1944 and 1945 to make provision for pharmaceutical benefits, but was declared by the High Court of Australia to be invalid on constitutional grounds. Following a referendum on 28th September, 1946, Commonwealth powers in respect of social services were enlarged, and the Pharmaceutical Benefits Act was re-enacted with amendment in June, 1947. The Act commenced on 1st June, 1948, and was amended again in March, 1949.

In terms of the Act, medicines and certain materials and appliances listed in a prescribed formulary may be prescribed by a medical practitioner only on an official prescription form, and thereupon are to be available free of charge. The cost of the benefits is to be a charge on the National Welfare Fund. The suppliers are to be paid by the Commonwealth.

As a result of dissatisfaction with certain aspects of the scheme by the medical profession, expenditure from the National Welfare Fund on prescriptions dispensed in Australia in 1948-49 was only £66,267. On 7th October, 1949, the High Court of Australia declared that the Commonwealth had no power to compel doctors to use the official form of prescription.

Pharmaceutical benefit is not provided under the Act in respect of patients in public wards of public hospitals, who are receiving free treatment in terms of the Hospital Benefits Act, but benefit at the rate of 10d.

per day is paid to these hospitals in respect of in-patients in non-public wards. In respect of registered out-patients, benefit paid to public hospitals is 3s. 3d. for each period of registration. Expenditure from the National Welfare Fund in respect of patients of public hospitals in Australia in 1948-49 was £82,770.

### TREATMENT OF COMMUNICABLE DISEASES.

Within the State, the Board of Health is vested with authority to make provision for the treatment and prevention of infectious diseases. The Commonwealth Government is responsible for the administration of the quarantine laws in respect of vessels, aircraft, persons, and goods arriving from oversea ports.

Cases of leprosy, bubonic plague, smallpox, scarlet fever, typhoid fever, diphtheria, infantile paralysis, epidemic cerebro-spinal fever (meningococcal meningitis), puerperal infection, typhus fever, yellow fever, cholera, pulmonary tuberculosis, encephalitis lethargica, anthrax and undulant fever, must be notified to the Board of Health.

The following table shows the notifications of various diseases from 1937 to 1947. Notifications in New South Wales of leprosy, bubonic plague, anthrax, smallpox, cholera, yellow fever or undulant fever, are very rare, and such cases are not included in the statement. Particulars of deaths and death rates are shown in the chapter "Vital Statistics."

Year.	Typhus Fever.	Typhoid Fever.	Scarlet Fever,	Diph- theria.	Pulmon- ary Tuber- eulosis.	Infantile Paralysis.	Epidemic Cerebro- Spinal Fever.	Enceph- alitis Lethar- gica.	Puerpera Infection.
1937	5	118	2,493	4,244	1,771	70	17	9	241
1938	7	91	2,599	3,935	1,797	658	22	11	259
1939		63	3,190	4,103	1,687	33	22	6	243
1940	5	67	3,026	1,834	1,907	11	41	7	245
1941	10	40	3,385	3,063	1,916	90	411	13	270
1942	8	31	1,576	1,454	1,912	34	879	12	244
1943	16	24	3,940	2,268	1,722	25	400	8	224
1944	33	24	5,618	1,402	1,743	15	172	3	205
1945	26	29	6,977	1,478	1,688	668	117	3	151
1946	43	25	3,090	1,279	1,671	656	89	3	185
1947	24	28	1,540	761	1,751	83	65	2	85
						I I			

Table 836 .- Infectious Diseases -- Cases Notified.

The marked increase in the number of notifications of pulmonary tuberculosis in 1940 was a result of the medical examination of recruits for war service, which brought to light many cases which otherwise would not have been notified at this stage. Consequently, the number of notifications exceeded 1,900 per annum in the years 1940 to 1942, and then declined again.

<sup>\*</sup> All forms of tuberculosis since 14th May, 1945.

1944

1945

1946

1947

3

#### LEPROSY.

Persons suffering from leprosy are segregated in the Leper Lazaret. Particulars regarding the number of patients and the cost of the lazaret during the six years 1942 to 1947 are shown below:—

		Nu	mber of Patient	8.		Cost of
Year.	Admitted.	Died.	Discharged,	Repatriated.	At end of year.	Maintenance,
1942	5 8		2		13	£ 4,567 6.019

6.530

7.357

8,973

17

Table 837.—Leper Lazaret—Patients and Cost.

The birthplaces of inmates at the end of 1947 were: Australia, 11; Malta, 4; Fiji and Singapore, 1 each.

6

3

#### Tuberculosis.

Pulmonary tuberculosis has been notifiable throughout the State since 1st March, 1929, and all forms of tuberculosis since May, 1945. During the year 1947, the notifications numbered 1,751, including 1,317 in the metropolitan sanitary district, and 94 in the Hunter River district. In 1946 notifications numbered 1,671, including metropolitan 1,287 and Hunter River district 80.

A special Division of Tuberculosis was formed in the State Department of Health to co-ordinate measures for the cure and prevention of the disease, to regulate the admission of patients to institutions, to investigate conditions of homes and places of employment of tuberculous persons, to arrange for the examination of contacts and to undertake publicity in regard to tuberculosis. An advisory committee on tuberculosis was formed in New South Wales in 1946 to advise the Minister for Health, through the Hospitals Commission, on all aspects of tuberculosis and its prevention.

Under the Tuberculosis Act, 1945-1946, the Commonwealth Government afforded financial assistance to the States for the improvement of means of combating tuberculosis, as indicated on page 841 of the 50th edition of the Year Book.

The Tuberculosis Act, 1948 (repealing the former legislation from a date to be proclaimed) was enacted to implement a uniform plan to combat tuberculosis, adopted by Commonwealth and State Ministers of Health and approved by a conference of Premiers. Under the plan, the States will continue to administer their existing organisations and facilities and expand them as may be necesary. Subject to agreement between the Commonwealth and the States (not ratified up to 30th June, 1949), the Commonwealth will (a) reimburse the States for new approved capital expenditure from 1st July, 1948, on land, buildings and equipment for the diagnosis, treatment and control of tuberculosis, and (b) bear net maintenance expenditure of the States in respect of tuberculosis in excess of that of the year ended 30th June, 1948. Expenditure incurred under the Act on items of a capital nature and on administration is to be met from Parliamentary appropriations, and all other expenditure is to be a charge on the National Welfare Fund.

Provision is made to encourage the training of medical and nursing personnel and for subsidisation of universities, etc., to foster training and research in respect of tuberculosis. Subject to Ministerial direction, the Director-General of Health may engage in such activities, and may provide facilities for the examination of sufferers and suspected sufferers, and for their treatment, after-care and rehabilitation. There is to be an advisory council comprised of Commonwealth and State representatives, including experts in tuberculosis, to advise the Minister on measures to prevent and control tuberculosis, and as to standards of equipment, apparatus, training, hospitals and sanatoria.

The former provisions for payment of allowances to persons suffering from tuberculosis and the dependants of such persons are to continue. The Commonwealth will provide finances for such allowances, which are made in order to minimise the spread of tuberculosis, to promote better treatment and to encourage sufferers to be treated.

Payment of allowances, at rates fixed according to financial resources and family responsibilities, was commenced in New South Wales on 2nd January, 1947. The allowances are administered by the Tuberculosis Allowances Committee, which consists of representatives of the State Treasury, the Department of Public Health, and the Department of Labour and Industry and Social Welfare. The amount of allowances paid in New South Wales was £8,217 in 1946-47 and £42,680 in 1947-48.

Institutions for the care of patients suffering from tuberculosis have been established by the Commonwealth and State Governments, and other institutions are assisted by State subsidy to provide treatment for such patients.

Members of the defence forces are treated at Commonwealth institutions, e.g., the Repatriation Hospital, Concord, the Prince of Wales Hospital, Randwick, and the Lady Davidson Home, Turramurra. State institutions under the control of the Director-General of Public Health are the Waterfall Sanatorium, Randwick Auxiliary Hospital, and an annexe to Lidcombe State Hospital and Home. The Rankin Park Hospital at Newcastle, built by the State and conducted by the Australian Red Cross Society, treats tubercular patients only. Five sanatoria receive subsidy from the State, and special accommodation for tubercular patients is provided at a number of public hospitals.

Seven chest clinics have been established in the metropolitan area and one at Newcastle for diagnosis and prevention of the disease.

A village settlement for tubercular patients and their families was established at Picton Lakes in 1925. It has been subsidised by the State since 1933.

### VENEREAL DISEASES.

The Venereal Diseases Act, 1918, which came into operation on 1st December, 1920, prescribes that all persons suffering from such diseases must place themselves under treatment by a qualified medical practitioner and must remain under treatment until cured. Treatment by unqualified persons is prohibited, and certain drugs used in connection with these diseases may not be sold unless prescribed by a qualified medical practitioner. There are clinics in operation in the metropolitan district and at Newcastle Hospital, and free treatment is provided at subsidised hospitals in other localities, drugs and instruments being provided by the Government.

Medical practitioners are required to notify all cases to the Commissioner appointed under the Act, but it is considered that notification is not fully effective. The notifications during the year 1947 numbered 5,011, of which 4,329 cases were notified in the metropolitan sanitary district and 449 in the Newcastle district; sexes of persons notified were males 4,324 and females 687. Notifications in 1946 were 5,401, including metropolitan 4,828 and Newcastle 373. In 1947 about 87 per cent. of the cases were notified by public hospitals and clinics.

Prisoners suffering from venereal diseases are detained for treatment in lock hospitals attached to the gaols. Such prisoners may be detained even after the definite sentence is served, until certified by the medical officer as free from disease.

### TREATMENT OF MENTAL DISEASES.

The law relating to persons suffering from mental diseases is contained in the Lunacy Act of 1898-1947. Persons certified as insane by two qualified medical practitioners may be admitted to an institution, either at the request of relatives or friends, or upon the order of a Magistrate or two Justices of the Peace. Relatives have the right of custody of insane persons if they can give a satisfactory assurance that proper care will be taken of them. Persons found to be insane by proceedings before the Supreme Court in its lunacy jurisdiction may be admitted to mental hospitals upon the order of the Judge. Voluntary patients may be received with the consent of the Inspector-General into mental hospitals and licensed houses, but may not be detained for more than seven days after written notice is given by the patient of his intention or desire to leave.

The estates of persons proved to be incapable, through mental infirmity, of managing their affairs, are placed under the management and care of the Master in Lunacy. Estates of voluntary patients are placed under his care only at the written request of the patient.

### MENTAL HOSPITALS.

The Government maintains eleven institutions for the reception and treatment of insane persons; it also operates a small convalescent hostel, opened in March, 1947, for patients on leave from mental hospitals. Only one private hospital is licensed under the Lunacy Act for the reception of mental patients; female patients only are treated. Another private institution where both men and women were received was closed at the end of March, 1946.

There are Reception Houses in Sydney, Newcastle, Goulburn and Orange, where persons showing symptoms of mental diseases are placed under observation and cases of short duration are treated.

Voluntary patients may be admitted to mental hospitals, and a psychiatric clinic has been established for those suffering from the milder forms of mental and nervous disorders. Psychiatric clinics have also been established at a number of general hospitals.

Unauthorised persons are not permitted to take charge for profit of a person of unsound mind. All institutions for mental cases, including reception houses, etc., for their temporary accommodation, are subject to inspection by the Inspector-General of Mental Hospitals. With his consent, harmless patients may be released on leave, or they may be discharged to relatives or friends who undertake to care for them.

Under an arrangement with the Government of South Australia, patients from Broken Hill are accommodated in hospitals in that State, the cost of their maintenance being paid by the Government of New South Wales.

The Mental Institution Benefits Act, 1948, made provision for payment from the National Welfare Fund of benefits in respect of inmates of State or approved State-assisted mental institutions, in accordance with agreements to be made for a period of five years between the Commonwealth and the State Governments. The Commonwealth is to recoup to the States the equivalent of fees received by them from the estates and relatives of patients, upon the States agreeing to remove all charges for customary services and comforts in respect of those patients. The requisite agreement in respect of the State of New South Wales was ratified in November, 1949.

Patients whose fees are borne by the Commonwealth are excluded from benefit. The benefit rate is represented by the actual amount received by the State from patients' estates and relatives during the year ended June, 1948, divided by the number of patient-days for that year, and is to be payable in respect of each patient-day in each financial year.

From 1st January, 1949, private mental hospitals were made eligible to be approved hospitals under the Hospital Benefits (Private Hospitals) Regulations, and in respect of qualified patients in such hospitals, the hospital benefit rate of 8s. a day is payable.

The mental patients under cognisance as being of unsound mind on 30th June, 1948, consisted of 5,350 males and 5,380 females in mental hospitals and a licensed house in New South Wales; 3 men and 3 women from this State in South Australian hospitals; and 473 men and 633 women on leave from the institutions. The total number of persons under cognisance, exclusive of voluntary patients, at intervals since 1911 is shown below.

AA OOAL Turr	Numbe	er of Mental Pa	itients.	Proportion per 1,000 of Population.			
At 30th June.	Males.	Females.	Total.	Males.	Females.	Total.	
1911*	3,810	2,573	6,383	4.27	3⋅18	3.78	
1921	4,510	3,432	7,942	4.21	3.33	3.73	
1931	5,346	4,357	9,703	4.12	3.47	3.80	
1936	5,846	5,172	11,018	4.34	3.92	4.1	
1938	5,978	5,503	11,481	4.36	4.08	4.2	
1939	6,082	5,604	11,686	4.39	4.11	$4\cdot 2$	
1940	6,158	5,686	11,844	4.42	4.13	$4 \cdot 2$	
1941	6,264	5,793	12,057	4.47	4 17	4.3	
1942	6.222	5,832	12,054	4.40	4.15	4.2	
1943	6.107	5.854	11,961	4.29	4.13	4.2	
1944	5,944	5,852	11,796	4.12	4.06	4.0	
1945	5,943	5,914	11 857	4.10	4.08	4.0	
1946	5,932	5,940	11,872	4.06	4.05	4.0	
1947	5,857	5,983	11,840	3.92	4.01	3.9	
1948	5,826	6,016	11,842	3.85	3.98	3.9	

Table 838 -- Mental Patients

<sup>\*</sup> At 31st December.

The particulars in the foregoing table relate to patients certified under the Lunacy Act. Voluntary patients also are admitted to the institutions; the average daily number in the hospitals was about 400 in recent years.

The number of admissions, re-admissions and deaths in mental hospitals in the last eleven years is shown below:--

Year		Admissions	.	R	e-admissior	ıs.		Deaths.	
ended 30th June.	Males.	Females.	Total,	Males.	Females.	Total.	Males.	Females.	Total.
1938	671	661	1,332	137	158	295	333	259	592
1939	729	672	1,401	138	138	276	363	337	700
1940	703	651	1,354	166	149	315	417	330	747
1941	765	653	1,418	108	104	212	363	287	650
1942	752	711	1,463	93	117	210	433	361	794
1943	705	695	1,400	98	124	222	484	395	879
1944	609	699	1.308	104	126	230	462	409	871
1945	624	700	1,324	93	118	211	385	353	738
1946	670	767	1,437	120	138	258	404	433	837
1947	632	780	1,412	102	117	219	407	401	808
1948	649	802	1,451	102	148	250	433	445	878

Table 839.-Mental Hospitals-Admissions and Deaths.

During 1947-48, the deaths numbered 878, or 8.2 per cent. of the average number resident, and the discharges included 570 persons, or 5.4 per cent., who had recovered, and 200, or 1.9 per cent., who had been relieved.

The average weekly cost of maintaining patients in government mental institutions during the year 1947-48 was 48s. 8d. per patient, of which the State paid 41s. 7d., and the balance was derived from private contributions. The following table shows the average weekly cost per patient during the years cited:—

Year	Annual Cost of	Cost of Maintenance per Patient per week.			Year	Annual Cost of	Cost of Maintenance per Patient per week.			
ended 30th June.	Mainten- ance of Patients.	To State.	Private Contri- butions.	Total.	ended 30th June.	Mainten- ance of Patients.	To State.	Private Contri- butions.	Total.	
1938 1939 1940 1941 1942 1943	£ 736,413 781,958 775,346 815,695 810,461 822,384	s. d. 22 1 23 2 21 11 23 0 22 9 22 7	s. d. 4 1 4 2 4 9 4 11 4 11 5 10	s. d. 26 2 27 4 26 8 27 11 27 8 28 5	1944 1945 1946 1947 1948	£ 889,686 935,081 1,006,897 1,110,163 1,400,231	s. d. 25 3 26 8 28 2 32 0 41 7	s. d. 5 11 5 11 6 3 6 9 7 1	s. d. 31 2: 32 7 34 5 38 9. 48 8	

Table 840.—Patients in State Mental Hospitals-Cost of Maintenance.

The cost of voluntary patients and inebriates is included. During the year ended June, 1948, salaries amounted to £836,020; the cost of provisions, stores, etc., was £391,044, fuel, light and water, £34,184, and miscellaneous items, £138,983. In addition, farm products to the value of £20,521 were grown and consumed at the institutions.

### DEAF-MUTISM AND BLINDNESS.

The care and education of the deaf and dumb and the blind are undertaken at the New South Wales Institution for the Deaf and Dumb and

the Blind, maintained partly by a State Government subsidy of £2,000 per annum, and partly by public subscriptions, and the Royal Sydney Industrial Blind Institute, which provides industrial training to enable blind persons to earn a livelihood, and conducts homes for them. Institutions for deaf mutes are conducted by Roman Catholic religious societies, at Waratah for girls and at Castle Hill for boys; there is also a Roman Catholic school for blind children at Strathfield.

Under the Commonwealth invalid pension system, provision is made for the payment of pensions to permanently blind persons above the age of 16 years, as described on page 937. Provisions for the education of deaf, dumb and blind children in public and private schools are outlined in the chapter "Education."

### HEALTH OF MOTHERS AND CHILDREN.

The Royal Society for the Welfare of Mothers and Babies, incorporated in 1919, was established with the object of co-ordinating measures for the welfare of mothers and children. The society provides premises in the city for use as baby health centres, day nurseries and free kindergartens, and conducts training schools, where nurses may receive postgraduate training in infant hygiene and mothercraft. Associations of medical practitioners, nurses, charitable organisations and institutions for children are affiliated with the Society, which received a grant of £9,534 from the New South Wales Government in 1947-48.

The maternal and baby welfare division of the State Department of Health administers the State health services for mothers and young children, including the baby health centres and a number of pre-natal clinics for the benefit of mothers. The Red Cross blood donor service with a mobile transfusion unit is available when required for maternity cases, and the advice of a specialist may be obtained, without cost to the patient, for mothers in poor circumstances. There is a medical committee to investigate maternal deaths, and efforts are directed toward the control of puerperal infection by means of compulsory notification of cases. Midwifery nurses are required to register in terms of the Nurses Registration Act. The subject of maternal mortality is discussed in the chapter "Vital Statistics."

# MATERNITY ALLOWANCES.

Maternity allowances in respect of births of living or viable children in Australia have been paid by the Commonwealth since 10th October, 1912.

Only one allowance is granted where more than one child is born at a birth but, since April, 1944, the allowance has been paid at an increased rate in such cases. If a child is stillborn or dies within twelve hours after birth, allowance is not payable unless the period of intra-uterine life was at least  $5\frac{1}{3}$  calendar months.

In terms of the Social Services Consolidation Act passed in June, 1947, maternity allowance is paid in respect of births which occur on ships proceeding to Australia or between ports in Australia or Commonwealth Territories, if the mother is residing in Australia at date of claim and intends to remain here. Allowance is not paid in the case of births which occurred outside Australian territorial waters for which the mother is entitled to similar benefit under the law of any other country. Allowance as payable, under certain conditions, to qualified Australians temporarily absent from Australia, and to aliens and abriginal natives in Australia.

The amount of maternity allowance was £5 until July, 1931, but thereafter it was subject to a means test, with the income limit varied from time to time and with rates of from £4 to £5 up to January, 1938, as indicated in earlier editions of the Year Book. From that date the allowance was increased to £7 10s. 0d. where there were at least three other children under 14 years of age in the family.

In July, 1943, the income limit was abolished and the allowance was raised to £15 where there is no other child under 14 years of age, £16 where there is one or two such children, and £17 10s. where there are three or more. Of the allowance, £10 represents benefit at the rate of 25s. a week for four weeks preceding and four weeks following the birth of a child. Since April, 1944, children up to 16 years of age have been taken into account in determining the amount of allowance, and in cases of plural births, £5 is added in respect of each additional child born.

The following statement shows the number of claims passed for payment in New South Wales (and the Australian Capital Territory) in the years stated, in comparison with the number of confinements:—

					Claims passed t	for Payment	; <b>.</b>
Year ended June.	Amount of Allowance.	Income Limit.	Confinements (approximate).	Number.	As proportion of Confinements,	Amount.	Average Amount per Claim.
	£	£	No.		per ceut.	£	£
1921	£ 5	No limit.	56,200	56,378	100	281,890	5,00
1929	5	,,,	54,900	54,275	99	271,375	5.00
1931	5 5		52,100	51,660	99	258,300	5.00
1932	ı 4	260	46,700	36,569	78	149,870	4.10
1933	4	$\left\{\begin{array}{c} 260 \\ 208 \end{array}\right\}$	45,800	31,699	69	126,740	4.00
1934	4	208	44,100	29,960	68	119,750	4.00
1935	4 to 5	208 to 299	44,500	30,354	68	130,886	4.31
1936	4 to 5	208 to 299	46,189	30,463	66	133,055	4.37
1937	4½ to 5	221 to 312	48,761	31,086	64	145,495	4.68
1938	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	221 to 312 \ 247 to 338 \	48,405	30,440	63	154,613	5.08
1939	4\(\frac{1}{4}\) to 7\(\frac{1}{4}\)	247 to 338	48,925	30,860	63	167,710	5.44
1943	4½ to 7½	247 to 338	53,812	19,182	36	104,188	5.43
1944	15 to 17½†	No limit,	61,530	57,792	94	888,850	15.38
1945	15 to 17½†	٠,,	62,560	61,755	99	983,453	15.92
1946	15 to 17½†	,,	61,500	60,730	99	966,967	15.92
1947	15 to 171†	,,	74,100	73,110	99	1,154,674	15.79
1948	15 to 17½†	,,	68,500	68,116	99	1,089,449	15.99
1949	15 to 17½†	,,	68,200	67,534	99	1,070,126	15.85
	1	1	1	1	1	1	1

Table 841.-Maternity Allowances Paid in New South Wales.\*

In the successive years 1944-45 to 1947-48, plural births included in the claims granted were cases of twins, 738, 683, 846 and 744, and cases of triplets 9, 11, 5 and 5. The amount of allowance ranges from £20 to £22 10s. in the case of twins, and from £25 to £27 10s. where triplets are born.

### BABY HEALTH CENTRES.

The baby health centres established by the Government of New South Wales are specially concerned with the health of children below school age. A staff of nurses and an honorary medical officer are attached to each centre. The nurses instruct the mothers in hygiene at the centres and in their homes, and make arrangements for medical or dental treatment of mothers and children when necessary.

<sup>\*</sup> Including Australian Capital Territory.
† Plus £5 since April, 1944, where twins or £10 where triplets were born.

In December, 1948, there were 270 centres, including 74 in the metropolitan area. Attendances at the centres numbered 1,174,711 in 1947, and 1,066,489 in 1948, and the nurses made 13,663 visits in 1947 and 10,335 in 1948 to cases within the area served by the centres. Expenditure from Consolidated Revenue on baby health centres was £81,933 in 1946-47 and £92,419 in 1947-48.

### CARE OF YOUNG CHILDREN.

In many places the baby health centres co-operate with voluntary organisations which make provision for the day care of young children, such as the Sydney Day Nursery and Nursery Schools Association, and the Kindergarten Union of New South Wales. Mothers who work outside their homes may leave their children at the nurseries or nursery schools during the daytime. Food, clothing, and medical and dental care are provided. A small daily fee is charged.

The Kindergarten Union provides free kindergarten schools and playgrounds, and trains kindergarten and nursery school teachers. It also co-operates with the Commonwealth Department of Health in supervising a model pre-school child development centre at Erskineville, Sydney.

In the outlying country districts, nurses engaged by the Bush Nursing Association at various centres give assistance to mothers and advise them as to the feeding and treatment of children, and the Far West Children's Health Scheme conducts travelling health clinics.

# SOCIETIES FOR CRIPPLED CHILDREN.

The New South Wales Society for Crippled Children cares for physically-handicapped children and young people up to the age of 25 years in the metropolitan and South Coast areas. Trained social workers provide therapeutic treatment and, in some cases, education and occupational training, for about 1,900 children living at home. The Society also owns and maintains the Margaret Reid Orthopaedic Hospital at St. Ives, Strathallan Hospital at Turramurra, Beverley Park Hospital at Campbelltown, and four schools for crippled children in the metropolitan area. The Society is supported principally by public donations and by payments under the hospital benefits scheme (see page 964); expenditure in 1948-49 was £52,000.

The Spastic Centre at Mosman (Sydney) undertakes the care and training of children suffering from infantile cerebral palsy (see page 1045).

The care of crippled children in the Newcastle and North Coast districts is undertaken by the Newcastle Association for Crippled Children, and in the western districts of the State they are cared for under the Far West Children's Health Scheme.

### SCHOOL HEALTH SERVICES.

School medical and dental services in New South Wales are under the control of the State Department of Public Health. The staff in December, 1948, consisted of 21 medical officers, 11 dental officers, 13 school nurses, 8 dental assistants, 4 psychologists, 4 social workers and a speech therapist.

It is the aim of the school medical service to examine every child at least twice during the period of compulsory school attendance. A full

medical examination was given to 84,297 children in 1948, viz., 42,551 in the metropolitan area and 41,746 in the remainder of the State.

The following summary gives particulars of children medically examined during the years 1943 to 1948:—

	1943.	1944.	1945.	1946.	1947.	1948.
Number examined	38,983	56,976	46,028	66,047	75,546	84,297
Number reviewed	21,670	28,032	26,412	22,707	20,513	24,946

School dental service is provided by travelling dental clinics. In addition to general examination, dental treatment is provided for young children and emergency work is done for children of all ages. The number of children examined during 1948 was 22,373; 12,577 of these children were treated by the clinics.

The expenditure on the school medical and dental services was £38,909 in 1946-47 and £44,160 in 1947-48.

Free milk is distributed daily to 125,000 children of primary school age in 297 public and 118 private schools. In 1947-48 expenditure by the State on this scheme was £101,612.

### DISPOSAL OF THE DEAD BY CREMATION.

The provisions of the law dealing with cremation are contained in the Public Health Act. There are five crematoria in New South Wales—four in the metropolitan district and one in Newcastle; the first was opened in 1925.

A comparative statement regarding the number of cremations is shown by the following table:—

Year.	Males.	Females.	Total	Year.	Males.	Females.	Total.
1931	507	366	873	1943	3,555	2,757	6,312
1936	1,579	1,192	2,771	1944	3,372	2,760	6,132
1939	2,304	1,825	4,129	1945	3,479	2,939	6,418
1940	2,662	1,943	4,605	1946	4,048	3,006	7,054
1941	2,898	2,183	5,081	1947	4,182	3,261	7,448
1942	3,243	2,387	5,630	1948	4,665	3,608	8,273

Table 842.—Cremations.

# HOUSING AND BUILDING

### CONTROL OF BUILDING.

The various phases of the war-time control of building operations are outlined on page 863 of the 50th edition of the Year Book.

Control of building operations passed from the Commonwealth to the State Government on 1st November, 1945, and the State Building Operations and Building Materials Control Act, 1945 (No. 12 of 1946) became operative from 4th February, 1946.

Under this Act, as subsequently amended, authority of the building control authority must be obtained for all building operations except for (a) the erection for permanent residence of single unit houses of a gross floor area not exceeding 1,200 sq. ft. if timber-framed and 1,250 sq. ft. if of brick, (b) dwellings for persons engaged in primary production, (c) buildings for primary production purposes costing not more than £500, (d) sewerage and drainage connections ordered by a local governing authority, and (e) alterations, repairs, and additions to dwellings and other specified buildings up to £150 in any financial year. Authority to erect dwelling houses with a floor area exceeding the limit shown above were required only in the Counties of Cumberland and Northumberland and the Wollongong-Port Keinbla and Blue Mountains districts until 20th June, 1947, when the control was extended to cover the whole State except the Broken Hill area and certain areas in the far north-western sector.

The Act also provided for the control of the distribution of building materials. The use of bricks was limited to certain specified purposes and the control authority was empowered to determine the allocation of bricks, timber, and other building materials and fittings between housing and other building operations.

The production of building materials for house construction is fostered and the controls over building operations are exercised to conserve the maximum quantity of materials for the housing programme. The Housing Commission sponsors home building operations under the Rural Bank of New South Wales, the Commonwealth War Service Homes Division, and other governmental agencies and these authorities share in the quota of building materials set aside for government housing. (For particulars of Government housing activities, see pages 986 and 989.) Priorities in the supply of materials are arranged to expedite completion of non-government houses in "hardship" cases.

By agreement with the States, the Division of Industrial Development of the Commonwealth Department of Post-War Reconstruction undertakes; the interstate allocation of certain building materials and fittings.

TOWN AND COUNTRY PLANNING.

### Cumberland County Council.

The Cumberland County Council, comprising ten councillors elected by the Municipal and Shire Councils within the County of Cumberland, was constituted in 1945 in terms of the Local Government (Town and Country Planning) Amendment Act, 1945. Its purpose was to prepare a master plan for the County District for submission to the Minister for Local Government on 27th July, 1948, after revision in the light of representations by governmental authorities and the general public.

The object of the Act and plan is to create an improved environment for the community, having regard to health, efficiency, comfort, and enjoyment of life. In addition to the detailed provisions for the location of roads and public utilities, the restriction of ribbon development, zoning for specific land uses and densities of population, and other aspects of general planning, the Plan incorporates proposals for the co-ordination of planning by governmental authorities, for its implementation, and for the distribution of costs. The County Scheme provides a framework around which all detailed local planning schemes are to be built.

So that current development will not prejudice implementation of the Scheme during its preparation and its passage through Parliament, development is regulated in terms of an interim plan. Development can proceed with little or no restriction when in conformity with the land use set down for an area, but otherwise the specific consent of the County Council must be obtained.

The principal features of the Plan submitted to the Minister on the due date were a central core preserved as the centre of the County and the State, urban districts ranged around the central zone where communities could function efficiently as independent and largely self-sufficient units, a network of open space separating these urban districts and a green belt encircling them, rural districts with satellite communities engaged in the supply of rural products, and a road and transport system. The County Council recommended that local governing bodies should implement these proposals, with the Council as the central co-ordinating authority, and that, as the scheme was in part national, State, County, and peculiarly local in character, the cost should be shared by Commonwealth, State, County, and local governmental authorities.

Further particulars of the Cumberland County Council are given on page 865 of this volume.

### Local Governing Authorities.

Municipal and shire councils have extensive powers for supervising and regulating the construction of buildings and for promoting town and country planning. In accordance with Ordinances under the Local Government Act, 1919-1948, permits to erect buildings must be obtained from local councils before any building operations can be commenced, and the councils supervise operations by oversight of plans and specifications and by inspections at various stages of construction.

Schemes for town planning prepared by local councils must be submitted to the Minister for Local Government and referred by him to the Town and Country Planning Advisory Committee comprising eight members appointed by the Governor under the Local Government (Town and Country Planning) Amendment Act, 1945. When the Committee has reported upon the plan, the Minister may decide to refer it to the council concerned for further consideration, to abandon it, or to proceed with it in the original or in an amended form.

#### Architects.

The practice of architecture in New South Wales is regulated by a Board of Architects. Persons using the name "architect" (other than naval architects) are required to be registered. Registration is granted to persons over 21 years of age who possess the requisite qualifications. There were 842 architects on the register at 31st December, 1948.

#### HOUSING.

Statistics as to houses and other dwellings in New South Wales are derived principally from particulars furnished by householders on census schedules.

For the purpose of the Census of 30th June, 1947, a "dwelling" is defined as a collection of rooms occupied by a household group living together as a family unit, whether comprising the whole or only part of a house or other building (including temporary structures). Where possible a separate schedule was obtained for each such dwelling. But in a number of cases where private houses were shared by two or more family units, only one Householder's Schedule was furnished for the whole of the house. These houses are shown in the Census tables as "Private Houses (shared by two or more families)" and represent not occupied dwellings but "houses" occupied by more than one family. In the case of those private houses shared by more than one family (for which separate schedules were furnished for each portion occupied) each portion is shown in the tables as a "dwelling" under the heading "Share of Private House." The number of dwellings being built was also recorded at the Census. This relates substantially to unoccupied dwellings of all types being built at 30th June, 1947, and is not identical with the number of houses under construction at that time as disclosed in building statistics given later in this chapter.

In the abnormal circumstances existing when the Census of 1947 was taken, it was not possible to ascertain precisely the number of occupied private houses and the number of family or household groups occupying them. Estimates based on the Census are as follows:—

Table 843.—N.S.W.: Estimated Number of Household Groups and Occupied Private Houses, 30th June, 1947.

	Family or Household Groups.	Occupied Private Houses,
Private house (1 family)	. 599,870	599,870
Shared private house (1 Schedule)	. 29,984*	13,440
Share of private house (individual schedules) .	. 38,371	17,200*
Total	668,225	630,510

Unadjusted particulars of dwellings as compiled from schedules at the census of 30th June, 1947, distinguishing the metropolis, other municipalities, and the remainder of the State are given below, together with data from the censuses of 1921 and 1933, but for the reasons indicated previously, the particulars for private dwellings are not fully comparable.

Table 844.—Class of Dwelling, New South Wales.

-			Ce	nsus, 30th	June, 19	47.	Per c	ent. of T	otal.
Particulars.	Census, 1921.	Census, 1933.	Munici	palities.	Balance	Total,			
			Metro- polis.	Country.	of State.	New South Wales,	1921.	1933.	1947.
Occupied Dwellings -									
Private House—  1 family 2 families 4 families	396,619	543,850	268,415 6,272 1,354 268	135,192 2,674 398 70	196,263 2,016 230 28	599,870 10,962 1,982 366	91.60	90.70	80·38 1·47 27 05
5 or more families Share of Private Houses Flats Tenements	17,849	41,600	102 22,981 56,820 14,337	9,965 5,958 1,624	5,425 1,672 418	38,371 64,450 16,379	$\left. \left. \left. \right. \right\} \right. 4.12 \left. \left. \right  \right.$	6.94	5·14 8·63 2·19
Caretaker's Quarters Hotel Boarding Honse,	627 2,640	868 2,104	479 587	132 755	13 <b>4</b> 684	745 2,026	·14 ·61	·14 ·35	·10 ·27
etc Educational Insti-	12,538	8,641	6,821	1,589	795	9,205	2.90	1.44	1.23
tution Hospital Charitable Institu-	463 735	546 826	182 200	145 200	181 167	508 567	·11 ·17	∙09 •14	·07 ·08
tion Other and not	99	154	49	41	44	134	.02	.02	.02
stated	1,406	1,161	273	145	230	648	•33	∙18	•08
Total Occupied Dwellings	432,976	599,750	379,140	158,906	208,297	746,343	100	100	100
Unoccupied Dwellings Dwellings being built	18,619 2,724	28,737 746	2,783 5,759	2,650 3,021	11,959 4,201	17,392 12,981			,··
Grand Total Dwellings Dwellings per sq. mile	454,319	629,233 2·00	387,682 1,582·37	164,577 44·13	224,457 0·73	776,716 2·51			
Waggon, Van, etc., including Campers- out		3,717	248	459	1,512	2,219			

The very marked changes between 1933 and 1947 in the proportions of private houses and flats and tenements reflects the continued growth in the intercensal period in the number and popularity of flat dwellings (there were comparatively few flat dwellings until the nineteen-twenties), and they also result from widespread sharing of dwellings normally occupied by one family but which, because of the current housing shortage, sheltered two or more families. Over the fourteen years there was a more than threefold increase in the number of dwellings grouped in the table as flats or tenements.

In Tables 845 and 846 where for 1947 houses and flats, etc. are distinguished, private houses shared by two or more families have been grouped with private houses (one family), but dwellings shown as share of

private houses have been treated as flats, etc. This allocation takes into account the probability that much house-sharing of the kind first mentioned may be but a temporary expedient; that the number so recorded, being "houses" and not "dwellings", is better so treated in considering the physical characteristics of dwellings; and that thereby the particulars are rendered more nearly comparable with those of preceding censuses.

A statement showing the number of occupied dwellings classified according to the number of rooms per dwelling as recorded at each census since 1911 is appended. The figures for 1947 are not adjusted to accord with the estimates given on page 979. A kitchen is counted as a room, as is a permanently enclosed verandah or sleep-out.

Table	845	–Occup	ned Privat	e Dwelling	s: Nun	nber o	Roor	ns.

	l		Census	, 1933.	Census,	30th Jun	e, 1947.	Pro	portio	n of T	otal.
Number of Rooms* per Dwelling.	Census, 1911.	Census, 1921.	Houses.	Flats, etc.	Houses.†	Flats, etc.‡	Total Dwel- lings,	1911.	1921.	1933.	1947.
								per cent.		per cent.	per eent.
1	20,321	12,787	21,625	3,113	9,999	12,307	22,306	6.4	3.1	4.3	3.1
2	14,596	14,072	16,202	7,467	12,108	20,694	32,802	4.6	3.1	4.1	4.5
3	24,288	30,132	28,957	8,857	30,979	24,664	55,643	7.6	7.3	6.5	7.6
4	70,241	102,175	121,007	10,187	142,505	33,266	175,771	22.1	24.9	22.7	24.1
5	75,063	124,131	163,171	5,862	205,540	18,060	223,600	23.6	30.2	29.3	30.7
6	54,369	71,158	111,522	2,212	140,787	6,683	147,470	17-1	17.4	19.7	20.2
7	26,993	29,292	43,717	689	43,521	1,641	45,162	8.5	7.1	7.7	6.2
8	14,766	13,627	17,356	231	14,696	428	15,124	4.6	3-3	3.0	2.1
9 and over	17,789	13,209	15,201	164	10,653	229	10,882	5.5	3.3	2.7	1.5
Not stated	1,340	3,885	5,092	2,818	2,522	1,228	3,750				<u></u>
Total	319,766	414,468	543,850	41,600	613,310	119,200	732,510	100	100	100	100
Average No. of Rooms per Dwelling	5.04	4.97	5-04	3.51	5.08	2.93	4.82				

<sup>\*</sup> Kitchen counted as a room. †Includes private houses shared by two or more families, but for which only one schedule was furnished. † Includes flats and share of flat, tenements, and share of private house (separate schedules).

Notwithstanding the unusual extent of house-sharing prevailing in 1947 and referred to below Table 844, the proportion of occupied private dwellings which had 4, 5, or 6 rooms increased from 62.8 per cent. in 1911 and 71.7 per cent. in 1933 to 75 per cent. in 1947 and the proportions with less than four rooms were 18.1, 14.9, and 15.2 per cent. in the respective years. The decrease in the average number of rooms per dwelling from 4.94 in 1933 to 4.82 in 1947 was due partly to house-sharing and partly to reduction in the number of dwellings containing 8 or more rooms, mainly by subdivision to provide flat dwellings. House-sharing apart, the data reveal an appreciable and progressive improvement in the standard of housing in New South Wales.

At the census of 1947, private houses of five rooms were most numerous and the most frequent size of flats was four rooms. In shares of private houses, ranging from 1 to 6 rooms, those with 2 and 3 rooms predominated, but most of the tenements comprised 1 or 2 rooms only. Of the private houses occupied by one family, those having 4, 5, or 6 rooms accounted for 80.1 per cent. of the number for which particulars as to rooms were given.

At 30th June, 1947, there were 88,429 persons sleeping out throughout the year on verandahs or in sleep-outs which were not permanently enclosed. These were inmates of 54,899 occupied private dwellings. The number sleeping out in similar conditions in 1933 was 117,877.

The number of immates per occupied private dwelling declined at each successive census from 4.67 in 1911 and 4.15 in 1933 to 3.78 in 1947. The decline is attributable mainly to the very definite trend over the years toward smaller families, and in lesser degree to a significant increase in the number of marriages during the years since 1940. In the latest intercensal period, the proportion of inmates of dwellings of all kinds domiciled in private houses (as one or more families collectively) decreased from 89.13 per cent. to 81.87 per cent. Comparisons of dwellings and inmates according to type of dwelling are as follows; the figures for 1947 are not adjusted to accord with the estimates given on page 979:—

W	Numbe	Number of Inmates per Dwelling.				Proportion of Total Inmates.			
Type of Dwelling,	1911.	1921.	1933.	1947.	1911.	1921.	1933.	1947.	
					per cent.	per cent.	per cent.	per cent.	
Private House	} 4.67	4.52	∫ 4.24	3.97*	31.43	89.78	€ 89.13	81.87	
Flat, Tenement, etc	[]		ે 2⋅84	2.81*	) "- "		4.56	11.26	
All Private Dwellings .	4.67	4.52	4.15	3.78	91.43	89-78	93-69	93.13	
Other Dwellings	12.50	11.51	11.41	14.75	8.57	10.22	6.31	6.87	

Table 846.—Dwellings: Inmates by Type of Dwelling.

Over the years there has been a definite trend toward the use of the more durable and fire-resistant materials, e.g., bricks, fibro-cement, and concrete, in the construction of dwellings. Since 1911 the number of dwellings with outer walls of bricks has increased by 231,386, those of fibro-cement (not in use in 1911) by 67,277 (including 50,973 in the last intercensal period), and those of concrete by 8,941, whilst those of weather-board increased by 103,678. In consequence the proportion of occupied private dwellings with outer walls of wood declined from 51 per cent. in 1911 to 42 per cent. in 1933 and to 36 per cent. in 1947, and the proportion of brick dwellings rose from 36 to 44½ and 47 per cent., respectively. Within the metropolis as at 30th June, 1947, more than three-fourths of the dwellings had brick outer-walls, about one-seventh had weather-board,

<sup>\*</sup> Comprised as in notes † and ‡ to table 845.

and about one-twentieth, fibro-cement. Over the balance of the State, weather-board dwellings (59 per cent.) predominated, followed by dwellings with outer walls of brick (16 per cent.) and of fibro-cement (14 per cent.).

The next table contains comparative particulars of occupied private dwellings in New South Wales according to the materials of outer walls distinguishing the metropolis and the remainder of the State in 1933 and 1947:—

Table 847 .- Occupied Private Dwellings: Materials of Outer Walls.

Materials of		1911.	1921.		1933.			1947.	
Outer Walls,		Whole State.	Whole State.	Metro- polis.	Balance of State.	Whole. State.	Metro- polis,	Balance of State.	Whole State,
-			;	NUMBER O	F DWELLIN	GS.			
Brick		114,679	166,558	215,505	45,181	260,686	286,868	59,199	346,067
Wood		162,493	202,782	51,890	194,316	246,206	53,376	212,795	266,17
Fibro-cement			3,063	4,302	12,002	16,304	18,070	49,207	67,27
Iron, Tin		8,851	11,639	1,018	21,117	22,135	785	18,492	19,27
Stone		9,020	9,684	4,651	4,328	8,979	6,422	4,294	10,71
Concrete		865	2,606	1,580	5,432	7,012	2,949	6,857	9,80
Other incl. specified	un- 	23,858	18,136	1,117	23,011	24,128	2,079	11,117	13,19
Total		319,766	414,468	280,063	305,387	585,450	370,549	361,961	732,51
		P	ROPORTION	OF TOTAL	DWELLING	s-Per o	ENT.		
Brick		36.04	40.40	76-95	14.79	44.53	77.42	16.36	47-2
Wood		51.07	49-19	18.53	63-63	42.06	14.40	58.79	36.3
Fibro-eement		•••	.74	1.54	3.93	2.78	4.88	13.59	9-1
Iron, Tin		2.78	2.82	.36	6.91	3.78	•21	5.11	2.6
Stone	,	2.83	2.35	1.66	1.42	1.53	1.73	1.19	1.4
Concrete		.27	-63	•56	1.78	1.20	-80	1.89	1.3
Other incl. specified	un-	7-61	3.87	·40	7.54	4.12	•56	3.07	1.8

Information regarding the roofing material of occupied private dwellings was collected at the censuses of 1921 and 1947 but not of 1933. The feature of the data is the very substantial displacement of iron by tiles between 1921 and 1947 as the popular roofing material in the metropolis, the proportion of dwellings in that area roofed with tiles having increased from 23 per cent. to 52 per cent., whilst those roofed with iron decreased from 46 per cent. to 30 per cent. Even outside the metropolis, tiles and fibrocement gained in proportion; between 1921 and 1947 the roofing materials of dwellings showed increases from 216,627 to 309,826 for iron, from 5,336 to 31,698 for tiles, and from probably about 2,000 to 8,603 for fibrocement. For the State as a whole, 57 per cent. of occupied private dwellings were roofed with iron in 1947 compared with 72 per cent. in

1921, whilst the proportion with tile roofs increased from 11 per cent. to over 30 per cent. The details are shown below:—

Table 8	48.—Occupied	Private	Dwellings:	Roofing	Material.
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	Number of Dwellings.				Proportion of Dwellings.				
Materials of Roofing.	Ceusus, 1921.		Census, 1947.		Census, 1921.		Census, 1947.		
	Metro- polis.	Whole State.	Metro- polis.	Whole State.	Metro- polis.	Whole State.	Metro- polis.	Whole State.	
ron, Tin Hiles Hate Mhro-cement Other and unspecified	79,420 39,990 47,961 * 5,951	296,047 45,326 50,319 2,720 20,056	109,802 191,414 52,676 5,001 11,656	419,628 223,112 54,917 13,604 21,249	per cent. 45.83 23.07 27.67 *	per cent. 71.95 11.02 12.23 .66	per cent. 29.63 51.66 14.22 1.35	per cent. 57·29 30·46 7·49 1·86	
Total	173,322	414,468	370,549	732,510	100.00	100.00	100.00	100.0	

<sup>\*</sup> Included in " Other and unspecified".

At the census in 1947, for the first time, householders were asked to indicate whether their dwellings were supplied with running water, electricity and gas, as to the existence therein of facilities such as bathroom, flush toilet, laundry and for cooking, and to state the principal means used for cooking. In cases of sharing, householders were to answer the questions regarding facilities only in relation to their own dwellings. If toilet, washing, and cooking facilities were shared, the householder of the dwellings containing the facilities was to include those facilities on his schedule and to indicate that they were being shared by another household. Householders of dwellings without facilities but sharing those of another household were asked not to include the shared facilities on their schedules. A summary of the information furnished in this relation is appended, but particulars of the number of dwellings in respect of which the questions were not answered have been omitted. For most items, these did not exceed 2 per cent. of the total number of dwellings.

Table 849.—Occupied Private Dwellings: Facilities. Census 30th June. 1947.

Facility.	Metropolis.		Country Municipalities.		Balance of State.		Whole State,	
	With.	Without.	With.	Without.	With.	Without,	With.	Without
Running water Electricity Gas Bathroom* Flush Tollet* Lauudry* For cooking*	365,941 365,468 338,207 337,745 289,556 303,987 358,172	2,380 3,561 27,846 31,021 75,903 61,148 11,621	143,581 144,211 63,887 137,059 83,745 128,017 150,608	9,656 9,908 79,642 16,768 64,979 24,087 4,571	85,797 108,994 13,054 152,274 19,221 138,455 200,031	102,822 85,672 167,029 45,420 166,299 55,792 3,281	595,319 618,673 415,148 627,078 392,522 570,459 708,811	114,858 99,141 274,517 93,209 307,181 141,027 19,473

MEANS OF COOKING MOSTLY USED.									
Electricity Gas Wood, Coal, C Other None	oke	30,277 306,612 16,171 1,331 11,621	14,741 46,255 86,631 2,207 4,571	16,647 11,876 162,593 8,224 3,281	61,665 364,743 265,395 11,762 19,473				

<sup>\*</sup> Whether shared or not shared.

The table reveals that, within the metropolis and country municipalities at the date of the census, 97.7 per cent. of the private dwellings for which particulars were given were supplied with running water, 95.6 per cent. of them with electricity, and 96.9 per cent. with cooking facilities, whilst 91 per cent. had or shared a bathroom and 83.5 per cent. had or shared a laundry. Within the metropolis 92.7 per cent. of the private dwellings were supplied with gas, and 79.3 per cent. of those in the metropolis and 56.3 per cent. of those in country municipalities had a flush toilet.

Gas was, by far, the predominant means employed for cooking in the metropolis, with electricity next in order, but elsewhere, and especially in the rural section of the State, wood, coal, or coke was the heating medium mostly used. Nevertheless, either gas or electricity was the principal cooking medium used in 39.6 per cent. of the dwellings in country municipalities.

An analysis of occupied private dwellings according to the nature of occupancy is given below covering the censuses 1911 to 1947, with separate data for the metropolis and the remainder of the State in 1933 and 1947. There was a definite trend toward home-ownership which continued in the latest intercensal period, notwithstanding the abnormal degree of house-sharing of the post-war (1939-45) years. In appraising the movement in that latter period, the severe restriction of house-building during the war and early post-war years should be taken into account, and may be accepted as a weighty factor in the appreciably reduced proportion of occupied private dwellings being purchased by instalments.

Table 850.—Occupied Private Dwellings: Nature of Occupancy.

					_		- '	
Natura C	1911.	1921.		1933.		1947.		
Nature of Occupancy.	Whole State.	Whole State.	Metro- polis.	Balance of State.	Whole State.	Metro- polis.	Balance of State.	Whole State.
			NUMBER O	F DWELLIN	īgs.			
Owner Purchaser by instalments Tenant Other methods and Unspecified	129,423 11,322 160,314 18,707	147,483 46,953 192,474 27,558 414,468	76,536 36,908 160,260 6,359 280,063	136,902 25,965 110,480 32,040 305,387	213,438 62,873 270,740 38,399 585,450	114,145 32,923 218,988 4,493 370,549	182,658 22,253 133,928 23,122 361,961	296,803 55,176 352,916 27,615 732,510
	I	ROPORTION	OF TOTAL	DWELLIN	gs—Per ci	ENT.		
Owner Purchaser by instalments Tenant Other methods and Unspecified	40·47 3·54 50·14 5·85	35·58 11·33 46·44 6·65	27·33 13·18 57·22 2·27	44·83 8·50 36·18 10·49	36·46 10·74 46·24 6·56	30·80 8·89 59·10 1·21	50·46 6·15 37·00 6·39	40·52 7·53 48·18 3·77

Within the metropolis, the proportion of private dwellings stated as occupied by tenants declined from 63.3 per cent. in 1911 to 57.2 per cent. in 1933, but increased to 59.1 per cent. in 1947. The latter increase may be attributed partly to abnormal house-sharing and partly to the growth

in number and popularity of flat dwellings. Dwellings either owned or in process of purchase by occupiers comprised 40.5 per cent. of the total in 1933 and 39.7 per cent. in 1947, the proportion under instalment purchase declining from 13.2 per cent. to 8.9 per cent. in that interval, during which period many occupancies in that class moved into absolute ownership by completion of instalment payments. Outside the metropolis, the proportion of dwellings occupied on tenancy had fallen from about 40 per cent. in 1911 to 37 per cent. in 1947, and those owned or in course of purchase by their occupiers had risen from 51.0 per cent. to 56.6 per cent. in the respective years.

### GOVERNMENT HOUSING ACTIVITIES.

State Government housing activities in New South Wales commenced with the passage of the Housing Act and the appointment of a Housing Board in 1912. Generally, however, operations under this Act were not extensive. Until 1944 housing was provided mainly by private enterprise with considerable financial assistance through governmental agencies and particularly the Rural Bank of New South Wales. Co-operative building societies have been influential since 1937 in the promotion of home building.

## Housing Commission of New South Wales.

A Ministry of Housing was established in May, 1941, a new Housing Act was passed in November, 1941, and the Housing Commission of New South Wales was constituted in February, 1942 with a full-time salaried chairman and four other members remunerated by fees. The Act vested in the Commission the housing functions exercised by the Housing Board and later the Minister for Local Government and Housing, by the Homes for Unemployed Trust, and by the Housing Improvement Board, and the administration of the Dacey Garden Suburb (built in 1912) and the Erskineville demonstration project (which are described on page 878 of the 50th edition of the Year Book). The Commission was also authorised to provide financial assistance for home building under certain schemes previously administered through the Government Agency Department of the Rural Bank and in terms of the Housing Act, 1912-41, as described on page 990 of this issue.

The Housing Commission is the executive authority for the administration of State housing plans and the Commonwealth-State Housing Agreement. The Commission may make surveys of housing conditions, recommend local government building ordinances, and undertake the manufacture, purchase, and supply of building materials. During the war years, it acted as agent for the Commonwealth War Workers' Trust under the war-time housing arrangements outlined on page 879 of the 50th edition and page 184 of the 1941-42 and 1942-43 edition of the Year Book.

Advances by the Commonwealth under the Commonwealth-State Housing Agreement are made to the State Treasury. The financial resources of the Commission comprise advances from the State Treasury, appropriations by Parliament, and income derived from housing activities.

The following table shows the source of the capital funds of the Housing Commission and the value, at cost, of the Commission's fixed assets at 30th June, 1948 and earlier years:—

Table 851 Housing	Commission:	Capital Funds,	etc., at 30th June.
-------------------	-------------	----------------	---------------------

					1948,	
Item.	1945. 1946.		1947.	Housing Agreement Activities.	Other Activities.	Total.
Housing Agreement Ad	£	£	£	£	£	£
vances State Government Advance		3,025,000 1,440,290	8,035,015 1,442,874	13,315,663	2,597,133	13,315,663 2,597,133
Total Capital Funds	2,027,988	4,465,290	9,477,889	13,315,663	2,597,133	15,912,796
Land and Property Works in Progress Developmental Costs	. 666,255 8,040	2,601,476 2,826,852 17,803	4,813,530 5,626,897 26,715	8,319,271 6,677,225 44,115	959,256 983,970	9,278,527 7,661,195 44,115
Plant, Equipment, etc	15,149	15,246	19,499		60,366	60,366
Total Fixed Assets*	1,410,394	5,461,377	10,486,641	15,040,611	2,003,592	17,044,203

<sup>\*</sup> Valued at cost.

The Housing Commission's home building programme includes the erection of permanent homes, mostly under the Commonwealth-State Housing Agreement, the provision of financial assistance to home builders (see page 990), and the conversion of military hutments for temporary occupation by families in urgent need of accommodation. By the end of 1948, the Commission's projects extended throughout the Metropolis, Newcastle, Wollongong-Port Kembla, and many country areas and involved slum clearance and the construction of single dwelling units, multi-unit blocks and shopping centres, and community housing estates.

The next table shows the number and value of houses and flats commenced and completed by or for the Housing Commission by day labour or by private builders on contract and the number of dwelling units provided by the conversion of military huts during the years 1944 to 1948:—

Table 852.—Dwellings Provided by or for the Housing Commission.

Year.	Conv	menced.	Con	Dwellings in Converted Military Huts.	
	Number.	Value,	Number.	Value.	
-		£		£	
1944	317	332,887	42	38,485	
1945	1,906	2,248,303	851	869,946	64
1946	3,483	4,001,368	1,802	2,094,407	1,535
1947	3,249	3,791,128	2,337	2,693,018	1,717
1948	3,752	5,166,372	3,254	3,923,331	212
To end of 1948	12,707	15,540,058	8,286	9,619,187	3,528

### COMMONWEALTH HOUSING DIVISION.

Since July, 1945, Commonwealth functions relating to housing have been conducted by the Housing Division (prior to September, 1947, the Housing Directorate) of the Commonwealth Department of Works and Housing. The Division administers the Commonwealth-State Housing Agreement and undertakes technical and economic research in relation to housing and building materials. An experimental building station has been established at Ryde, a suburb of Sydney.

### COMMONWEALTH-STATE HOUSING AGREEMENT.

The war-time housing arrangements between the State and Commonwealth (described briefly on page 879 of the 50th and on page 184 of the 1941-42 and 1942-43 edition of the Year Book) were merged into an agreement which was approved by the Commonwealth and States in November, 1945 and ratified by the State Parliament in April, 1946.

Under this Commonwealth-State Housing Agreement, the Commonwealth provides advances to the State to cover expenditure by the State on its war-time housing projects between 3rd December, 1943 and the date of the Agreement and its housing projects for the following ten years. The advances are repayable by the State in equal annual instalments of principal and interest over a maximum period of fifty-three years. The rate of interest on each advance was not to exceed the rate payable on the long-term Commonwealth loan last raised prior to, or being raised on, the date of the advance, but a flat rate of interest of 3 per cent. has since been agreed upon. The State must ensure that, during the currency of the Agreement, it has adequate statutory power to control rental housing projects under the Agreement, slum clearance, and town planning.

The Agreement is administered by the Housing Commission for the State Government and the Housing Division of the Department of Works and Housing for the Commonwealth Government. Three-fifths of the losses incurred by the State in the sale of houses or in connection with the administration of housing projects under the Agreement are to be borne by the Commonwealth and two-fifths by the State.

Homes erected in New South Wales under the Agreement are allocated amongst persons requiring proper housing in accordance with a scale of "needs", and ex-servicemen, Merchant marinemen, and their dependants receive at least 50 per cent. of those erected. Approved applicants for homes are classified into groups according to the family, and each applicant is admitted to ballot for the homes allocated to his group, the ballots being conducted by the Housing Commission as dwellings become available for allocation.

The weekly rent of the houses, termed the "economic rent", is calculated in terms of the Agreement and includes allowances for interest and repayment of principal, maintenance, rates and taxes, insurance, and administrative costs. Where a house is let to a family with low income, rebate of rent may be granted, but not so as to reduce the rent below 8s. per week. The rebate is the difference between the economic

rent and one-fifth of the family income, where the income is equal to the basic wage, and it is increased or decreased if the income is less or more than the basic wage.

The Agreement relates primarily to rental projects, but the State may sell a house after its completion, the Commonwealth Treasurer's consent being required if the sale price is less than capital cost. The full sale price is payable to the Commonwealth and any loss resulting from the sale is shared.

The following statement shows the financial position of the Agreement in respect of New South Wales up to 30th June, 1949:—

Table 853.—Commonwealth-State Housing Agreement: Financial Position.

Year ended			Interest Due	
30th June.	Made.	Repaid.	Outstanding.*	and Paid.
	£	£	£	£
1946	2,525,000		2,525,000	5,264
1947	5,530,000	19,985	8,035,015	146,920
1948	5,345,000	64,352	13,315,663	318,234
1949	6,295,000	129,756	19,480,907	498,951
To 30 June, 1949	19,695,000	214,093	19,480,907	969,369

<sup>\*</sup> At 30th June.

The number and location of houses financed under the Agreement from its inception to the end of the calendar year 1948 were as follows:—

Location,	Houses Completed.	Houses* Uncompleted.	Total :	Houses Comp	eted and T	Incompleted.
	-	-	Brick.	${f Timber} \ {f Framed.}$	Other.	Total.
Metropolis	6,441	3,070	4,398	4,984	129	9,511
Country	1,806	1,226	683	2,349	• • •	3,031
Total N.S.W.	8,247	4,296	5,081	7,333	129	$12,\!543$

<sup>\*</sup> At end of 1948.

# ADVANCES FOR HOMES.

The extent to which financial assistance to acquire or to improve homes was afforded by governmental authorities and terminating co-operative building societies in New South Wales in the years 1938-39 to 1947-48 is indicated in the next table. During the period shown, advances made under the various schemes (described later) for the erection or purchase of new houses, improvements and repair of houses, or the discharge of a mortgage on a home amounted to £34,269,636, of which £18,465,167 was advanced in 1946-47 and 1947-48 and £4,941,357 in 1938-39. Finance

for home building and home purchase is also provided by life assurance offices, private trading banks, Starr-Bowkett and permanent building societies, and private mortgagees.

Year ended 30th June.	State Government Home Building Schemes.*	Rural Bank: Advances for Homes.	Common- wealth Bank.	War Service Homes,	Terminating Co-operative Building Societies.†	Total.
1939 1940	£ 159,801 145,903	£ 513,554 456,266	£ 	£ 40,908 16,576	£ 4,227,128 2,558,996	£ 4,041,891 3,177,741
1941 1942 1943 1944	118,154 80,977 12,111 9,617	648,100 497,861 186,931 142,949	•••	18,633 24,525 8,326 7,770	1,878,882	2,663,769 5,021,568
1945 1946 1947 1948	14,400 57,561 93,222 96,437	231,108 1,023,212 1,977,403 2,510,104	21,788 528,212 800,000	18,092 57,021 375,408 530,530	6,016,094 5,537,757	8,990,339 9,474,828
1939 to 1948	788,183	8,187,488	1,350,000	1,097,789	22,846,176	34,269,636

Table 854.—Advances for Home Building.

# STATE GOVERNMENT HOME BUILDING SCHEMES.

The Housing Commission of New South Wales provides financial assistance to home builders under certain Government Home Building Schemes formerly administered by the Rural Bank and under the Housing Act, 1912-41.

Under Section 24 of the Housing Act, advances for the erection of new houses are made to persons who own the land on which the house is to be erected and require a home for family purposes, and whose annual income does not exceed £600 (prior to December, 1947, £400). The advances are secured by first mortgage on the land and dwelling and may be granted up to 100 per cent. of valuation of the property, with a maximum of £1,540 (prior to December, 1947, 95 per cent. and £1,000). The normal periods of repayment of the advances are 30 years for brick structures and 25 years for timber-framed and brick veneer structures. Houses financed in this way are constructed by private builders on contract in accordance with specifications approved by the Housing Commission. Financial assistance on similar terms is provided to persons seeking to purchase existing houses of which voluntary vacant possession can be obtained.

Section 10 of the Act permits the Housing Commission to erect houses of a value in excess of the £1,540 maximum stated above on land owned by the Commission for sale on terms to persons whose annual income exceeds the limit of £600 and whose housing need equals that of a person admitted to ballot for accommodation under the Commonwealth-State Housing Agreement.

The scope and purposes of the Home Building, Government Housing, Building Relief, Soldiers' Families Housing, and Homes for the Unemployed Schemes are described on page 881 of the 50th edition and in earlier issues of the Year Book. These schemes, with the exception of

<sup>\*</sup> Includes Housing Commission advances.

<sup>†</sup> Year euded September.

the Homes for the Unemployed Scheme conducted by a separate Trust, were administered by the Rural Bank through its Government Agency Department prior to 31st October, 1942, when the Bank's activities were confined to the administration and collection of loans outstanding at that date and the Housing Commission was authorised to make and control any subsequent advances.

The following table combines particulars of advances made by the Rural Bank and the Homes for the Unemployed Trust and, later, by the Housing Commission and summarises the extent of home building assistance under State Government Home Building schemes during 1947-48 and earlier years:—

Table 855.—Operations of State Government Home Building Schemes.

Year ended 30th	and Gov			g Relief eme.	Soldiers' Housing		Homes for ployed	or Unem- Scheme,	To	otal
June.	Ad- vances made.	Ad- vances out- standing.	Ad- vances made.	Ad- vances out- standing.	Ad- vances made.	Ad- vances out- standing.	Ad- vances made.	Ad- vances out- standing.	Ad- vances made.	Ad- vances out- standing.
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	£ 6,785 4,682 4,876 19,807 9,494 2,215 514 1,245 44,337 82,772 88,760	£ 655,345 597,107 527,022 473,102 422,371 362,985 304,775 255,242 260,431 305,162 348,075	£ 85,692 100,619 78,327 45,047 37,987 4,613 1,814 4,248 7,494 3,462 5,962	£ 322,301 308,489 297,762 264,748 231,226 173,102 130,246 101,875 80,394 61,523 49,498	£   6,896 183 1,285 95 91 	£  6,819 6,692 7,657 7,377 6,602 5,639 4,349	£ 55,600† 54,500† 62,700† 53,300† 26,600† 5,100 6,004 8,812 5,639 6,988 1,715	178,900† 209,700† 192,223	£ 148,077 159,801 145,903 118,154 80,977 12,111 9,617 14,400 57,561 93,222 96,437	£ 977,646 905,596 824,784 737,850 660,416 542,779 442,678 364,494 347,427 372,324 401,922

<sup>\*</sup> At 30th June.

### RURAL BANK OF NEW SOUTH WALES.

The Advances for Homes Division of the Rural Bank of New South Wales provides assistance to individuals for the erection, improvement, or purchase of homes or the discharge of mortgages on homes.

Under this scheme, which commenced in July, 1914, loans may be granted up to 80 per cent. of the value of the property for periods of from five to thirty years; prior to January, 1946, the limit was 75 per cent. of valuation, with maxima of £750 until 1928, £1,000 until 1944, and £1,200 until 1946. For the most part, assistance has been provided within these limits, but in 1928 the Bank was authorised to advance up to 90 per cent. of valuation (with a limit of £1,000) where the building contract was controlled by the Bank, and, under the Commonwealth Housing Act, 1927, to use funds of the Commonwealth Savings Bank to make advances up to 90 per cent. of valuation with a maximum of £1,800.

Table 856 summarises the operations of the Advances for Homes Division of the Rural Bank during 1947-48 and recent years and to the

<sup>†</sup> Approximated from calendar year data.

end of 1947-48. Additional particulars relating to the Division are given on page 818 of this volume.

Table 856 .- Operations of Advances for Homes Division, Rural Bank.

Year ended		vances ng year.		Advances d of year,		nces fully end of year.		s outstand- nd of year.
30th June.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount,
1938 1939 1940 1941 1942 1943	928 682 696 896 711 246	£ 818,579 513,554 456,266 648,100 497,861 186,931	38,280 38,962 39,658 40,554 41,265 41,511	£ 21,930,075 22,443,630 22,899,896 23,547,997 24,045,858 24,232,789	13,034 14,226 15,575 16,928 18,383 19,966	£ 9,387,895 10,340,555 11,310,486 12,285,179 13,297,870 14,338,328	25,246 24,736 24,083 23,626 22,882 21,545	£ 12,542,180 12,103,075 11,589,410 11,262,818 10,747,988 9,894,461
1944 1945 1946 1947 1948	223 411 1,605 2,673 3,184	142,949 231,108 1,023,212 1,977,403 2,510,104	41,734 42,145 43,750 46,423 49,607	24,375,738 24,606,846 25,630,058 27,607,461 30,117,565	21,745 23,607 25,745 27,916 30,011	15,401,814 16,454,603 17,633,319 18,855,190 20,130,530	19,989 18,538 18,005 18,507 19,596	8,973,924 8,152,243 7,996,739 8,752,271 9,987,035

<sup>\*</sup> In effect, the number of houses covered,

The activities of the Government Agency Department of the Rural Bank are described on pages 309 and 820 of this issue.

#### COMMONWEALTH BANK.

Advances by way of overdraft for the purchase of houses are available to individuals through the General Banking Division of the Commonwealth Bank.

Since January, 1946, the Commonwealth Bank has provided loans to individuals for the erection of new houses or purchase of newly-erected houses. The loans are on credit foncier terms, secured by first mortgage on land, and may be granted up to 85 per cent. of valuation (with a maximum of £1,750) for periods of from five to thirty-five years. During 1947-48, the Bank approved of 625 loans in New South Wales amounting to £650,000, and actually advanced £800,000. To 30th June, 1948, 2,050 loans had been approved in New South Wales for a total of £2,100,000, and £1,358,000 had been advanced.

The Commonwealth Bank is also authorised to provide loans at the lowest practicable rate of interest to building societies for the erection or purchase of homes or for the discharge of mortgages on homes. These loans may not exceed 90 per cent. of the value of the property on which the building society makes an advance.

#### WAR SERVICE HOMES.

In terms of the War Service Homes Act, 1918-1948, the Commonwealth Government provides assistance in acquiring a home to persons who were enlisted or appointed for or employed on active service outside Australia during the first and second World Wars. Persons eligible for assistance include members of the Australian and other British armed forces who had resided in Australia prior to enlistment and certain members of the Mercantile Marine Service. Assistance may be granted also to dependent widowed mothers of unmarried eligible persons and to the widows of eligible persons.

The scheme is administered by the War Service Homes Division of the Commonwealth Department of Works and Housing (prior to July, 1947, by an independent Commission). The Division may erect homes on land acquired for that purpose or owned by eligible persons, sell homes on a rent-purchase system, and make advances for the erection or purchase of homes or for the discharge of a mortgage on a home. The cost of a home (including land) constructed by the Division may not exceed £1,750 (prior to July, 1947 the limit was £1,250, and prior to April, 1946, £950), and the maximum advance which may be granted is 90 per cent. of the value of the property, but not exceeding £1,500 (£1,250 prior to 1947 and £950 prior to 1946).

The following table shows the number of homes provided in New South Wales, the number of loans repaid, and the amount of instalments paid and in arrears to 30th June, 1948 and in selected earlier periods:—

		Houses 1	Provided.		Homes		Instalm	ents.
Period (Years ended 30th June).	By Erection.	By Purchase,	By Discharge of Mortgage.	Total.	under Con- struction.	Loans Repaid,	Paid.	In Arrears,
	No.	No.	No.	No.	No.	No.	£	£
To 1940 1941 to 1945 1946 1947 1948	6,630 4 5 52 168	4,267 8 52 284 205	1,420 56 20 101 113	12,317 68 77 437 486	1 64 119 301	3,048 1,313 482 487 532	7,880,691 2,270,098 510,123 509,181 530,477	293,858 189,255 172,423 158,961 140,200
Total to 1948	6,859	4,816	1,710	13,385	301	5,862	11,700,570	140,200

Table 857.-War Service Homes in New South Wales.

### Co-operative Building Societies.

Co-operative Building Societies assist members to finance the building or acquisition of homes. A committee appointed in 1937 to foster the growth of the societies selected as most suitable for this purpose a type of terminating building society which obtains funds from outside sources and makes advances to members when they require them. On joining a society, the member takes up the number of shares which corresponds with the amount he intends to borrow. The rates of contribution are related to the term of the society, and the rate payable by a member prior to advance is increased when he obtains a loan. When all shares have been advanced and external obligations have been met, the society is wound up.

The Government has assisted the societies to obtain requisite funds by guaranteeing the repayment of loans made to them by banks, insurance societies, and other approved bodies, thus enabling the societies to advance to members 90 per cent. of the value of the security

<sup>\*</sup> Constructed or sponsored by Division.

<sup>†</sup> At end of period.

offered. Under certain conditions, the societies are authorised to advance 100 per cent. of valuation, with a maximum of £1,540 (£1,250 prior to 24th December, 1948).

The next table shows the number of societies with funds available for advances (and of these the number operating under Government guarantee) and the number of members and shares held at 31st March, 1949 and earlier available years. These data illustrate the remarkable growth of terminating building societies in recent years. A brief account of the development of the societies prior to 1939 is given on page 198 of the Year Book for 1938-39.

Table 858.—Development o	of Terminating	Building Societies.

	Me	tropolite	an Socie	ties.	Country Societies,				Total.			
At		es with				es with				es with		
31st March	With Gov't Guar- antee.	Total.	Meni- bers.	Shares Held.	With Gov't, Guar- antee.	Total.	Mem- bers.	Shares Held.	With Gov't. Guar- antee.	Total.	Meni- bers.	Shares Held.
1939 1940 1941 1946* 1947 1948 1949	94 108 122 224 256 291 338	105 111 128 248 276 315 387	12,743 13,557 14,643 23,007 24,511 26,389 29,047	185,799 205,766 352,052 397,892 447,262	$\begin{array}{c} 54 \\ 62 \\ 121 \\ 137 \\ 158 \end{array}$	53 55 66 129 143 161 200	5,875 5,805 6,000 8,391 10,915 13,127 15,870	65,042 70,961 128,222 168,221 217,241	145 162 184 345 393 449 528	158 166 194 377 419 476 587	18,618 19,362 20,643 31,398 35,426 39,516 44,917	250,841 276,727 480,274 566,113

<sup>\*</sup> At 30th September.

Particulars of the loans approved and advances up to 31st March, 1949 by the societies with Government guarantee are as follows:—

Table 859.—Terminating Building Societies with Government Guarantee:

Advances to 31st March, 1949.

	Met	ropolita	n Socie	ties.	C	ountry	Societie	s.		Tot	tal.	
Purpose of Loan.	Loa Appr		Adva Ma		Los Appr	ins. oved.	Adva Ma	ances de.	Los Appr		Adva Ma	nces de.
	No.	Am'nt	No.	Am'nt	No.	Am'nt	No.	Am'nt	No.	Am'nt	No.	Am'nt
		£000		£000		£000		£000		£000		£000
Erection	15,772	16.061	13,626	11,981	8,889	7,760	7,792	6.072	24,661	23,821	21,418	18.053
Purchase	9,967	8,978			4,491		4,090	2,756				
Discharge of	'		-,	-,	-,	-,	-,	_,,,,,	,	,	,	,
Mortgage	874	643	864	630	469	284	457	276	1,343	927	1,321	906
Alterations &									_,		_,.	
Additions	205	55	189	50	358	84	332	74	563	139	521	124
Other	97	38	89	36	56	26	50	25	153	64	139	61
Total	26,915	25,775	24,204	21,072	14,263	11,296	12,721	9,203	41,178	37,071	36,925	30,275

The average amount of loans approved for the erection or purchase of a home up to 30th September, 1941 was about £800 in the metropolitan societies and £750 in all societies. By 31st March, 1949, the averages had increased to £973 and £919, respectively.

# SCOPE AND DEFINITIONS OF BUILDING STATISTICS.

The statistics in succeeding pages relate to new buildings as distinct from works which are not buildings and therefore exclude construction of railways, roads, earthworks, retaining walls, water storage, silos, rural fencing, etc. Particulars of repairs, renovations, and minor alterations to buildings are not available owing to the difficulty of obtaining satisfactory records.

Prior to July, 1945, statistics of new building in New South Wales were derived mainly from returns of permits to build issued in terms of the Local Government Act, 1919 as amended, by the councils of the City of Sydney, the metropolitan municipalities, 129 country municipalities, and 7 extra-metropolitan shires. These returns showed the number, value, and types of new buildings and alterations and additions to existing buildings approved by the Councils.

Since July, 1939, these were supplemented by records of governmental building for which local council permits are not required.

Since September quarter, 1945, a quarterly return of new building has been collected from individual builders and governmental authorities. The collection has been extended to include the operations of the many owner-builders who build their home without the service of a building contractor.

During 1946, periodical returns of the actual number of new houses built were obtained from most of the local councils in the State. Since January, 1947, almost every local government council in New South Wales has provided a monthly (in some cases, a quarterly) return of permits for new building and of actual new house and flat building.

The term *value*, as applied in this chapter to building operations, represents the estimated cost of the building when completed (exclusive of the land).

Building is classified as private or Government according to ownership. Building classified as government therefore includes houses, flats, and other buildings owned by the Housing Commission or other governmental authorities, irrespective of whether constructed by these authorities or by private builders on contract to them. Buildings for which finance and materials were "sponsored" by governmental authorities to assist building for private ownership are not classified as "government".

The value of new building approved is defined as the value of permits issued by local government councils plus the value of contracts let or work commenced and day labour projects authorised by governmental authorities.

The number of new houses and flats approved is defined as the number of new houses and flats for which permits were issued by local government councils plus the number covered by contracts let and day labour projects authorised by the Housing Commission and other governmental authorities.

Houses and flats are classified as *uncompleted* if not completed at the end of a period, irrespective of whether construction was actually proceeding on that particular date.

An owner-builder is a person who is building his own home without the services of a builder working on formal contract. The operations of owner-builders are included in the statistics given in succeeding pages.

### VALUE OF NEW BUILDING APPROVED.

Statistics of building activity in New South Wales in years prior to 1946 were derived from returns of permits to build issued by the metropolitan councils of Sydney, 129 country municipalities, and 7 extra-metropolitan shires. It is believed these data, which were supplemented by records of government building projects as from July, 1939, covered not less than 85 per cent. of the total approved building within the State and, although not complete, illustrate the trend of building activity.

The following table shows the value of new building approved in New South Wales from 1929 to 1946, as far as recorded, distinguishing the value of government building projects from 1940 to 1946 and the value of permits issued by councils for houses, flats, factories, and other private buildings:—

Table 860.—Value of New Building\* Approved, 1929 to 1946.
£thousand.

			Private Build	ing. †		Government	Total
Year,	Houses,	Flats.	Factories.	Other	Total	Building,	Building
1929	‡	İ	‡	ţ	19,722	‡	‡
1930	‡ ‡	į.	‡	‡	7,479	‡	‡
1931	‡	‡ ‡ ‡	‡	‡ .	2,146	ļ ‡	‡
1932	‡	‡	‡	‡	2,659	‡	‡
1933	#	‡	‡	‡	4,370	‡	‡
1934	† "	‡ ‡	‡	‡	8,370	‡	‡
1935	‡	‡	‡	‡	12,846	ļ ‡	‡
1936	‡	‡	‡	‡	14,798	‡	‡
1937	7,532	2,367	1,354	5,403	16,656	‡	‡
1938	9,508	3,574	1,171	6,119	20,372	‡	1
1939	8,999	2,958	1,394	4,231	17,582	] ‡ [	‡
1940	8,688	2,801	1,377	3,739	16,605	3,566	20,17
1941	10,178	2,370	1,448	1,609	15,605	4,629	20,23
1942	970	36	1,004	515	2,525	5,303	7,828
1943	284	13	1,125	447	1,869	4,683	6,55
1944	723	20	1,225	504	2,472	3,911	6,38
1945	8,003	59	968	871	9,901	5,300	15,20
1946	22,951	789	4,212	3,625	31,577	6,444	38,02

New buildings and alterations and additions combined. † Permits issued by Councils specified above.
 Not available.

Building activity was high in the years 1927 to 1929, but declined heavily from 1930 to 1932 owing to economic depression, after which it recovered gradually. The effects of war-time restrictions on private building operations became evident in 1942 and intensified in 1943. In these years, however, there was a large volume of government building for war purposes. Total building activity reached its lowest war-time level in 1944, when private building was little more than one-tenth of the level

of 1938. With gradual easing of restrictions upon private building and gradual development of the government housing programme, a strong upward trend began in 1945.

The exigencies of war are reflected in the drastic curtailment of private house and flat building and the maintenance of factory building activity during the war years. In 1945 and 1946, pressure for houses and industrial expansion were the major factors leading to the upward trend in house and factory building. The proportions of the aggregate value of private building in 1946 were houses 73 per cent., flats 3 per cent., and factories 13 per cent. In the years 1942 to 1944, the proportions were houses, 29 per cent., flats, 1 per cent., and factories, 49 per cent., and in 1938, 47, 17, and 6 per cent., respectively.

The next table shows more recent trends in building activity in New South Wales as indicated by the value of all private and governmental building approved, commenced, and completed within the State since July, 1945. The cost of building increased substantially from 1945 to 1949.

Table 861.—Value of New Building Approved in New South Wales. £thousand.

	Ne	w Buildin	gs	Alterati	ons and A	dditions.	Total	Building A	ctivity.
Period.	Ap- proved.	Com- menced.	Completed.	Ap- proved.	Com- menced.	Completed.	Ap- proved.	Com- menced.	Com- pleted.
1945— July to Dec.	†	†	4,536	†	†		11,500*	6,000*	4,536
1946— Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	7,062* 8,464* 10,739* 9,905*	4,000* 5,500* 6,915 7,310	1,846 2,924 3,713 4,516	1,154* 1,404* 1,990* 1,751*	1,200 1,300 1,300 1,200	600 600 700 600	8,216* 9,868* 12,729* 11,656*	5,200 6,800 8,215 8,510	2,446 3,524 4,413 5,116
Year	36,170*	23,725	12,999	6,299*	5,000	2,500	42,469*	28,725	15,499
Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	10,393 10,721 11,484 10,175	8,351 7,882 8,851 8,101	4,082 4,784 5,696 5,700	1,919 1,507 1,819 1,121	1,200 1,300 1,300 1,200	600 600 700 600	12,312 12,228 13,303 11,296	9,551 9,182 10,151 9,301	4,682 5,384 6,396 6,300
Year	42,773	33,185	20,262	6,366	5,000	2,500	49,139	38,185	22,762
1948— Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	10,847 15,009 14,019 14,283	8,569 10,675 11,904 10,447	5,877 7,029 7,823 9,229	1,462 1,523 1,999 1,644	1,200 1,300 1,300 1,200	600 600 1,000 1,000	12,309 16,532 16,018 15,927	9,769 11,975 13,204 11,647	6,477 7,629 8,823 10,229
Year	54,158	41,595	29,958	6,628	5,000	3,200	60,786	46,595	33,158
1949— Mar. Qr. June Qr.	14,164 15,448	10,234 12,567	7,578 9,189	2,439 2,150	1,200 1,300	1,000 1,000	16,603 17,598	11,434 13,867	8,578 10,189

<sup>\*</sup> Partly estimated.

In the period covered by Table 861, expansion was affected by shortages of skilled labour, inadequate and irregular supplies of many building materials, and industrial disputes.

During the period from July, 1945 to December, 1948, the total value of private and government building approved in New South Wales was £164,000,000, the value of building actually commenced was £120,000,000, and the value of building actually completed was £76,000,000.

<sup>†</sup> Not available.

The average quarterly value of building approved has increased progressively since July, 1945, and in 1948 was 23 per cent. greater than in 1947, 43 per cent. greater than in 1946, and 164 per cent. greater than in the period July to December, 1945. A similar trend is apparent in the value of building commenced and completed, although the value of completions lags behind the rate of commencements. The average quarterly values of building commenced and completed in 1948 were 22 and 46 per cent., 62 and 114 per cent., and 288 and 265 per cent. above their respective levels in 1947, 1946, and July to December, 1945.

### VALUE OF NEW BUILDING APPROVED.

The next table contains a classification of the value of private and governmental building approved in New South Wales during June quarter, 1949 and earlier periods according to the main types of building.

From 1945 to 1949, house building was the predominant building activity in New South Wales. The value of house building approved amounted to £113,932,000 during the years 1946 to 1948 and increased from 72 per cent. of the total value of building approved in 1946 to 75 per cent. in 1947 and 76 per cent. in 1948. The proportion of total building represented by flats likewise rose from 2 per cent. in 1946 to 3 per cent. in 1947 and 4 per cent. in 1948, but the value of factory building, which amounted to £14,927,000 during the three years, declined from 12 per cent. of building aproved in 1946 to 9 per cent. in both 1947 and 1948. The changes in the respective proportions represented by other types of building were very small. House building approved in 1948 was 51 per cent. and 25 per cent. greater in value than in 1946 and 1947, while the value of flat building was 153 per cent. and 36 per cent. and of factory building approved 5 per cent. and 26 per cent. above their respective levels in 1946 and 1947.

The proportion of government to total building approved rose from 14 per cent. in 1946 and 1947 to 18 per cent. in 1948. Housing is the major element in government building, with the provision of flats, factories, hospitals, and schools of growing relative importance. In 1948, the value of total government building approved was greater by 76 per cent. and 55 per cent., respectively, than in 1946 and 1947, compared with respective increases of 42 and 43 per cent. in the value of house building approved, of 272 and 193 per cent. in the value of factory building, and of 108 and 49 per cent. in the value of other governmental building approved.

In governmental building activity, the value of house building approved decreased from 63 per cent. of total government building approved in 1946 to 55 per cent. in 1947 and 51 per cent. in 1948. The proportions of total government building represented by flats increased from 1 per cent. in 1946 to 3 per cent. in 1947 and 4 per cent. in 1948 and by factories from 6 and 7 per cent. to 12 per cent., respectively. Schools and hospitals are important avenues of government building; schools cemprised 5 per cent. in 1946 and 1947 and 9 per cent. in 1948 and factories 11 per cent. in 1946, 15 per cent. in 1947, and 9 per cent. in 1948 of total government building approved.

Table 862.—Value of New Building\* Approved: Type of Building. £thousand..

			COLO	usanu				
Period.	Houses.	Flats.	Hotels, Guest Houses, etc.	Shops with Dwellings.	Shops Only,	Factories.	Other Buildings.	Total
			PRI	VATE.				
1946—Mar. Qr. † June Qr. † Sept. Qr. † Dec. Qr. †	5,363 6,759 7,862 6,646	60 136 318 319	41 125 139 187	42 105 113 107	47 127 393 270	798 768 1,270 1,979	329 409 729 583	6,680 8,429 10,824 10,091
Year †	26,630	833	492	367	837	4,815	2,050	36,024
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	7,503 8,412 9,001 8,123	272 389 425 375	125 105 164 86	129 130 94 113	202 180 124 64	1,351 871 1,046 584	497 680 478 294	10,079 10,767 11,332 9,639
Year	33,039	1,461	480	466	570	3,852	1,949	41,817
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	8,244 10,735 10,900 10,607	395 552 451 365	25 21 100 101	88 144 152 86	47 84 142 82	954 1,243 977 880	376 414 508 770	10,129 13,193 13,230 12,891
Year	40,486	1,763	247	470	355	4,054	2,068	49,443
1949—Mar. Qr. June Qr.	11,236 12,445	364 433	24 32	117 154	110 113	1,005 702	646 742	13,502 $14,621$
			Gove	RNMENT.				
1946—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	1,021 1,083 970 969	48   14				129 55 64 120	338 301 871 429	1,536 1,439 1,905 1,565
Year	4,043	62		33	,	368	1,939	6,445
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	823 979 1,030 1,169	59 92 40 20		3 		371 22 13 62	980 365 888 406	2,233 1,461 1,971 1,657
Year	4,001	211		3		468	2,639	7,322
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	1,094 1,753 1,494 1,392	161 99 151 93		54 34 9		43 511 612 204	828 942 522 1,347	2,180 3,339 2,788 3,036
Year	5,733	504		97		1,370	3,639	11,343
1949—Mar. Qr. June Qr.	1,191 1,349	191 298				391 227	1,328 1,103	$^{3,101}_{2,977}$
_		Pi	RIVATE ANI	GOVERNMI	ENT.			
1946—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	6,384 7,842 8,832 7,615	108 136 318 333	41 125 139 187	42 105 113 140	47 127 393 270	927 823 1,334 2,099	667 710 1,600 1,012	8,216 9,868 12,729 11,656
Year	30,673	895	492	400	837	5,183	3,989	42,469
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	8,326 9,391 10,031 9,292	331 481 465 395	125 105 164 86	129 133 94 113	202 180 124 64	1,722 893 1,059 646	1,477 1,045 1,366 700	12,312 12,228 13,303 11,298
Year	37,040	1,672	480	469	570	4,320	4,588	49,139
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	9,338 12,488 12,394 11,999	556 651 602 458	25 21 100 101	142 178 161 86	47 84 142 82	997 1,754 1,589 1,084	1,204 1,356 1,030 2,117	10,309 16,532 16,018 15,927
Year	46,219	2,267	247	567	355	5,424	5,707	60,786
1949—Mar. Qr. June Qr.	12,427 13,794	555 731	24 32	117 154	110 113	1,396 929	1,974 1,845	16,603 17,598

<sup>•</sup> New buildings and alterations and additions to existing buildings combined. 

† Partly estimated.

The value of certain types of buildings authorised during the years 1946 to 1948 by the building control authority is classified below. These authorisations do not correspond to permits issued by local government authorities.

Table 863.—Value of Building Authorised by Building Control Authority. £thousaud..

Type of Building.	1946.	1947.	1948.
Hotels, Guest Houses, etc.	359	260	227
Shops with dwellings	320	619	849
Shops only	882	382	386
Offices, Banks, Warehouses,			
etc	597	495	799
Factories	8,853	6,335	6,021
Churches	34	56	72
Private Schools	378	176	313
Halls, Theatres, etc	458	339	237
Hospitals, etc	256	316	256
Other (not Houses and Flats)	293	539	525
Total of above	12,430	9,517	9,685

The following table shows a geographical distribution of the value of government building approved in New South Wales during June quarter, 1949 and earlier periods, distinguishing house and flat building from other building:—

Table 864.—Value of New Government Building \* Approved : Geographical Distribution.

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	Metropolis.			Rest of State.			Total, New South Wales.		
Period.	Houses and Flats.	Other Build- ings.	Total.	Houses and Flats.	Other Build- ings.	Total.	Houses and Flats.	Other Build- ings.	Total.
1946—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	644 679 656 606	260 197 408 344	904 876 1,064 950	425 404 314 377	207 159 527 238	632 563 841 615	1,069 1,083 970 983	467 356 935 582	1,536 1,439 1,905 1,565
Year	2,585	1,209	3,794	1,520	1,131	2,651	4,105	2,340	6,445
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	502 595 524 604	994 277 562 242	1,496 872 1,086 846	380 476 546 585	357 113 339 226	737 589 885 811	882 1,071 1,070 1,189	1,351 390 901 468	2,23 <b>3</b> 1,461 1,971 1,657
Year	2,225	2,075	4,300	1,987	1,035	3,022	4,212	3,110	7,322
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	700 1,064 891 713	404 972 604 896	1,104 2,036 1,495 1,609	555 788 754 772	521 515 539 655	1,076 1,303 1,293 1,427	1,255 1,852 1,645 1,485	925 1,487 1,143 1,551	2,180 3,339 2,788 3,036
Year	3,368	2,876	6,244	2,869	2,230	5,099	6,237	5,106	11,343
1949—Mar. Qr. June Qr.	843 1,000	840 685	1,683 1,685	539 646	879 645	1,418 1,291	1,382 1,646	1,719 1,330	3,101 2,976

<sup>\*</sup> New buildings and alterations and additions to existing buildings combined.

Rather more than half the government building approved in New South Wales was undertaken in the Metropolis of Sydney. In 1948, the value of building approved in the metropolis was 55 per cent. of the total building approved, having fallen from 59 per cent. in both 1947 and 1946. Similarly, the value of house and flat building approved in the metropolis represented 63 per cent. in 1946, 53 per cent. in 1947, and 54 per cent. of total house and flat building approved in 1948.

Housing is the major element of government building in both the metropolis and the rest of New South Wales, tending to be relatively more important in the extra-metropolitan areas. The value of house and flat building approved within the metropolis represented 54 per cent. of total building approved in the metropolis in 1948, compared with 52 per cent. in 1947 and 68 per cent. in 1946, while the corresponding proportions in the rest of New South Wales were 56, 66, and 57 per cent.

A geographical distribution of the value of private building approved in New South Wales during June quarter, 1949 and earlier periods, distinguishing house and flat building from other building is as follows:—

Table 865.—Value of New Private Building \* Approved: Geographical Distribution.

£thousand.

Balance Hunter Plains Western Metro. North South Table-Total Period. of Cum-berland. and Slopes. Coast. and polis. N.S.W. Coast. lands Manoing Riverina sion. HOUSES AND FLATS. 1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr. 7,775 8,80**1** 9,42**6** 8,498  $3,586 \\ 3,922$ 1,696 1,964357 710 378 448 435 135 30 467 890 485 419 136 63 455 4,389 3,775 2,081 391 1,002 506 1,817 429 918 426 461 434 149 98 Year 15,672 7.558 1.644 3,520 1,795 1,780 1,714 542 275 34,500 2,029 2,688 2,710 1948—Mar. Qr. June Or. 3,696 377 974 524 431 403 156 40 8,639 4,989 4,952 435 1,301 1,237 546 601 169 11,289 11,350 627 482 52 Sept. Qr. 501 Dec. Qr. 4,651 2.680 494 1,299 539 507 549 131 120 10,970 Venr 18.288 10.107 1.807 4,811 2,291 2,085 1,914 625 320 42,248 1949 -Mar. Qr. June Qr. 5,183 2,495 2,9071,322 11,601 5,620 580 1,450 700 685 659 148 129 12,878 OTHER BUILDINGS. 1947—Mar. Qr. June Qr. Sept, Qr.  $\frac{20}{37}$  $\frac{71}{82}$ 2,304 1,966 1.609 118 999 1.244166 76 13 139 73 136 1,069 72 57 57 52 . 79 40 2211.905 Dec. Qr. 658 140 115 47 28 5 1,142 7,317 4,580 386 770 395 259 102 Year 228 353 244 -Mar. Qr. June Qr. Sept. Qr.  $1,490 \\ 1,905$ 1,070 721948-54100 67 15 273 823 64 415 178 47 56 40 85 72 17 20 1,880 1,257 Dec. Qr. 37 221 112 90 74 37 1,920 4,308 7,195 638 144 50 Year 240 665 630 267 253 1949--Mar. Qr. 1,241 62 53 92 22419 1,902 June Qr. 1,000 125 54 161 198 99 26 1.743 TOTAL BUILDINGS, -Mar. Qr. June Qr. Sept. Qr.  $\frac{1,814}{2,103}$ 10,079  $5,195 \\ 5,166$ 35 1947-403 933 492 519 533 155 591 173 76 540 1,056 561 501 5,458 4,433 469 474 11,331 9,640 307 1.874 481 170 101 Dec. Qr. 1,058 541 508 41,817 20,252 7,944 1,872 4,290 2,190 2,039 2,067 644 519 Year -Mar. Qr. June Qr. Sept. Qr. 4,766 5,812 6,110 2,095 3,103 2,795 2,752 596 10,129 13,194 171  $\frac{53}{61}$ 1948-431 1,074 498 445 1,479 1,403 900 209 499 593 538 221 116 13.23012,890 Dec. Qr. 168 5,908 531 1,520 651 597 623 140 22,596 10,745 2,047 769 370 49,443 Year 5,476 2,921 2,352 2,167 247 13,503 -Mar. Qr. 6,424 2,557 498 1,414 897 181 132 14,621 June Qr. 6,620 3,032 634 1,611 898 762 758 174

<sup>\*</sup> New buildings and alterations and additions to existing buildings combined.

<sup>\*18647-4</sup> 

Nearly half the private building approved within the State is undertaken in the metropolis, the proportion falling slightly from 48 per cent. in 1947 to 46 per cent. in 1948. Other important centres of private building activity are the Balance of Cumberland, which is, in part, an extension of the metropolitan area, and the Hunter and Manning and South Coast divisions, in which the Newcastle and Greater Wollongong industrial areas are located. The value of private building projects in these centres represented, respectively, 19, 10, and 5 per cent. in 1947 and 22, 11, and 6 per cent. in 1948 of the value of private building approved in the State.

There was an almost identical distribution of the total value of private house and flat building approved, the respective proportions in the metropolis, Balance of Cumberland, Hunter and Manning, and South Coast divisions being 45, 22, 10, and 5 per cent. in 1947 and 43, 24, 11, and 5 per cent. in 1948.

House and flat building approvals predominate in private building. The following summary shows, for each district, the proportion per cent. of the total value of approved private building represented by house and flat building in 1947 and 1948:—

Year.		Metro- polis,	Balance of Cum- berland,	North Coast.	Hunter and Manning	South Coast.	Table- lands.	Slopes,	Plains,	Vestern Divi- sion.	N.S.W.
1947	per cent.	77	95	88	82	82	87	83	84	53	82
1948	per cent.	81	94	88	88	78	89	88	81	87	85

The following table summarises the value of alterations and additions approved to existing buildings in New South Wales during June quarter, 1949 and earlier periods:—

Table 866.—Value of Alterations and Additions Approved. £thousand.

		Priva	te Build	ings.		Private and Government Buildings.					
Period.	Hous	Houses and Flats.			Total.	Houses and Flats.			Other Build- ings,	Total.	
	Metro- polis.	Rest of State.	N.S.W.	N.S.W.	N.S.W.	Metro- polis.	Rest of State.	N.S.W.	N.S.W.	N.S.W	
1946—Mar. Qr. June Qr. Sept. Qr Dec. Qr.	112 142 156 140	207 217 292 233	319 359 448 373	755 943 1,375 1,216	1,074 1,302 1,823 1,589	112 142 157 140	211 217 293 251	323 359 450 391	831 1,045 1,540 1,360	1,154 1,404 1,990 1,751	
Year	550	949	1,499	4,289	5,788	551	972	1,523	4,776	6,299	
1947—Mar. Qr. June Qr Sept. Qr Dcc. Qr.		307 379 321 292	509 593 526 471	1,290 831 857 539	1,799 1,424 1,383 1,010	202 214 206 179	308 380 321 298	510 594 527 477	1,409 913 1,292 644	1,919 1,507 1,819 1,121	
Year	800	1,299	2,099	3,517	5,616	801	1,307	2,108	4,258	6,366	
1948—Mar, Qr. June Qr Sept. Qr. Dec. Qr.		287 399 404 332	477 645 742 582	757 693 1,047 799	1,234 1,338 1,789 1,381	191 246 338 250	291 400 404 332	482 646 742 582	980 877 1,257 1,062	1,462 1,523 1,999 1,644	
Year	1,024	1,422	2,446	3,296	5,742	1,025	1,427	2,452	4,176	6,628	
1949—Mar. Qr. June Qr.	250 282	360 364	610 646	I,039 941	1,649 1,587	250 282	360 364	610 646	1,829 1,504	2,439 2,15 <b>0</b>	

Of the total value of alterations and additions approved to private and government buildings in New South Wales, the value of alterations and additions to houses and flats represented 37 per cent. in 1948, compared with 33 per cent. in 1947 and 24 per cent. in 1946. The proportions for house and flat alterations in the metropolis in these years were 42, 38, and 36 per cent., respectively.

## VALUE OF NEW BUILDINGS COMMENCED.

The following table contains a classification of the value of new private and governmental buildings commenced in New South Wales during June quarter, 1949 and earlier periods according to the main types of building. Data of alterations and additions commenced and separate data of private and government building are not available.

Table 867.—Value of New Private and Government Buildings Commenced. £thousand.

Period.	Houses.	Flats,	Hotels, Guest Houses, etc.	Shops with Dwellings.	Shops Only,	Factories.	Other Buildings.	Total,
1946—Sept. Qr. Dec. Qr	5,341 4,950	121 259	6 11	23 21	36 41	469 1,462	919 566	6,915 7,310
July to Dec.	10,291	380	17	44	77	1,931	1,485	14,225
1947—Mar. Qr June Qr Sept. Qr. Dec. Qr Year	6,245 6,793 6,426	197 289 197 334 1,017	42 4 29  75	34 41 33 49 —————————————————————————————————	32 41 43 10	699 763 886 650 	1,861 499 870 632 3,862	8,351 7,882 8,851 8,101 33,185
1948—Mar. Qr June Qr Sept. Qr. Dec. Qr	8,780 9,200 8,400	528 546 701 292 2,067	3 42 72 54	120 82 55 80	31 20 12 15 84	395 614 1,323 359 2,691	1,005 585 541 1,247 3,378	8,569 10,675 11,904 10,447 41,595
1949—Mar. Qr June Qr	7,805 9,060	512 696	15 148	58 76	27 33	597 516	1,220 2,038	10,234 12,567

The distinct upward trend during these years in the value of building commenced in New South Wales was due primarily to activity in the construction of houses. The value of house building commenced during the period from July, 1946 to December, 1948 amounted to £68,108,000 and increased from 72 per cent. of the total value of building commenced in July to December, 1946 to 75 per cent. in 1947 and 79 per cent. in 1948. The proportion of total building represented by flats commenced likewise rose from 3 per cent. in 1946 and 1947 to 5 per cent. in 1948, but the value

of factory building, which amounted to £7,620,000 during the period, declined from 14 per cent. of building commenced in 1946 to 9 per cent. in 1947 and 6 per cent. in 1948.

The average quarterly value of building commenced has increased progressively since July, 1946 and in 1948 was 25 per cent. and 46 per cent., respectively, greater than in 1947 and the period July to December, 1946. The value of houses and flats commenced in 1948 was 35 and 64 per cent. above, and of factory building commenced 10 and 30 per cent. below, their respective levels in 1947 and 1946.

#### VALUE OF NEW BUILDINGS COMPLETED.

The following table contains a classification of the value of new private and government buildings completed in New South Wales during June quarter, 1949 and earlier periods according to the main types of building. Data of alterations and additions completed and separate data of private and government building are not available.

Table 868.—Value of New Private and Government Buildings Completed. £thousand.

Period.	Houses.	Flats.	Hotels, Guest Houses, etc.	Shops with Dwellings,	Shops Only.	Factories.	Other Bnildings.	Total.
1946—Mar. Qr.	1,260	$\begin{array}{c} \\ 7 \\ 24 \\ 37 \end{array}$	2	5	8	230	341	1,846-
June Qr.	2,472		15	2	7	145	276	2,924
Sept. Qr.	2,998			4	4	141	542	3,713-
Dec. Qr.	3,967			17	16	224	255	4,516
Year	10,697	68	17	28	35	740	1,414	12,999
1947—Mar. Qr.	3,317	61	33	15	36	258	362	4,082
June Qr.	4,134	69	1	13	16	225	326	4,784
Sept. Qr.	4,497	178	3	22	30	672	294	5,696
Dec. Qr.	4,769	205	2	46	32	369	277	5,700
Year	16,717	513	39	96	114	1,524	1,259	20,262
1948—Mar. Qr.	4,791	205	19	41	10	343	468	5,877
June Qr.	5,955	234	6	71	26	381	356	7,029
Sept. Qr.	6,405	339	5	36	28	563	447	7,823
Dec. Qr.	7,877	412	15	39	17	314	555	9,229
Year	25,028	1,190	45	187	81	1,601	1,826	29,958
1949—Mar. Qr.	6,095	320	46	60	32	712	313	7,578
June Qr.	7,444	398	37	64	42	457	7 <b>4</b> 7	9,189

During the three years 1946 to 1948, the value of new private and government buildings completed in New South Wales amounted to £63,219,000 and included new houses valued at £52,442,000, flats at £1,771,000, and factories at £3,865,000. The value of houses completed rose from 82 per cent. of the total value of buildings completed in 1946 to 83 per cent. in 1947 and 84 per cent. in 1948, while the value of flats increased to 3 per cent. in 1947 and 4 per cent. in 1948 and of factories varied between 5 and 7 per cent. Housing construction thus dominated the expansion of the value of building completed during these years.

Although the value of completions lags behind commencements, the average quarterly value of building completed has increased progressively since 1946, and in 1948 was 48 per cent. and 130 per cent. greater, respec-

tively, than in 1947 and 1946. The value of houses and flats completed in 1948 was 52 and 144 per cent. and of factories 5 and 116 per cent. above their respective levels in 1947 and 1946.

## BUILDING OF NEW DWELLINGS IN NEW SOUTH WALES.

## NEW HOUSE BUILDING.

The following table traces the current trend in new house building activity in New South Wales and shows the number of new private and government houses approved, commenced, completed, and uncompleted within the State since July, 1945:—

Table 869.—New House Building in New South Wales.

Number of Private and Government Houses.

Period.	Approved.	Commenced.	Completed.	Un- completed*
1945—July to December†	· ‡	5,100	2,100	4,800
1946—March Qr.†  June Qr.†  September Qr.†  December Qr.†	7,059 7,300	3,700 4,100 4,600 4,000	1,500 1,900 2,700 3,400	7,000 9,200 11,100 11,700
$Year^+_1$	. 26,326	16,400	9,500	11,700
1947—March Qr June Qr September Qr December Qr	. 7,668 . 6,457	4,301 4,819 5,075 4,678	2,726 3,361 3,494 3,610	13,279 14,737 16,318 17,386
Year	27,850	18,873	13,191	17,386
1948—March Qr	. 7,762 . 7,448	4,400 5,654 5,810 5,202	3,510 4,244 4,359 5,139	18,276 19,686 21,137 21,200
Year	29,185	21,066	17,252	21,200
1949—March Qr June Qr	0.949	4,818 5,461	3,769 4,597	22,249 23,113

<sup>\*</sup> At end of period.

The marked activity in the provision of new houses in the years following the cessation of hostilities reflects the efforts of revived private and governmental building enterprise to meet the accumulated deficiency of housing. During the post-war period from July, 1945 to December, 1948, 61,439 new

<sup>†</sup> Partly estimate I.

<sup>‡</sup> Not available.

private and government houses were commenced in New South Wales and 42,043 houses were completed, and 21,200 new houses were uncompleted at the end of the period. Progress has been retarded, however, by industrial disputes and shortages of building labour and materials.

Apart from the seasonal movements, house building activity has increased steadily since July, 1945. The number of houses approved in 1948 was 5 per cent. and 11 per cent. greater, respectively, than in 1947 and 1946, while the number of houses commenced was 12, 28, and 106 per cent., of houses completed was 31, 82, and 311 per cent., and of houses uncompleted was 22, 81, and 121 per cent. above their respective levels in 1947, 1946, and the period July to December, 1945.

The lag in building progress is apparent in the gap between the number of houses commenced and completed in each quarter and the growth from 4,800 at the end of 1945 to 21,200 at the end of 1948 in the number of houses remaining uncompleted. During the period, however, completions have increased at a more rapid rate than commencements and the proportion of completions to commencements rose from 41 per cent. in July to December, 1945, 58 per cent. in 1946, and 70 per cent. in 1947 to 82 per cent. in 1948.

The data of new houses approved, commenced, completed, and uncompleted in New South Wales since July, 1945 are dissected in the next table to distinguish private and government house building activity (see definitions on page 995):—

Table 870.—Private and Government New House Building.

Number of Houses.

	4	Priv	ate.	l		Gover	nment.	
Period.	Ap-	Com-	Com-	Un-	Ap-	Com-	Com-	Un-
	proved.	menced.	pleted.	completed	proved,	menced,	pleted.	completed
1945—July to Dec.†	<u> </u>	3,600	1,600	3,470	<b>‡</b>	1,500	500	1,336
1946—Mar. Qr.†	5,179	2,800	1,300	4,970	591	900	200	2,030
June Qr.†	5,843	3,100	1,400	6,670	1,216	1,000	500	2,530
Sept. Qr.†	6,383	3,700	2,100	8,270	917	900	600	2,830
Dec. Qr.†	5,230	3,200	2,800	8,670	967	800	600	3,030
Yearf	22,635	12,800	7,600	8,670	3,691	3,600	1,900	3,030
1947 —Mar. Qr.	5,762	3,565	2,250	9,985	652	736	476	3,294
June Qr.	6,418	3,939	2,748	11,176	893	880	613	3,561
Sept. Qr.	6,644	4,204	2,776	12,604	1,024	871	718	3,714
Dec. Qr.	5,860	3,747	2,955	13,396	597	931	655	3,990
Year	24,684	15,455	10,729	13,396	3,166	3,418	2,462	3,990
1948—Mac. Qr.	5,641	3,569	2,837	14,128	$^{496}_{671}_{400}_{1,122}$	831	673	4,148
June Qr.	7,091	4,445	3,491	15,082		1,209	753	· 4,604
Sept. Qr.	7,048	4,806	3,545	16,343		1,004	814	4,794
Dec. Qr.	6,716	4,272	3,994	16,621		930	1,145	4,579
Year	26,496	17,092	13,867	16,621	2,689	3,974	3,385	4,579
1949—Mar. Qr.	6,779	4,036	3,041	17,616	998	782	728	4,633
June Qr.	7,352	4,587	3,626	18,577	990	874	971	4,536

<sup>\*</sup> At end of period.

<sup>†</sup> Partly estimated.

<sup>‡</sup> Not available.

During the post-war period from July, 1945 to December, 1948, 48,947 new privately-owned houses and 12,492 government-owned houses were commenced and 33,796 private and 8,247 government houses were completed. There were 16,621 new private and 4,579 new government houses uncompleted at the end of the period.

Government enterprise is thus an important element in the provision of new housing. The number of government houses approved comprised 9 per cent. in 1948, 11 per cent. in 1947, and 14 per cent. in 1946 of all houses approved, while government houses commenced, completed, and uncompleted represented, respectively, 19, 20, and 22 per cent. of the total number of houses commenced, completed, and uncompleted in 1948, 18, 19, and 23 per cent. in 1947, 23, 20, and 26 per cent. in 1946, and 29, 24, and 28 per cent. in July to December, 1945. Most house construction, however, is actually undertaken by building contractors on their own account, for private clients, or for governmental authorities or by private owner-builders, and only a small number of houses is constructed directly by governmental authorities using day labour.

The proportion of completions to commencements rose substantially during the period, in the case of government-owned houses from 33 per cent. in 1945 and 50 per cent. in 1946 to 72 per cent. in 1947 and 85 per cent. in 1948, and in the case of privately-owned houses from 44 per cent. and 60 per cent. to 69 per cent. and 81 per cent., respectively.

A distribution of the number of private and government houses commenced, completed, and uncompleted in the State in 1947 and 1948 according to the materials of the outer walls is given below. Fibro-cement dwellings are the most numerous and represented 53 per cent. of the total houses completed in 1948. The corresponding proportions for brick and brick veneer, etc. and weatherboard dwellings were 34 and 13 per cent.

Table 871.—New House Building: Materials of Outer Walls.

Number of Private and Government Houses.

		1947.			1948.				
Materials of Outer Walls.	Commenced.	Completed.	Un- completed.*	Commenced.	Completed.	Un- completed.*			
Brick, Brick Veneer, etc.	6,892	4,342	6,401	7,446	5,835	8,160			
Wood, Weatherboard .	. 2,273	1,596	1,879	2,533	2,213	2,205			
Fibro-cement	. 9,492	7,139	8,829	11,008	9,121	10,641			
Other	. 216	114	277	79	83	194			
Total	. 18,873	13,191	17,386	21,066	17,252	21,200			

\* At end of period.

The following table gives a geographical distribution of house building activity in New South Wales and shows the number of new private and government houses approved, commenced, completed, and uncompleted in various parts of the State in June quarter, 1949 and earlier periods.

Table 872.—New House Building: Geographical Distribution.

Number of Private and Government Houses.

							, ,			
Period,	Metro-	Balance of Cum- berland.	North Coast.	Hunter and Manning	South Coast,	Table- lands,	Slopes.	Plains and Riverina	Western Division	Total, N.S.W.
				Appro	VED.					
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	2,409 2,636 2,853 2,421	1,464 1,792 1,904 1,326	330 445 391 413	840 1,037 1,131 901	407 541 498 452	389 322 355 340	378 352 353 386	150 140 126 156	47 46 57 62	6,414 7,311 7,668 6,457
Year	10,319	6,486	1,579	3,909	1,898	1,406	1,469	572	212	27,850
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	2,023 2,774 2,629 2,921	1,547 1,829 1,704 1,790	318 418 404 438	895 1,277 1,153 1,298	477 548 548 454	336 419 450 366	348 342 366 384	155 125 144 117	38 30 50 70	6,137 7,762 7,448 7,838
Year	10,347	6,870	1,578	4,623	2,027	1,571	1,440	541	188	29,185
1949—Mar. Qr. June Qr.	2,943 3,094	1,703 1,942	354 409	1,226 1,204	552 600	402 495	379 419	97 103	121 76	7,777 8,342
				COMMEN	CED.					
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	1,648 1,872 2,044 1,843	827 966 1,108 986	303 341 283 906	680 643 552 619	252 292 408 293	298 241 287 268	203 270 259 251	69 136 99 83	21 58 35 29	4,301 4,819 5,075 4,678
Year	7,407	3,887	1,233	2,494	1,245	1,094	983	387	143	18,873
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	1,785 2,342 2,417 2,075	1,009 1,162 1,235 1,074	251 289 253 266	384 726 861 658	328 438 421 489	240 275 264 283	269 319 266 251	116 95 90 82	$^{18}_{\ \ 3}_{\ \ 24}$	4,400 5,654 5,810 5,202
Year	8,619	4,480	1,059	2,629	1,676	1,062	1,105	383	53	21,066
1949—Mar. Qr. June Qr.	1,826 2,175	$1,127 \\ 1,106$	$\frac{259}{268}$	541 650	$\frac{357}{482}$	325 283	272 264	81 83	30 150	4,818 5,461
-		· '		Сомьге	TED.		_			
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	986 1,224 1,547 1,442	571 784 669 683	215 299 222 249	478 406 323 367	184 244 310 306	107 153 176 214	138 178 175 227	42 63 58 75	5 10 14 47	2,726 3,361 3,494 3,610
Year	5,199	2,707	985	1,574	1,044	650	718	238	76	13,191
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	1,397 1,742 1,877 2,342	610 723 841 937	320 204 236 262	338 853 627 590	284 251 261 306	249 187 196 244	240 192 198 271	62 75 111 110	10 17 12 77	3,510 4,244 4,359 5,139
Year	7,358	3,111	1,022	2,408	1,102	876	901	358	116	17,252
1949—Mar. Qr. June Qr.	1,514 1,972	784 883	229 275	379 551	264 380	227 205	230 249	116 63	26 19	3,769 4,597
				UNCOMPI	ETED.*				-	_
1947—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	5,418 6,066 6,740 7,141	2,460 2,642 2,964 3,267	572 614 647 704	2,405 2,642 2,824 3,076	767 815 914 901	095 783 856 910	635 727 829 853	210 283 323 331	165 221	13,279 14,737 16,318 17,386
Year	7,141	3,267	704	3,076	901	910	853	331		17,386
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	7,529 8,129 8,669 8,402	3,666 4,105 4,499 4,636	635 720 737 741	3,122 2,995 3,229 3,297	945 1,132 1,292 1,475	901 989 1,057 1,096	882 1,009 1,077 1,057	385 405 384 356	202 193	18,276 19,686 21,137 21,200
Year	8,402	4,636	741	3,297	1,475	1,096	1,057	356		21,200
.1949—Mar. Qr. June Qr.	8,714 8,917	4,976 5,199	771 764	3,459 <b>3,</b> 558	1,571 1,673	1,194 1,272	1,099 1,114	$\frac{321}{341}$		22, <b>249</b> 23,113

<sup>\*</sup> At end of period,

House building was naturally most extensive in the more densely populated metropolis, Balance of Cumberland, Hunter and Manning, and South Coast divisions. In 1948, the proportion per cent. of houses approved and completed in each section of the State was as follows:—

Houses—	Metro- polis.	Balance of Cum- berland,	North Coast.	Hunter and Manning.	South Coast,	Table- lands.	Slopes.	Rest of State.	Total, N.S.W.
Approved % Completed %	36 43	23 18	5 6	16 14	7	5 5	5 5	3 3	10 <b>0</b>

The distribution of houses commenced and uncompleted in 1948 followed a similar pattern.

The lag in building progress, as measured by the gap between the number of houses commenced and completed in each quarter and the increasing number of houses uncompleted, varies widely between the regions, but in almost all regions the proportion of completions to commencements rose during 1947 and 1948. The proportions per cent. in these years were, respectively, 70 and 85 in the Metropolis, 70 and 69 in Balance of Cumberland, 80 and 96 in the North Coast, 63 and 92 in Hunter and Manning, 84 and 66 in the South Coast, and 70 and 82 in the State as a whole.

Data showing a geographical distribution of the private and government owned houses approved, commenced, completed, and uncompleted in New South Wales in 1948 are given in the following table:—

Table 873.—Private and Government New House Building: Geographical Distribution, 1948.

		Private	Houses.		Government Houses.			
Region.	Ap- proved.	Com- menced,	Completed.	Uncom- pleted.*	Ap- proved.	Com- menced,	Com- pleted.	Uncompleted.*
Metropolis Balance of Cumberland North Coast Hunter and Manning South Coast Tablelands Slopes Plains and Riverina Western Division	9,131 6,448 1,468 4,299 1,804 1,434 1,281 454 177	6,680 3,761 957 2,296 1,161 952 935 303 47	5,493 2,482 980 2,116 860 813 770 277 76	6,019 3,890 622 2,927 979 972 828 250 134	1,216 422 110 324 223 137 159 87	1,939 719 102 333 515 110 170 80 6	1,865 629 42 292 242 63 131 81 40	2,383 746 119 370 496 124 229 106 6
Total, N.S.W	 26,496	17,092	13,867	16,621	2,689	3,974	3,385	4,579

\* At end of year.

The proportion of house building undertaken on government account has increased in most regions of the State. In 1948, government-owned houses represented 25 per cent. of the total houses completed in the metropolis, 20 per cent. in Balance of Cumberland, 12 per cent. in Hunter and Manning, 22 per cent. in the South Coast division, and 20 per cent. in the State as a whole.

Government and private houses are spread over the State in similar pattern. Of the total government houses completed in 1948, with the corresponding proportion of private houses in parentheses, 55 (40) per

cent. were located in the metropolis, 19 (18) per cent. in Balance of Cumberland, 9 (15) per cent. in Hunter and Manning, 7 (6) per cent. in the South Coast, and 1 (7) per cent. in the North Coast division.

## NEW FLAT BUILDING.

The course of new flat building in New South Wales is illustrated in the next table, which shows the number of new private and government flat units approved, commenced, completed, and uncompleted in the State since July, 1946:—

Table 874.—New Flat Building Activity in New South Wales. Number of Private and Government Individual Dwelling Units.

Period.	Approved.	Commenced.	Completed.	Uncompleted.*
1946—September Qr.	229	105	19	185
December Qr.	285	208	37	356
July to December	514	313	56	356
1947—March Qr. June Qr. September Qr. December Qr.	246	153	48	461
	333	197	53	605
	304	129	126	608
	516	233	138	703
Year	1,399	712	365	703
1948—March Qr. June Qr. September Qr. December Qr.	362	372	130	945
	470	359	163	1,141
	334	409	212	1,338
	632	191	284	1,245
Year	1,798	1,331	789	1,245
1949—March Qr.	310	322	181	1,386
June Qr.	436	380	217	1,549

<sup>\*</sup> At end of period.

Flat building has expanded steadily since 1946. Between July, 1946 and December, 1948, 2,356 new individual flat units (1,747 private and 609 government owned) were commenced and 1,210 flat units (1,014 private and 196 government) were completed, leaving 1,245 units (801 private and 444 government) uncompleted at the end of 1948. The lag in flat building progress is very marked and the proportion of completions to commencements was only 51 per cent. in 1947 and 59 per cent. in 1948.

Data distinguishing the extent of private and government flat building activity in the State since July, 1946 are given below:—

Table 875.—Private and Government New Flat Building.

Number of individual dwelling units.

		Priv	ate.		Government.					
Period,	Ap- proyed.	Com- menced.	Com- pleted.	Uncompleted.*	Approved.	Com- menced,	Com- pleted.	Uncompleted.*		
1946—Sept. Qr. Dec. Qr	219 189	105 186	19 37	154 303	10 96	22		3 53		
July to Dec.	408	291	56	303	106	22		53		
1947—Mar. Qr June Qr Sept. Qr. Dec. Qr	216 287 298 248	105 127 103 217	48 53 126 129	360 434 411 499	30 46 6 268	48 70 26 16	  9	101 171 197 204		
Year	1,049	552	356	499	350	160	9	204		
1948—Mar. Qr June Qr Sept. Qr. Dec. Qr	256 341 285 187	225 281 275 123	112 139 181 170	612 754 848 801	106 129 49 445	147 78 134 68	18 24 31 114	333 387 490 144		
Year	1,069	904	602	801	729	427	187	114		
1949—Mar. Qr June Qr	$\frac{201}{249}$	190 156	157 193	834 797	109 187	132 224	24 24	552 752		

<sup>\*</sup> At end of period.

Table 876 shows a geographical distribution of private and government flat building in New South Wales during June quarter, 1949 and earlier periods. Of the total number of flat units completed in the State, 88 per cent. in 1947 and 77 per cent. in 1948 were located in the division of Cumberland, and of those uncompleted, 73 per cent. and 82 per cent., respectively, were in this division.

Table 876.—New Flat Building: Geographical Distribution. Number of Private and Government individual dwelling units.

	Divi	sion of	Cumber	rland.		Rest of	State.		1 3	Cotal, N	.s.w.	
Period.	A.	в.	C.	U.C.	A.	В.	c.	U.C.	A.	В.	C.	U.C.
1947—Mar, Qr. June Qr. Sept. Qr. Dec. Qr.	208 271 249 409	115 158 107 216	46 53 112 111	305 410 405 510	38 62 55 107	38 39 22 17	2  14 27	156 195 203 193	246 333 304 516	153 197 129 233	48 53 126 138	461 605 608 703
Year	1,137	596	322	510	262	116	43	193	1,399	712	365	703
1948—Mar. Qr. June Qr. Sept. Qr. Dec. Qr.	306 422 283 598	330 328 300 159	108 148 179 174	732 912 1,033 1,018	56 48 51 34	42 31 109 32	22 15 33 110	213 229 305 227	362 470 334 632	372 359 409 191	284	1,338 1,245
Year	1,609	1,117	609	1,018	189	214	180	227	1,798	1,331	789	1,245
1949—Mar. Qr. June Qr.	245 328	301 327	178 179	1,141 1,289	65 108	21 53	3 38	245 260	310 436	322 380	181 217	1,386 1,549

A .-- Approved; B .-- Commenced; C .-- Completed; U.C .-- Uncompleted at end of period.

## BUILDING OF OTHER DWELLINGS.

The extent of new building on rural holdings to which the local government building ordinances do not apply was first recorded on annual returns from farmers for the year ended 31st March, 1948. The number of new houses completed on farms (and not included in the tables in this chapter) was 525 in that year and 846 in the following year.

The Housing Commission of New South Wales and several local councils have provided temporary accommodation for families by the conversion of military huts into dwellings. The number and cost of military huts converted to the end of 1948 are given in the following table:—

			Comm	enced.			Completed.
Period.	Metro	opolis.	Rest of	N.S.W.	Total,	N.S.W.	
<b></b>	Number.	Value.*	Number.	Value.*	Number,	Value.*	Number.
1945	44	£ 4,406	33	£ 18,944	77	£ 23,350	64
1946	1,081	150,941	507	69,378	1,588	220,319	1,535
1947	985	288,175	738	117,745	1,723	405,920	1,719
1948	193	77,490	24	4,205	217	81,695	218
To end of 1948	2,303	521,012	1,302	210,272	3,605	731,284	3,536

Table 877.-Military Huts Converted into Dwellings.

# EMPLOYMENT IN THE BUILDING INDUSTRY.

The following table shows the number of male wage and salary earners employed in the building and construction industries in New South Wales in March, 1949 and selected earlier months. Employment on building and construction works fell heavily during the war years, with the severe restriction of private and ordinary governmental building activity, and recovered slowly during the early post-war years. In March, 1949, the number of male employees was 63,159, or 95 per cent. above the level when hostilities ceased in August, 1945 and 9 per cent. above the pre-war level in July, 1939.

Table	878.—Male	Employees	in	Building	and	Construction	Industries.

Year and Month.	Number.	Year and Month.	Number.	Year and Month.	Number.
1933—June	55,100	1944—August	27,092	1947—December	56,994
1939—July	57,900	1945—June	32,540	1948—March	58,961
1941—July	54,000	August	32,329	June	60,144
1942—June	45,047	1946—June	44,094	September	61,392
1943—June	31,538	1947—March	52,944	December	61,524
1944—June	27,488	June	55,757	1949—March	63,159

<sup>\*</sup> Cost of conversion.

A further indication of post-war trends in the labour resources of the building industry is provided by the returns collected from private builders and governmental authorities engaged in the construction of new buildings. These returns, with adjustments to cover the operations of untraced builders, show the number of men actually working on new buildings on a specified day, including working principals, employees, men working as or for sub-contractors, and men temporarily absent on account of weather and other chance causes. Men engaged exclusively on the repair, renovation, alteration, or maintenance of buildings, men working on owner-built houses, and building trade employees engaged in factories, workshops, mines, and other industries are excluded.

The next table shows, according to occupational status and trade, the estimated number of men actually engaged on jobs carried out by builders of new buildings in New South Wales on 31st March, 1949 and earlier dates. Between June, 1946 and March, 1949, the number of men engaged on new buildings increased by 60 per cent., the rate of increase being rather higher from June, 1946 to June, 1948 than in later months.

Table 879.—Men Engaged on Actual Construction of New Buildings. (Excluding men engaged on owner-built houses.)

	Oceup	ational	Status.	Trade.							
Year and Month.	Contractors.	Sub- Contractors.	Wage Earners.	Carpenters.	Brick-layers.	Painters.	Electricians.	Plumbers.	Builders' Labourers.	Other.	Total En- gaged.
1946—June 30th	3,554	3,544	19,322	9,515	2,555	2,298	1,347	2,433	4,883	3,389	26,420
1947—Mar. 31st	3,889	3,702	24,398	11,422	3,144	2,486	1,563	2,766	5,744	4,864	31,989
June 30th	4,093	3,907	26,845	12,499	3,347	2,816	1,707	2,918	6,097	5,461	34,845
Sept. 30th	4,449	4,571	28,753	13,723	3,756	3,041	1,935	3,207	6,381	5,730	37,773
1948—Jan. 12th	4,402	4,012	27,533	13,345	3,598	2,894	1,743	3,023	5,880	5,464	35,947
Mar. 31st	4,375	4,447	29,894	14,289	3,889	3,055	1,904	3,208	6,316	6,055	38,716
June 30th	4,538	4,854	31,739	15,089	4,217	3,299	2,111	3,605	6,585	6,225	41,131
Sept. 30th	4,593	4,997	32,328	15,438	4,447	3,396	2,296	3,628	6,799	5,914	41,918
1949—Jan. 10th	4,568	4,063	29,171	14,560	3,580	3,143	1,832	3,138	5,951	5,598	37,802
Mar. 31st	4,952	4,961	32,480	15,707	4,400	3,614	2,423	3,760	6,823	5,666	42,393

#### BUILDING MATERIALS AND FITTINGS.

The following table shows the production of certain building materials and fittings in New South Wales during 1948-49 and certain earlier years. Monthly production data for these items are given in the "Monthly Summary of Business Statistics".

The production of building materials and fittings fell to low levels during the war years, when all non-defence construction work was severely curtailed, but as ordinary building activity expanded during the post-war years, production increased and in most cases exceeded the pre-war level of output. The supply of materials and fittings, however, has been somewhat ill-balanced and has been adversely affected by labour shortages, transport difficulties, and inadequate and irregular supplies of basic materials. Consequently, the demands of the building industry have not been fully met.

Table 880.—Production of Certain Building Materials and Fittings.

Item.	Unit of	1938-	1945-	1946	1947		1948–49.	
Toom,	Quantity.	39,	46.	47.	48.	Sept. Qr.	Dec. Qr.	Mar. Qr.
	Bur	LDING M	ATERIAL	S,				
Bricks	million	379-2	144.6	249.5	303-2	89.5	82.6	73.2
Cement Building Shects	thous. sq. yd.	5,291	7,805	9,657	9,018	2,310	2,219	2,075
Portland Cement	thous. tons	432.5	320-6	393.4	441.0	126.8	107-4	114.4
Fibrous Plaster Sheets	thous. sq. yd.	2,671	1,632	3,397	3,985	1,265	1,188	1,208
Roofing Tiles-								
Terra Cotta	thons.	20,129	12,230	19,523	21,594	6,569	6,101	5,375
Cement	thous,	*	*	230	2,841	1,580	1,423	1,330
Sawn Native Timber	mill. sq. ft.	179-4	252-1	300.9	332-6	83.6	95-3	87.5

#### BUILDING FITTINGS.

						1			ī	
Coppers-										
Solid Fuel			No.	*	*	*	*	12,903	15,355	12,088
Gas			No.	*	*	*	*	6,864	6,093	5,712
Electric	•••	• • •	No.	*	*	*	*	4,104	2,267	1,884
Bath Heaters-					'					
Solid Fuel		}	No.	*	*		35,696	13,478	7,674	6,668
Gas			No.	*	*	*	28,337	7,924	3,966	2,458
Electric			No.		*		7,375	1,347	1,646	1,186
Basins (all types)			No.	*	*	36,255	44,350	13,000	16,108	10,979
Baths (all types)			No.	*	*		35,219	10,726	16,791	9,772
Pans—Earthenware	• • • • •	}	No.	*	*	35,523	35,439	11,635	9,520	9,778
Sinks—										
C.I.P.E.†			No.			31,681	31,951	9,466	7,399	7,866
Stainless Steel			No.		757	6,969	13,079	3,782	3,409	3,008
Stoves-		1		}						
Solid Fuel			No.	17,154	10,154	12,033	11,748	3,854	3,245	2,669
Gas			No.	17,736	8,507	12,883	14,627	6,651	5,662	5,947
Electric			No.	4,930	5,069	31,221	8,942	2,310	4,124	3,840

<sup>\*</sup> Not available.

<sup>†</sup> Cast iron porcelain enamel.

In 1947-48, compared with 1938-39, there were increases in the output of sawn native timbers of 85 per cent., cement building sheets of 70 per cent., fibrous plaster sheets of 49 per cent., terra-cotta roofing tiles of 7 per cent., and Portland cement of 2 per cent., while the output of bricks was 20 per cent. less. Increased supplies of local timber did not fully offset a marked reduction in imports of timber from abroad.

# EDUCATION

## SYSTEM OF EDUCATION IN NEW SOUTH WALES.

In New South Wales there is a system of education controlled by the State, which embraces primary, secondary and technical education, and there are numerous private educational institutions, of which the majority are conducted under the auspices of the religious denominations. The University of Sydney and the University of Technology (established in 1948) are maintained partly by Government endowment and grants and partly by students' fees and moneys derived from private sources.

The Public Instruction Act of 1880, with amendments, is the basis of the State system, which aims at making education secular, free and compulsory, these principles being enjoined by statute. General religious instruction is given by teachers, and special religious instruction for limited periods, with the consent of parents, by visiting religious teachers. Education in public primary and secondary schools is free.

Attendance at school is compulsory for children between the ages of 6 and 15 years. The statutory period was extended gradually between 1940 and 1943; formerly it was from 7 to 14 years.

Private schools must be certified as efficient for the education of children of statutory school age and, with few exceptions, are subject to State inspection.

The course in the primary schools supplies education of a general character in subjects such as English, mathematics, nature knowledge, civics and morals, art and manual work. Beyond the primary stage there are various types of courses in secondary education.

The full secondary course extends over five years, with the intermediate certificate examination at the end of the third year and the leaving certificate examination at the end of the fifth year. Certain subjects, e.g., English, are regarded as basic, and other subjects may be selected by the pupil; these include foreign languages, science, art, home science (for girls), and technical and commercial subjects.

On completing a secondary course, pupils may continue their training at technical or business colleges. Those who have completed the full course may matriculate at the University of Sydney or at the University of Technology.

Courses in agricultural science and practice and allied subjects are given at district rural schools, agricultural high schools and certain other schools. Advanced training in agriculture, dairying, etc., is provided for farmers and students at the Hawkesbury and Wagga Agricultural Colleges administered by the Department of Agriculture. The final stages are reached at the University of Sydney, where there are degree courses in agriculture and veterinary science.

Afforestation work is done by schools where areas are reserved for the purpose of enabling the pupils to study scientific forestry and sylviculture.

Educational and vocational guidance services are provided in public schools. In this work, School Counsellors in various districts and Careers Advisers in secondary schools co-operate with the Commonwealth employment offices and the youth welfare section of the State Department of Labour and Industry and Social Welfare.

A school medical service is maintained by the State for the benefit of children attending both public and private schools, as described in the chapter "Public Health."

The Department of Education provides classes for the training of migrants in English and Civics.

#### THE AUSTRALIAN EDUCATION COUNCIL.

The Australian Education Council is composed of the Ministers of Education of the various Australian States and has power to co-opt the services of other Ministers if necessary.

The Council is concerned with such matters as the development of education in Australia in co-ordination with employment and social welfare, and the organisation of technical education with due regard to the requirements of industry.

Associated with the Council is a Standing Committee on Education, composed of the Permanent Heads of the State Departments of Education and the Officers-in-charge of Technical Education. The functions of the Committee are to report upon matters referred to it by the Council, to act as advisory body to the Commonwealth and State Governments, and to co-operate with the Commonwealth Scientific and Industrial Research Organization and similar bodies in research into the requirements of industry.

## COMMONWEALTH OFFICE OF EDUCATION.

The Commonwealth Office of Education was established under the Commonwealth Education Act in 1945. The Office is administered by a Director, and its principal function is to advise the Minister in regard to education and financial assistance to the States and other authorities for educational purposes. It is required to maintain liaison with the States and other countries, and to undertake educational research.

The Director of the Commonwealth Office of Education (as Chairman) and three other members constitute the Universities Commission. Its functions include the provision of financial assistance to students at universities and similar institutions, and the administration of university-type training under the Commonwealth Reconstruction Training Scheme. Further details of the Commission's activities are given on pages 1018 and 1070.

#### COMMONWEALTH RECONSTRUCTION TRAINING SCHEME.

The Commonwealth Reconstruction Training Scheme came into operation in March, 1944, and was ratified by the Re-establishment and Employment Act, 1945. The object of the scheme is to provide training for exservice men and women in order to re-establish them in civilian occupations.

Applications for full-time training may be made by service personnel who have served at least six months and have been honourably discharged.

Applicants are selected subject to certain conditions designed to ensure that they are suitable for the type of training applied for, and that there are reasonable prospects for the profitable pursuit of the calling. Widows of servicemen whose death was due to war service are eligible for training.

There is a vocational guidance service with provision for psychological tests, counselling and welfare work. Training is provided at governmental and private institutions as follows: (a) university-type (professional); (b) technical-type (professional or vocational); and (c) rural training.

Professional training follows normal lines at a university or similar institution. Vocational training includes all types of trade training usually given at technical colleges or schools.

Rural training is provided by one of the following courses according to the circumstances in each case:—

- (a) Practical training on an approved farm, for a period up to two years;
- (b) An intensive course in farm management of about eight weeks' duration;
- (c) Training at technical institutions for such vocations as wool classing and meat inspection; or
- (d) Courses at agricultural colleges.

In New South Wales the eight weeks' intensive course is provided at Wagga Experimental Farm, and there are diploma courses at the Hawkesbury Agricultural College. The students receiving full-time rural training in New South Wales numbered 110 in December, 1948.

For full-time trainees tuition and examination fees are paid, as well as allowances of £10 per annum for books and £20 per annum for tools and instruments. Living allowances are paid during training; the rates in June, 1949, ranged from £3 10s. per week for a man without dependants or a woman maintaining herself, and £2 15s. for a woman living with parents. Dependants' allowances are paid to both men and women, and additional allowances are made to trainees living away from home. Living allowances in the fourth and subsequent years of a professional course (other than allowances for dependants or for living away from home) are a loan repayable by the trainee.

For part-time training a maximum allowance of £60 may be granted, provided that the training will improve the applicant's occupational status. This is given, as far as possible, through universities and governmental institutions. Refresher courses are provided on a full-time basis where necessary.

The scheme as a whole was administered by executive committees within the Ministry of Post-war Reconstruction until December, 1949, when control was transferred to the Department of Labour and National Service. The central body, viz., the Commonwealth Reconstruction Training Committee, is assisted by regional committees in the capital cities. Associated with the regional committees are professional, industrial and rural subcommittees of employee and employer respresentatives in the particular calling, and a representative of the training authority concerned. The functions of the sub-committees are mainly advisory.

The professional training scheme is administered by the Universities Commission in conjunction with the Department of Post-war Reconstruc-

tion, and the technical training scheme by the Industrial Training Division of the Commonwealth Department of Labour and National Service.

At the end of 1948 there were 32,592 persons in training under the scheme in New South Wales, viz.: 5,333 full-time trainees (4,148 university-type, 1,075 technical-type and 110 rural); and 27,259 part-time (1,856 university-type and 25,403 technical-type). In addition, there were 10,036 trainees in subsidised employment, including some receiving part-time technical training.

Further details are given on pages 1059 and 1071 of this chapter.

STATE EXPENDITURE ON EDUCATION, LIBRARIES, MUSEUMS, ETC.

Expenditure on education in the State of New South Wales includes expenses incurred in respect of the public school system, the cost of operating the Public Library, National Art Gallery, etc., and grants and subsidies to the University and other educational and scientific organizations. A summary of the total expenditure by the State in respect of education (including technical education) in various years since 1923-29 is shown below. The figures exclude the interest on loan moneys expended on buildings, equipment, sites, etc.

Table 881.—State Expenditure on Education and Encouragement of Science, Art and Research.

	Expenditure.											
Year ended 30th June.	On Ed	lucation.	On Encour Science,	ragement of Art, etc.	Total.	Per Head						
	From Revenue.	From Loan (gross).				Population.						
	£	£	£	£	£	£ s.L						
1929	4,911,861	788,701	77,002	10,254	5,787,818	267						
1931	4,504,392	154,636	68,635	5,677	4,733,340*	1 17 2						
1939	5,364,801	433,099	73,624	5,982	5,877,506	236						
1943	6,030,539	120,276	91,784	17,349	6,259,948	246						
1944	6,292,174	169,742	92,062	10,469	6,564,447	259						
1945	6,551,562	86,795	94,739	5,927	6,739,023	265						
1946	7,054,760	203,693	122,939	2,342	7,383,734	2 10 4						
1947	8,599,271	285,751	169,612	583	9,055,217	3 1 T						
1948	9,641,769	552,934	188,538	2,717	10,385,958	3 9 £						

<sup>\*</sup> Excludes £185,425 expended from Unemployment Relief Fund on school buildings, etc.

Total expenditure by the State on education and the encouragement of science, art and research increased by £951,205 or 17 per cent. between 1928-29 and 1944-45, and by £3,646,935 or 54 per cent. between 1944-45 (the last year of the war) and 1947-48. Expenditure per head of population was £3 9s. 1d. in 1947-48, as compared with £2 3s. 0d. in 1938-39 and £2 6s. 5d. in 1944-45.

The next table shows further details of State expenditure on education, etc., in the last five years:—

Table 882.—State Expenditure on Education and Encouragement of Science,
Art and Research.

D. 41. I		Year	ended 30th	June.	
Particulars.	1944.	1945.	1946.	1947.	1948.
Revenuc Expenditure.	£	£	£	£	£
Primary and Secondary Education, in- cluding Administrative Expenses Training of Teachers, including Allowances	5,391,161	5,514,233	5,934,728	7,130,455	7,873,640
to Students Bursaries and Scholarships	121,064 52,204	165,116 53,949	209,886 59,180	251,310 50,846	345,226 55,809
Total, Primary and Secondary Education	5,564,429	5,733,298	6,203,794	7,432,611	8,274,675
Technical Education Hawkesbury Agricultural College Conservatorium of Music Aid to Sydney University Aid to other Educational Institutions, etc.	491,809 34,958 12,371 171,672 16,935	573,202 35,405 12,831 179,685 17,141	643,481 45,814 13,223 131,584 16,864	908,066 56,561 17,717 164,743 19,573	1,103,383 74,306 20,410 148,175 20,814
Total, Education	6,292,174	6,551,562	7,054,760	8,599,271	9,641,769
Encouragement of Science, Art and Research—Public Library and Library Board Australian Musenm Museum of Technology and Applied Science National Art Gallery Observatory Subsidies to Associations, etc	49,000 18,913 10,097 9,259 2,543 2,250	51,173 19,450 9,271 12,130 2,465 250	65,425 20,014 12,518 12,975 2,972 9,035	89,755 24,754 16,689 14,873 2,846 20,695	100,429 25,330 23,151 14,971 3,235 21,422
Total, Encouragement of Science, Art and Research	92,062	94,739	122,939	169,612	188,538
Total, Revenue Expenditure	6,384,236	6,646,301	7,177,699	8,768,883	9,830,307
Loan Expenditure (gross).  Education— School Buildings, etc  Teachers' Colleges	73,724	51,865	116,500 6,978	200,217 17,771	343,462 61,986
Technical Colleges	94,477  1,541	31,720 1,941 1,269	76,616 2,039 1,560	40,973 20,144 6,646	119,183 8,243 20,060
Total, Education	169,742	86,795	203,693	285,751	552,934
Encouragement of Science, Art, etc	10,469	5,927	2,342	583	2,717
Total, Loan Expenditure	180,211	92,722	206,035	286,334	555,651
Grand Total, Loan and Revenue Expenditure	6,564,447	6,739,023	7,383,734	9,055,217	10,385,958

Expenditure from revenue on education in 1947-48, viz., £9,641,769, was the highest on record. Of this amount, £8,274,675 or 86 per cent. represented the cost of primary and secondary education and the training of teachers, and £1,103,383 or 11 per cent. the cost of technical education. Expenditure of the Public Library and Library Board, viz., £100,429, comprised 53 per cent. of the total revenue expenditure on the encouragement of science and art. In 1947-48, expenditure from loan funds (chiefly on buildings and sites for schools and technical colleges) was the highest since 1928-29.

In recent years, considerable sums have been spent by the Commonwealth on education in New South Wales, in addition to the amounts expended by the State. In 1947, Commonwealth assistance to the University of Sydney was £163,239 for administrative costs in connection with

the reconstruction training scheme and for special research. In the same year, fees and allowances to university students under the scheme of financial assistance were £86,425, fees and allowances to university-type reconstruction trainees in New South Wales, £1,192,094, and subsidies to the State Technical Education Department for reconstruction training purposes, £501,239. Fees and allowances to technical-type trainees and subsidies to employers under the reconstruction training scheme amounted to £2,474,144 in New South Wales in 1947-48. The Commonwealth also provides funds for educational purposes under the Soldiers' Children Education Scheme, and makes grants to such bodies as the Sydney Day Nursery and Nursery Schools Association.

## Administration of the Public School System.

The State system of education is administered by a responsible Minister of the Crown, through a permanent Director-General of Education, assisted by the Board of Secondary School Studies.

The public school teachers are for the most part full-time employees, and are classified in the Education Division of the New South Wales Public Service. The State is divided into school districts and an inspector supervises the schools and teachers in each district. In 1948 there were thirteen districts in the metropolitan area and thirty-two elsewhere.

## Murrumbidgee Regional Area.

In 1948 a Murrumbidgee Regional Area was established by the Department of Education as an experiment in decentralization of administration. The area contains four inspectorial districts, viz., Wagga, Albury, Temora, and Griffith, and covers the Murrumbidgee, Upper Murray and Central Murray Regions. Within the area there are 22,000 pupils and 290 schools, viz., 7 high schools, 25 central schools, 55 primary schools and 203 one-teacher schools; there are also 24 subsidised schools, two evening colleges, and technical training facilities at six centres. Subject to oversight by the Director-General, the functions of the Department within the area are administered by an Area-Director of Education.

## Board of Secondary School Studies.

The Board of Secondary School Studies advises the Minister for Education on secondary education and determines the courses of study and examinations for secondary schools. Special committees are appointed by the Board to advise regarding the course of study in individual subjects.

The Board consists of the following members:—Five representatives of the University; five representatives of the Department of Education, including the Director-General of Education (as Chairman), the Chief Inspector of Schools (Deputy-Chairman) and the Director of Technical Education; a principal teacher of secondary schools (other than Roman Catholic schools) registered under the Bursary Endowment Act; a representative of Roman Catholic schools similarly registered; and a headmaster and a headmistress of the public secondary schools.

#### Parents and Citizens' Associations.

Parents and citizens' associations and kindred bodies have been organised in connection with public schools, with the object of promoting the interests of local schools and the welfare of the pupils and providing school equipment. The associations do not exercise authority over the staff or the management of the school.

District councils, composed of two representatives of each parents and citizens' association within the district, may be formed in proclaimed areas. They advise the Minister on certain school matters, and assist in raising funds for the establishment of scholarships in public schools and the purchase of special equipment, and in the founding of central libraries, etc.

#### STATE EXPENDITURE ON PUBLIC SCHOOLS.

The following statement provides a comparison of the State expenditure on public schools at intervals since 1921. The expenditure on technical education is not included. The basis used for calculating costs per pupil is the average weekly enrolment.

	Amorago		Expenditure.		Per Pupil—Average Weekly Enrolment.					
Year.	Average. Weekly Enrol- ment.	Maintenance and Administra- tion.	School Premises.	Total.	Maintenance and Administra- tion.	School Premises.	Total Expenditure,			
		£	£	£	£ s. d.	£ s. d.	£ s. d.			
1921	292,264	3,229,042	329,795	3,558,837	11 0 11	1 2 7	12 3 6			
1929	346,644	4,207,754	846,625	5,054,379	12 2 9	2 8 10	14 11 7			
1931	366,378	3,823,684	415,379	4,239,063	10 8 9	1 2 8	11 11 5			
1941	333,024	4,712,545	460,795	5,173,340	14 3 0	1 7 8	15 10 8			
1943	333,317	5,006,711	362,596	5,369,307	15 0 5	1 1 9	16 2 2			
1944	335,965	5,172,967	409,483	5,582,450	15 7 11	1 4 5	16 12 4			
1945	335,915	5,429,045	425,397	5,854,442	16 3 3	1 5 4	17 8 7			
1946	336,615	6,192 600	569,660	6,762,260	18 7 11	1 13 10	20 1 9			
1947	340,867	7,556,125	747,294	8,303,419	22 3 4	2 3 10	24 7 2			
1948	348,855	8,065,276	1,069,789	9,135,065	23 2 5	3 1 4	26 3 9			
		' '		' '						

Table 883.—Expenditure on Public Schools.

Between 1941 and 1948 the annual expenditure on maintenance and administration increased by 71 per cent., and expenditure on school premises more than doubled. The total expenditure per pupil in 1948, viz., £26 3s. 9d., was the highest on record.

#### Schools in Australian Capital Territory.

The particulars relating to public and private schools in this chapter are inclusive of the schools in the Australian Capital Territory.

By arrangement with the Commonwealth Government, the New South Wales Department of Education conducts the public schools in the Capital Territory. Expenditure on the schools is recouped by the Commonwealth.

In 1948 there were 11 public schools (including the Camberra High School and the Camberra Nursery School, but not the Camberra Technical College) with 77 teachers and an effective enrolment of 1,966 pupils. Expenditure by the Department on these schools in the year ended 30th June, 1948, amounted to £48,003.

There were also four private schools with 41 regular teachers and an effective enrolment of 1,012 pupils.

PUBLIC AND PRIVATE SCHOOLS, PUPILS AND TEACHING STAFFS.

The following table shows the total number of public and private schools in operation at the end of various years since 1921, the average weekly enrolment, and the aggregate teaching staff in each group of schools. The figures in this table, and in the subsequent tables relating to public and private schools, include secondary schools, but are exclusive of evening colleges, technical colleges, private kindergarten and nursery schools, shorthand and business colleges, etc.

Table 884.—Public and Private Schools—Pupils and Teaching Staffs.

		Schools.		Pupils-	–Average Enrolment	Weekly	Teaching Staffs.			
Year.	Public.	Private.	Total,	Public Schools.	Private Schools.	Total.	Public Schools.	Private Schools.	Total,	
1921	3,170	694	3,864	292,264	74,336	366,600	8,672	2,983	11,655	
1929	3,104	745	3,849	346,644	86,404	433,048	10,992	3,501	14,493	
1931	3,195	751	3,946	366,378	88,263	454,641	11,581	3,585	15,166	
1936	3,416	763	4,179	353,870	94,609	448,479	11,614	3,626	15,240	
1943	2,753	741	3,494	333,317	105,022	438,339	11,228	3,971	15,199	
1944	2,725	745	3,470	335,965	107,934	443,899	11,202	4,065	15,267	
1945	2,690	733	3,423	335,915	109,914	445,829	11,214	4,124	15,338	
1946	2,686	728	3,414	336,615	109,726	446,341	11,869	4,206	16,075	
1947	2,657	725	3,382	340,867	111,203	452,070	11,943	4,275	16,218	
1948	2,617	720	3,337	348,855	114,066	462,921	12,243	4,294	16,537	

<sup>\*</sup> Including subsidised schools.

The "average weekly enrolment" includes children temporarily absent through illness or other causes, but excludes those known to have left the school.

The number of teachers in public schools, as shown above, is exclusive of teachers absent on military duty during the war years, and of students in training, who numbered 2,250 in 1948, including 1,207 men. In the case of private schools, visiting or part-time teachers are excluded, because some of them attended more than one school and were included in more than one return.

## PUBLIC AND PRIVATE SCHOOLS—PUPILS ENROLLED.

The following statement shows the average weekly enrolment at all public and private schools in New South Wales, other than evening colleges, private kindergarten and nursery schools, and technical and business schools and colleges. The enrolment figures for private schools include pupils at charitable schools.

37	In Public Schools.*			In P	rivate Sch	ools.	In Public and Private Schools.			
Year.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	
1921 1929 1931 1938 1939 1940 1941 1942 1944 1945 1946 1947 1948	152,242 181,270 191,020 179,833 178,884 176,564 173,882 169,792 173,913 175,218 175,264 177,048 180,981	140,022 165,374 174,458 164,410 162,729 161,096 159,142 156,092 159,404 160,633 160,697 161,351 163,819 167,874	292,264 346,644 366,378 344,243 341,613 337,660 333,024 325,884 333,317 336,965 335,915 336,615 340,867 348,855	34,141 39,822 41,475 45,623 46,598 47,220 47,298 46,812 50,892 52,837 53,615 53,622 54,335 55,952	40,195 46,582 46,788 50,042 49,997 50,186 50,958 50,040 54,130 55,097 56,299 56,104 56,868 58,114	74,336 86,404 88,263 95,665 96,595 97,406 98,256 96,852 105,022 107,934 109,914 109,726 111,203 114,066	186,883 221,092 233,395 225,456 225,482 223,784 221,180 216,604 224,805 228,169 228,833 228,886 231,883 236,933	180,217 211,956 221,246 214,452 212,726 211,282 210,100 206,132 213,534 216,996 217,455 220,687 225,988	366,600 433,048 454,641 439,908 438,208 431,280 422,736 431,280 445,829 445,829 446,341 452,070 462,921	

Table 885 .- Public and Private Schools -- Average Weekly Enrolment.

The total enrolment of pupils in public and private schools declined from 439,908 in 1938 to 422,736 in 1942, in spite of the extension of the period of compulsory school attendance in the years 1940 to 1942. Since the latter year there has been an annual increase in enrolments, and in 1948 the total enrolment, viz., 462,921, was 40,185 or 9.5 per cent. greater than in 1942.

Enrolments at schools are affected by fluctuations in the number of children born and, at certain periods, by migration. The steady decline from 1938 to 1942 was primarily due to the decrease in the number of births in New South Wales during the economic depression; the number of births was only 43,335 in 1934, as compared with an annual average of 53,814 in the period 1925 to 1929. The increase in total school enrolments from 438,339 in 1943 to 462,921 in 1948 reflects the steady growth in the number of births since 1934 to a peak of 69,398 in 1947.

Migration is becoming a factor of importance in relation to future school enrolments. Estimates prepared by the Commonwealth Office of Education suggest that, under the combined influence of the increase in births and migration plans (if fulfilled), enrolments in New South Wales public schools will expand from 349,000 in 1948 to 468,000 in 1953, an increase of 119,000 or 34 per cent.; primary pupils in public schools should increase from 274,000 in 1948 to 341,000 in 1953 without migration, or to 379,000 if migration is taken into account. If enrolments at private schools increase in the same ratio, the total enrolment of public and private schools in 1953, taking migration into account, should be about 620,000, as compared with 463,000 in 1948.

The total enrolment at public schools in each year 1939 to 1947 was less than in 1938, but in 1948 the number increased to 348,855, or 4,612 more than in 1938. Enrolments at private schools increased from 95,665 in 1938 to 114,066 in 1948, or by 19.2 per cent.

In the public schools there are more boys than girls, the proportion in 1948 being boys 52 per cent. and girls 48 per cent. In the private schools girls are in a slight majority, the proportion in 1948 being 50.9 per cent.

The proportion of children enrolled in public schools increased from 79.7 per cent. of the total enrolment in 1921 to 80.6 per cent. in 1931.

<sup>\*</sup> Including subsidised schools.

Subsequently the ratio declined slowly to 78.0 per cent. in 1939 and to 75.4 per cent. in 1948.

The following table shows the relative average weekly enrolments at public and private schools:

				_		
		kly Enrolment, Ages.		Average		dy Enrolment, Ages.
Year.	In Public Schools.	In Private Schools,	Year.	In Public Sch	ools.	In Private Schools

Table 886.—Public and Private Schools—Proportionate Enrolment,

Y per cent. per cent. per cent. per cent. 1921 79.7 20.3 1942 77.1 22.91929 80.0 20.01943 76.024.01931 80.6 19.4 1944 75.724.324.7 1938 78.3 21.71945 75.31939 78.0 22.024.6194675.477.6 22.41940 24.6 1947 75.41941 77.222.81948 75.424.6

#### CHILDREN RECEIVING EDUCATION.

There are few children of statutory school age in New South Wales who are not reached in some way by the education system. For children handicapped by physical or mental deficiency or by remoteness from centres of population, special schools have been established by the Department of Education and private organisations; these include a correspondence school, schools at hospitals and child welfare homes, subsidised schools in isolated rural areas and schools for blind and deaf mutes. In certain cases the Department subsidises the transport of children to school.

Children of statutory school age not enrolled consist mainly of those receiving private tuition at home and those exempted from attendance at school for special reasons.

The following comparison indicates the degree of regularity of attendance among children enrolled at public and private schools:

Table 887.—Public and Private	Schools—Attendance of Pupils.

Average Weekly Enrolment.	Average Daily	Ratio of At-	Average	Average	Ratio of
	Attendance.	tendance to Enrolment.	Weekly Enrolment.	Daily Attendance.	Attendance to Enrolment.
292,264 346,644 366,378 353,870 333,317 335,965 336,915 336,615 340,867	248,605 298,743 322,816 310,450 285,873 293,133 293,251 291,358 299,970	per cent. 85·1 86·1 88·1 87·7 85·8 87·3 87·3 86·8 88·3	74,336 86,404 88,263 94,609 105,022 107,934 109,914 109,726 111,203	65,222 77,797 80,005 84,674 90,630 96,738 97,951 97,428 99,844	per cent. 87.7 90.0 90.6 89.5 86.3 89.6 89.1 88.8 89.8 89.8
	346,644 366,378 353,870 333,317 335,965 335,915 336,615	346,644     298,743       366,378     322,816       353,870     310,450       333,317     285,873       355,965     293,133       356,915     293,251       336,615     291,358       340,867     299,970	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

The "average daily attendance" is based on the attendance on each school day in the year.

The proportion of attendance to enrolment signifies that on the average children attend less than four and a half days in a school week of five days.

#### Public and Private Schools—Age Distribution of Pupils.

The period of compulsory attendance at school was from age 7 to 14 years from 1917 to 1939; from age 6 to 14 years in 1940; from age 6 to 14 years 4 months in 1941; from age 6 to 14 years 8 months in 1942; and from age 6 to 15 years from the beginning of 1943.

The following table shows the age distribution of public and private school pupils enrolled during 1921, 1929, and later years to 1940. (Particulars since 1940 are set out in Table 889.) The figures represent the gross enrolment during the December term at primary and secondary schools, omitting those enumerated on page 1023. The "gross" enrolment consists of all pupils on the roll during the term, including those who left school or were transferred to another school.

Table 888.—Public and Private Schools—Age Distribution of Pupils.

		Public Sch	ool Pupils.		Private School Pupils.				
Year.	Under 7 years.	7 years and under 14.	14 years and over.	Total.	Under 7 years.	7 years and under 14.	14 years and over.	Total.	
		Gross	Enrolm	ent, Dec	ember Ti	ERM.	_		
1921	41,938	246,136	27,154	315,228	12,770	54,294	12,243	79,307	
1929	52,943	282,517	35,870	371,330	15,758	61,844	14,799	92,401	
1931	53,120	288,730	46,031	387,881	15,552	62,693	15,777	94,022	
1936	54,098	286,525	37,092	377,715	17,119	67,641	15,972	100,732	
1937	53,118	280,309	36,795	370,222	16,937	68,085	16,087	101,109	
1938	50,855	278,080	38,117	367,052	16,563	68,982	16,871	102,416	
1939	50,805	271,519	40,810	363,134	16,119	67,725	17,545	101,389	
1940	52,698	266,643	40,436	359,77.7	18,202	67,396	17,565	103,163	

Owing to changes in the period of compulsory attendance and in the basis of records of enrolment (gross or effective), the figures in the foregoing table (No. 888) are not comparable with those for later years.

The pupils enrolled in the years 1941 to 1948 are classified in the following table in age groups based on the period of compulsory school attendance current since 1943. The particulars of public school pupils relate to effective enrolment at a date in the first week of August in each year, but for private school pupils the figures for the four years 1941 to 1944 relate

to gross enrolment, December term. The "effective" enrolment is the actual enrolment at a date and is exclusive of all pupils believed to have left the school.

Table 889.—Public and Private Schools—Age Distribution of Pupils.

		Public Sch	nool Pupils.			Private Sch	ool Pupils.	
Year.	Under 6 years.	6 years and under 15,	15 years and over.	Total.	Under 6 years.	6 years and under 15 years and over.		Total.
Effe	CTIVE EN	ROLMENT	ın Augu	Gross E	NROLMENT	—Десемі	BER TERM	
1941 1942 1943 1944	22,248 21,525 22,060 23,988	301,376 298,902 300,295 296,316	13,449 12,753 16,305 18,168	337,073 333,180 338,660 338,472	9,675 10,024 10,611 11,348		,644 ,591   12,791   13,618	105,319 105,615 109,814 114,637
	<u>'</u>	Eff	OTIVE E	ROLMENT	ın Augu	st.		
1945 1946 1947 1948 Boys Girls	25,635 27,076 30,150 30,846 15,944 14,902	295,153 295,631 299,861 308,623 158,907 149,716	18,080 16,629 15,360 14,592 8,731 5,861	338,868 339,336 345,371 354,061 183,582 170,479	11,757 11,868 12,402 12,854 6,265 6,589	88,489 88,192 89,544 91,774 44,261 47,513	11,595 11,710 11,350 10,743 6,018 4,725	111,841 111,770 113,296 115,371 56,544 58,827

The increase in the enrolment of children under six years of age since 1945 is mainly due to an increase in births in New South Wales since 1940. There is a certain amount of duplication in the gross enrolment figures for private schools in the years 1941 to 1944.

Further details of the age and sex distribution of school pupils in 1948 are given in the next table; similar particulars for public schools have been available since 1941, but they were not collected from private schools prior to 1948.

Table 890.—Public and Private Schools—Age and Sex Distribution,
August, 1948. (Effective Enrolment.)

Age in Years.	In :	In Public Schools.			rivate Sc	hools.	In Public and Private Schools,		
Tears.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Under 6 6 and under 7 7 8 8 8 9 9 10 10 11 11 12 12 13 14 14 15 and over 15	20,349 18,902 18,478 18,189 17,769 17,639 16,982 15,970 14,629	14,902 19,179 18,082 17,455 17,184 16,840 16,755 15,896 14,866 13,459 5,861	30,846 39,528 36,984 35,933 35,373 34,609 34,394 32,878 30,836 28,088 14,592	6,265 5,097 5,199 4,760 4,864 4,957 5,169 4,989 4,837 4,389 6,018	6,589 5,563 5,429 5,075 5,203 5,366 5,305 5,541 5,306 4,725 4,725	12,854 10,660 10,628 9,835 10,067 10,323 10,474 10,530 10,143 9,114 10,743	22,209 25,446 24,101 23,238 23,053 22,726 22,808 21,971 20,807 19,018 14,749	21,491 24,742 23,511 22,530 22,387 22,206 22,060 21,437 20,172 18,184 10,586	43,700 50,188 47,612 45,768 45,440 44,932 44,868 43,408 40,979 37,202 25,335
Total	183,582	170,479	354,061	56,544	58,827	115,371	240,126	229,306	469,432

With some minor exceptions, the number of pupils in each age group from 6-7 years upwards is progressively smaller. This is due mainly to fluctuations in the number of births, described elsewhere in this chapter.

Details of the ages of children in the various classes at public schools are published annually in the report of the Minister for Education. (See also pages 1033 and 1036.)

## PUBLIC AND PRIVATE SCHOOLS—RELIGIONS OF PUPILS.

Particulars of the religion of each child attending a public school are obtained upon enrolment, but such information is not available regarding pupils of private schools. Any analysis of the religions of school pupils is restricted, therefore, to a comparison of the number of children of each denomination enrolled at public schools, and the number of children (irrespective of religion) attending schools conducted under the auspices of the various religious denominations.

Such a comparative review of the aggregate enrolment in primary and secondary schools (public and private) during the December term of various years is given below. Particulars of the religious denomination of public school pupils in 1945 and later years were in respect of individual enrolments for the whole year. The "individual" enrolments consist of distinct children who attended a public school during the whole or some portion of the year, those who received instruction at more than one public school during the year being counted only once.

Table 891.—Public and Private Schools—Religions of Pupils.

	D		blic School n of Child	is— ren Enrolle	Children in Private Schools— Denomination of Schools.							
Year.	Church of England.	Roman Catholic.	Presby- terian.	Methodist	Other Denom- inations.	Church of England,	Roman Catholic.	Other Denoni- inations.	Unde- nomina- tional,			
GROSS ENROLMENT, DECEMBER TERM.												
1921 1929 1931 1986 1943 1944	176,998 210,286 218,333 213,216 205,173 205,324 INDIVID 210,216 213,508	35,532 39,614 42,590 41,202 38,047 37,254 UAL ENROI 40,287 40,992	37,497 47,232 49,200 47,043 43,339 42,722 MENT, WI	44,210 49,447 51,244 49,295 44,945 44,865 HOLE YEAR. 45,952 46,207	20,991 24,751 26,514 26,959 24,271 24,059	5,417 6,220 5,459 5,269 6,383 7,123 G308S I 7,415 8,058	63,486 75,311 79,684 85,449 92,332 95,136 ENROLMENT 95,199 95,162	2,004 3,174 2,579 3,516 4,603 5,283 DECEMBE 5,264 5,499	8,400 7,696 6,300 6,498 6,496 7,095 ER TERM.			
1947 1948	216,957 220,956	41,301 41,2 <b>48</b>	41,778 45,594	47,036 47,902	24,939 25,393	8,220 8,670	96,354 99,060	5,877 5,970	6,523 6,511			
_		PI	ROPORTION	PER CENT.	OF ALL P	UPILS ENR	OLED.					
1921 1929 1931 1936 1948 1944 1945 1946 1947 1948	44.9 45.4 45.3 44:0 44.1 43.8 43.5 43.7 43.8 43.8	9·0 8·5 8·9 8·6 8·2 8·0 8·3 8·4 8·3 8·2	9.5 10.2 10.2 9.8 9.3 9.1 9.1 9.1 9.0 9.0	11·2 10·7 10·6 10·3 9·6 9·6 9·5 9·5 9·5 9·5	5·3 5·3 5·6 5·2 5·1 5·0 5·1 5·0	1.4 1.3 1.1 1.1 1.4 1.5 1.6 1.7 1.7	16·1 16·2 16·6 17·9 19·8 20·3 20·3 20·0 20·0 20·2	0.5 0.7 1.0 1.1 1.1 1.2 1.2	2·1 1·7 1·3 1·4 1·4 1·5 1·6 1·4 1·4 1·3			

Of the total enrolment in public schools, children of the Church of England constituted 56.1 per cent. in 1921, and 58.0 per cent. in 1948. Children of the Roman Catholic faith attending public schools represented 11.3 per cent. in 1921 and 10.8 per cent. in 1948. Of the total enrolment in private schools, children attending Roman Catholic schools constituted 80 per cent. in 1921, 81.5 per cent. in 1929, and 82.4 per cent. in 1948.

## PUBLIC AND PRIVATE SCHOOLS—SAVINGS BANKS.

A system of school savings banks in connection with public schools was commenced in 1887, and was later extended to private schools. Deposits are received by the teachers, and an account for each depositor is opened at the local branch or agency of the savings bank.

At 30th June, 1948, there were 2,598 school savings banks, of which 196 were at private schools. The number of depositors was 167,220, and the balance to credit of accounts was £725,290, as compared with 164,868 accounts and balance £683,252 at 30th June, 1947.

#### Public Schools.

Some public secondary schools are conducted in conjunction with a primary school, and in the following classification such schools are included in both groups. The number of individual schools, excluding evening colleges, was 2,617 in 1948.

Table 892.—Classification of Public Schools.

Type of Sci	nool.		ato	School end of		Type of School.	Schools at end of year.		
			1946.	1947.	1948.		1946.	1947.	1948.
Primary Education	n—					Secondary Education—			
Public	•••	•	1,850	1,820	1,821	High	54	57	58
Provisional			529	544	552	Junior High	b	9	9.
Half-time and T	ravell	ing	5	3	2	Correspondence	1	1	1
Special (Hospita atory, etc.)	l, Re	form-	29	29	33				
Nursery			7	8	10				
Correspondence			1	1	1	Central Schools-			
Subsidised			187	171	118	Intermediate High	<b>4</b> 2	46	46
2						Junior Technical	26	25	25
				•		Commercial	6	в	5-
						Home Science	32	31	29
						District Rural	15	15	15
						Other	134	128	125
Total—Primary			2,608	2,576	2,537	Total—Secondary	319	318	313

Composite courses in secondary education are provided at schools other than the secondary schools shown above. In 1948 this type of instruction was provided at 1,059 public schools for 2,489 pupils.

At a number of small country schools not classified in the table as secondary, pupils may, with the teacher's assistance, secure a year's course of secondary instruction by means of lesson sheets. (See page 1036.)

## Types of Public Primary Schools.

**Primary** work in its various stages is undertaken in public schools classified broadly into three groups:—(a) Primary schools in more or less populous centres; (b) schools in isolated and sparsely-settled districts, viz., provisional, half-time, subsidised schools, and one travelling school; and (c) a correspondence school instructing children so isolated as to be unable to attend a school.

A public school may be established in any locality where the attendance of twenty children is assured. In most schools boys and girls are taught together. There are five classes of primary schools, viz.: (1) Schools of three departments with a total average attendance of more than 750 pupils; (2) schools with three departments and less than 750 pupils; or with two departments and more than 320 pupils, provided that one of the departments is for infants (kindergarten and 1st and 2nd classes); (3) schools with two departments and more than 180 pupils; (4) schools with more than 35 but not more than 180 pupils; and (5) schools with not more than 35 pupils.

Small schools are not established where it is convenient to arrange for the daily conveyance of the pupils to an adjacent school. In such cases the teachers and parents and citizens' associations make arrangements for the transport of the children, and the Department of Education grants a subsidy towards the cost of conveyance. The subsidy amounted to £97,328 in 1947 and £155,416 in 1948. Pupils travelling to school by Government transport services are conveyed without charge by trains and at concession rates by trams and omnibuses.

Provisional schools are maintained where there is an average attendance of nine pupils and where doubt exists as to the permanence of the settlement. At the end of 1948 there were 552 such schools in operation, with an enrolment of 8,894.

Half-time schools are established where a number of children sufficient to maintain a minimum attendance of nine pupils can be collected in two groups, not more than 10 miles apart. One teacher divides his time between the two groups, arranging for home-work and preparatory study to occupy the time of each pupil in his absence from either school. There was one half-time school with an enrolment of 16 pupils at the end of 1948.

In sparsely populated districts where attendance at a public school is impracticable, a single family with at least three children of school age may establish a subsidised school by engaging a teacher with the approval of the Department of Education, or two or more families may combine to do so.

The teacher receives an annual subsidy from the Department of Education, in addition to the remuneration paid by the parents. In 1948 the subsidy in the eastern portion of the State was at a minimum rate of

£37 10s. per annum, increasing according to the average monthly attendance to a maximum of £110 per annum. Elsewhere the minimum rate was £41 5s. and the maximum £120 per annum.

The course in subsidised schools is as far as practicable the same as in primary schools, and a post-primary course may be given by means of leaflets issued by the correspondence school. The schools are subject to inspection by the public school inspectors. Subsidised schools have declined steadily since 1935. There were 118 schools with an average weekly enrolment of 994 pupils in 1948, compared with 771 schools and 6,172 pupils in 1935.

## Correspondence School.

The Correspondence School with 174 teachers is located in Sydney for teaching children residing in various parts of the State who are unable to attend school.

Pupils are not admitted to the school until they reach the age of six years. In 1948 the enrolment was 4,921 primary and 695 secondary pupils. In addition to teaching these children, the correspondence school issues leaflets for primary education to subsidised schools and for secondary education to small country schools. Educational talks are broadcast each week

There is reciprocity between the Correspondence School and the Sydney Technical College in regard to teaching certain secondary and technical subjects by correspondence.

## Primary Education—Courses and Pupils.

Where facilities are available, primary education in public schools may include nursery training for children aged two to five years and kindergarten training for 5-year-old children. Formal education begins at the age of six years, when school attendance becomes compulsory. It is given in six classes and is normally completed when the pupil is about 12½ years of age; the first two classes comprise the infants' course.

At the public nursery schools, children are medically examined on enrolment and grouped according to age and health. At each school provision is made for medical attention. The children attend from 9 a.m. to 3.30 p.m. with an interval of two hours for rest. Milk and hot midday meals are provided. Activities include drawing, painting, handwork and dramatization. In 1948 there were ten public nursery schools in New South Wales with a total enrolment of 455.

Where accommodation is available, kindergarten classes, providing substantially the same training as nursery schools, are attached to infants' schools. In the infants' schools two years' instruction is given in reading, writing, composition and arithmetic, but a part of each day is reserved for activities such as occupy children in the nursery schools and kindergartens. Primary classes—third to sixth inclusive—provide instruction in English (with emphasis on speaking, reading, composition and spelling), social studies (history, civics and geography), mathematics, nature study, arts and crafts (including drawing, music, woodwork, needlework, etc.), and physical education.

The following table shows primary school pupils in classes since 1941, based on the effective enrolment on the first Friday of August in each year. Subsidised schools are excluded.

Table 893.—Public Schools—Pupils Receiving Primary Education,
According to Sex and Class.

			Effe	ective E	nrolmen	t in Aug	gust.				
Tear.	Primary Pupils.*										
	Kinder- garten.†	Class 1.	Class 2.	Class 3.	Class 4.	Class 5.	Class 6.	Total.	Public Schools.		
				1	Boys.						
1941 1942 1943 1944 1945 1946 1947 1948	9,383 9,344 10,208 11,129 12,089 12,796 14,875 15,761	23,983 24,046 24,996 25,569 25,554 26,100 26,362 28,037	18,422 18,122 18,328 19,071 19,670 19,972 20,213 20,560	19,111 18,286 18,037 18,112 19,062 19,556 19,665 20,405	19,675 19,114 18,345 17,786 18,083 18,847 19,587 19,516	20,735 19,565 19,125 18,646 17,718 17,953 18,587 19,313	21,982 21,147 20,290 18,641 18,433 17,392 17,506 18,077	133,241 129,624 129,329 128,954 130,609 132,616 136,795 141,669	175,866 173,181 176,207 176,498 176,480 176,612 179,170 183,582		
				G	irls.						
1941 1942 1943 1944 1045 1946 1947 1948	8,762 8,754 9,492 10,402 11,125 12,136 13,835 14,424	21,566 21,714 22,295 22,638 23,033 23,337 24,142 25,361	17,058 16,739 16,947 17,670 17,967 18,381 18,582 19,349	17,291 17,255 16,872 17,041 17,915 18,252 18,642 19,150	18,406 17,370 17,210 16,957 17,389 17,829 18,240 18,610	19,418 18,531 17,698 17,418 16,948 17,183 17,699 18,068	21,121 20,474 20,076 17,793 17,390 16,915 17,100 17,421	123,620 120,837 120,590 119,919 121,767 124,033 128,240 132,383	161,207 159,999 162,453 161,974 162,388 162,724 166,201 170,479		
				Т	OTAL.						
1941 1942 1943 1944 1945 1946 1947 1948	18,145 18,098 19,700 21,531 23,214 24,932 28,710 30,185	45,499 45,760 47,291 48,207 48,587 49,437 50,504 53,398	35,478 34,861 35,2 <b>7</b> 5 36,741 37,637 38,353 38,795 39,909	36,402 35,541 34,909 35,153 36,977 37,808 38,307 39,555	38,081 36,484 35,555 34,748 35,472 36,676 37,827 38,126	40,153 38,096 36,823 30,064 34,666 35,136 36,286 37,381	43,103 41,621 40,366 36,484 35,823 34,307 34,606 35,498	256,861 250,461 249,919 248,873 252,376 256,649 265,035 274,052	337,073 333,180 338,660 338,472 338,868 339,336 345,371 354,061		

<sup>\*</sup> Excluding subsidised schools. † Including nursery schools.

The relatively high eurolment in first class is due to the fact that children under six years of age are enrolled in first class for two years in succession at schools where there is no provision for kindergarten classes.

Between 1941 and 1948, kindergarten and first class pupils increased by 19,939 or 31.3 per cent. Sixth class pupils declined from 43,103 in 1941 to 34,307 in 1946, but increased to 35,498 in 1948. There were 12.5 per cent. fewer fifth and sixth class pupils in 1948 than in 1941, whereas, in the same period, the number of pupils in all other primary classes increased by 27,568 or 15.9 per cent. Between 1941 and 1944 the total number of primary pupils in public schools declined from 256,861 to 248,873, but the number increased to 274,052 in 1948, owing to the increased rate of enrolment since 1943. The proportion of boys to girls has remained fairly constant, boys being more numerous than girls by 9,621 in 1941 and by 9,286 in 1948.

The fluctuations in the enrolment of primary pupils in classes, as shown for public schools in Table 893, are primarily the result of variations in the number of births in New South Wales. In particular, the decline in fifth and sixth class enrolments between 1941 and 1946 was the result of a decline in births during the economic depression of the nineteen-thirties. Enrolments in all classes increased in 1947 and 1948 as a result of the steady increase in births since 1934 (see page 1024).

The following table shows a classification of primary pupils in public schools in 1948, according to age and class:—

Table 894.—Public Schools—Pupils Receiving Primary Education, According to Age and Class, 1948.

day to Ware		Number of Pupils—Effective Enrolment in August, 1948.*									
Age in Years.	Kinder- garten.	Class 1.	Class 2.	Class 3.	Class 4.	Class 5.	Class 6.	Total. Primar <b>y</b>			
Under 6 6 and under 7 7 8 8 9 9 10 11 11 12 and over	26,766 3,242 134 27 7 4 2 2	4,074 34,859 12,191 1,691 368 131 48 36	1,421 23,349 12,422 2,026 425 141 119	1,296 20,530 13,425 3,013 761 525	1 14 1,255 18,379 13,185 3,770 1,522	 8 1,165 16,741 13,496 5,971	  3 1,108 15,467 18,920	30,846 39,528 36,984 35,989 35,373 34,607 33,685 27,096			
Total	30,185	53,398	39,909	39,555	38,126	37,381	35,498	274,052			

<sup>\*</sup> Excluding Subsidised Schools.

Of the sixth-class pupils in August, 1948, 44 per cent. were 11 years of age and 53 per cent. 12 years or over.

## Secondary Education in Public Schools.

The principal public schools providing secondary education are classified as high, central and "secondary" schools. High schools are separate units, providing a full secondary course of five years. Central schools are primary schools where secondary instruction is provided for two or more years and the average attendance in secondary classes is 20 pupils; they include schools designated as intermediate high, junior technical, home science, commercial and district rural. "Secondary" schools are separate units with a minimum average attendance of 300 pupils, providing secondary instruction for three or more years; they include junior high schools (courses up to four years in duration) and, where no primary school is attached, home science, commercial and junior technical schools.

Particulars of the principal types of public secondary schools and the average weekly enrolment of secondary pupils in each year 1946 to 1948 are shown in the following table; all "secondary" schools, except the junior high schools, are included in the figures for central schools.

Table 895.—Public Schools—Principal Types of Secondary Schools and Average Weekly Enrolment.

Type of School.		19	946.	19	47.	1948.		
		No. of Schools.	Average Weekly Enrolment.	No. of Schools.	Average Weekly Enrolment.	No. of Schools.	Average Weekly Enrolment	
High Junior High Central—		54 9	30,082 3,690	57 9	29,870 3,663	58 9	27,420 3,708	
Intermediate High Commercial Junior Technical Home Science District Rural *Other		42 6 26 32 15 135	9,487 $1,206$ $10,164$ $13,057$ $2,245$ $8,708$	46 6 25 31 15 129	9,578 $1,134$ $9,270$ $12,679$ $2,092$ $8,545$	46 5 25 29 15 126	10,006 979 9,245 11,426 2,159 8,266	

<sup>\*</sup> Includes Secondary Section of Correspondence School.

In 1948 the five commercial schools included two separate units (or "secondary" schools), and the 25 junior technical and 29 home science schools included 8 and 10 separate units, respectively. The table above does not include subsidised schools with secondary pupils, primary schools with an average attendance of less than 20 secondary pupils, or evening colleges.

Enrolment is competitive at all agricultural high schools and at high, junior high and intermediate high schools in the metropolitan area, Newcastle and Wollongong. Pupils are selected for these schools by special departmental committees on the basis of the child's primary school record, intelligence tests, and the recommendation of the principal of the school last attended. Pupils for all other public secondary schools are selected by the district inspectors on the basis of the pupil's primary school record (including the results of intelligence tests made in fourth, fifth and sixth classes).

Hostels for high school students required to live away from home are conducted by the Department of Education at East and West Maitland and at Albury. Hostels at other places are conducted by local committees and are subsidised by the Department. Students living at the hostels are required to pay board.

During the first three years of secondary education, the pupil is required to study not less than six nor more than eight subjects, including English and either history or social studies or science. The pupil may select the other subjects from five groups which include foreign languages, science, mathematics, business principles, and a group of eight practical and technical subjects (e.g., music, needlework, home economics, woodwork and farm mechanics). In the fourth and fifth years, six subjects must be studied, one being English and the others selected from not less than three out of five groups of subjects similar to those set for the first three years, except that business principles is replaced by history, social studies and economics. Guidance in the selection of courses is given by school counsellors (see page 1040).

The junior technical, home science, commercial and rural schools usually have special facilities for the study of the practical and technical subjects indicated by the designation of the school, but the study of such subjects is not confined to these schools; for instance, commercial courses are provided at home science schools. The high schools include two home science, three technical and three agricultural. A full secondary course of five years is provided at the Conservatorium of Music. Particulars of agricultural education in public schools are given on page 1037.

Since 1920 there has been a steady increase in the provision of facilities for secondary education in public schools, and this is reflected in the enrolment figures. In 1921 approximately 8 per cent. of all pupils enrolled in public schools were receiving secondary education, as compared with 22 per cent. in 1939 and 26 per cent. in 1944; the proportion declined to 24 per cent. in 1946 and 23 per cent. in 1948.

The following table shows secondary pupils in classes since 1941, according to the effective enrolment on the first Friday in August each year. Similar details in respect of earlier years are not available on the same basis. Secondary pupils at primary schools where the secondary enrolment is less than 20 are included, but subsidised schools and evening colleges are excluded.

Table 896.—Public Schools—Pupils Receiving Secondary Education,
According to Sex and Class.

		E	Effective E	Inrolment	in Angus	t.					
August.		Secondary Pupils.*									
	First Year.	Second Year,	Third Year,	Fourth Year.	Fifth Year.	Total.	Pupils in Public Schools.*				
			Во	ys.							
$1941 \\ 1942 \\ 1943 \\ 1944 \\ 1945 \\ 1946 \\ 1947 \\ 1948 $	19,388 19,366 20,080 19,619 18,439 18,125 17,528 17,720	12,371 13,308 14,493 14,497 13,741 12,982 12,889 12,711	7,540 7,812 8,529 9,054 9,038 8,304 7,696 7,557	1,909 1,782 2,308 2,567 2,657 2,619 2,327 2,166	1,417 1,289 1,468 1,807 1,996 1,966 1,935 1,759	42,625 43,557 46,878 47,544 45,871 43,996 42,375 41,913	175,866 173,181 176,207 176,498 176,480 176,612 179,170 183,582				
			GIR	LS.							
1941 1942 1943 1944 1945 1946 1947 1948	18,367 18,335 18,741 18,299 17,115 16,678 16,289 16,545	11,353 12,520 13,509 13,712 13,242 12,380 12,311 12,326	5,957 6,484 7,267 7,344 7,425 6,942 6,736 6,773	1,149 1,110 1,501 1,684 1,673 1,527 1,522 1,359	761 713 845 1,016 1,166 1,164 1,103 1,093	37,587 39,162 41,863 42,055 40,621 38,691 37,961 38,096	161,207 159,999 162,453 161,974 162,388 162,724 166,201 170,479				
			Tor	AL.							
1941 1942 1943 1944 1945 1946 1947 1948	37,755 37,701 38,821 37,918 35,554 34,803 33,817 34,265	23,724 25,828 28,002 28,209 26,983 25,362 25,200 25,037	13,497 14,296 15,796 16,398 16,463 15,246 14,432 14,330	3,058 2,892 3,809 4,251 4,330 4,146 3,849 3,525	2,178 2,002 2,313 2,823 3,162 3,130 3,038 2,852	80,212 82,719 88,741 89,599 86,492 82,687 80,336 80,009	337,078 333,180 338,660 338,472 338,868 330,336 345,371 354,061				

<sup>\*</sup> Subsidised schools and evening colleges are not included.

These figures indicate that less than half the first year pupils complete three years of secondary instruction in public schools, and less than 10 per cent. complete the full course of five years. There were 34,803 first-year pupils in 1946 but only 14,330 third-year pupils in 1948, indicating that nearly 60 per cent. left between first and third year. The intermediate certificate is awarded on completion of three years of the secondary course and, as attendance ceases to be compulsory at the age of 15 years, only a small proportion of the pupils remain for the full course.

At public schools, slightly more than half the pupils in the first three years of secondary education are boys, and in the fourth and fifth years the proportion exceeds 60 per cent. of the total. In 1948, boys comprised 52.8 per cent. of first-year, 52.7 per cent. of third-year, and 61.6 per cent. of fifth-year pupils.

The decline in the number of births in the depression years affected to some extent the enrolment of first-year pupils in public secondary schools, which decreased from 38,821 in 1943 to 33,817 in 1947, and then increased slightly to 34,265 in 1948. Second-year pupils declined from 28,209 in 1944 to 25,037 in 1948, and third-year pupils from 16,463 in 1945 to 14,330 in 1948.

The following table shows secondary pupils in public schools in 1948, classified according to age and class:—

Table	897.—Public	Schools-Pupils	Receiving	Secondary	Education,
	A	cording to Age a	and Class,	1948.	

Age in Years.		Number of Pupils*—Effective Enrolment in August, 1948.							
		First Year.	Second Year.	Third Year.	FourthYear.	Fifth Year.	Total Secondary.		
Under 12 12 and under 13 13 , 14 14 , 15 15 , 16 16 , 17 17 , 18 18 and over		709 12,566 14,560 5,995 405 19 5	2 533 10,083 12,714 1,608 84 10	 1 409 7,808 5,421 649 39 3	  227 2,183 991 118 6	  2 192 1,560 941 157	711 13,100 25,052 26,746 9,809 3,303 1,113 175		
Total		34,265	25,037	14,330	3,525	2,852	80,009		

<sup>\*</sup> Excluding subsidised schools and evening colleges.

In August, 1948, 82 per cent. of the secondary pupils at public schools were under the age—15 years—when attendance is no longer compulsory; 12 per cent. were 15 years of age, and 6 per cent. were 16 years or over. Nearly all the pupils under age 15 and 75 per cent. of those aged 15 years were enrolled in first, second or third-year. The majority of fourth-year pupils were aged 15 or 16 years and fifth-year pupils 16 or 17 years.

## Secondary Courses in Country Primary Schools.

Composite courses are provided at public primary schools in country districts where secondary schools are not readily accessible. The courses lead to the intermediate certificate and the Public Service entrance examinations.

Secondary instruction by means of leaflets is arranged for children attending small country schools who have completed the primary course and are prepared to continue their education for at least one year. The subjects of instruction include English, mathematics, languages, art, technical subjects (for boys), and home science subjects (for girls). This system differs from instruction by correspondence in that the pupil's work is arranged and corrected by the teacher in charge of the school.

## Evening Colleges.

In 1946, the evening continuation schools, described in issues of the Year Book prior to No. 50, were re-organised as Evening Colleges. These colleges, maintained by the Department of Education, are designed to meet the needs of adults, as well as younger people who have left school, in respect of general education and cultural and leisure activities.

An evening college may be established where a regular attendance of thirty students per evening can be maintained for three evenings per week. In general, the courses of instruction provided at each college are those requested by the students enrolled. Apart from general subjects, such as English, mathematics and science, instruction is given in commercial subjects, physical education and a wide variety of arts, crafts and hobbies, e.g., dramatic art, dressmaking, weaving and woodwork. Courses of study may be provided for the intermediate certificate, leaving certificate

and Public Service examinations. No fees are charged. School buildings and equipment are made available, but students provide their own materials.

In 1948 there were 27 evening colleges with an enrolment of approximately 7,000 pupils.

The following is the record of enrolment and attendance at evening colleges:--

Year.	Number of	Average	Weekly Enro	olment,	Average Weekly Attendance.		
	Colleges.	Males.	Females.	Total.	Males.	Females.	Total.
1921	46	2,876	821	3,697	2,239	531	2,770
1931	45	3,843	1,621	5,464	3,090	1,288	4,378
1936	36	3,071	1,106	4,177	2,412	838	3,250
1941	30	2,223	540	2,763	1,689	372	2,06
1942	30	1,212	168	1,380	920	105	1,02
1943	28	1,201	190	1,391	789	116	90
1944	28	1,174	318	1,492	835	157	99
1945	26	1,281	384	1,665	831	160	99
1946	24	1,654	1,101	2,755	1,098	632	1,73
1947	25	2,075	1,750	3,825	1,363	1,105	2,46

Table 898.—Evening Colleges.

The eurolment at evening colleges declined from 4,177 in 1936 to 1,380 in 1942, but increased to 2,755 in 1946 and 7,000 in 1948, following a re-organisation of the curricula. Women comprised 46 per cent. of the total eurolment in 1947, as compared with only 23 per cent. in 1945. Similar details of enrolments in 1948 are not available.

### Agricultural Education.

The Government of New South Wales maintains three agricultural high schools, viz., the Yanco Agricultural High School (750 acres) in the Murrumbidgee Irrigation Area; the Hurlstone Agricultural High School (395 acres) at Glenfield, 23 miles from Sydney; and the Farrer Memorial High School (270 acres) at Nemingha, 7 miles from Tamworth. The schools at Yanco and Nemingha are mainly for resident pupils, and the Glenfield school is for day and resident pupils.

The course at these schools extends over five years, with an examination for the intermediate certificate at the end of three years, and for the leaving certificate at the conclusion of the course. Successful candidates at the intermediate certificate examination may gain entrance to the Hawkesbury and Wagga Agricultural Colleges; those successful at the examinations for the leaving certificate may qualify for matriculation at the University or for scholarships at Teachers' Colleges. The average weekly enrolment at the Agricultural High Schools in 1948 was 792, viz., 416 at Hurlstone, 226 at Yanco, and 150 at Farrer.

Courses in agriculture are also given in other public secondary schools. In co-operation with the Department of Agriculture a system of junior farmer clubs has been established in country centres. The majority of members are school pupils and instruction is given by State teachers. Advisory committees and district councils assist in organising competitions and demonstrations and in preparing exhibits for agricultural shows.

At the end of 1948 there were 318 clubs with 9,141 members, of whom 2,554 had left school. Girls, as well as boys, belong to the clubs; the ages of members range from 10 to 21 years.

### School Forestry.

Portions of State forests or Crown lands may be set apart for the purpose of enabling pupils of public schools to acquire some knowledge of scientific forestry and sylviculture. The control and management of each school forest area is vested in a trust consisting of the inspector of public schools for the district as chairman, the teacher of the school as deputy-chairman, and two members nominated by the Parents and Citizens' Association. The trust may sell the products of the area, and any surplus over expenses may be used for educational purposes as determined by the Minister for Education.

# "Opportunity" Classes and Special Schools.

The Department of Education maintains a number of special schools and classes for children who, because of ability below or above average or because of some physical disability or other special circumstances, would be handicapped in a normal class.

For primary school pupils there are "opportunity" classes, classified as "A," "B," "C" and "D." Opportunity "A" classes, for children who are sub-normal but educable, are attached to primary schools in the metropolitan area, and, within limits fixed by their ability to travel without supervision, children may be admitted from adjacent schools. Eurolment is limited to 22 pupils per class so that individual attention may be given to each pupil. A syllabus is not fixed and a large measure of discretion is left to the teacher. Participation in the corporate school life is encouraged. Children are usually admitted at age about 9 years and remain until about 13½ years. In 1948 there were 15 opportunity "A" classes with a total enrolment of 348. For children of the type enrolled in opportunity "A" classes there is also a special residential school at Glenfield. The school serves partly as a demonstration centre and individual instruction is given with emphasis on handicrafts. The enrolment in 1948 was 64 boys and 48 girls.

Opportunity "B" classes have been organised in a number of primary schools in urban areas for children of normal capacity but backward on account of illness, irregular attendance or late enrolment, etc. The object of the treatment in the "B" classes is to enable the pupil to return to his normal primary class; enrolment is limited to 22 pupils per class. In 1948 there were 44 opportunity "B" classes with a total enrolment of 968.

Opportunity "C" classes are for primary school children of superior ability. The pupils are selected by means of scholastic and intelligence tests from the pupils between 9½ and 11 years of age in 4th and 5th classes. The children are enrolled for two years and grouped in classes limited to 35 pupils under special teachers. The subjects of study are those of the normal 5th or 6th class, but treatment is more advanced and there is opportunity for a variety of related activities. In 1948 there were 28 opportunity "C" classes with a total enrolment of 980 pupils, attached to 9 centres in the metropolitan area.

Opportunity "D" classes, of which there are seven in Sydney and one in Newcastle, are for children who are backward because of partial deafness.

Each class is limited to ten pupils and is attached to the infants' department of a primary school. The children are equipped with individual hearing aids and are instructed in lip-reading. The object of the treatment is to enable the pupils to return to their normal classes. The total enrolment in opportunity "D" classes in 1948 was 62.

In addition to those described above there are opportunity 7th classes for pupils above 12½ years of age who are considered unlikely to benefit from the normal secondary courses or from a repetition of 6th class work. In the smaller country central schools, where numbers are insufficient to form an opportunity 7th class, children of this type are taught by means of a special correspondence course under the supervision of one of the teachers of the school. The syllabus for the opportunity 7th class is designed for pupils who are slow to learn. In 1948 there were opportunity 7th classes in 48 schools in the metropolitan area; in other districts there were 73 classes and 24 groups within normal classes. The total enrolment in these classes was 7,611.

There is an Activity or Handicraft school at Enmore for boys of secondary school age of average ability who have completed the primary course, but whose work, particularly in academic subjects, is not in keeping with their ability. The curriculum includes general subjects, but a large proportion of the time is devoted to handicrafts, drawing and hobbies. The enrolment in 1948 was 168.

At certain hospitals the Department of Education maintains schools for children likely to remain in hospital for a long period. In December, 1948, there were 15 hospital schools with a total enrolment of 259 boys and 235 girls.

An Act was passed in 1944 to provide for the education and compulsory school attendance of children who, by reason of blindness or other infirmity, are not capable of being educated by ordinary methods. In February, 1948, the Wahroonga School for the Blind was proclaimed a "special school" under the Act, and the whole of New South Wales was proclaimed the district for that school. As a result of the proclamation, attendance at school is now compulsory for blind children throughout the State between the ages of six and fifteen years. The school at Wahroonga is maintained by the Department and is closely associated with the residential institution maintained by the New South Wales Institute for the Deaf and Dumb and Blind on the same property. In 1948 the school had 35 pupils (15 boys and 20 girls), of whom 31 were boarders; there were 5 full-time and 2 part-time teachers.

A sight-saving class has been established at a metropolitan public school for children with defective but sufficient sight to benefit from special visual methods of instruction. Children with defects of speech may receive remedial treatment from speech therapists of the School Medical Service.

The Department of Education provides teachers for schools at 15 child welfare homes.

Particulars of private schools for blind and deaf mutes are given on page 1045.

Pre-apprenticeship and Pre-employment Classes.

Pre-apprenticeship and pre-employment classes for selected pupils—boys and girls—who have completed two years of a post-primary course are conducted at certain technical colleges (see page 1054). The intermediate

examination is taken after the first year's study; in the second year the boys are prepared for the electrical, mechanical, or building trades or for commerce and the girls for commercial work (following a special prevocational curriculum). During 1948, 389 boys and 8 girls were enrolled.

# Physical Education.

Physical education is compulsory for all pupils in public schools. There is a Director of Physical Education under the Director-General of Education, and a course of training for teachers is provided at the Sydney Teachers' College.

Two forty-minute periods are set aside each week for physical training, and one full afternoon for sport. School camps for pupils over 11 years of age are held throughout the year at National Fitness centres at Broken Bay, Lake Macquarie and elsewhere. Weekly swimming classes are conducted each summer. In 1947-48, the number of children taught to swim was 20,418, including 8,703 in the vacation swimming class. The Public Schools' Amateur Athletic Association, which has about fifty branches throughout the State, organises inter-school sport and athletic competitions.

### Educational and Vocational Guidance.

In the public school system there is a staff of School Counsellors, consisting of teachers trained in psychology, to assist teachers and parents in the selection of suitable school courses for the children and to help those with special difficulties. A counsellor visits the primary schools in his district. Systematic psychological tests are applied to the fourth and higher classes, and a record is kept in respect of each child for guidance purposes.

Attached to each public secondary school is a Careers Adviser to assist parents and pupils in the selection of the pupil's future vocation. Vocational guidance is given to pupils of both public and private schools by the Director of Youth Welfare in the Department of Labour and Industry and Social Welfare.

In 1948 there were 20 school counsellors in the metropolitan area and 13 at other centres.

### Educational Aids.

Educational aids employed in schools include school broadcasts, still and motion films, film strips and school libraries. In the case of public schools, equipment is provided mainly by the Parents and Citizens' Associations, with the assistance of a 20 per cent. subsidy from the Department of Education in respect of the purchase price of film projectors and library books.

The School Broadcasts Advisory Council, which arranges school broadcasts, consists of representatives of the Australian Broadcasting Commission, the Department of Education, and the teachers of public and private schools. At the end of 1948 there were approximately 2,000 receiving sets in use in public schools.

The Department of Education assumes responsibility for the maintenance of film projectors in public schools and the purchase and loan of films. At the end of 1948 approximately 1,836 motion films, including some produced by the Department, were available for distribution to schools,

and there were 295 sound and 75 silent motion film projectors in 365 public schools. The amount of the film subsidy in the year ended 30th June, 1948, was £4,367.

Usually there is a library at each public school in the metropolitan area and larger towns, and for the smaller schools a central library from which boxes of books may be lent to the schools in the district. The libraries are in charge of teachers trained in library work. In 1948 there were 63 district units under the central library scheme. There were also 1,842 libraries with 653,376 volumes in public primary schools and 100 libraries with 231,895 volumes in public secondary schools. Subsidies paid by the Department during the year ended 30th June, 1949, amounted to £2,197.

# Religious Instruction in Public Schools.

The Public Instruction Act, 1880, provides that religious instruction may be given in public schools by visiting ministers and teachers of religious bodies for a maximum period of one hour in each school day, and the following table indicates the number of lessons in special religious instruction given in public schools during the past six years.

Denomination.	Number of Lessons.									
Denomination,	1943.	1944.	1945.	1946.	1947.	1948.				
Church of England Roman Catholic Presbyterian Methodist Other Denominations	 66,706 22,435 26,293 31,637 19,600	68,059 23,891 26,295 31,558 20,404	64,489 23,628 25,231 30,555 20,339	71,252 24,811 28,087 33,622 23,021	76,229 26,567 29,977 34,735 24,272	76,067 26,430 29,317 34,859 23,995				
Total	 166,671	170,207	164,242	180,793	191,780	190,668				

Table 899.—Religious Instruction in Public Schools.

The number of religious lessons given in public schools in 1948 was 15 per cent. greater than in 1943.

# Education of Migrants.

Evening classes, with a minimum enrolment of six students, have been established for adult migrants by the Department of Education. Generally, the classes are held in schools and are attached to evening colleges where practicable. Instruction is given in Elementary English and Civics, and usually continues for each migrant for approximately one year or until the migrant has acquired sufficient knowledge of English for general purposes. In 1949 there were approximately 2,500 migrants attending classes.

Migrant children residing in school districts are normally enrolled in public schools. In Holding Camps established for migrants by the Commonwealth, special schools are provided, as part of the State educational system, for migrant children of primary school age. Migrant camp children of secondary school age attend accessible secondary schools.

# PRIVATE SCHOOLS.

The position of private schools in the education system of the State has been discussed at the beginning of this chapter.

Children of statutory school age must be provided with efficient education, and a school is not recognised as efficient unless it is certified by the Minister for Education, who takes into account the standard of instruction, the qualifications of the teachers, the suitability of the school premises, and the general conduct of the school. This provision applies to both primary and secondary schools where children of statutory ages are educated. The conditions upon which benefits under the Bursary Endowment Act are extended to private secondary schools involve similar inspection and certification, and nearly all of them have been registered by the Department of Education. The standards of instruction required of private schools are the same as those of public schools of similar grade.

The total number of private schools certified by the Minister for Education in 1948 was 720. Of these, 128 were registered under the Bursary Endowment Act as qualified to provide the full secondary course, and 99 as qualified for the education of secondary pupils to the intermediate certificate stage.

## The Roman Catholic School System.

The Roman Catholic schools comprise the largest group of private schools in New South Wales. They are organised to provide a complete school system of religious and secular education, comprising kindergarten, primary, and secondary schools; and there are two Roman Catholic colleges within the University of Sydney. Special schools are maintained for the training of deaf mutes and the blind (see page 1045), as well as orphanages and refuge schools. There are also the training centres of the religious communities and seminaries for the education of the clergy, but particulars of these are not included in the statistics of schools.

The Roman Catholic school system is organised on a diocesan basis in eight dioceses in New South Wales. Supervision is exercised by the Bishop through clerical and lay inspectors in each diocese, and a Director of Catholic Education, appointed by the Bishops, is charged with general supervision.

The majority of the schools are parochial primary schools for the education of children from 6 to 15 years of age; at many of them secondary education to the intermediate certificate standard is provided—especially in country districts—if a Catholic secondary school is not available. These schools are parochial property and the parochial authorities are responsible for the buildings, maintenance, repairs and equipment. The cost is provided only to a small extent by school fees, and these are supplemented by parochial collections and voluntary contributions.

Secondary education, usually the five years' course leading to the leaving certificate examination, is provided at boarding colleges and secondary day schools for boys and for girls, and there are day schools where the course leads to the intermediate certificate examination. The secondary schools are registered under the Bursary Endowment Act; in secular subjects they follow the curricula of the Department of Education and they are subject to inspection by the departmental inspectors. As a general rule, the secondary schools are the property of the religious communities who conduct them and are supported by the fees charged. In association with some of the secondary schools for boys, a separate primary school, which is parochial property, is conducted for boys from 9 to 15 years of age by the same community as the secondary school. At the secondary day schools for

girls there is, in many localities, a primary department for the elementary education of pupils who proceed to the secondary courses, and the fees are charged at a higher scale than in parochial primary schools.

Commercial and technical training is provided in connection with the secondary day schools, and in some separate institutions; and there are commercial schools for boys and for girls in Sydney. At two institutions—one at Lismore and the other at Campbelltown—theoretical and practical study of agriculture is combined with the regular secondary course; farm training is also given at the Westmead Home for orphan boys. In all the orphanages special attention is given to training the boys and girls in some trade or occupation as a means of future livelihood, and at the Westmead Home there is a fully equipped printing shop where boys are trained in this skilled trade. Home science is a usual subject in the girls' secondary schools; needlework and art form part of the ordinary curriculum, and tuition is given in vocal and instrumental music.

The pupils of the Roman Catholic schools attend the public examinations described on page 1046, as well as examinations conducted by the diocesan inspectors at the end of the primary and the intermediate stages. On the results of these examinations, scholarships and bursaries are awarded.

The teaching staffs are, with few exceptions, members of religious communities. Information relating to their training for teaching is shown on page 1051.

# Private Schools, Teachers and Pupils.

The following table shows particulars of the private schools of each denomination in 1947 and 1948. Schools attached to charitable institutions are included.

		19	47.			1948.				
Classification.	Schools.	Teachers	Effective Enrol- ment in August.	Gross Enrol- ment, Decem- ber Term.	Schools.	Teachers	Effective Enrol- ment in August.	Gross Enrol- ment, Decem- ber Term.		
		ļ	ĺ ——		l					
Undenominational Roman Catholie Church of England Presbyteriau Methodist Lutheran Seventh Day Adventist Theosophical Christian Science Hebrew	75 575 46 12 5 2 7 1 1	351 3,154 455 173 98 2 25 5 7	6,184 93,237 8,152 3,273 1,778 40 449 31 87 65	6,629 96,354 8,220 3,295 1,787 40 464 30 89 66	70 579 43 11 5 2 8  1	335 3,168 477 174 101 2 24  8	5,927 94,971 8,590 3,367 1,865 44 447  95 65	6,532 99,060 8,670 3,388 1,875 44 478  99 65		
Total	725	4,275	113,296	116,974	720	4,294	115,371	120,211		

Table 900.-Private Schools-Teachers and Pupils.

The number of teachers, as shown in the table, does not include those who visit schools to give tuition in special subjects only, because many of them give instruction in more than one school. The actual number of private school teachers is not recorded.

Fees are usually charged at private schools, but they vary considerably in amount. In some denominational schools the payment of fees is to

some extent voluntary, and a number of scholarships and bursaries have been provided by private subscription for the assistance of deserving students. Some of the private schools are residential. There were 98,470 day scholars and 14,826 boarders in August, 1947, and 100,580 day scholars and 14,791 boarders in August, 1948.

The following statement shows the number of secondary pupils enrolled in private schools, as indicated in the returns for 1922 (the first year for which the particulars are available) and later years. The form of return was changed in 1945 in respect of the definition of secondary pupils and type of enrolment; therefore particulars for 1945 and later years are not comparable with those for earlier periods.

~								
Year.		y Pupils En rivate School		Year.	Secondary Pupils Enrolled in Private Schools,			
	Boys.	Girls.	Total.		Boys.	Girls.	Total.	
1922 1931 1941 1943 1944	GROSS ENRO 5,705 8,365 12,423 14,281 15,653	5,954 8,068 11,723 13,633 14,086	11,659 16,433 24,146 27,914 29,739	1945 1946 1947 1948	EFFECTIVE 16,182 16,027 15,822 16,090	ENROLMENT 16,480 15,910 15,845 16,068	32,662 31,937 31,667 32,158	

Table 901.—Private Schools—Secondary Pupils.

Secondary instruction is given in a high proportion of private schools, including 227 registered under the Bursary Endowment Act (see page 1047).

Prior to 1945, secondary pupils were defined in the enrolment returns as those following a course of instruction similar to that of the public secondary schools, and pupils who were not following the full secondary course were omitted. Since 1945, the returns have included all pupils above the primary stage, *i.e.*, above sixth class.

The number of secondary pupils in August, 1948, viz., 32,158, represented 28 per cent. of all pupils enrolled in private schools. Slightly more than half those studying secondary courses were boys.

### Private Schools—Kindergartens and Nurseries.

The Kindergarten Union maintains free kindergartens, nursery schools and playgrounds in Sydney and Newcastle for children under statutory school age. In August, 1948, there were thirty-two schools with an effective enrolment of 1,747 pupils. The organisation receives a State subsidy of £10,000 per annum.

The Sydney Day Nursery and Nursery Schools Association conducts fourteen nursery schools for children between the ages of two and six years; in 1948 the effective enrolment was 797. Attached to these schools are six day nurseries for children between one month and two years of age. In 1946-47 the Association received as subsidy £13,000 from the State, £650 from the Commonwealth, and £1,502 from municipal councils; children's fees amounted to £8,949.

For children of pre-school age there are numerous small kindergartens and nursery schools not attached to public or private schools or the associations described above. Statistics of these small kindergartens and nurseries are not collected.

# Private Schools for Deaf, Dumb and Blind.

The education of deaf and dumb children is undertaken at a school conducted by the Institution for the Deaf and Dumb and the Blind, which is endowed by the State. In August, 1948, there were 244 children in the Institution's school.

Deaf mutes are trained at two Roman Catholic institutions, one at Waratah for girls, with 60 inmates in August, 1948, and the other at Castle Hill, where 80 boys were enrolled. There were twenty-two children at a Roman Catholic school for blind children at Homebush.

The Samuel Cohen Kindergarten at Pyrmont serves children of preschool age who are deficient in hearing. Approximately forty children attended the kindergarten in 1948.

# Private Schools for Crippled Children.

The Spastic Centre at Mosman (Sydney) was established in 1945 for the care and training of children suffering from infantile cerebral palsy. Therapeutic treatment and training in ordinary school subjects are provided, and four teachers are supplied by the Department of Education. Transport between home and the Centre is provided by the institution. Children and young people are accepted from 5 to 25 years of age, and the total enrolment in 1948 was \$1. The Centre is supported chiefly by public donations, and the total expenditure in 1948 was £19,666.

The New South Wales Society for Crippled Children conducts four schools for crippled children in the metropolitan area. In 1949, the total enrolment at these schools was 63.

### Enrolment in Private Schools.

A comparative statement of the enrolment in certified private schools is shown below. The enrolment at the kindergarten and nursery schools described above is not included.

Table 902.-Private Schools-Gross Enrolment during December Term.

	Pupils on Roll during December Term.												
Year.	Un- denomina- tional.	Roman Catholic.	Church of England.	Presby- terian.	Methodist.	Seventh Day Adventist.	Lutheran.	Other Denom- inations.	Total Private Schools.				
1921 1929 1931 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	8,400 7,760 6,339 6,546 6,211 6,505 6,849 6,169 6,496 7,095 7,309 6,769 6,629	63,486 75,311 79,684 86,238 85,761 87,296 88,827 89,259 92,332 95,136 95,199 95,162 96,354	5,417 6,220 5,459 5,622 5,444 5,476 5,757 6,098 6,383 7,123 7,415 8,058 8,220	788 1,599 1,235 2,082 2,104 2,215 2,263 2,277 2,590 3,034 2,945 3,120 3,295	605 1,074 890 1,049 1,050 1,119 1,110 1,159 1,412 1,525 1,625 1,694 1,787	301 311 310 670 655 372 366 498 467 494 476 460	51 76 105 86 63 68 70 71 86 72 57	259 50  123 101 98 79 85 63 144 146 168	79,307 92,401 94,022 102,416 101,389 103,163 105,615 109,814 114,637 115,488 116,974				

Of the total enrolment at private schools in 1948, Roman Catholic schools accounted for 82 per cent., Church of England schools 7 per cent., and undenominational schools 5 per cent.

#### SCHOOL EXAMINATIONS.

To test the proficiency of students in secondary schools, a system of public examinations has been organised by the Department of Education in co-operation with private secondary schools and the University, where appropriate certificates issued by the Department are accepted as evidence or educational qualification. The University also holds an annual matriculation examination, on the results of which a number of University scholarships and prizes are awarded.

The regulations of the Department of Education provide for the issue of certificates which mark definite stages in the progress of secondary school pupils. The intermediate certificate marks the satisfactory completion of the first three years of the secondary course in public and private schools. From 1949 it will be issued subject to satisfactory attendance, conduct and application to studies, and a pass in at least four subjects at an internal examination at each school; there will be a public (or external) examination for pupils not attending school. Prior to 1949, the requirements included satisfactory school work in four subjects and a pass in two out of three subjects at a public examination.

At the leaving certificate examination, which is held at the close of the five years of the secondary course, candidates may not take more than six subjects nor more than eight papers. A pass in four subjects is required for the issue of the leaving certificate. An appropriate pass at the leaving certificate examination may qualify a student for matriculation at the University.

The intermediate and leaving certificates are generally accepted as proof of sufficient educational qualification for admission to the State and Commonwealth Public Services (with a supplementary examination), the teaching profession, banks, and kindred bodies.

The following statement relates to the number of caudidates for the intermediate and leaving certificates during the six years ended 1948:—

	Interm	ediate Cert	ificate.	Leaving Certificate.			
Year.	Candidates.	Pa	isses.	Candidates. —	Passes.		
	Candidates,	No.	Proportion.	Candidates. –	No.	Proportion	
			per cent.			per cent.	
1943	20,157	16,346	81-1	4,380	3,600	82.2	
1944	21,097	16,460	78.0	5,399	4,248	78.7	
1945	20,985	16,710	79-6	6,125	4,540	74.1	
1946	19,811	15,990	80.7	6,116	4,844	79.2	
1947	19,245	15,483	80.4	6,512	4,684	71.9	
1948	19,148	15,554	81.2	6,207	4,635	74.7	

Table 903.-School Examinations.

### SCHOLARSHIPS AND BURSARIES.

It is the policy of the State to assist promising students to obtain secondary and tertiary education by granting scholarships and bursaries. These are supplemented by privately endowed scholarships, etc.

# Bursary Endowment Act.

By the Bursary Endowment Act, 1912, and amendments, provision is made for State bursaries tenable in approved public or private secondary schools, in technical colleges and in the University of Sydney. The Act is administered by a board, consisting of two representatives each of the University of Sydney, the Department of Education, and private secondary schools registered under the Act. The award of bursaries is subject to a condition that the applicant's family income does not exceed a prescribed amount. This amount (in 1949), for a family of three or fewer dependants, ranged from £400 per annum in the case of bursaries awarded on the results of the bursary examination (at the end of the primary course) to £700 per annum in the case of bursaries awarded on the results of the leaving certificate examination.

The bursaries awarded and accepted in 1948 (on the results of the examinations at the end of 1947) were as follows:—290 tenable for five years—123 at public high schools and 167 at private schools; 8 for two years in pre-apprenticeship (technical) classes; 301 upon results of the intermediate certificate examination, tenable for two years; and 38 tenable at the University of Sydney. In addition, 6 bursaries were accepted for various courses at the technical colleges.

The bursaries tenable at the University are awarded at the leaving certificate examination to candidates under 19 years of age, whose parents' means are inadequate for the expense of a University education.

The number of pupils holding bursaries at 30th June, 1948, was 1,862, viz., 1,741 attending courses of secondary education, 20 enrolled at technical colleges and 101 at the University. These numbers are exclusive of 23 war bursaries.

The annual monetary allowances payable to bursars in terms of the Bursary Endowment Act at 30th June in each year 1943 to 1948 were as follows:—

Table 904.—Bursary Endowment Act—Bursars and Annual Allowances.\*

l	Rates of Allowances and Number of Bursars.											
At 30th June,	Under £10 per annum.	£10 and nnder £20 per annum.	£20 and under £35 per annum,	£35 and under £45 per annum,	£60 per annum,	£75 per annum.	Total.					
1943		711	716	331	155	42	1,955					
1944	•••	599	730	348	166	34	1,877					
1945	1	622	724	341	159	40	1,887					
1946		594	724	347	172	40	1,877					
1947	1	628	761	350	172	37	1,949					
1948		612	757	300	167	26	1,862					

<sup>\*</sup> Exclusive of allowances for textbooks, etc.

Bursars attending courses of secondary instruction and those following University courses are allotted grants for text-books. At 30th June, 1948, the maximum amounts were:—Secondary bursars in the first, second and third years 30s. per annum, and in the fourth and fifth years 50s. per annum; and University bursars £7 10s. per annum.

War bursaries are provided by the Bursary Endowment Board for children of incapacitated and deceased soldiers. The number in operation at 30th June, 1948, was 23, each bursar receiving £10 per annum. The total number awarded since they were initiated in 1916 was 3,264.

# Soldiers' Children Education Scheme.

The Soldiers' Children Education Scheme, administered by the Repatriation Commission, applies to children of deceased and incapacitated exservicemen. The scheme takes two forms: (a) assistance to children under the age of 13 years by way of a refund of school requisites and fares; and (b) assistance to children aged 13 years or over in the form of a regular allowance for secondary education, technical training, and in some cases, for University education. In New South Wales the number of applications for assistance approved in 1947-48 was 2,014 (including 1,377 for children under 13 years of age and 637 for those aged 13 or over. Of the total number of applications approved, 1,731 were for children of servicemen of the 1939-45 war and the balance for those of servicemen of the 1914-18 war. Commonwealth expenditure on the scheme in New South Wales was \$58,629 in 1946-47 and £74,893 in 1947-48.

# Hawkesbury Agricultural College—Bursaries, etc.

Eight bursaries, tenable at the Hawkesbury Agricultural College with exculption from education and maintenance fees up to £70 per annum, are awarded annually on the results of the intermediate certificate examination; four of these bursaries are provided by the Department of Agriculture and four by the Department of Education. In addition, a number of scholarships at the college are awarded by various organisations.

The Department of Agriculture also provides cadetships at the Hawkesbury Agricultural College for the training of junior livestock officers. The cadetships are tenable for periods varying from one to three years, and they cover fees and expenses up to £80 per annum, with an allowance of £25 per annum. The cadets must enter into a bond to serve the Department for at least three years after obtaining the Hawkesbury Diploma of Agriculture.

### Technical College Scholarships, etc.

Scholarships, conferring free tuition, are awarded annually on the results of the intermediate and leaving certificate examinations, for various courses at the technical colleges. In addition, a number of scholarships, entitling the holder to higher technical instruction free of charge, is awarded on the results of technical college examinations. In 1948 forty-six scholarships were awarded on the results of the intermediate and twenty-two on the leaving certificate examinations held in 1947. Other technical college scholarships awarded numbered fifty-eight.

A number of bursaries for technical college courses is awarded each year by the Bursary Endowment Board (see page 1047).

# University of Technology-Scholarships, etc.

Certain Government Departments and business firms select junior officers for free training at the University of Technology. Students selected receive a living allowance and their University fees.

In addition, 15 scholarships are available each year in Mining Engineering. Twelve of these are given by the Joint Coal Board and three by the New South Wales Combined Colliery Proprietors' Association. If the student is living at home, the value of each scholarship is £156 in the first year, £182 in the second year, £208 in the third year, and £234 in the fourth year. There is an additional allowance of £56 per annum if the student lives away from home, and each student is entitled to £35 per annum for fees and books.

Students at the University of Technology may apply for assistance under the Commonwealth Scheme of Financial Assistance (see page 1070).

# University of Sydney—Exhibitions, Scholarships, etc.

Two hundred public exhibitions, conferring exemption from the payment of matriculation, tuition and degree fees, are awarded annually by the Senate of the University on the results of the leaving certificate examination. Half of these exhibitions are allotted to candidates in order of merit, and in allotting the balance the income of the candidate and his family is taken into account. Matriculation scholarships are awarded by the Senate and by the University colleges from private foundations. A number of University bursaries is awarded each year by the Bursary Endowment Board (see page 1047). Two scholarships, tenable at the University, with an allowance of £100 per annum for two years, and one with an allowance of £80 per annum for three years, may be awarded annually to diploma students of the Sydney Technical College.

In each year the Public Service Board of New South Wales selects a number of junior officers for free University training. The trainee receives an allowance of £112 per annum for the first two years and £156 per annum thereafter if living at home, or £120 and £168 per annum, respectively, if living away from home. The University fees are paid by the State. The trainee is required to enter into a bond in the sum of £500 to continue in the public service for a period of five years after obtaining his degree.

Particulars of teachers' college scholarships and of Commonwealth assistance to university students and reconstruction trainees are described elsewhere in this chapter.

### TRAINING OF TEACHERS.

## State Teachers' Colleges.

Four colleges were maintained by the State during 1948 for the training of teachers for public schools, viz., Sydney (in the University grounds), Balmain, Armidale, and Wagga (wholly residential). A fifth college was opened at Newcastle in 1949.

Scholarships are awarded by the Department of Education on the results of the leaving certificate examination for a period of training which is usually two years for primary school teachers and from three to five years for secondary school teachers. University graduates may be awarded a scholarship for a year's course of professional training. Each scholarship-holder must guarantee to serve the Department for three years where the period of training is two years, or for five years in the case of longer periods of training.

In 1949 the scholarship allowance for students living at home was £112 per annum in the first two years, and £120 per annum in subsequent years;

for other students the rates were £156 and £168 per annum respectively. The students receive free tuition and £3 per annum for books.

Private students may be admitted to the colleges and are required to pay fees amounting to £27 per annum.

Women students away from home live in a hostel unless specially exempted. A hostel for women is attached to each training college.

Two-year courses are provided for teachers of nursery, infants' and primary schools; there are also two-year courses for specialist teachers in various subjects and a three-year course in physical education. Teaching methods are demonstrated at special schools associated with the teachers' colleges, and practical training at other selected schools.

Courses for secondary teachers (four or five years in duration) enable the students to study for a University degree in arts, science, agriculture or economics at Sydney University or the New England University College while they receive training in the theory and practice of education. The final year is devoted to professional training at one of the Teachers' Colleges, and successful students may qualify for the post-graduate Diploma in Education. There is a similar system for training specialist teachers of music at the Conservatorium, and teachers of art at the Technical College, with the final year at the Sydney Teachers' College. Post-college training and refresher courses are provided for teachers in the service of the Department of Education. The University fees of teachers in training are paid by the Department.

Particulars of teachers enrolled at the teachers' colleges in 1938 and the last six years are given in the following table:—

-	Schol	arship Stu	dents.	P	rivate Stude	nts.	All Students.			
Year.	Males. Females. Total.		Total.	Males.	Females.	emales. Total.		Females,	Total.	
1938	68 <b>4</b>	779	1,463		13	13	684	792	1,476	
1943	215	710	925		34	34	215	744	959	
1944	375	778	1,153	4	39	43	379	817	1,196	
1945	529	800	1,329	4	70	74	533	870	1,403	
1946	953	898	1,851	21	112	133	974	1,010	1,984	
1947	1,102	954	2,056	8	101	109	1,110	1,055	2,165	
1948	1,207	1,043	2,250	10	27	37	1,217	1,070	2,287	

Table 905.—State Teachers' Colleges—Students Enrolled.\*

The number of male students increased by 154 in 1945 and by 441 in 1946, mainly as a result of the enrolment of ex-servicemen receiving benefits under the Commonwealth Reconstruction Training Scheme in addition to scholarship benefits; there were further increases of 136 in 1947 and 107 in 1948. Private students at the colleges increased from 13 in 1938 to 133 in 1946, but declined to 37 in 1948. The total number of students in 1948, viz., 2,287, was 811 or 55 per cent. greater than in 1938.

<sup>\*</sup> Exclusive of students in Defence Services.

Students enrolled at the teachers' colleges during 1948 are classified in the following statement according to college and course:—

Course and Year.	Sydney,	Balmain.	Armidale.	Wagga	All Colleges.			
Course and Tear.	ayuney.	Daimani,	Armidale.	Wagga.	Males.	Females.	Total.	
Two-year Courses (mainly for primary teachers) Special Courses (Physical Edu-	519	202	327	294	603	739	1,342	
eation, Music, Art, etc.) University Courses (for second-	205	•••	22		129	98	227	
ary teachers) Graduate Professional Course	456	•••	92		409	139	548	
(Diploma in Education)	107 37		26 		66 10	67 27	133 37	
Total	1,324	202	467	294	1,217	1,070	2,287	

In 1948, 548 students of the teachers' colleges, including 139 women, attended University degree courses. These included 456 students at Sydney University, viz., Arts, 287, Science 136, Economics 13, and Agriculture 20; and 92 students studying Arts or Science at the New England University College. In addition, there were 107 at Sydney and 26 at Armidale studying for the post-graduate Diploma in Education.

The libraries at the teachers' colleges contained 94,407 volumes in December, 1948.

# Training of Teachers—Private Schools.

Teachers in the Roman Catholic Schools, who are members of religious communities, are trained at twenty-three centres, located in different parts of the State. These centres are registered after inspection by a Board of Registration—a central body appointed by the Roman Catholic Hierarchy of New South Wales. The course of training lasts two years; the first is the novitiate year required by the communities and is devoted largely to the testing and formation of character. The second is the year of professional training; it consists of a course of study of pedagogy, combined with practical exercises and opportunities for observing experienced teachers; it is terminated by an examination in theory and practical work. The entrance qualification is the leaving certificate or its equivalent. Certificates of competence are issued in three grades—sub-primary, primary, and super-primary—to those who are successful in the examinations at the end of the course.

The Kindergarten Union of New South Wales conducts the Sydney Kindergarten Teachers' College at Waverley. There is accommodation for thirty resident trainees, and there were 130 girls in training in 1948, of whom 40 gained diplomas.

The Sydney Day Nursery and Nursery Schools Association provides a three-year course of training for nursery school teachers at Newtown. In 1948 there were 94 students.

## CLASSIFICATION OF PUBLIC SCHOOL TEACHERS.

Public school teachers are classified according to their educational qualifications. Students who have completed a course of training at the

teachers' colleges are required to obtain practical experience as teachers before they are classified.

In 1948 there were 12,125 teachers in public schools (excluding subsidised schools and technical colleges), viz., 8,752 primary teachers and 3,373 secondary teachers. Of the primary teachers, 4,598, or 52.5 per cent. were women. Of the secondary teachers, most of whom are University graduates, 1,385 or 41.1 per cent. were women.

Teachers of subsidised schools must have sufficient educational attainments to teach the curriculum of primary schools. Schools of method are held in Sydney during the mid-summer vacation for the purpose of increasing the knowledge and efficiency of these teachers. The average number of pupils enrolled in subsidised schools is less than nine per teacher, the schools being situated in remote districts.

Particulars of teachers in public and subsidised schools during the eleven years, 1938 to 1948, are shown below:—

		I	n Public Scho	ols.	_	In Subsidised Schools.				
Year.			1							
	Males.	Females.	Graduates.	Others.	Total.	Males.	Females.	Total.		
1938	5,631	5,423	1,950	9,104	11,054	103	511	614		
1939	5,832	5,254	1,967	9,119	11,086	90	484	574		
1940	5,956	5,268	2,065	9,159	11,224	62	477	539		
<b>1</b> 941	5,224	5,467	2,100*	8,591*	10,691	52	462	514		
1942	4,986	5,802	2,163	8,625	10,788	33	291	324		
1943	4,753	6,228	2,253	8,728	10,981	18	229	247		
1944	<b>4,6</b> 48	6,345	2,289	8,704	10,993	11	198	209		
1945	4,781	6,226	2,269	8,738	11,007	9	198	207		
1946	5,769	5,913	2,216	9,466	11,682	13	174	187		
1947	5,966	5,806	2,077	9,695	11,772	19	152	171		
1948	6,142	5,983	2,182	9,943	12,125	12	106	118		

Table 907. -Public and Subsidised Schools-Teachers Employed.

The figures for the years 1941 to 1945 are exclusive of teachers on war service. During this period the total number of teachers varied only slightly, the decline in the number of men being offset by an increase in women. In 1946, owing to the return of ex-servicemen, male teachers in public schools increased by nearly a thousand; there were further increases of 197 in 1947 and 176 in 1948. Women teachers declined from 6,226 in 1945 to 5,806 in 1947, but increased to 5,983 in 1948. Of the total number of public school teachers in 1948, viz., 12,125, men comprised 6,142 or 50.7 per cent. The number of teachers in subsidised schools declined from 614 to 118 between 1938 and 1948.

<sup>\*</sup> Approximate.

Graduates comprised 18.0 per cent. of the teachers in public schools in 1948, as compared with 17.6 per cent. in 1938. The degrees held by the 2,182 graduates in 1948 included:—M.A. 114, B.A. 1,428, B.Ec. 209, B.Sc. 394, and B.Sc.Agr. 28. Fifty-eight teachers held two or more degrees. Women graduates numbered 783 or 35.9 per cent. of total graduates.

# DEPARTMENT OF TECHNICAL EDUCATION.

Under the Technical Education and New South Wales University of Technology Act, 1949, a separate Department of Technical Education has been established under the Minister for Education. The Department is administered by a Director, a Deputy Director and Assistant Directors. Prior to this Act, post-school technical education in New South Wales was administered as a branch of the Department of Education.

The Act provides for a Technical Education Advisory Council to represent industry, commerce, the professions, the trade union movement and educational authorities. The Director of Technical Education is chairman of the Council and the Director-General of Education is an exofficio member. The council is to make recommendations to the Minister with respect to technical education in the State and the co-ordination of the functions of the Department of Technical Education with those of the Department of Education, the University of Sydney, the New South Wales University of Technology and other educational bodies.

Under the Act, the Governor may declare any subject matter to be vocational in character, and the Minister may register schools or institutions providing instruction in such matters. After the expiration of 12 months from the date of commencement of this part of the Act, no person may give paid instruction in a vocational matter without a permit from the Minister, unless he is a teacher in a public school, or a school registered under the Bursary Endowment Act or an institution registered under the Technical Education Act. The Minister will be assisted by a Vocational Instruction Advisory Committee comprising the Director of Technical Education, the Under Secretary of the Department of Labour and Industry and Social Welfare, and one other member appointed by the Minister. This part of the Act had not commenced up to the time of publication of this Year Book.

The Act also establishes the University of Technology (see page 1062).

# Technical Colleges and Courses.

The Department of Technical Education conducts a number of technical colleges in various parts of the State. The Sydney Technical College is situated at Ultimo and the East Sydney Technical College at Darlinghurst, and there are five technical colleges in the suburbs. There are large colleges at Newcastle, Wollongong, Broken Hill and Lithgow, and smaller colleges in 29 country towns, including one at Canberra, A.C.T. In addition, four mobile units, each consisting of three rail cars, provide practical instruction in skilled trades in 12 country towns. Instruction in dressmaking, sheep and wool and other technical subjects is given by parttime and itinerant teachers in many country towns where no technical college is available. There are also correspondence courses in technical subjects for students unable to attend classes.

Apart from preparatory and special courses, the courses provided by the Technical Education Department may be classified broadly into three groups: diploma and post-diploma courses of professional standard in

science, engineering, commerce and the fine arts; trade courses for apprentices and others engaged in the skilled trades; and certificate courses, usually of a semi-professional nature.

There are 28 different diploma courses in the various branches of science, engineering, commerce and fine arts, leading to the Associateship of the Sydney Technical College (A.S.T.C.). This is recognised by the Australian Chemical Institute and the Institution of Engineers, Australia, as conferring professional status equivalent to that of a university graduate in similar fields of study. A standard of education equivalent to that of university matriculation is required for admission to diploma courses, but there are special preparatory classes in English, mathematics, physics, mechanics and history for those who have not reached this standard. Diploma courses are organised on a part-time basis and, in general, students must be engaged in an occupation related to the course undertaken. At least three years' occupational experience is required for most diplomas. Post-diploma courses in special subjects are held from time to time for holders of diplomas and for university graduates.

Trade courses, also part-time, are designed to supplement work experience. There are more than 50 different trade courses in the various branches of the engineering, building, printing, electrical and other trades. Students must have reached a standard of education sufficient to enable them to follow the course; usually they must be apprenticed in the trade relating to the course, but journeymen may be admitted to trade and special post-trade courses. With some exceptions, the trade courses are in two groups; lower trade courses of three years' duration, and higher trade courses of two years' duration. The lower trade course must be completed before commencement of the higher course, which entitles the student to the trade certificate.

There are certificate courses of a semi-professional nature, providing three years' training in a variety of technical and commercial subjects, including agriculture, industrial management, production management and woolclassing. There are no occupational qualifications and the standard required is the intermediate certificate or a special entrance examination. On satisfactory completion of the course a certificate is issued.

Special courses of short duration are provided from time to time to meet particular needs; they include various engineering subjects, commercial and home science courses, women's handicrafts, etc. For some of these courses there are no educational or occupational requirements.

Pre-vocational courses are conducted by a number of technical colleges in conjunction with central and secondary schools of the Department of Education. The courses comprise two years of full day instruction and are of two types: (a) pre-apprenticeship, designed to prepare boys to enter certain trades; and (b) pre-employment (commercial), designed to prepare boys and girls for commercial careers. Students selected must have completed two years of secondary education.

Classes in the different sections of trade and diploma courses are coordinated with practical needs by means of advisory committees composed of representatives of employers and employees in particular trades.

The committees visit the classes regularly and discuss with the Director and heads of departments matters relating to the maintenance of standards of efficiency in equipment and teaching.

Advisory councils have been constituted to co-ordinate the work of the committees and to facilitate the discussion of general problems arising in technical education.

The fees payable for technical classes are very low, being usually at the rate of 5s, per term of thirteen weeks for juniors, and 10s, per term for seniors, for one lesson (of up to two hours' duration) per week.

Technical Education Department-Expenditure.

Particulars of expenditure on technical education and receipts from fees, etc., since 1937 are given below:—

Table 908 .- Technical Education-Expenditure and Receipts from Fees, etc.

		Expen	diture from I	Revenue and	Loans,			
Year.	Salaries.	Equipment.	Mainten-	Buildings	, Sites, etc.	Total Expendi-	Receipts from Students'	
	Dalarios.	Equipment.	ance, etc.	From Revenue.	From Loans.	ture.	Fees, etc.	
1937 1938	£	£ 250,117 313,298 .	£	£ 14,375 17,352	£ 185,884 146,166	£ 450,376 476,816	£ 56,851 68,697	
1939 1940	272,539 287,021	90,975	17,076 21,768	21,075 21,871	205,852 109,479	607,517 625,044	84,057 78,635	
1941 1942	312,422 316,377	67,598 45,806	23,235 24,266	19,276 17,883	43,642 2,302	466,173 406,634	85,341 75,492	
1943 1944	333,681 369,917	45,374 74,350	27,528 30,260	24,001 44,929	80,910 63,728	511,494 583,184	116,639 112,175	
1945 1946	450,564 561,573	74,725 103,801	38,498 45,527	34,586 34,307 25,615	66,221 46,004	670,594 791,212	134,844 162,886	
1947	735,649	164,186	55,213	35,615	39,633	1,030,296	221,738	

Between 1937 and 1947 the total expenditure on technical education more than doubled. The increase was partly due to higher salaries and other costs and partly to the growth in enrolments. Large sums have been expended on technical college buildings and sites, particularly during the four years 1937 to 1940; the amount spent from revenue and loans on these items was £226,927 in 1939 and £75,248 in 1947. Receipts from fees increased by nearly 300 per cent. between 1937 and 1947.

Technical Education Department—Teachers and Students.

Particulars of the teachers and students at the technical colleges in each year from 1937 to 1947 are shown below:—

Table 909 .- Technical Education - Teachers and Students.

		Te	eaching Sta	ff,		Ind	ividual Stude	ents.	
Year.	Fnll	-time.	Part	-time.			l	Total.	
	Males.	Females.	Males.	Females.	Total.	Males.	Females.		
1937	*	*	*	*	848	18,416	7,772	26,188	
1938	*	*	*	*	1,062	22,739	8,126	30,865	
1939	203	98	832	62	1,195	27,403	9,861	37,264	
1940	277	104	930	54	1,365	28,123	10,413	38,536	
1941	289	97	1,058	51	1,495	30,368	10,615	40,983	
1942	289	97	1,070	59	1,515	29,942	9,439	39,381	
1943	356	82	966	106	1,510	26,443	8,497	34,940	
1944	412	98	1,030	105	1,645	29,431	10,319	39,750	
1945	416	82	1,479	111	2,088	30,940	11,827	42,767	
1946	764	137	1,313	148	2,362	38,874	11,078	49,952	
1947	842	160	1,333	326	2,661	45,242	14,058	59,300	

<sup>\*</sup> Not available.

The number of individual students in 1947, viz., 59,300, was the highest on record and 59 per cent. more than in 1939. In 1947 there were three times as many full-time teachers as in 1939.

In 1947 the distribution of students amongst the various centres was Sydney and East Sydney 28,399, other metropolitan centres 9,536, Newcastle and district 5,843, Wollongong 1,589, other country centres 9,600, and correspondence 4,333.

A comparative statement regarding the ages of male and female students enrolled at technical classes is shown below.

Table 910.—Technical Education—Ages of Students.

				Age	Last Birtl	hday.			
Year.	14 and 15,	16.	17.	18.	19.	20.	21 to 24.	25 and over,	Total Students
				Mali	s.				
1937	2,157	2,735	2,542	2,251	1,770	1,393	5,5	68	18,416
1938	2,381	3,059	3,241	2,366	2,087	1,598	8,0	07	22,739
1939	2,442	3,260	3,606	3,456	2,582	2,117	5,319	4,621	27,403
1940	2,980	3,530	3,852	3,593	2,886	1,755	4,387	5,140	28,123
1941	2,766	3,549	3,910	3,792	3,079	2,327	5,627	5,318	30,368
1942	2,816	3,665	4,147	3,665	3,394	2,385	6,814	3,056	29,942
1943	2,220	3,507	3,769	3,235	3,041	2,284	8,3	87	26,443
1944	2,564	3,567	4,164	3,753	3,408	2,437	5,524	4,014	29,43
1945	919	2,944	5,006	4,728	3,651	2,713	4,490	6,489	30,940
1946	821	2,766	4,937	5,320	4,326	3,153	6,994	10,557	38,874
1947	720	2,561	4,768	5,215	4,916	3,961	10,097	13,004	45,242
_	1		<u>'</u>	FEMAL	LES.		<u>'</u>	·	
1937	1,795	1,149	929	710	497	392	2,3	00	7,775
1938	1,805	1,112	992	658	532	410	2,6	17	8,120
1939	2,297	1,488	1,329	1,014	608	450	1,231	1,444	9,86
1940	2,284	1,626	1,416	1,055	764	479	1,240	1,549	10,413
1941	2,307	1,508	1,378	1,067	707	537	1,346	1,765	10,61
1942	2,294	1,270	1,198	867	615	416	1,270	1,509	9,43
1943	1,733	1,301	1,066	868	598	466	2,4	65	8,49
1944	2,284	1,560	1,425	1,042	718	499	1,411	1,380	10,31
1945	1,750	1,412	1,389	1,122	870	719	1,826	2,739	11,82
1946	726	1,242	1,235	1,066	754	666	1,613	3,776	11,07
1947	573	1,323	1,502	1,233	991	841	2,709	4,886	14,058

The increase in enrolments of male students since the end of the war consisted largely of part-time reconstruction trainees over 21 years of age; full-time reconstruction trainees are not included in the figures (see page 1059). The number of male students over 21 years of age increased by 12,122 or 114 per cent. between 1945 and 1947, and female students in the

same age group by 3,030 or 66 per cent. Since 1945 there has been a decline in the number of male students under the age of 18 years and of females under the age of 17. In 1947, females represented 24 per cent. of the total enrolment, as compared with 27 per cent. in 1939.

Technical Education Department—Students and Courses.

Particulars of the courses of study for which students were enrolled in 1939 and recent years were as follows:—

Table 911.-Technical Education-Students and Courses.

				Individua	l Students.		
Type of Course.	ĺ	1939.	1945.	1946.		1947.	
				1340.	Males.	Females.	Total.
Diploma		1,491	2,827	4,776	4,292	147	4,439
Diploma Preparatory	•••	2,149	2,331	921	2,622	92	2,714
Trades		15,768	18,287	21,657	26,014	234	26,248
Art		1,424	1,638	1,317	709	1,081	1,790
Women's Handierafts		5,672	6,092	6,424	180	7,838	8,018
Home Science		1,298	1,306	1,032		799	808
Correspondence		2,049	2,079	2,562	2,782	1,551	4,333
Sheep and Wool		1,440	1,257	1,586	1,261	13	1,274
Commercial		2,856	2,749	4,457	3,977	2,213	6,190
Trades Preparatory		436	104	59	9		9
Industrial Management			1,507	1,434	1,940	12	1,952
Miscellaneous		2,681	2,590	3,727	1,447	78	1,525
Total Individual Studen	ts	37,264	42,767	49,952	45,242	14,058	59 <b>,30</b> 0

In 1947, trades courses occupied 44 per cent. of the students, women's handicrafts 13 per cent. and commercial courses 10 per cent. Between 1939 and 1947 the number of students in trades courses increased by 10,480 or 66 per cent., those in diploma courses by 2,948 or 198 per cent., and those enrolled in commercial and correspondence courses by more than 100 per cent.

Of the 14,058 women students in technical colleges in 1947, 12,683 or 90 per cent. were studying women's handicrafts, art, commercial or correspondence courses. Women comprised 60 per cent. of all art students and 36 per cent. of all commercial students.

The following table shows the ages of students enrolled in the principal courses in 1947:—

Table 912.—Technical Education—Ages of Students in Principal Courses, 1947.

Age Last B	athdo.				Number o	of Students.		
(Years		y. 	Diploma.	Trades.	Women's Handicrafts.	Commercial.	Corres- pondence.	All Courses.
15 and under		i		371	242	229	166	1,293
16				1,996	611	636	201	3,884
17 17			174	3,718	851	578	250	6,270
18			432	3,866	675	380	284	6,448
19			594	3,483	509	261	326	5,907
20			532	2,586	385	250	387	4,802
21 to 24			1,387	4,848	1,291	1,458	1,869	12,806
25 and over	•••		1,305	5,380	3,454	2,398	850	17,890
Total			4,439	26,248	8,018	6,190	4,333	59,300

The majority of students in trades courses in 1947 were between 17 and 21 years of age; of the total, 10,228 or 39 per cent. were aged 21 years or more. In the case of each of the other courses listed in the table, less than half the students were under 21 years of age. Forty-three per cent. of the correspondence students were aged 21 to 24 years, as compared with 22 per cent. of all students enrolled.

Particulars of students enrolled in courses in the diploma and trades groups in 1946 and 1947 are shown below:—

Table 913.—Technical Education—Students Enrolled in Diploma and
Trades Courses.

Diploma Courses,	No. of S	tudents.	Trades Courses.	}	No. of	Students.
Dipionia Courses,	1946.	1947.	Trades Courses.		1946.	1947.
Electrical	855 766 497 229 986 485 336	807 742 422 177 952 487 350 502	Fitting and Mach'ning Electrical Trades Carpentry Plumbing Automotive Mechanics Welding Boilermaking Ticketwriting Other Trades Courses		5,165 3,502 2,420 1,328 1,486 1,297 764 544 5,151	5,560 3,929 2,831 1,881 1,824 1,578 901 712 7,032
Lotal	4,776	4,439	Total		21,657	26,248

The diploma students in 1947 included 2,148 (or 48 per cent.) studying engineering and 952 (or 21 per cent.) studying chemistry. In the same year, there were 147 diploma students in architecture and 100 in accountancy. The distribution of diploma students in 1947 according to centre of training was Sydney 3,480, Newcastle 574, Wollongong 265, and Broken Hill 120.

Of the trades courses, fitting and machining occupies more students than any other; in 1947 they numbered 5,560 or 21 per cent. of the total. Students being trained in the electrical trades, carpentry, plumbing, automotive mechanics and welding in 1947 numbered 12,042 or 47 per cent. of all trades students.

Technical Education Department—Diplomas and Certificates Awarded.

The following table shows particulars of diplomas and certificates awarded by the Technical Education Department in each year since 1943:—

Particulars.		1943.	1944.	1945.	1946.	1947.
Diploma of Associateship .		 182	199	219	237	280
Certificates—						
Trade Competency	., ,.,	 261	450	506	652	872
Lower Trades		 379	500	400	822	1,010
Shorthand		 186	179	225	197	222
Typewriting		 222	222	263	238	321
Welding		 127	169	178	191	162
Industrial Management .		 l <b>.</b>		850	827	403
Engine Operation		 			416	259
Other		 341	325	723	802	300

Table 914.—Technical Education—Diplomas and Certificates Awarded.

In 1947 the number of trades certificates awarded was 1,882, or 49 per cent. of all diplomas and certificates, as compared with 640, or 38 per cent. in 1943. Certificates awarded for shorthand and typewriting in 1947 numbered 543, or 14 per cent. of the total.

1,698

2,044

3,364

4,382

3,829

Total, Diplomas and Certificates

Commonwealth Reconstruction Training Scheme—Technical-type.

A description of the Commonwealth Reconstruction Training Scheme is given on pages 1017 to 1019.

In New South Wales, technical-type training under the scheme is administered by the Director of Technical Education, who is also the New South Wales Regional Director of the Industrial Training Division; he is assisted by representative committees of employees and employers. Successful applicants receive full-time vocational and professional training at the technical colleges, approved industrial establishments or private training institutions. Part-time training is provided at the technical colleges or at private institutions, either by attendance at classes or by correspondence. Full-time trainees receive a living allowance during the period of training.

From the inception of the scheme in March, 1944, to December, 1948, 27,853 applications (including 2,696 from females) were received for full-time technical-type training in New South Wales. Sixty-six per cent. of the applicants had enlisted on or before their 21st birthday. At the end of 1948, 13,094 full-time and 5,900 part-time students had completed their training.

The number of persons in full-time training under the technical-type scheme in New South Wales was 5,203 in 1946, 5,087 in 1947 and 1,075 in 1948. Part-time trainees numbered 20,666 in 1946, 31,431 in 1947 and 25,403 in 1948. These figures include trainees taking refresher courses.

Full-time students in training at the end of 1948 comprised 920 at the technical colleges (32 courses), 91 at industrial establishments (31 courses), and 64 at private institutions (10 courses). Part-time students numbered 20,012 at the technical colleges (151 courses) and 5,391 at private institutions (141 courses). Of the total number of part-time students, 13,351 or 53 per cent. were being trained by correspondence.

The following statement shows particulars of students in training in the principal technical-type courses in each of the last three years. Trainees in subsidised professional or vocational employment are not included.

Table 915.—Commonwealth Reconstruction Training Scheme in New South Wales—Technical-type Students and Courses.

	Full	l-time Stude	nts.	Part	-time-Stude	nts.*
Course.	December, 1946.	December, 1947.	December, 1948.	December, 1946.	December, 1947.	December, 1948.
Building Trades— Bricklaying	1,234 427 288 141 89	470 1,330 302 71 57 20	5 6 216 4  24 255	44 657 37  440 516 1,694	232 1,744 226 178 679 632 3,691	534 2,406 300 164 554 596 4,554
Other Courses— Accountancy	95 87 446 238 62	368 250 145 886  50 1,138	104 249 46 43  46 332	6,227 287 673 222 468 720 10,375	9,356 520 1,748 62 771 771 14,512	6,297 448 1,354 56 343 519 11,832
Total, All Courses	5,203	5,087	1,075	20,666	31,431	25,403

<sup>\*</sup> Exclusive of professional and other students in subsidised employment (see page 1061).

The number of full-time students in 1948, viz., 1,075, was only 21 per cent. of the number in 1946. Part-time trainees in 1948 were 6,028 fewer than in 1947, but were more numerous than in 1946.

Building trades courses occupied 24 per cent. of the full-time trainees, and 18 per cent. of the part-time students in 1948, as compared with 52 per cent. and 8 per cent. respectively, in 1946. Accountancy students in 1948 comprised 10 per cent. of full-time and 25 per cent. of part-time students.

The full-time trainees in December, 1948, included 349 or 32 per cent. studying professional-type courses not requiring subsequent occupational training; of these students, 248 were being trained as artists and 36 as teachers of dressmaking, and 43 were studying for matriculation.

The remainder (68 per cent.) of the full-time students were vocational (or trades) trainees. After reaching a standard of proficiency equal to an earning capacity of at least 40 per cent. (usually in 3 to 12 months), these trainees are placed in employment for further practical training. They receive award wages, and their employers are subsidised by the Commonwealth to the extent of the difference between the full wage and the trainee's standard of proficiency, which is assessed at three-monthly

intervals. If satisfactory progress is not made, training benefits may be withdrawn. The average period of subsidised employment before the trainee is qualified to earn full wages is about  $2\frac{1}{2}$  years. Trainees in subsidised employment include a number receiving professional training partly in practice and partly at the technical colleges. Trainees who had reached the necessary standard of proficiency before demobilisation are placed directly in subsidised employment.

The number of trainees in subsidised employment was 3,001 in 1946, 8,015 in 1947, and 10,030 in 1948. The number in December, 1948, included 6,388 or 64 per cent. in building trades and 783 or 8 per cent. in professional occupations. Of 9,247 employed in trades, 192 were women. The number of trainees in subsidised employment and their principal occupations are shown below:—

Table 916.—Commonwealth Reconstruction Training Scheme in New South Wales—Trainees in Subsidised Employment.

		Train	ees in Subsid	lised Employm	ent.	
Occupation.	D	ecember, 1947.		D	ecember, 1948.	
ououpusion.	Without Recon- struction Training.	After Recon- struction Training.	Total.	Without Recon- struction Training.	After Recon- struction Training.	Total.
Building Trades—						
Bricklaying	22	777	799	15	1,178	1,193
Carpentry	108	2,286	2,394	105	3,134	3,239
Painting	24	669	693	18	1,002	1,020
Plastering	12	458	470	10	452	462
Plumbing	27	332	359	26	353	379
Other	4	72	76	4	91	95
Total, Building Trades	197	4,594	4,791	178	6,210	6,388
Other Trades—						
Butchering	304	37	341	311	34	345
Furniture Trades	56	229	285	47	331	378
Hairdressing	34	120	154	22	168	190
Pastrycooking	154	1	155	115	1	116
Other	338	915	1,253	713	1,117	1,830
Total, Trades	1,083	5,896	6,979	1,386	7,861	9,247
Professional Occupations—						1
Accountancy	705		705	497		497
Architecture	99		99	89		89
Surveying	60		60	53		53
Other	172	•••	172	144	•••	144
Total, All Occupations	2,119	5,896	8,015	2,169	7,861	10,030

Trainees in subsidised employment may continue their studies on a parttime basis. Expenditure by the Commonwealth on technical-type reconstruction training in New South Wales includes subsidies to the State technical education authorities, fees and allowances to trainees and subsidies to employers. Expenditure on the scheme by the Technical Education Department from Commonwealth subsidies was £275,314 in 1946 and £501,239 in 1947. Expenditure in 1947 included salaries, £348,942, maintenance, £124,323, and equipment, £10,316.

In the year ended 30th June, 1948, Commonwealth expenditure on fees and allowances to technical-type trainees in New South Wales was £1,197,044, and subsidies to employers, £1,277,100. In the previous year, the total expenditure on these items was £1,590,631.

### University of Technology.

In July, 1946, the State Government decided to establish a New South Wales University of Technology to provide higher specialised instruction in technology and to confer degrees of university status. In August, 1947, a Developmental Council was set up to determine the requirements of the proposed institution and to control it pending the enactment of legislation.

Degree courses were commenced in March, 1948, in four branches of engineering, viz., Civil, Mechanical, Electrical and Mining, and two additional courses, Applied Chemistry and Chemical Engineering, were introduced in 1949. The degrees awarded on completion of these courses (four years in duration) will be Bachelor of Engineering (B.E.), and Bachelor of Science (B.Sc.). In addition to attending lectures and demonstrations, students are required to gain five months' industrial experience in each year.

The entrance qualifications for degree courses are the same as the matriculation requirements of the University of Sydney, except that a knowledge of mathematics is essential for all courses. The fee payable is £27 per annum for a full-day course, or £18 per annum for a part-day, part-evening course. Particulars of scholarships, etc., are given on page 1048.

Pending the construction of its own buildings, appointment of staff, etc., the University of Technology is using the facilities (buildings, teaching staff, etc.) of the Technical Education Department. Expenditure on the University is included in that of the Department. A building to house the University (at present located at the Sydney Technical College, Ultimo) is being erected at Kensington (Sydney).

In March, 1949, there were 110 first-year and 43 second-year students. Particulars of students in courses were as follows:—

Table 917.--University of Technology-Students and Courses, March, 1949.

			,				,,	
Students.		Applied Chemistry.	Chemical Engineering.	Civil Engineering.	Electrical Engineering.	Mechanical Engineering.	Mining Engineering.	All Courses.
Full-time		6	4	28	28	28	24	118
Part-time		17	16		***	2	•••	35
	1							
Total		23	20	28	28	20	24	153

Technical Education and New South Wales University of Technology Act. 1949.

The Technical Education and New South Wales University of Technology Act, 1949, provides, inter alia, for the establishment of a University of Technology to afford facilities for advanced training in technology and science and in their application to industry and commerce, and to aid the application of science to industry by research.

The powers and functions of the University of Technology are vested in a Council of thirty members representing the New South Wales Parliament, industry and commerce, the trade unions and professional bodies, the Technical Education Department, the University of Sydney, and the teaching staff, graduates and undergraduates of the new University. The executive officer of the Council is the Director of the University.

The Council may establish branches or colleges at Newcastle, Wollongong, or other places, and may provide courses in applied science, engineering, technology, commerce, etc. Degrees may be conferred on completion of courses and honorary degrees may be awarded. Special investigations may be carried out for any person or organization.

The State Treasury will subsidise the University of Technology to the extent of the difference between its income from other sources and its expenditure.

The Act was proclaimed on 24th June, 1949.

## HAWKESBURY AND WAGGA AGRICULTURAL COLLEGES.

The Hawkesbury Agricultural College, administered by the Department of Agriculture, provides training in agriculture, animal husbandry and allied sciences mainly for students intending to enter farming and grazing occupations. The College is situated at Richmond near the Hawkesbury River, and accommodates 200 resident students. It includes a farm of 3,493 acres and a library of 4,000 volumes.

There are diploma courses in Agriculture (3 years) and Dairying (2 years). Applicants for enrolment must have the intermediate certificate, produce a testimonial as to character and fitness for agricultural education, and must be at least 16 years of age for the agriculture course and at least 17 years for the dairying course. Education and maintenance fees amount to £64 per annum; in addition, each student must pay a deposit of £5 at the commencement of his course.

The number of students at the Hawkesbury College in 1948 was 169, of whom 144 were studying Agriculture and 25 Dairying. In addition, 32 first-year students were being trained on the Department's former experiment farm at Wagga. Forty-five Diplomas in Agriculture (H.D.A.) and twelve Diplomas in Dairying (H.D.D.) were awarded to students who completed courses in 1948. Expenditure on maintenance of the College in 1947-48 was £74,306, and loan expenditure on buildings, etc., was £8,243.

In March, 1949, the Wagga Experiment Farm controlled by the Department of Agriculture, was opened as the Wagga Agricultural College, with accommodation for about 30 students. The College includes a farm of 3,228 acres.

### University of Sydney.

The University of Sydney was incorporated by Act of Parliament on 1st October, 1850, and it was granted a Royal Charter on 27th February, 1858, when its graduates were accorded the same status in the British Empire as graduates of the Universities of the United Kingdom. Since 1884 women have been eligible for all University privileges.

Within the University there are ten faculties, viz., Arts, Law, Medicine, Science, Engineering, Dentistry, Veterinary Science, Agriculture, Architecture, and Economics. The Senate of the University may grant degrees in all branches of knowledge, and may admit ad eundem gradum graduates of approved Universities. Bachelor Degrees are awarded in all the faculties and Master or Doctor Degrees on completion of post-graduate studies in most faculties. Degrees, Bachelor and Doctor, may be awarded in Divinity. Diplomas are awarded in specified subjects. Particulars of the duration and cost of courses are shown on page 1066.

Residential colleges established within the University grounds are Church of England (St. Paul's, 1854), Roman Catholic (St. John's, 1857, and Sancta Sophia for women, 1929), Presbyterian (St. Andrew's, 1867), and Methodist (Wesley, 1910). There is also the Women's College (1889), which is conducted on an undenominational basis.

A Teachers' College, not affiliated with the University, is situated in the University grounds; it is non-residential and is maintained by the State for the training of teachers.

By arrangement with the Commonwealth Government, a School of Public Health and Tropical Medicine was established at the University in 1930 for the training of graduates and students and for research. The McMaster Animal Health Laboratory is also within the University grounds.

### New England University College.

An Act was passed in 1937, giving the Senate power to establish University Colleges outside the metropolitan area. The first college, the New England University College, was established at Armidale in 1938. Courses are available for the B.A. and B.Sc. degrees and for the first year in veterinary science and agriculture.

Expenditure of the College (included in the University expenditure shown in Table 919) was £42,831 in 1946 and £54,038 in 1947. Students in attendance in 1947 numbered 148 males and 79 females.

The following text and tables relating to the University of Sydney refer also to the New England University College unless otherwise stated.

## University Finances.

The University is supported chiefly by Government aid, the fees paid by students, and income derived from the private foundations. Under the University and University Colleges Act, 1900-1948, the University receives a permanent endowment of £125,000 per annum from the State. Prior to 1947-48, the amount of the statutory endowment was £100,000 per annum, but this was supplemented by £50,000 in each year 1943-44 and 1944-45. The amount of the endowment was £100,000 in each year 1945-46 and 1946-47, but, by amendment of the Act it was increased to £125,000 per annum as from 1st July, 1947. In 1948-49 the statutory endowment of £125,000 was supplemented by an additional £75,000. The State Treasurer also pays to

the University the amounts by which the expenditure of the New England University College exceeds its income; the amount was £26,192 in 1946 and £35,043 in 1947. Other State grants, amounting to £17,350 in 1947, are made to the University for specific purposes.

The University receives grants from Commonwealth funds for administration of the Commonwealth Reconstruction Training Scheme, special research and other purposes. In 1947 Commonwealth grants amounted to £163,239, including £40,404 for research.

Many benefactions have been bestowed by private persons. These endowments include the Challis Fund, of which the original amount, £276,856, has been increased by investment to £410,052; the G. H. Bosch Fund, £268,929; the P. N. Russell Fund, £101,457; and the Fisher Estate, £43,245. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of this bequest, the credit balances of the private foundations amounted to £1,702,983 at 31st December, 1948.

The following statement shows the amounts derived from the principal sources of revenue and the total expenditure during each year since 1939:—

Receipts. Government Grants. Expendi-Interest, Year. Rent, Dividends Fees. Other. Total. Commonand Donations, State. wealth. £ £. £ £. £ £ 1939 115,530 14,164 97,999 70,243 17,425 315,361 304,704 1940 126,588 13,239 103,941 92,161 11,370 347,299 311,243 1941 127,481 18,204 106,756 85,739 12,343 350,523 343,887 55,074 1942 143,748 90,081 85,614 11,399 385,916 352,247 1948 128,926 54,411 103,120 88,852 12,307 387,616 358,386 199,295 51,547 13,971 383,873 1944 109,355 97,198 471,366 462,195 1945 160,609 63,847 140,447 96,804 16,424 478,131 645,744 1946 142,865 135,492 260,521 98,849 21,428 659,155

Table 918 .- University of Sydney\* -- Classification of Receipts.

113,144

772,845

23.404

789,947

308.165

Between 1939 and 1947, total receipts increased by £457,484 or 145 per cent. The receipts in 1947 were £294,714 or 62 per cent. greater than in 1945, largely owing to increases in students under the Commonwealth Reconstruction Training Scheme. In 1947, fees comprised 39.9 per cent. of the total receipts, Government grants (including special research grants) 42.4 per cent., and other items 17.7 per cent. Fees paid by the Commonwealth on behalf of reconstruction trainees and students receiving financial assistance are included in the total receipts from fees.

1947

164,893

163,239

Î

<sup>\*</sup> Includes New England College.

**<sup>\*</sup>** 18647—6

Expenditure has increased since 1939 under all heads, except special grants. In 1948 expenditure on administration, teaching departments, maintenance of properties and special research was in each case more than double the amount in 1939. The expenditure, excluding capital items, in each year since 1939 was distributed as follows:—

Year.	Admin- istration.	Teaching Depart- ments,	Libraries.	Main- tenance of Proper- ties,	Special Grants.	Special Research.	Adult Edu- cation,	Other Items.	Total.
	£	£	£	£	£	£	£	£	£
1939	21,674	195,407	8,964	24,813	11,689	14,436	5,862	21,859	304,704
1940	23,393	200,766	9,901	20,186	5,103	14,164	4,645	33,085	311,243
1941	26,313	201,857	11,010	23,851	13,660	24,520	5,302	37,374	343,887
1942	26,192	198,075	9,867	23,219	2,915	55,462	4,941	31,576	352,247
1943	24,814	206,729	9,693	23,604	2,641	56,590	5,815	28,500	358,386
1944	27,191	226,193	10,595	25,348	4,169	41,437	9,065	39,875	383,873
1945	31,625	279,675	11,943	24,898	5,681	43,550	11,420	53,403	462,195
1946	45,958	402,880	14,141	39,620	6,517	40,564	10,852	85,212	645,744
1947	61,204	500,761	15,977	57,475	10,713	50,056	8,752	85,009	789,947
									Į.

Table 919 .- University of Sydney\*-Classification of Expenditure.

Expenditure by the University in 1947 included £47,443 for scholarships, prizes, etc.

The amount expended on new buildings and repairs was £161,775 in 1946, and £62,316 in 1947.

# University Courses, Staff and Students.

Before admission to courses of study leading to degrees, students must furnish proof of educational qualifications by passing in prescribed subjects at the leaving certificate or matriculation examination. Non-matriculated students are admitted to lectures and to laboratory practice in certain faculties, but are not eligible for degrees. On the satisfactory completion of any course, however, they may be awarded a certificate. Lectures are delivered during the day-time in all subjects necessary for degrees and diplomas, and evening lectures are provided in the faculties of Arts and Economics. Students are required to attend at least ninety per cent. of the lectures in each course of study leading to a degree.

Lectures are delivered during three terms in each year. The period of study and total cost of graduation vary according to the faculty and, in 1948, ranged from three years and £118 16s. in Arts to six years and £365 10s. in Medicine. In addition to lecture fees there is a matriculation fee of £3 and a degree fee ranging from £3 to £10 according to the faculty. A general service fee ranging from £4 10s. to £7 17s. 6d. per annum is imposed on all students attending lectures, including students exempt from payment of ordinary fees.

The principal diploma courses and the term of study and the cost of each are as follows: Education, one year, £39 2s.; Social Studies, two years, £72 4s.; Pharmaceutical Science, three years, £73 1s. There are short-term post-graduate courses in special branches of Medicine. Diploma courses in Commerce and Public Administration were discontinued in 1943 and 1945 respectively.

<sup>\*</sup> Includes New England College,

In 1947 the teaching staff of the University (including the New England College) comprised 334 full-time and 353 part-time professors, lecturers and demonstrators. Other staff, including librarians and laboratory assistants, numbered 608.

Particulars of scholarships and bursaries at the University are given on page 1049. Students assisted include reconstruction trainees and those aided by the Universities Commission (see pages 1018 and 1070). In 1947, students receiving State or Commonwealth assistance, or both, numbered 6,669 and those assisted by the University, 185. Some students receive more than one form of assistance; the number of individual students in receipt of assistance was 4,680 in 1946 and 6,804 in 1947.

The following statement shows the number of students in the various faculties at the University and the New England College in each year since 1942. Service personnel enrolled under the Services Education Scheme are not included; these students numbered 1,072 in 1945.

Table 920.—University of Sydney\*—Students Enrolled in Courses.

			N	umber of	Students	.†		
Course,	1942.	1943.	1944.	1945.	1946.		1947.	
		2010.	1011.	1010.	1040.	Males.	Females.	lotal.
Higher Degrees (All Faculties)							1	2
Bachelor Degree-						_	-	_
Arts	544	619	704	987	1,812	1,379	886	2,265
Divinity	1	3	5	6	1,012	1,579	000	2,203
Law	72	59	92	161	588	713	25	738
Economics	181	209	240	290	676	632	71	703
Science	445	505	519	673	975	811	260	1,071
Medicine	1,011	957	972	1,159	1,602	1,560	312	1,872
Engineering	274	275	322	436	834	992	1 1	993
Agriculture	55	51	78	128	200	198	18	214
Veterinary Science	94	87	116	190	316	346	31	377
Dentistry	164	185	205	272	577	724	53	777
Architecture	16	21	39	79	162	180	37	217
Diploma (Post-Graduate)—							1	
Anthropology		2	1		4		l l	
Education	71	53	55	78	103	57	52	109
Medicine	7		5	4	88	88	5	93
Diploma (Sub-Graduate)—								
Commerce	12	11	8	5	19	14		14
Public Administration	21	20	34	46	57	43	" 2	45
Social Studies	26	53	88	160	152	29	110	139
Massage	62	50	75	41	73	4	75	79
Pharmacy	115	103	117	125	240	225	106	331
Miscellaneous (Odd Sub-				-				
jects)	82	154	204	212	302	165	111	276
Total	3,253	3,417	3,879	5,052	8,794	8,168	2,156	10,324

<sup>\*</sup> Includes New England College,

In 1947 there were 7,543 men and 1,695 women studying for bachelor degrees. Students in sub-graduate and post-graduate diploma courses numbered 608 and 202 respectively.

<sup>†</sup> Includes students enrolled in more than one course.

The particulars in the foregoing table include students who were attending more than one course. The number of individual students (excluding service personnel) enrolled in various years since 1921 is shown below:—

		- Onive	iskty Oi i	Sydney	IIdividadi	- Deducties.	
Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1921 1929 1931 1937 1938 1939 1940	2,506 1,815 2,269 2,617 2,716 2,864 3,016	769 705 850 761 834 972 1,071	3,275 2,520 3,119 3,378 3,550 3,830 4,087	1941 1942 1943 1944 1945 1946 1947	2,994 2,166 2,113 2,364 3,271 6,556 8,078	1,171 1,087 1,292 1,497 1,717 2,155 2,135	4,165 3,253 3,405 3,861 4,988 8,711 10,213

Table 921.—University of Sydney\*-Individual Students.

Prior to the war, the proportion of women students was relatively constant at somewhat less than 30 per cent. of the total. The proportion increased during the war as a result of the withdrawal of male students for war service, and it declined in the post-war years owing to the enrolment of ex-servicemen for reconstruction training. In 1947 it was 21 percent.

In 1941 the number of students, viz., 4,165, was the highest recorded to that date, but there was a sharp decline to 3,253 in the following year owing to the war-time quota system of enrolment. As a result of the enrolment of reconstruction trainees and the relaxation of war-time restrictions there were steep increases in the three years 1945 to 1947. In 1947 the number of students, viz., 10,213, was nearly three times the number in 1939. The number of individual students in 1948 was 10,660. Further details for 1948, other than particulars of reconstruction trainees and financially-assisted students (see page 1070) were not available at time of publication.

Particulars of students enrolled in 1939, 1946 and 1947, according to sex and age, are shown below. Students aged 25 years or over comprised 13 per cent. of the total in 1939 and 22 per cent. in 1947. The increase may be attributed mainly to the enrolment of reconstruction trainees; there were 4,119 such students in 1947, including 1,496 aged 25 years or over.

Age (Years).				1939.		1946.			1947.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	
- 16			80	34	114	146	88	234	147	78	225
16 17		,	283	144	427	625	359	984	528	310	838
18			406	185	591	787	439	1,226	815	420	1,235
19		[	374	153	527	742	324	1,066	822	384	1,206
20			388	147	535	689	274	963	885	251	1,136
21	• •		341	86	427	577	143	720	778	172	950
			286	68	354	571	112	683	744	101	845
00			188	25	213	504	79	583	723	97	820
24			126	25	151	400	54	454	585	50·	635
25 and ov	er		392	105	497	1,515	283	1,798	1,963	267	2,230
Not State	ed		•••			· · · ·		·	88†	5†	93
Total	1		2,864	972	3,836	6,556	2,155	8,711	8,078	2,135	10,213

Table 922.—University of Sydney\*—Sex and Age of Students.

<sup>\*</sup> Includes New England College. Post-graduate students not included prior to 1939.

<sup>\*</sup> Includes New England College.

<sup>†</sup> Post-graduate Medicine students.

New admissions to the University (including the New England College) in 1947 included 3,756 matriculated and 558 non-matriculated students.

Degrees conferred by the Senate of the University numbered 853 in 1939, but declined during the war years owing to the restrictions on enrolments and the interruption or postponement of studies for war service. In 1947 the number conferred, viz., 1,079, was the highest on record, and represented an increase of 226 or 27 per cent. as compared with 1939. Particulars of degrees conferred in 1939 and in each year from 1943 to 1947 are given below:—

Table 923 .- University of Sydney\* - Degrees Conferred.

		Degrees Conferred.								
Degree.	1939.	1943.	1944,	1945.	1946,	1947.				
		_					Males.	Females	Total.	
Arts—										
D.Litt.			.,,	2						
M.A		17	11	8	18	21	9	10	19	
B.A		139	110	129	127	176	174	127	241	
Divinity										
B.D					2		4	•••	4	
Law—										
$_{ m LL.D.}$							1		1	
LL.B		40	18	16	12	32	47	4	51	
Economics-										
M.Ee		1		1	1	1	2		2	
B.Ec		63	37	33	20	31	54	21	75	
Science—		.								
D.Sc		3	1	1	1	3	1	l	1	
M.Sc		10	9	6	6	11	11	1	12	
B.Sc		62	101	125	107	159	102	56	158	
B.Sc.For.			1	4	3	3	3		3	
Medicine—			_		_		_		ĺ	
M.D		2	1	1	1		3	<b></b>	3	
M.S				$\bar{4}$	6	4	7	1	8	
Ch.M.		2		$\tilde{4}$	š		1		1	
М.В		210	149	$13\overline{4}$	151	152	143	36	179	
B.S		185	143	135	150	158	143	34	177	
Engineering	•••	100	1.0	100	200					
M.E		1			1	i ı			l	
B.E			56	88	$\hat{2}$	69	79		79	
Agriculture—	• • •	39	00	00	_			'''		
D.Sc.Agr.		1					l			
M.Sc.Agr.		1	•••			Ι				
B.Sc.Agr.		7 5	13			14	15	2	17	
Veterinary Scien		19	10	"	U		10	-		
B.V.Sc.		27	16	11	18	17	1		1	
	•••	21	10	11	10	1,	1		_ ^	
Dentistry— D.D.Sc.			1		2	1				
D.D.Sc. M.D.S.		2	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	2	$\frac{2}{2}$	3	7			
		0.7	41	41	$2\overset{2}{2}$	17	26	1	27	
B.D.S.	• • •	27	*1	<del>*</del> 1	~~	''		1	~ ~ ~	
Architecture— B. Arch.		4	3	4	5	2	9	4	13	
D.Arch.		4	3	*	J					
m.	otal	853	713	754	669	876	782	297	1,079	
$\mathbf{T}$	otai	853	113	104	600	010	104	201	1,019	

\*Includes New England College.

More degrees are conferred in the School of Medicine than in any other faculty, the number in 1947 being 368 or 34 per cent. of the total. In order to qualify for registration as medical practitioners, students must

complete a course of six years, which leads to two degrees, viz., M.B. (Bachelor of Medicine) and B.S. (Bachelor of Surgery). In 1947, degrees in Arts and Science comprised 24 per cent. and 17 per cent., respectively, of the total conferred. Comparatively few degrees are conferred in Agriculture, Veterinary Science and Architecture.

Degrees conferred on women in 1947 numbered 297 or 28 per cent. of the total, as compared with 172 or 20 per cent. of the total in 1939. In 1947, more degrees were awarded to men than women in all faculties except Arts; 127 women received the B.A. degree, as compared with 114 men. Degrees were conferred on women in all schools except Engineering, Veterinary Science, and Divinity.

In 1947 the Senate granted 143 post-graduate and 67 sub-graduate diplomas, as compared with 108 and 46 respectively in 1946.

War-time Enrolment and Assistance to University Students.

From 1942 to 1945 the enrolment of students in Australian Universities was controlled in terms of National Security Regulations. The number of admissions to the various faculties was restricted and students were admitted in order of merit at approved examinations. In 1943 the Commonwealth Government introduced a scheme of financial assistance to students through the Universities Commission, constituted in February of that year. Particulars regarding these wartime arrangements were published on page 228 of the 1941-42 and 1942-43 edition of the Year Book.

# The (Commonwealth) Universities Commission.

Permanent status was given to the Universities Commission by the Commonwealth Education Act, 1945. Under this Act the Commission is required to make arrangements for the training of discharged members of the Forces as provided by the Re-establishment and Employment Act, to assist other persons to obtain training in universities or similar institutions, and to advise the Minister in regard to university training and associated matters.

Restrictions on enrolment in all faculties were removed in 1946, but it was decided to continue the system of financial assistance for at least five years from the cessation of hostilities. A quota of assisted full-time students is fixed each year for the various faculties in each University, and in New South Wales the quota of applicants is selected in order of merit at the Leaving Certificate and Matriculation examinations. The quota for Sydney University in 1948 was 270, distributed as follows: Medicine, 50, Science 50, Engineering 35, Dentistry, Veterinary Science and Agriculture 55, other faculties 80. A full-time course is one which the University considers to be a reasonable full-time activity.

An applicant for assistance must not be more than 21 years of age, and must guarantee, if selected, to continue his studies till graduation, not to accept employment during terms, and to undertake national service, if required, for at least three years after graduation. An exception in regard to the age limit is made in the case of Social Studies diploma students.

Students assisted financially must satisfy a means test. The maximum amount of assistance payable (as in December, 1948), where the adjusted family income does not exceed £250, is £130 per annum if living with a parent, or £169 if living away from home, the payment of University fees

and, for students in technical faculties, an allowance of £10 toward cost of equipment. The adjusted family income is taken as the taxable income of the student and his parents, less £50 for each dependent child (other than the student) under 16 years of age. The amount of assistance is reduced by £4 for every £10 by which the adjusted family income exceeds £250, and by the monetary equivalent of any scholarship, etc., held by the student.

Reconstruction trainees receive higher allowances (see page 1018) and are not subject to a means test. The Universities Commission controls and assists their training in professional-type courses (both full-time and parttime) at universities and at other governmental and private institutions. In 1948, there were 4,148 full-time trainees (in receipt of living allowances) studying professional-type courses in New South Wales; they comprised 3,323 studying at the University of Sydney, and 825 at other institutions. The latter included 290 being trained in nursing, 187 (at the teachers' colleges) being trained as teachers, 154 studying theology and 81 (mainly at the Conservatorium) studying music. Part-time trainees in professional-type courses numbered 1,856, including 829 at the University. The total number of reconstruction trainees in professional-type courses in 1948 was 6,004, and of these, 650 or 18 per cent. were women.

Enrolments of financially-assisted students and reconstruction trainees at Sydney University (including the New England College) in each year 1945 to 1948 are shown below. The reconstruction trainees include a proportion taking refresher courses.

Table 924.—University of Sydney\*-Students assisted by Commonwealth.

_	Stude	nts Assist	ed Finan	cially.	Reconstruction Trainees.				
Course.		1945.	1946.	1947.	1948.	1945.	1946.	1947.	1948.
Arts		9	53	96	118	66	519	807	897
Law		3	8	9	11	60	387	529	505
Economics		13	14	17	11	38	317	480	371
Seienee		191	157	127	127	34	236	348	347
Medieine		244	237	229	215	58	316	493	549
Engineering		123	113	117	113	36	370	485	483
Agriculture		33	39	28	30	8	79	79	75
Veterinary Science		52	35	41	40	27	99	134	134
Dentistry		66	77	76	57	25	249	370	400
Architecture		9	17	18	18	23	87	128	137
Other Courses		16	11	11	8	22	143	266	254
Total		759	761	769	748	397	2,802	4.119	4.152

<sup>\*</sup> Includes New England College.

In 1948 assisted students comprised 7 per cent. and reconstruction trainees 39 per cent. of the total enrolment at the University. The 4,152 reconstruction trainees at the University in 1948 included 174 women.

Commonwealth expenditure on fees and allowances to financially-assisted students in New South Wales was £86,425 in 1947 and £87,179 in 1948.

Expenditure on university-type training of reconstruction students in New South Wales at the University of Sydney and other institutions was £1,192,094 in 1947, and £1,446,481 in 1948. The greater part of these amounts consisted of fees and allowances to students.

# University Clinics.

Five metropolitan hospitals, viz., Royal Prince Alfred, St. Vincent's, Sydney, Repatriation General Hospital and Rachel Forster Hospital for Women and Children provide clinical schools for students in medicine, who are required to attend at these institutions for clinical lectures, training and practice during the fourth, fifth, and sixth years of the medical course.

At the Royal Alexandra Hospital for Children provision is made for systematic instruction of medical students in diseases of children.

Clinical training and practice in obstetrics is provided at the Royal Hospital for Women (Paddington), the Women's Hospital (Crown-street), and King George V Memorial Hospital for Mothers and Babies.

In connection with the Faculty of Dentistry, the Dental Hospital of Sydney provides facilities for the instruction of students. The University lecturers in surgical and mechanical dentistry are, ex officio, honorary dental surgeons of the hospital.

## University Extension Lectures.

University Extension Lectures are conducted under the direction of a University Extension Board of twelve to eighteen members appointed annually by the Senate. Courses of lectures upon topics of literary, historical, and scientific interest are given in various centres at a charge of £2 per course. Regular classes in various foreign languages are also held at the University. At the conclusion of a systematic course of ten lectures, an examination may be held and certificates awarded to successful candidates. Lectures are delivered each year in Sydney and various country towns. The cost of Extension Board classes was £2,906 in 1947 and £2,880 in 1948.

## Tutorial Classes.

In conjunction with the Workers' Educational Association (see page 1073), the Senate has established evening tutorial classes in particular branches of study at the University and in suburban and country centres. There is a resident tutor at Newcastle and one at Armidale. A sum of £16,895 was expended upon the maintenance of tutorial classes during 1947 and £20,920 in 1948.

# University Appointments Board.

The University Appointments Board assists graduates and undergraduates to obtain employment.

### INSTITUTES FOR TRANSPORT EMPLOYEES.

Classes for the technical, commercial and general education of railway employees are conducted by the Railways Institute, which is under the control of a director.

The headquarters of the institute are in Sydney, and there are branches in various parts of the State. The total membership, 33,509 at 30th June, 1948, embraces more than half the railway employees. Instruction is given in elementary railway principles and various subjects to the University matriculation standard. Correspondence courses are provided. The number of students was 8,728 at 30th June, 1948. The institute possesses a library of 138,871 volumes.

Educational and recreational facilities are provided by the Road Transport and Tramways Institute. The membership at 30th June, 1948, was 9,698 and 429 students were enrolled. There are 40,912 books in the twenty-one libraries of the institute.

### EDUCATIONAL AND SCIENTIFIC SOCIETIES.

There are many organisations in New South Wales which have as their objective the encouragement of professional interests, and the advancement of science, art, and literature.

The learned professions such as solicitors and barristers, engineers, surveyors, architects, chemists, physicians and surgeons, dentists and optometrists are represented by institutes, associations or societies.

# Workers' Educational Association.

The Workers' Educational Association of New South Wales was founded: at a conference called by the Labour Council of New South Wales in June, 1913. It organises tutorial classes, discussion groups, study circles, summer and holiday schools and public lectures. In 1948 the membership of the association consisted of 838 individual members and 68 organisations other than tutorial classes affiliated with it.

In 1948, 112 tutorial classes were held, including 79 in Sydney and suburbs, 30 in the Newcastle district, and six in country towns. The number of students enrolled was 3,658. Fourteen discussion groups were organised in various centres during the year; the gross enrolment was 233 and the effective attendance 167.

The income of the association in 1948 was £12,056, including grants from the State, £6,570, and subscriptions, fees, etc., £3,679.

# Conservatorium of Music.

The Conservatorium of Music, which was established by the State in 1915, provides tuition in music, from elementary to advanced stages. The studies are divided into two sections. The music school section provides tuition in theory and practice leading to annual examinations in five grades and the issue of certificates to successful students. On passing the examination at the highest grade, the student may be admitted to the diplomate section, in which a course of two years' tuition, leading to the professional diploma, is given under the personal direction of the Director of the Conservatorium. A preparatory theoretical course is available for beginners, and an opera school was opened in February, 1935. Training is also provided in chamber and orchestral music, and there is a full secondary school course of five years, which includes instruction in music.

The number of students enrolled in the various courses of study at the Conservatorium was 2,366 in 1948, as compared with 3,094 in 1946 and 2,350 in 1945. In 1948 seven students gained the Conservatorium diploma, and there were 21,581 candidates for examinations under the Australian Music Examination Board's system. Receipts in this year consisted of fees, proceeds from concerts, etc., amounting to £54,774, and the gross expenditure was £64,066. Teachers engaged at the Conservatorium are paid from students' fees less a commission for administrative costs and rental of studios.

# MUSEUMS, LIBRARIES, AND ART GALLERY.

The Government of New South Wales maintains a number of museums and libraries and a National Art Gallery. The capital expenditure by the State on buildings for these institutions (except the Museum of Technology and Applied Science) to 30th June, 1948, amounted to £640,315, including the capital cost of the Public Library, £357,952.

#### Museums.

The Australian Museum in Sydney is the oldest institution of its kind in Australia. It is incorporated under the control of trustees, with a statutory endowment of £1,000 per year, which is supplemented by annual Parliamentary appropriations. It contains fine specimens of the principal objects of natural history and a valuable collection of zoological, mineral and ethnological specimens. A library containing 32,731 volumes at 31st December, 1948, is attached to the institution. Lectures and gallery demonstrations are given in the Museum and are open to the public. During the year ended 30th June, 1948, visitors to the Museum numbered 197,827. The expenditure was £24,754 in 1946-47 and £25,330 in 1947-48.

There is a Museum of Technology and Applied Science in Sydney, administered by a Board of Trustees under the Minister for Education. Prior to 1st July, 1946, this Museum was administered as an adjunct to the Sydney Technical College. It contains a valuable series of specimens illustrative of various stages of manufacturing, and a collection of natural products. The scientific staff conducts research work in connection with the development of the natural resources of Australia. There are also technological museums at Goulburn, Bathurst, West Maitland, Broken Hill and Albury. During 1948 the number of visitors to the Sydney museum was 137,310, and the number of volumes in the museum's library at the end of the year was 7,244. Expenditure in 1947-48 was £23,151.

There is a Mining and Geological Museum attached to the Department of Mines. Its functions include the preparation and collection of minerals to be used as teaching aids in schools and in other institutions.

The Agricultural and Forestry Museum is an adjunct to the Department of Agriculture.

The public have access to the "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History, the Museum of Normal and Morbid Anatomy, attached to the Sydney University, and the National Herbarium and Botanical Museum at the Botanic Gardens. Housed in the Macleay Museum is the Aldridge collection of Broken Hill minerals.

# Public Library of New South Wales.

The Australian Subscription Library, established in 1826, became a State institution in 1869. It was incorporated in 1899, as the Public Library of New South Wales, with a body of trustees and an annual statutory endowment of £2,000, which is supplemented by Parliamentary appropriations.

In 1898 the late David Scott Mitchell bequeathed to the trustees of the Public Library a collection of 60,000 volumes dealing principally with Australasia and the Southern Pacific, together with manuscripts and pictures. With these he also bequeathed £70,000, and the income from this sum is spent on additions.

Sir William Dixson has given a collection of pictures and prints relating to Australian history to the Public Library. This collection forms the William Dixson Gallery.

The library embraces a General Reference Library, a Country Circulation Department, the Mitchell Library and the William Dixson Gallery, all housed in a building completed in June, 1942. The Country Circulation Department sends books to rural schools, agricultural bureaux, municipal libraries operating under the Library Act, 1939, schools of arts and similar institutions, as well as to individual students. The library includes a research department which collects bibliographical references mainly of a scientific and technical nature, and a school where librarians are trained for the Public and other libraries. The main reading room of the library accommodates 375 seated readers.

The library building cost £357,951 to 30th June, 1948, and expenditure on the library during 1947-48 amounted to £69,169, including £8,005 for books and periodicals.

The library staff numbered 101 at 30th June, 1948. The average number of seated readers during the year ended 30th June, 1948, was estimated at 187 on week-days, 356 on Sundays and 207 on holidays. The number of volumes in the library at 30th June, 1948, exclusive of pamphlets was 568,770, viz., General Reference Library 297,571, Mitchell Library 146,013, Model School Library 2,069, and Country Circulation Department 123,117. The Research Department made 574 researches in 1947-48.

### Public Library Services under Library Act, 1939.

The Library Act, 1939, provides for the payment of State subsidies in respect of libraries maintained by municipal and shire councils, and for the appointment of a Library Board to administer the Act and to assist in the organisation of local library services. The subsidy provisions of the Act were proclaimed as from 1st January, 1944, and the Library Board of New South Wales was constituted during that year. The Principal Librarian of the Public Library is executive member of the Board and acts for the local libraries in the purchase and processing of books. Librarians are trained in a school conducted by the Public Library.

Local authorities which adopt the Act are entitled to State subsidy provided that they administer a library service which is free to all residents (except that a charge may be made for works of fiction), and that they expend from rates at least 2s. per head of population per annum. The maximum amount of State subsidy is 1s. per head per annum.

At 30th June, 1948, seventy councils had adopted the Act, and of these, 56 had established libraries. There were 49 libraries in operation, viz., 13 (including 4 branch libraries) in Sydney and suburbs, 1 in Newcastle and 35 in other localities. The staff numbered 119. In 1947-48 the Board expended £28,823, including subsidies to councils £26,460, and the aggregate amount contributed by the councils towards the upkeep of the libraries was £64,638. In 1946-47, expenditure by the Board was £24,160 including £21,905 for subsidies and expenditure by councils totalled £56,452.

# Sydney Municipal Library.

The Sydney Municipal Library is a free lending library administered by the Council of the City of Sydney. It contained 72,006 volumes (of which 6,929 were classified as fiction) in 1948. In that year 462,982 books were lent, equal to 1,523 daily, compared with 426,355 (1,470 daily) in 1947.

Maintenance costs amounted to £20,972 (including £3,433 for new books) in 1948, and £18,791 (including £3,067 for new books) in 1947.

The library is subsidised by the State under the Library Act, 1939 (see above).

# Sydney University Library.

The library of the University of Sydney is the Fisher Library, named after its principal benefactor, Thomas Fisher, from whom a bequest of £30,000 was received in 1885. The library contained 302,144 volumes at 30th June, 1948. The Fisher Library is primarily for the use of the University, but may be used by other students. There is a medical branch and other departmental sections and a fine collection of periodicals, especially scientific publications, and valuable old books and manuscripts. The Reading Room, with 18,000 volumes on the open access system, can accommodate 300 students.

### Children's Library Movement.

The Children's Library Movement, which commenced operations in 1924, has established twenty-four free libraries and centres and a travelling library; the total number of books was approximately 50,000 in 1948. Books may be borrowed or used at the centres, and facilities are provided for arts and crafts. The funds of the movement are derived mainly from private sources but are supplemented by an annual grant of £1,000 from the State Government and by grants (amounting to £1,117 in 1948) from municipal councils.

### Other Libraries.

Local libraries established in a large number of centres throughout the State, may be classed broadly under two heads—Schools of Arts, which are organised and controlled by committees of private citizens and dependent upon the monetary support accorded by the public; and free libraries established by municipalities or shires. Under the provisions of the Local Government Act any shire or municipality may establish a public library, art gallery, or museum. Subject to certain conditions, libraries operated by municipalities and shires are entitled to State subsidy under the Library Act, 1939 (see above).

The library of the Australian Museum, though intended primarily as a scientific library for staff use, is accessible to students. It contains 32,731 volumes. In the library attached to the National Herbarium there are approximately 10,000 volumes.

In December, 1947, the number of volumes in the central and class libraries of the Sydney Technical College was 30,835, and the number in the libraries of country technical colleges was 18,901. The number of

volumes in the library of the Museum of Technology and Applied Science was 7,244.

There are 94,407 volumes in the libraries of the Teachers' Colleges and 885,271 in 1,942 libraries attached to public schools.

The Parliamentary Library contains 99,750 books, and large numbers of volumes are in the libraries of the law courts and Government offices.

The Royal Sydney Industrial Blind Institution in East Sydney conducts a free Braille Library, containing 19,000 volumes.

# National Art Gallery of New South Wales.

The National Art Gallery contains a number of oil paintings, water colours, and statuary, including some works of prominent modern artists, and some valuable gifts from private persons.

The value of the contents of the Gallery in 1947 was approximately £245,730 and the cost of the building to 30th June, 1948, was £96,004.

Apart from 1,123 reproductions, there were 4,625 works of art in the Gallery at the end of 1947, viz., 1,001 oil paintings, 633 water-colours, 1,713 black-and-white works, 228 statuary casts and bronzes, and 1,050 other works of art. The total amount expended during the year in purchasing works of art was £6,310. Ninety-two works of art were acquired by purchase during the year and six by gift.

The total expenditure during 1947 amounted to £18,504, including salaries and wages £6,767. In 1946 expenditure amounted to £16,934, of which £5,707 was paid in salaries and wages.

The attendance at the National Art Gallery during 1946 was 123,300 on week-days and 65,300 on Sundays. Attendances in 1945 were 158,760 and 83,570 respectively. Particulars of attendances since 1946 are not available.

Art students, under certain regulations, may copy works and enjoy the benefit of a collection of books of reference on art subjects. Collections of pictures are sent to the principal country towns for temporary exhibition, 16 pictures being so distributed during 1947; in addition, 322 works of art were lent to various Government departments and institutions in the city and suburbs.

# LAW COURTS

A cardinal principle of the legal system of New South Wales, like that of England on which it is based, is the supremacy of the law, to which all persons are bound to conform. No person may be punished except for a breach of law which has been proved in due course of law in a court before which all persons have equal rights. It excludes the existence of arbitrariness or prerogative on the part of the government or of any exemption of officials or others from obedience to the ordinary law or from the jurisdiction of the ordinary tribunals.

#### Sources of Law.

The law in force in New South Wales consists of-

- (i) So much of the common law of England and such English statute law as came into force on the original settlement of the colony in 1788, or was made applicable by the New South Wales Constitution Act passed in 1828.
- (ii) Acts passed by the Parliament of the State of New South Wales, together with regulations, rules, orders, etc., made thereunder.
- (iii) Acts passed by the Parliament of the Commonwealth of Australia within the scope of its allotted powers, together with regulations, rules, orders, etc., made thercunder.
- (iv) Imperial law binding New South Wales as part of the British Commonwealth, as part of the Commonwealth of Australia or as a State—subject, since 1931, to the Statute of Westminster. (These relate mainly to external affairs or matters of Imperial concern.)
- (v) Case law. (The extent to which judicial decisions of the English, Commonwealth or State Courts respectively formed part of the State law would require too lengthy a statement to be set out here.)

The proper subjects for Commonwealth legislation are limited to those specified in the Commonwealth Constitution. In some cases Commonwealth powers of legislation are exclusive of, in others concurrent with, those of the State. In all cases of conflict valid Commonwealth laws override State laws.

# THE JUDICIAL SYSTEM.

Characteristic features of the judicial system are—(a) The law is enforceable in public courts; (b) the judiciary is independent of control by

the executive; (c) officials concerned with the administration of justice do not enjoy any exemption from law; (d) advocates are admitted to practice by the Supreme Court and are subject to control exercisable through the Court.

### Administration.

In New South Wales the duty of administering laws is allotted to Ministers of the Crown in their respective spheres. As a general rule an Attorney-General and a Minister of Justice are included amongst the Ministers, but sometimes these offices are combined. There is also a Crown Solicitor—a salaried public servant. A common practice is to have an officer known as Assistant Law Officer as a further legal adviser to the Government.

The Attorney-General is the legal adviser of the Government. He is charged with the conduct of business relating to the higher courts (such as Supreme and District Courts), the offices of the Crown Solicitor, Crown Prosecutors, Clerk of the Peace, Public Solicitor, Public Defender, Parliamentary draftsmen and Court reporters, as well as statute law consolidation and certain Acts, including the Crimes Act, the Poor Prisoners' Defence Act, the Poor Persons' Legal Remedies Act and the Legal Assistance Act. Furthermore, he advises Ministers on questions on which his legal opinion is required, initiates and defends proceedings by and against the State, and determines whether a bill should be found in cases of indictable offences. The grand jury system has not been adopted. The Attorney-General is in the position of a grand jury to find a bill. No person can be put upon his trial for an indictable offence unless a bill has been found, except where an ex officio indictment has been filed by the Attorney-General or the Supreme Court has directed an information to be filed.

The Minister of Justice supervises the working of the magistrates' courts, of gaols and penal establishments, and the operations of the various offices connected with the Supreme and District Courts. He administers Acts of Parliament relating to justices, juries, coroners, prisons and prisoners, landlords and tenants, inebriates, real property, land titles, registration of firms, companies and deeds, births, deaths and marriages, and licensed trades and callings.

#### The Courts.

The work of the courts is distributed amongst various jurisdictions with a view to simplifying procedure and avoiding unnecessary delay. Minor civil matters are heard in Courts of Petty Sessions (Small Debts Courts) which have a jurisdiction limited in point of locality and amount. The civil jurisdiction of District Courts also is limited in these respects. The Supreme Court's jurisdiction is limited only in respect of matters which are reserved for the original jurisdiction of the Commonwealth Courts. In criminal matters less serious offences are heard in Courts of Petty Sessions, and other offences, not being of a capital nature, are dealt with by Courts of Quarter Sessions. Capital charges are tried at sittings of the Supreme Court and, in practice, offences of an important public nature are often so dealt with.

A number of legal tribunals have been established to deal with special matters, viz., Licensing Courts, Wardens' Courts (Mining), Courts of Marine Inquiry, Land and Valuation Court, Crown Employees' Appeal Board, and, among courts of magisterial rank, Coroners' Courts and

Children's Courts. Special jurisdictions are exercised Industrial Commission by and  $_{
m the}$ Workers' Compensation Particular matters arising under the various land laws mission. of the State are dealt with by Local Land Boards. A Transport Appeal Court, consisting of a District Court Judge, hears appeals from certain decisions of the transport authorities. Jurisdiction to hear disputes arising under the Friendly Societies Act and the Co-operation Act is given to the Registrar under those Acts.

New South Wales as a State of the Commonwealth forms part of the Commonwealth judicial system. By the Commonwealth Judiciary Act, 1903-1947, the jurisdiction of the High Court is exclusive in regard to certain matters. In regard to other matters, the courts of the State are invested with Commonwealth jurisdiction, subject to conditions stated in that Act.

Appeal lies to the Privy Council from the Supreme Court of New South. Wales and the High Court of Australia, respectively, in proper cases. The British Privy Council is the final Court of Appeal.

# JUDGES, MAGISTRATES AND COURT OFFICERS.

Judges of the Supreme Court.

Judges of the Supreme Court of New South Wales are styled "Justices," and are appointed by Commission of the Governor on the advice of the Executive Council. No person may be appointed Judge of the Supreme Court unless he is a barrister of five years' standing. The judges have power to make rules governing court procedure and to control the admission to practice of barristers and solicitors and to supervise their conduct.

A judge cannot be sued for any act done in the performance of his judicial duties within the scope of his jurisdiction. He holds office "during good behaviour" until the age of seventy years at a salary fixed by statute; the rate in June, 1949, was £3,100 per annum. By these provisions the judiciary is rendered independent of the executive, but a judge may be removed from office by the Crown on the address of both Houses of Parliament. A judge, including the Chief Justice, is granted on retirement a pension according to his salary and length of service. The judge of the Land and Valuation Court is a puisne judge of the Supreme-Court, and each member of the Industrial Commission of New South Wales and the Chairman of the Crown Employees' Appeal Board have the same status and rights as such a judge.

### Judges of the District Court.

A barrister of five years' standing or attorney of seven years' standing may be appointed as judge of the District Court by the Governor to exercise the jurisdiction of the Court in districts allotted by the Governor. District Court judges hold office during ability and good behaviour up to the age of 70 years. They may be removed from office by the Governor for inability or misbehaviour, subject first to appeal to the Governor-in-Council. A judge of any District Court is also chairman of every Court of Quarter Sessions in the State. A judge is granted a pension on retirement, the amount of which is dependent on length of service. A judge may not engage in the practice of the legal profession. Members of the Workers' Compensation Commission have the status and rights of a District Court judge.

# Officers of the Courts.

Certain ministerial functions are performed by magistrates and justices in addition to their judicial duties, but special officers are appointed for certain purposes in the administration of justice, viz., Crown Prosecutors to act in Criminal Courts in prosecuting persons accused of indictable offences, Clerks of Petty Sessions, the Clerk of the Peace and his deputies to act as Clerks for the Courts of Quarter Sessions, Registrars of the Small Debts and District Courts and bailiffs.

In connection with the Supreme Court there are two important officers in addition to those connected with special jurisdictions, viz., the Prothonotary and the Sheriff.

The Prothonotary of the Supreme Court is its principal officer in common law and criminal jurisdiction. He acts as registrar of the Courts of Admiralty and Criminal Appeal. The Prothonotary or his deputy is empowered under rules of the court to transact business usually transacted by a judge sitting in chambers, except in respect of matters relating to the liberty of the subject. The Matrimonial Causes Jurisdiction has its own Registrar who, with the Deputy Registrar, is empowered by the rules of the Court to exercise certain delegated powers formerly performed by the judge of the jurisdiction sitting in chambers.

The office of Sheriff is regulated by the Sheriff Act, 1900. There are a Sheriff and an Under Sheriff. Sheriff's officers are stationed at convenient country centres, where there is a Deputy Sheriff—usually a Stipendiary Magistrate. The functions of the Sheriff include the enforcement of judgments and execution of writs of the Supreme Court, the summoning and supervision of juries and administrative arrangements relating to the holding of courts.

#### Magistrates.

Magistrates are appointed from among members of the Public Service unless it is certified by the Public Service Board that no member of the service is suitable and available for such office. Persons so appointed must have attained the full age of thirty-five years, and have passed the prescribed examination in law. They hold office at the pleasure of the Governor.

Within the districts of the Metropolis, Parramatta, Newcastle, Broken Hill, Bathurst, Windsor, Richmond, Ryde, Hornsby and Wollongong the jurisdiction of the Court of Petty Sessions is exercised exclusively by Stipendiary Magistrates.

In country districts, jurisdiction in Petty Sessions is exercised by Stipendiary Magistrates wherever convenient, and otherwise by honorary justices in minor cases. The designation of the magistrates in country districts was changed from Police to Stipendiary Magistrates in July, 1947.

The jurisdiction of magistrates is explained later in connection with Courts of Petty Sessions, and their functions comprise those of Justices of the Peace. In addition, they usually act in country centres as District Registrars in Bankruptcy, Revising Magistrates, Visiting Justices to gaols, Mining Wardens, Coroners and Industrial Magistrates, and exercise delegated jurisdiction under the Liquor Act.

### Justices of the Peace.

Persons of mature age and good character may be appointed as Justices of the Peace by Commission, under the Grand Seal. The office is honorary,

and is held during the pleasure of the Crown. No special qualifications in law are required, but appointees must be persons of standing in the community and must take prescribed oaths. Women became eligible for the office under the Women's Legal Status Act, 1918.

The functions of justices are numerous, extending over the administration of justice generally, the maintenance of peace and the judicial duties of the office. The judicial powers are explained later (see page 1096); other duties include the issue of warrants for arrests, issue of summonses, administration of oaths and certification of documents.

On 31st December, 1948, there were 57,163 Justices of the Peace in New South Wales, of whom 3,588 were women.

### JURY SYSTEM.

Crimes and misdemeanours prosecuted by indictment in the Supreme Court or Courts of Quarter Sessions must be tried before a jury of twelve persons, who find as to the facts of the case, the punishment being determined by the judge. Most civil cases may be tried before a jury of four persons or a jury of twelve persons, upon application and with the consent of the court. The jury in such cases determines questions of fact and assesses damages. The procedure in relation to juries is governed principally by the Jury Act, 1912-1947, and other Acts regulate special cases.

All men (with certain exceptions) entitled to be enrolled as electors for Parliamentary elections became eligible for jury service from 1st January, 1948. The Jury (Amendment) Act, 1947, contains provisions, not yet proclaimed, extending eligibility to act as jurors to women who submit their names for inclusion in jury lists.

The principal exceptions from liability to serve as jurors are foreign subjects, who have not resided in New South Wales for at least seven years, and certain persons attainted of treason or felony. Persons specially exempted include judges, members of Parliament, certain public officers, officers of the public service of the Commonwealth, members of the defence forces, salaried officers of the State public service, clergymen, barristers, solicitors, magistrates, police officers, doctors, dentists, druggists, schoolmasters, certain employees of banks, incapacitated persons, and men above the age of 60 years who claim exemption. Special petty sessions, when summoned to revise jury lists, have authority to exempt any person from jury service on the ground of undue hardship or undue public inconvenience.

A jurors' list is compiled annually in October for each Jurors' District by the senior police officer. This list is made available for public inspection, and revised in December before a special petty sessions held before a stipendiary magistrate or by two or more justices.

The jurors summoned to hear an issue are decided by lot. Accused persons and the Crown each have the right to challenge eight jurors in criminal cases, and twenty in capital cases, without assigning reasons. In striking the jury in a civil case, sufficient names are drawn from the ballot box to leave the required number of jurors after each party to the case has struck off names equal to one half of the number to be empanelled.

In criminal cases the verdict of the jury must be unanimous. Where agreement is not reached within six hours, the jury may be discharged and the accused tried before another jury. In civil cases where a unanimous

agreement has not been reached after four hours' deliberation, the decision of three-fourths of the jury shall be taken as the verdict of all; but if, after having remained six hours or upwards in deliberation, three-fourths of the jury do not concur, the jury shall be discharged and the case may be set down for a new trial.

#### Poor Persons' Legal Expenses.

Under the Poor Prisoners' Defence Act, 1907, a person committed for trial for an indictable offence may apply for legal aid for his defence before the jury is sworn. If the judge or committing magistrate considers that the person is without adequate means and that such legal aid should be supplied, the Attorney-General may arrange for the defence of the accused either by the Public Defender or by some other counsel or attorney, and for payment of expenses of all material witnesses.

The Legal Assistance Act, 1948-47, which came into force on 1st July, 1944, provides for the appointment of a Public Solicitor and lays down the conditions on which legal assistance may be granted.

The Public Solicitor keeps lists of barristers and solicitors who are willing to investigate and report on applications for legal assistance or to act for assisted persons in proceedings. He issues certificates of eligibility for assistance. He may act for an assisted person or may assign a solicitor whose name is on the list so to act.

#### LEGAL PROFESSION.

The legal profession in New South Wales is controlled by rules of the Supreme Court, which prescribe the conditions of entry to the profession, regulate studentships at law and specify the legal examinations which must be passed prior to admission to practice. Separate boards have been established to govern the admission of barristers and of solicitors. Women are eligible for admission.

By the Legal Practitioners Act, 1898-1940, provision has been made for the admission of conveyancers as solicitors and the discontinuance of the grant of conveyancers' certificates; for the examination of accounts of solicitors and conveyancers; and for the establishment and administration of a solicitors' fidelity guarantee fund. The fund is maintained from annual contributions from or levies imposed on solicitors. From it may be paid the amount of pecuniary loss suffered by persons as the result of theft or fraudulent misapplication by a solicitor of any moneys or other valuable property entrusted to him.

Any solicitor duly admitted to practice has the right of audience in all courts of New South Wales. The law provides for the hearing of charges of professional misconduct upon the part of solicitors by the Statutory Committee of the Incorporated Law Institute of New South Wales, which has the power to make an order striking off the roll, suspending from practice or imposing a fine on any solicitor; appeal lies to the Court from an order of the Statutory Committee.

Barristers have, in general, no legal right to fees for their services in court, but scales of charges for certain services rendered by solicitors are prescribed by regulation, and in certain instances costs of suits are taxed by an officer of the Supreme Court.

The following table shows the number of members of the legal profession in practice at intervals since 1931.

End of		Solicitors.					
Year.	Barristers.	Sydney.	Country.	Total.			
1931	236	1,013	568	1,581			
1939	285	1,118	647	1,765			
1943	289	1,162	596	1,758			
1944	308	1,149	583	1,732			
1945	318	1,130	590	1,720			
1946	319	1,128	600	1,728			
1947	324	1,106	613	1,719			

Table 925.—Barristers and Solicitors.

The number of barristers at the end of 1947 included 33 King's Counsel. The number stated in the table does not include the District Court judges, the Master in Equity, magistrates, State officials who are barristers, non-practising barristers, nor those on the roll—but not resident—in New South Wales. There were also 27 certificated conveyancers.

Barristers are organised under the New South Wales Bar Association, and solicitors under the Incorporated Law Institute of New South Wales. There is also a Society of Notaries.

#### Supreme Court.

The Supreme Court of New South Wales was established in 1824 under the Charter of Justice. Jurisdiction is exercised by a Chief Justice and not more than eleven Puisne Judges, of whom seven are engaged usually in the Common Law, including Commercial Causes and Criminal Jurisdictions, and the remainder in Equity, Bankruptcy, Probate, Lunacy and Matrimonial Causes.

The Court possesses original jurisdiction over all litigious matters arising in the State, except where its jurisdiction is excluded by statute, in certain cases where extra-territorial jurisdiction has been conferred, in Admiralty and in appeal. Its original jurisdiction is exercised usually by one judge. The procedure and practice of the Court are defined by statute, or regulated by rules which may be made by any three or more judges. The Supreme Court has power at common law to restrain inferior courts which act in excess of their jurisdiction, and to grant mandamus to enforce a legal right. The right of appeal to the Supreme Court from inferior courts is purely the creation of statute law. In proper cases appeals may be carried from findings of the Supreme Court to the High Court of Australia or to the Privy Council.

Particulars are given below of each division of the civil jurisdiction of the Court. Information regarding the criminal jurisdiction of the Supreme Court is given in conjunction with other Higher Criminal Courts on page 1092.

### Common Law Jurisdiction.

The jurisdiction of the Supreme Court at Common Law extends to cases not falling within any other jurisdiction. Actions are tried usually in the first instance in sittings at *nisi prius*, before one judge and a jury of four, or of twelve in special cases. A jury may be dispensed with by consent of both parties and under statutes governing certain cases. A judge may sit "in chambers" to deal with questions not requiring to be argued in court.

The following table gives particulars of causes set down and writs issued in the Supreme and Circuit Courts (Common Law Jurisdiction) during the last six years. The number of writs issued includes cases which were settled by the parties without further litigation.

Particulars.	1943.	1944,	1945.	1946.	1947.	1948.
Writs Issued	. 1,723	1,629	1,726	2,527	3,215	3,661
Judgments Signed	. 758	677	607	803	1,130	1,393
Causes Tried—						
Verdict for Plaintiff	. 153	188	170	172	201	281
" Defendant	. 35	39	28	41	34	51
Jury Disagreed	.		2	1	1	1.
Nonsuits	. 7	7		9	4	4
Total	. 195	234	200	223	240	337
Causes not proceeded with	. 92	91	80	64	72	101
Total Causes dealt with	287	325	280	287	312	438

Table 926.-Common Law Jurisdiction-Writs and Causes.

The difference between the number of writs issued and judgments signed indicates the extent to which suits are not proceeded with, and the difference between the number of judgments signed, and the number of causes tried indicates the extent to which cases are settled without legal proceedings in court.

#### Equity Jurisdiction.

The jurisdiction of the Supreme Court in Equity (which includes infancy) is exercised by the Chief Judge in Equity, or by any other Judge of the Supreme Court sitting in Equity. The procedure of the Court is governed by the Equity Act, 1901, and subsidiary rules. The jurisdiction extends to granting equitable relief by enforcing rights not recognised at Common Law and by special remedies such as the issue of injunctions, writs for specific performance, and a jurisdiction in infancy. The Court in making binding declarations of right may obtain the assistance of specialists such as actuaries, engineers, or other persons. In deciding legal rights incidental to its cases, it exercises all the powers of the Common Law jurisdiction of the Supreme Court, and may award damages in certain cases.

The office of the Court is under the control of the Master in Equity who performs many judicial functions, and, when directed by the Court, determines certain matters such as conducting inquiries, taking accounts, etc. He is also Registrar of the Court, and controls the records and funds within its charge.

The transactions in Equity during the year ended 30th June, 1948, included the following:—Decrees 51, orders on motions and petitions 1,843, and orders by Judge in Chambers, 208. In 1946-47, 56 decrees were made, 2,072 orders on motions and petitions, 220 orders by Judge in Chambers, and 1 order by the Master in Equity.

# Lunacy Jurisdiction.

The Supreme Court in its Lunacy jurisdiction is constituted, except on appeal, by the Chief Judge in Equity or by any other judge sitting for him during his absence or illness or at his request. In respect of the administration of estates, the jurisdiction may be exercised by the Master in Lunacy and the Deputy Master in Lunacy.

Persons whose affairs are brought under control by the Lunacy Act are grouped in three main classes—(1) persons of unsound mind and incapable of managing their affairs; (2) persons who are incapable of managing their affairs through mental infirmity arising from disease or age; and (3) insane patients in the mental hospitals. The affairs of those in the first class are administered by committees, and 'hose in the second class by managers, subject in both cases to the order and direction of the Court constituted by the Master; and the affairs of insane patients are administered by the Master in Lunacy.

The amount of trust funds controlled by the Master in Lunacy was £1,669,357 at 30th June, 1948. The Funds comprised mortgages £17,693, Commonwealth Government securities £1,495,439, fixed deposits £36,639 and cash £119,586. In addition, there were assets of considerable value in the form of scrip, real estate, etc. A deduction ranging up to 4 per cent. from the net income of insane persons whose estates are managed by the Master in Lunacy amounted to £5,162 in 1947-48, and fees collected to £132.

#### Probate Jurisdiction.

Probate jurisdiction extends over all property, real or personal, in New South Wales of deceased persons, testate or intestate. The jurisdiction is exercised by a Probate Judge, or by any judge acting on his behalf.

The Registrar in Probate exercises jurisdiction in granting probate and letters of administration in all matters where no contention has arisen and in passing the accounts of executors and administrators, including the allowance of commission to them for their trouble. The Registrar or any interested party may refer any matter to the Court. The Registrar also exercises jurisdiction in minor dealings affecting estates where no objection is raised by any interested party.

Until the granting of probate or letters of administration, the property of deceased persons vests in the Public Trustee and cannot be legally dealt with except in minor matters. In this way the rights of the successors, the creditors and the State are safeguarded. Cases of disputed wills are tried by the Judge, with or without a jury, to determine issues of fact, and jurisdiction is exercised over administrators and executors.

The following table shows the number and values of estates dealt with in the past six years:—

ጥ- ነተ-	927.—Probate	I:	M L	J	37-1	_ C	Estates.	
Lable	927.—Probate	Jurisdiction—	–Number	and	Value	ot	Lstates.	

	Probates	Granted.	Letters of Ad	Iministration.	Total.			
Year.	Number of Estates.	Gross Value of Estates,	Number of Estates.	Gross Value of Estates.	Number of Estates.	Gross Value of Estates.		
		£		£		£		
1943	8,135	31,654,520	3,270	3,908,700	11,405	35,563,220		
1944	8,217	32,444,392	3,080	3,273,382	11,297	35,717,774		
1945	8,306	33,913,219	2,915	4,311,822	11,221	38,225,041		
1946	9,384	37,078,201	3,426	3,425,861	12,810	40,504,062		
1947	8,917	50,573,875	3,547	4,868,810	12,464	55,442,685		
1948	9,789	54,482,363	2,917	4,821,922	12,706	59,304,285		
	1		_					

The values shown above represent the gross value of estates, inclusive of those not subject to duty, and of estates dealt with by the Public Trustee. In some cases probate or letters of administration are taken out a second time, and such estates are duplicated in the foregoing figures. Where estates are less than £300 in value, probate or letters of administration may be granted on personal application to the Registrar, without the intervention of a solicitor.

### Jurisdiction in Matrimonial Causes (Divorce).

This jurisdiction was conferred on the Supreme Court by the Matrimonial Causes Act, 1873. Previously, marriages could be dissolved only by special Act of Parliament. This Act, with its amendments, was consolidated in 1899, and the consolidated Act was amended in 1929 and 1943.

A Judge of the Supreme Court is appointed Judge in Divorce, but any other judge may act for him. The forms of relief granted are dissolution of marriage, judicial separation, declaration of nullity of marriage, jactitation of marriage, and orders for restitution of conjugal rights. Orders for the custody of children, alimony, damages, and settlement of marriage property may be made. Decrees for the dissolution of marriage are usually made provisional for a short period, and absolute at the expiration thereof if no reason to the contrary is shown, e.g., collusion. Where there is reason to believe that dissolution of marriage is sought for ulterior motives and that collusion has taken place between the parties, it is customary for the Crown to intervene and place before the Court any relevant facts in its possession. The Crown, however, cannot intervene after the decree nisi has been made absolute.

The grounds on which dissolution may be granted on petition and the conditions as to domicile were set out on page 532 of the Official Year Book, 1928-29 (see also Table 930).

The following statement shows the number of petitions in matrimonial causes made and granted in New South Wales during the past six years in comparison with the average per year in quinquennial periods since 1908:—

Table 928.-Divorces, etc.-Petitions and Decrees.

	Petitions		Number	of Petition	ns Granted.	·	Restitution of Conjugal Rights		
Year.	Lodged for Divorce, Judicial Separation.	Div	orce.	Petitions for	Nullity of	f Marriage.			
	and Nullity of Marriage.	Decrees Nisi Granted.	Decrees Nisi made Absolute.	Judicial Separation Granted.	Decrees Nisi Granted.	Decrees Nisi made Absolute.	Petitions.	Decrees Granted.	
1908–12*	453	260	260	12	4	4	28	18	
1913–17*	642	393	342	9	3	3	4	51	
1918-22*	1,041	672	562	13	7	5	6	141	
1923-27*	1,391	992	903	13	9	8	266	168	
1928-32*	1,480	1,060	967	10	11	9	311	180	
1933-37*	1,749	1,216	1,124	13	11	11	365	224	
1938–42*	2,037	1,589	1,521	9	6	6	414	285	
1943-47*	3,896	2,836	2,701	6	26	23	1,143	767	
1943	3,038	1,980	1,828	3	11	9	776	454	
1944	3,807	2,905	2,027	5	36	17	1,100	741	
1945	4,199	2,621	3,097	10	31	32	1,244	681	
1946	4,309	3,453	2,771	6	22	21	1,538	1,117	
1947	4,128	3,222	3,784	5	31	37	1,057	840	
1948	3,878	3,352	3,277	8	28	23	867	75 <b>4</b>	
		<u> </u>						<u> </u>	

<sup>\*</sup> Average per year.

In 1939 the number of petitions for divorce, judicial separation or nullity of marriage, viz., 1,973, was higher than in any earlier year. After a slight decline in 1940, the number increased rapidly to 3,038 in 1943 and further to a peak of 4,309 in 1946; it declined slightly in both 1947 and 1948.

The number of petitions lodged with a suspension of fees or in forma pauperis during 1948 was 429; of these 408 were for divorce, 4 for nullity of marriage, 1 for judicial separation, and 16 for restitution of conjugal rights.

The number of petitioners of each sex in cases where decrees for divorce or nullity of marriage were made absolute or judicial separation was granted during each of the past eleven years was as follows:—

Table 929.—Divorce, Nullity of Marriage, Judicial Separation—Sex of Successful Petitioners.

Year in which Petition		ber of Succions lodged		Year in which Petition	Number of Successful Petitions lodged by—			
was Granted.	Husband.	Wife.	Total.	was Granted.	Husbaud.	Wife.	Total.	
1938 1939 1940 1941 1942 1943	611 667 671 722 772 918	829 886 826 855 839 922	1,440 1,553 1,497 1,577 1,611 1,840	1944 1945 1946 1947 1948	1,115 1,703 1,469 2,048 1,734	934 1,436 1,329 1,778 1,574	2,049 3,139 2,798 3,826 3,308	

The majority of successful petitions for divorce, nullity or separation were granted on the petitions of wives until 1943, but in later years these were exceeded by the number lodged by husbands. The proportions in the three years 1937 to 1939 were husbands 42 per cent. and wives 58 per cent., and in the years 1946 to 1948 husbands 53 per cent., wives 47 per cent.

The grounds for divorce in cases where decrees were made absolute during each of the past eleven years were as follows:—

Table 930.—Divorce—Grounds.

			Gro	ounds on w	hich Divo	ces were	Granted.		
Year (Decree made Absolute).	Adultery	Adultery and Bigamy.	Cruelty.	Drunken- ness and Cruelty.	Druuken- ness and Neglect to Sup- port or Neglect of Domestle Duties.	Deser- tion.	Non-compliance with Order for Restitution of Conjugal Rights.	Other and Not Stated.	Total Decrees made Absolute.
1938	309	2	5	10	16	827	252	3	1,424
1939	348	1	11	16	17	899	242	6	1,540
1940	304	2	6	16	15	783	280	73	1,479
1941	328	1	8	17	9	856	274	66	1,559
1942	389	2	6	22	13	905	256	9	1,602
1943	440	1	5	29	15	1,055	275	8	1,828
1944	541	1	12	30	24	1,072	341	6	2,027
1945	933	5	29	87	17	1,468	593	15	3,097
1946	867	2	17	45	13	1,251	557	19	2,771
1947	1,112	3	28	51	18	1,663	897	12	3,784
1948	792		48	64	29	1,421	911	12	3,277

In the three years 1937 to 1939 the grounds for divorce were desertion or non-compliance with orders for restitution of conjugal rights in 75 per cent. and adultery in 22 per cent. of the cases where decrees were made absolute; the proportions in the three years 1946 to 1948 were 68 per cent. and 28 per cent. respectively.

Particulars of the duration of marriage and issue, in cases in which decrees *nisi* for divorce were made absolute in 1939 and each of the last three years are shown in the following table.

Duration		Divo	rces.		Number of	Divorces.				
Marriage.	1939.	1946.	1947.	1948,	Children.	1939.	1946.	1947.	1948.	
Years.										
Under 5	89	371	455	341	0	476	1,083	1,477	1,322	
5 to 9	420	899	1,361	1,249	1 1	523	784	1,143	998	
10 to 14	457	620	824	718	2	296	506	639	529	
15 to 19	264	423	527	389	3	137	201	284	236	
20 to 29	259	378	502	469	4	57	107	133	103	
30 and over	51	80	115	111	5 and over	51	84	105	88	
					Not stated		6	3	1	
Total	1,540	2,771	3,784	3,277	Total	1,540	2,771	3,784	3,277	

Table 931.—Divorces—Duration of Marriage and Issue.

The duration of marriage, i.e., the interval between marriage and the date the decree *nisi* for divorce was made absolute, was less than 5 years in 6 per cent., and less than 10 years in 33 per cent., of the cases in 1939. The corresponding proportions were 12 per cent. and 48 per cent. in 1947, and 10 per cent. and 49 per cent. in 1948.

There was no child of the marriage in 31 per cent., and one child in 34 per cent. of the cases in 1939, and no child in 40 per cent. and one child in 30 per cent. of the cases in 1947 and 1948.

Particulars regarding the age at marriage of persons divorced—decrees made absolute—in 1948 are shown below:—

Age of Husband		Age o		Husbands.			
at Marriage.	Under 21 years.	21 to 24 years.	25 to 29 years.	30 to 34 years.	35 years and over.	Total.	Per cent
	No.	No.	No.	No.	No.	No.	
Under 21 years	335	66	5	1		407	12
21 to 24 years	760	569	88	13	1	1,431	44
25 to 29 years	244	419	209	22	6	800	28
30 to 34 years	47	96	97	40	16	296	9
35 years and over	19	47	50	51	62	229	7
Wives—Total	1,405	1,197	449	127	85	3,277*	
Per cent	43	36	14	4	3	•••	100

<sup>\*</sup> Includes 14 divorces in which ages of the parties were not stated.

Forty-three per cent. of the wives and 12 per cent. of the husbands divorced in 1948 were under 21 years of age at marriage, and 79 per cent. of the wives and 56 per cent. of the husbands were under 25 years of age.

Ages of persons at the time of divorce in respect of the same parties as in Table 932—decrees made absolute in 1948—are shown in the following summary:—

25 to 29 years.	30 to 34 years.	35 to 39 years.	40 to 44 years.	45 years and over.	Total.	Per cent.
15						
1 20		•••	• • • •		43	1
354	35	6		]	518	16
354	310	53	8	2	755	23
81	313	266	35	2	701	22
18	85	212	158	20	494	15
9	32	81	201	429	752	23
	354 81 18	354 310 81 313 18 85	354 310 53 81 313 266 18 85 212	354 310 53 8 81 313 266 35 18 85 212 158	354 310 53 8 2 81 313 266 35 2 18 85 212 158 20	354 310 53 8 2 755 81 313 266 35 2 701 18 85 212 158 20 494

Table 933.-Divorces-Age of Husband and Wife at Divorce, 1948.

618

19

402

12

453

14

3.277\*

100

775

184

Wives-Total

Per cent.

831

25

Thirty-one per cent. of the wives and 17 per cent. of the husbands divorced in 1948 were under 30 years of age, and 74 per cent. of wives and 62 per cent. of the husbands were under 40 years of age.

# Admiralty Jurisdiction.

Jurisdiction as a Colonial Court of Admiralty was conferred on the Supreme Court of New South Wales on 1st July, 1911, by Order-in-Council, under the Colonial Courts of Admiralty Act (Imperial), 1890. The Prize Act (Imperial), 1939, extends to Australia, and prize rules were promulgated by Order-in-Council of 19th October, 1939.

# HIGHER CRIMINAL COURTS.

The higher courts of criminal jurisdiction consist of the Central Criminal Court (which sits in Sydney and is presided over by a Judge of the Supreme Court), the Supreme Court on circuit, and Courts of Quarter Sessions held at important centres throughout the State, each presided over by a Judge of the District Court as chairman of Quarter Sessions. These courts deal with indictable offences, which are the more serious criminal cases. Offences punishable by death may be tried only before the Central Criminal Court, which exercises the criminal jurisdiction of the Supreme Court, or before the Supreme Court on circuit.

All persons charged with criminal offences must be charged before a judge with a jury of twelve chosen by lot from a panel provided by the sheriff. The question of the guilt or innocence of the accused is determined by the jury after the direction by the presiding judge as to the law and the facts proved by evidence, and the verdict must be unanimous. If unanimity is not reached within twelve hours, the jury is discharged and the accused may be tried before another jury.

Indictable offences against Commonwealth law are tried before these courts.

<sup>\*</sup> Includes 14 divorces in which ages of the parties were not stated.

# Central Criminal Court and Supreme Court on Circuit.

The Central Criminal Court exercises the criminal jurisdiction of the Supreme Court in Sydney, and a Judge of the Supreme Court presides at sittings of the Supreme Court in circuit towns. Usually capital offences, the more serious indictable offences committed in the metropolitan area, and offences which may not be tried conveniently at Quarter Sessions or at sittings of the Supreme Court in the country, are tried at the Central Criminal Court. Appeal from these courts lies to the Court of Criminal Appeal, consisting of three or more Judges of the Supreme Court, and in proper cases, to the High Court of Australia or the Privy Council. A Judge of the Supreme Court sitting in Sydney or at circuit towns may act as a Court of Gaol Delivery, to hear and determine the cases of untried prisoners upon returns of such prisoners supplied by the gaolers of the State under rules of the Court.

# Courts of Quarter Sessions.

These courts are held at times and places appointed by the Governor-in-Council, in districts which coincide with those of District Courts. Forty-seven places were appointed in 1948, courts being held usually prior to District Court sittings, from two to four times a year in country centres, but eleven times in Sydney, and six times in Parramatta.

In addition to exercising their original jurisdiction, the courts hear appeals from Courts of Petty Sessious and certain appeals from other courts, e.g., Licensing Courts. Appeals from Quarter Sessious or sittings of the Supreme Court by persons convicted on indictment are heard by the Court of Criminal Appeal.

# Cases before Higher Criminal Courts.

The following table relates to the number of distinct persons tried before Courts of Quarter Sessions, sittings of the Supreme Court at circuit towns and the Central Criminal Court, and it shows the number of convictions in each of the classes of more serious offences. Where two or more charges were preferred against the same person, account has been taken only of the principal charge.

Ta	ble	934.	—Higher	Criminal	Courts—Persons	Tried	and	Convictions.	
_									_

			·	Conv	ictions—Pr	incipal Offe	nce.	
Year ended 30th June.	Distinct Persons	Not Guilty,	Against	Against	Against Currency,	Other		Persons icted,
	Tried.		Person.	Property.	and Forgery.	Offences.	Number,	Per 10,000 of Popula tion.
1931	1,171	503	170	977	36	25	1,208	4.75
1939	1,173	369	188	577	29	10	804	2.94
1943	1,182	241	239	664	6	32	941	3.32
1944	1,470	340	266	829	6	29	1,130	3.96
1945	1,347	297	253	772	6	19	1,050	3.64
1946	1,474	296	290	864	5	19	1,178	4.04
1947	1,812	416	351	1,008	16	21	1,396	4.71
1948	1,710	413	329	930	12	26	1,297	4.31

Trials of accused persons in higher criminal courts take place on indictment by the Attorney-General, usually after magisterial inquiry into the

sufficiency of evidence for such trials, and the question of guilt is decided by a jury of laymen. Nevertheless, only about 77 per cent. of the persons tried during the five years ended June, 1948, were convicted; in the case of offences against the person the proportion was approximately 64 per cent.

Of the persons convicted during the year ended 30th June, 1948, males numbered 1,241 and females 56.

The following table shows the number of persons convicted for specific offences included in the foregoing statement:—

Table 935.—Higher Criminal Courts—Convictions for Certain Specific Offences.

Offences,		Numbe	er of Offe	nders Con	victed.	
Onences,	1930–31.	1938–39,	1944–45.	1945–46.	1946–47.	1947-48
Murder Attempted Murder and Shooting with Intent Manslaughter Rape and other Offences against Females Unnatural Offences Abortion and Attempts to Procure Bigamy and Offences relating to Marriage Assault Burglary and Housebreaking Robbery and Stealing from the Person Stealing Horses, Cattle, Sheep. Embezzlement and Stealing by Servants Larceny and Receiving Fraud and False Pretences Arson Forgery, Uttering Forged Documents Conspiracy Perjury and Subornation	1 44 13 4 17 56 383 52 2 24 326 72	6 4 4 50 26 7 7 19 28 374 37 4 10 90 39 6 19 7	9 45 45 33 4 59 28 497 46 1 172 16 6 6	2 1 15 75 28 1 85 556 58 1 177 23 20 5 4	5 6 9 89 58 5 5 61 628 61 3 13 234 11 16 0	11 3 8 80 64 1 53 30 559 75  202 52 2 12 4 9

### DISTRICT COURTS.

District Courts have been in existence in New South Wales since 1858 as intermediaries between the Small Debts Courts and the Supreme Court. They are presided over by judges with special legal training, whose jurisdiction is defined in the District Courts Act, 1912-1936. Sittings are held at places and times appointed by the Governor-in-Council. The courts sit at intervals during ten months of the year in Sydney, and two or more times per year in important country towns. A registrar and other officers are attached to each court. At the close of 1948 there were 68 district courts and 12 district court judges.

Ordinarily, cases are heard by a judge sitting alone, but a jury may be empanelled by direction of the judge, or upon demand by either plaintiff or defendant, in any case where the amount claimed exceeds £20. The jurisdiction of the Court extends over issues of fact in equity, probate and divorce proceedings remitted by the Supreme Court and over actions at Common Law involving an amount not exceeding £400, or £200 where a title of land is involved.

The findings of the District Court are intended to be final, but new trials may be granted and appeals may be made to the Supreme Court in certain cases.

Particulars of suits brought in District Courts in their original jurisdictions during 1939 and the last six years are given in the following table:—

	Cause	s Tried,	Causes	Judgment for	0		Total	
Year.	Verdict for Plaintlff.	Verdiet for Defendant (including Nonsuit, etc.).	Dis- continued	Plaintiff by Default, Con- fession, or Agree- ment.	Causes Settled by Arbi- tration,	Total Suits disposed of.	Suits arising during Year.	Causes Pending and in Arrear.
1939	840	246	4,058	6,890	1	12,035	12,481	4,591
1943	444	121	2,297	2,220		5,082	3,873	1,567
1944	398	99	1,724	1,310	•••	3,531	3,176	1,212
1945	394	96	1,795	1,296	8	3,589	3,455	1,078
1946	501	171	2,099	1,653	3	4,427	5,151	1,802
1947	817	171	3,037	2,551	2	6,578	7,337	2,561
1948	871	199	2,903	2,946	<b>2</b>	6,921	6,031	1,671

Table 936.—District Courts—Transactions.

Of the causes tried during 1948, 190 were tried by jury and 880 without a jury.

In addition to the suits covered by the foregoing table, a considerable amount of work under various Acts is done in the District Courts.

### LA'ND AND VALUATION COURT.

The Land Court of Appeal, established originally in 1889, was reconstituted at the close of 1921, as the Land and Valuation Court. This court is presided over by a judge, who is also a Judge of the Supreme Court; he may sit as an open court at such places as he determines, and, in certain circumstances, with two assessors in an advisory capacity. The procedure of the court is governed by rules made by the Judge, who also exercises powers over witnesses and the production of evidence similar to those of a Judge in the Supreme Court. On questions of fact the decisions of the Judge are final, but appeal may be made to the Supreme Court against his decision on points of law.

The Court exercises original jurisdiction in: (a) claims for compensation arising out of resumption by public authorities or for damages caused by the execution of authorised works; (b) registration of land agents and their charges; and (c) determination of certain rentals under the Landlord and Tenant Act. The Court has appellate jurisdiction in respect of (a) appeals from the decisions of the local land boards under the Crown Lands Acts, Pastures Protection Acts, Irrigation Acts and kindred Acts; (b) valuations by the Valuer-General; (c) valuations by rating authorities, including the City Council, where the valuation exceeds £5,000; (d) claims for compensation in respect of delicensed premises; (e) claims for compensation under the Mines Subsidence Act; (f) appeals under the Reclamation Act and the Transport Act; and (g) appeals under the Rivers and Foreshores Improvement Act.

#### WORKERS' COMPENSATION COMMISSION.

A special and exclusive jurisdiction has been conferred on the Workers' Compensation Commission of New South Wales to examine into and determine questions arising under the Workers' Compensation Act, for which

purpose it has certain of the powers of a Royal Commission. The Commission is a body corporate and consists of a chairman and three other members appointed from barristers of more than five years' standing. All have the same status, salary, pension rights and tenure of office as District Court judges. Each judge sits alone and exercises the jurisdiction, powers and authorities of the Commission. The sittings are arranged by the chairman, who is also the permanent head of the staff of the Commission. Under certain conditions, an acting judge may be appointed.

The chairman of the Commission is also chairman of the Insurance Premiums Committee, which fixes workers' compensation insurance premium rates, and administers the workers' compensation Loss Ratio Scheme; it also levies and collects contributions from insurers and self-insurers for purposes of the Silicosis Compensation Fund.

The Commission may appoint qualified medical practitioners to be medical referees, and may obtain medical reports from a referee or a medical board consisting of two or more referees.

The determinations of the Commission on matters of fact are final and may not be challenged in any court. Appeal by way of a case stated on questions of law lies to the Supreme Court, and from the Supreme Court to the High Court of Australia and the Privy Council. The Commission is required to furnish workers and employers with information as to their rights and liabilities under the Workers' Compensation Act, and to endeavour to bring parties to agreement and to avoid litigation. This work is carried out by its Conciliation and Information Bureau under the supervision of the Commission's Registrar as Conciliator. No charge is made for these services. In practice, 98 per cent. of claims for compensation are settled by agreement, those contested before the Commission laying down the principles on which the majority of such settlements are based.

The cost of the Commission's administration is borne by a fund for which contributions are levied by the Commission, under statutory authority, on insurers who undertake the liability to pay compensation, and on self-insurers.

Further particulars relating to compensation are given in the chapter "Employment."

### COURTS OF MARINE INQUIRY.

Cases of shipwreck or casualty to British vessels, or the detention of any ships alleged to be unseaworthy, and charges of misconduct against officers of British vessels arising on or near the coast of New South Wales, or on any ship registered at or proceeding to any port therein, are heard by one or more authorised Judges of the District Court or Stipendiary Magistrates sitting with two or more assessors as a Court of Marine Inquiry. Provision is made in the Navigation Act, 1901-49, for appeal from a Court of Marine Inquiry to the Supreme Court.

The proceedings of the Court are governed by the Navigation Acts of the State and Commonwealth.

# STATE INDUSTRIAL TRIBUNALS

Since its inauguration in 1901, the State system of industrial arbitration has undergone fundamental changes from time to time, and the present basis is the Industrial Arbitration Act, 1940-48.

The Industrial Commission of New South Wales, the chief industrial tribunal, is comprised of six members, one of whom is President. Members have the same status and rights as a puisne judge of the Supreme Court, and must be drawn from judges of the Supreme Court, District Court judges, or practising barristers or solicitors of not less than five and seven years' standing, respectively. The Commission may divide and sit simultaneously as two full courts of the Commission. At its sittings three members must be present, and matters are resolved by majority decision. Where particular matters are delegated to a single member, appeal from his findings lies to the Commission.

It is the function of the Commission, on reference or application, to make awards fixing rates of pay and working conditions, determine the standard hours to be worked in industries within its jurisdiction, and determine any widely defined "industrial matter." It has authority to adjudicate in cases of illegal strikes, lockouts or unlawful dismissals, and may summon persons to a compulsory conference, and hear appeals from determinations of subsidiary tribunals.

The Commission has power to conduct investigations regarding the prices of commodities and services and the rents of dwellings, but during the war (1939-45) these functions were undertaken by Commonwealth authorities, and currently they are discharged under the State Prices Regulations and Landlord and Tenant Acts (see the chapter, "Food and Prices").

Conciliation Commissioners, up to five in number, inclusive of the Apprenticeship Commissioner, are appointed for a period of seven years under the Act, as amended in 1943. These act as the Chairman of Conciliation Committees established for various industries on the recommendation of the Industrial Commission. A Committee has power to inquire into industrial matters in its particular industry, and on reference or application, to make orders or awards prescribing rates of wages and other conditions of employment. Where an industrial dispute has occurred or is impending, a Conciliation Commissioner may summon the parties to a compulsory conference.

Apprenticeship Councils have power to regulate wages, hours and conditions of apprenticeship in an industry, and comprise the Apprenticeship Commissioner and the members of the Conciliation Committee for each particular industry.

Industrial magistrates exercise jurisdiction in cases arising out of non-compliance with awards and statutes governing working conditions of employees. Their powers are cognate with those of stipendiary magistrates.

Further information regarding these tribunals and the Commonwealth Court of Conciliation and Arbitration is published in the chapter relating to "Industrial Arbitration."

#### LOWER COURTS OF CIVIL JURISDICTION.

Courts of Petty Sessions (Small Debts Courts).

A limited civil jurisdiction is conferred by the Small Debts Recovery Act, 1912-1933, on magistrates and justices sitting as Small Debts Courts to determine, in a summary way according to equity and good conscience, actions for the recovery of debt or damages. The jurisdiction of these courts is limited to cases involving not more than £50. A stipendiary magistrate may exercise the full jurisdiction of the court, two justices of the peace

may hear cases involving amounts up to £30 and one justice up to £5. In cases of unliquidated demands the jurisdiction of two justices extends only to cases involving £10, or, by consent of the parties, up to £30, but the courts may not deal with matters involving titles to freehold or future rights.

In general, a decision of the court is subject to review only when it exceeds its jurisdiction or violates natural justice.

The principal officers of the court are a registrar, who acts as clerk to the bench and may enter judgment in cases of default of defence or where claims are admitted and agreed upon, and such bailiffs as are appointed from time to time for the service and execution of process.

Particulars of the transactions of Small Debts Courts during 1939 and the last six years are shown below:—

Year.	Plaints	Verdicts fo	or Plaintiff.	Executions	Garnishee Orders	
	Entered. Number.		Amount.	Issued.	Issued.	
			£			
1939	78,970	45,300	426,429	10,664	13,544	
1943	28,725	14,502	141,049	3,184	4,327	
1944	19,635	10,244	103,862	2,421	3,401	
1945	18,064	8,825	99,049	1,945	2,660	
1946	20,245	9,832	110,321	2,136	2,432	
1947	24,397	10,822	135,243	2,906	2,596	
1948	26,579	11,246	146,525	3,695	2,130	

Table 937.—Small Debts Courts—Transactions.

In garnishee cases, the Court may order that all debts due by a garnishee to the defendant may be attached to meet a judgment debt, and by a subsequent order, may direct the garnishee to pay so much of the amount owing as will satisfy the judgment debt. Garnishee orders in respect of wages or salary may be made only for the excess over £3 per week. The garnishee cases numbered 2,130 in 1948, as compared with 13,544 in 1939.

#### Licensing Courts.

Under the Liquor Act, 1912 (as amended), three persons, each of whom is a stipendiary magistrate, are appointed licensing magistrates. They constitute the Licensing Courts for all licensing districts of the State, and also sit as stipendiary magistrates in the Metropolitan District to deal with offences arising under the Act.

The licensing magistrates are empowered, with the approval of the Minister, to delegate their jurisdiction either generally or in any special matter to stipendiary magistrates. Under a general delegation, applications for renewals, transfers, booth licenses and other minor matters outside the Metropolitan Licensing District are dealt with by stipendiary magistrates.

The Licensing Court sits as an open court, and appeals from its decisions lie to a Court of Quarter Sessions, except in certain matters such as applications for the grant or removal of licenses, where appeal, other than

by way of prohibition or special case, lies only to the Full Bench of licensing magistrates.

The three licensing magistrates also constitute the Licenses Reduction Board, which was established to reduce publicans' and Australian wine licenses.

Provision for reconstitution of the Licensing Courts and the Board on a date to be proclaimed has been made by the Liquor Amendment Act of 1946 (see page 928). This provision had not been proclaimed up to 30th June, 1949.

Particulars relating to the operations of the Licensing Courts and the Licenses Reduction Board are shown on page 930.

# Wardens' Courts (Mining).

By virtue of the Mining Act, 1906-1946, mining wardens may hold courts to determine disputes within their districts as to the possession of mining lands, or claims under mining contracts. In general their procedure is summary and their decisions final, but appeal lies in certain cases to a District Court sitting as a Mining Appeal Court or, on points of law, by way of stating a case to the Supreme Court.

#### Land Boards.

Local Land Boards, each consisting of a salaried chairman, usually possessing legal and administrative experience, and two other members (paid by fees) possessing local knowledge, were first appointed under the Crown Lands Act of 1884. These boards sit as open courts and follow procedure similar to that of Courts of Petty Sessions. Their functions are to determine questions under the Crown Lands Acts and other matters referred by the Minister. Sittings are held as required at appointed places in each of twelve Land Board Districts in the Eastern and Central Divisions of the State. There are also special Land Boards for the Yanco, Mirrool and Coomealla Irrigation Areas, having the powers and duties of a Local Land Board.

There are Land Boards in the administrative districts of the western division as in other territorial divisions. The members are the Western Lands Commissioner, one of the two Assistant Commissioners and a local representative (paid by fees). Two members constitute a quorum, except in the consideration of matters referred by the Minister for inquiry or recommendation, and of applications for leases of land made available for settlement by way of original or additional holdings, when all three members sit.

# Fair Rents Courts.

The State Landlord and Tenant (Amendment) Act, 1948, which commenced on 16th August, 1948, replaced Commonwealth regulations on the determination of rents and the State Fair Rents Act, 1939, which was repealed from 16th August, 1948.

Under the Act, rents of certain types of premises are determined by Fair Rents Boards, each constituted by a stipendiary magistrate; rents of shared accommodation in the County of Cumberland are determined by the Rent Controller. For the recovery of possession of premises from a lessee, a Court of Petty Sessions, constituted by a stipendiary magistrate, is the only competent court.

Details regarding the regulation of rents in New South Wales are published on page 678.

LOWER COURTS OF CRIMINAL AND QUASI-CRIMINAL JURISDICTION.

Courts of Petty Sessions.

These courts are held daily in large centres and periodically in small centres. Though known as courts of inferior jurisdiction, they are concerned with criminal, quasi-criminal and civil issues arising from Commonwealth and State legislation.

The criminal jurisdiction arises mainly under the State Crimes Act, the Commonwealth Crimes Act, the Vagrancy Act, the Police Offences Act, and, during the war period, the Commonwealth National Security or other regulations, which describe the nature of the offences, penalties and procedure, and prescribe the number of justices or magistrates for the trial of various offences.

In the quasi-criminal and civil jurisdiction, issues arise in tort and contract under the Small Debts Recovery Act (see page 1096), and under Commonwealth and State legislation with respect to moratorium orders, hire-purchase agreements, money-lending transactions, detention of property, taxation laws, rights of landlords and tenants, inebriates, lunacy, marriage, husbands and wives, and masters and servants.

Courts of Petty Sessions were appointed tribunals in respect of matters arising under the National Security Act or the Defence (Transitional Provisions) Act and regulations thereunder.

Procedure generally is governed by the Justices Act, 1902-1947. Cases are heard in Sydney and in nine other centres by a stipeudiary magistrate; in other districts by a magistrate or justices of the peace, unless the magistrate has exclusive jurisdiction.

The criminal jurisdiction is concerned with offences punishable summarily; it includes most offences against good order and breaches of regulations and certain indictable offences which may be determined summarily with the consent of the defendant. Other offences, originally indictable, may be determined summarily without the consent of the defendant, as provided by the State Crimes Act, where the amount of the money or the value of the property in respect of which the offence is charged does not exceed ten pounds, or under the Commonwealth Crimes Act, where the offence relates to property the value of which does not exceed fifty pounds. In other indictable cases, a magisterial inquiry is held, and the accused is committed for trial to a higher court when a prima facie case is established.

Reference to the right of appeal to Quarter Sessions is made on page 1092.

# Children's Courts.

Children's courts, established in 1905, exercise jurisdiction under the Child Welfare Act, 1939-41, which was brought into operation on 1st December, 1939. Each court consists of a special magistrate with jurisdiction within a proclaimed area. Elsewhere the jurisdiction of a court may be exercised by a special magistrate or two justices of the peace.

\* 18647---8¶

Where practicable, children's courts are not held in ordinary court rooms, and at any hearing or trial persons not directly interested are excluded. By these means children are protected against the adverse influences which they would encounter in the ordinary courts.

The magistrates exercise all the powers of a Court of Petty Sessions in respect of children under 16 years of age and young persons under 18 years of age, and in respect of offences committed by or against them, to the exclusion of the ordinary courts of law. Jurisdiction is also exercised in respect of neglected and uncontrollable children.

The functions of the Court are reformative, not punitive; it is endowed with extensive powers, such as committal of children to institutions, to the care of persons other than the parents or to the care of the Minister for Education to be dealt with as wards, etc.

Children's courts deal with proceedings for the maintenance of illegitimate children under the Child Welfare Act and complaints for maintenance of wife and children under the Deserted Wives and Children Act. They act reciprocally with other States of the Commonwealth under the Interstate Destitute Persons Relief Act, and with other British Dominions under the Maintenance Orders (Facilities for Enforcement) Act, in the making and enforcement of orders for maintenance when one of the parties is resident outside New South Wales. The Courts also deal with disputed questions of custody under the Infants' Custody and Settlements Act, 1899-1934.

Appeal from its decision lies in proper cases to the Supreme Court, Quarter Sessions or, in certain circumstances, to a District Court.

Statistics compiled by the Child Welfare Department in respect of the two principal children's courts in Sydney show the number of children under 18 years of age dealt with annually. Where a juvenile was charged with more than one offence, generally only the principal offence has been counted. The number of children appearing before these courts has decreased in each of the last five years; it declined by 43 per cent. between 1943 and 1948. Particulars since 1943 are shown in the following table:—

Year ended	Nun	Number of Juveniles.			Number of Juveniles.			
30th June.	Boys.	Girls.	Persons.	Year ended 30th June.	Boys.	Girls.	Persons.	
1943	3,564	723	4,287	1946	2,243	614	2,857	
1944	3,309	750	4,059	1947	2,087	526	2,613	
1945	2,712	728	3,440	1948	1,864	598 .	2,462	

Table 938.—Children's Courts, Sydney—Cases Dealt With.

A dissection of the number of juveniles in these cases according to the nature of the offence and action taken is shown in the next table. Many children were charged with offences under the Child Welfare Act. A negligible proportion of children is sentenced to gaol terms. Where detention is ordered, they are generally committed to an institution, controlled by the Child Welfare Department.

Table 939.-Children's Courts, Sydney-Offences and Action Taken.

	Number of Juveniles.						
Particulars.	1942-43.	1943–44.	1944–45.	1945–46.	1946-47.	1947-4	
	OFFENCE					•	
Chinatanal							
Criminal—	1,190	1,064	970	874	733	0.10	
Stealing and Breaking and Entering Other Criminal Offences	460	325	407	375	367	649 305	
Child Welfare Act—							
Uncontrollable Child	267	070	297	270	223	226	
11 . 1/- C	207 221	273	235	213	240		
- IT OM T - CT II TT 10 1 1	671	189 770	689	456	399	216 502	
m m t 1 m m or om	1,346	1,124	553	452	537	429	
Truancy under Public Instruction Act	132	314	289	217	114	135	
Total Cases	4,287	4,059	3,440	2,857	2,613	2,462	
, Ac	TION TAK	EN.	1				
Imprisoned	46	53	46	59	54	21	
Fined	1,642	1,235	510	436	454	335	
Bound over	21	22	44	35	31	40	
Committed for Trial	31	43	38	39	44	26	
Committed to Institution of Child Welfare Department	512	603	540	409	353	367	
Committed to Institution of Child Welfare Department—Order Suspended	131	127	112	120	66	78	
Returned to Former Custody	73	57	98	107	109	62	
Isolated Deteution within Institution	63	62	72	33	45	56	
Committed to Care of Approved Person	150	172	232	191	144	128	
Committed to Care of Minister	133	111	155	141	131	121	
Released on Probation	860	743	688	593	728	782	
Admonished, Discharged, etc	604	806	871	644	428	412	
	21	25	34	50	26	34	
Variation of Order		- 1					

Of the juveniles dealt with in 1947-48, 39 per cent. were charged with criminal offences, 38 per cent. with offences under the Child Welfare Act. and 23 per cent. with truancy and transport offences. The number of juveniles charged with criminal offences, mainly stealing and breaking and entering, has declined steadily since 1942-43; in 1947-48 it was only 58 per cent. of the number in 1942-43. Offences committed in trains and trams, principally evasion of fares, fell sharply in 1944-45 compared with the two previous years.

Separate statistics of the proceedings of Children's Courts in districts other than Sydney are not available, as they are included with those of ordinary Courts of Petty Sessions.

<sup>\*18647---9¶</sup> 

# Cases before Magistrates' Courts.

Particulars of the number of offences charged and convictions obtained in Courts of Petty Sessions and Children's Courts, are shown below:—

Table 940.—Courts of Petty Sessions and Children's Courts—Charges and Convictions.

		Offences	Charged.		Proportion	of Total ( Charged.	Offences
Year.	Withdrawn or Discharged.	Convicted.	Committed to Higher Courts,	Total.	Withdrawn or Discharged.	Convicted.	Committed to Higher Courts.
					per cent.	per cent.	per cent.
1931	17,317	101,675	2,751	121,743	14.2	83.5	2.3
1938	16,540	96,933	2,048	115,521	14.3	83.9	1.8
1939	16,207	126,353	2,288	144,848	11.2	87.2	1.6
1940	15,319	131,891	2,211	149,421	10.3	88.3	1.4
1941	12,018	119,735	1,717	133,470	9.0	89.7	1.3
1942	11,792	140,620	2,119	154,531	7.6	91.0	1.4
1943	14,326	118,366	2,811	135,503	10.6	87.4	2.0
1944	12,862	111,008	2,631	126,501	10.2	87.7	2.1
1945	12,036	125,982	3,061	141,079	8.5	89.3	2.2
1946	12,637	157,108	3,566	173,311	7.3	90.6	2.1
1947	12,215	165,472	3,148	180,835	6.8	91.5	1.7
1948	11,976	183,367	3,113	198,456	6.0	92.4	1.6

Except where otherwise stated, the foregoing figures represent the total number of offences charged, and where multiple charges are preferred at the same time, separate account is taken of each. The figures should not be used for the purpose of comparison with other States or countries, unless the same rules are observed in tabulating the statistics of crime. It is not possible to determine the number of distinct persons charged in each year, as particulars obtained from persons accused of minor offences, particularly vagrants, do not form a reliable basis for identification.

Since 1916, persons arrested for drunkenness have been allowed to forfeit a deposit (nominally bail) in lieu of appearing in court. The majority of the cases of drunkenness are dealt with in this manner and they are included in the statistics as convictions, as well as those cases where the offender is admonished and set free without penalty.

Only a small proportion of the offences for which summary convictions are effected are really criminal offences, that is, offences against persons or

property. The following table shows a classification of the offences for which summary convictions were recorded, and the rate per 1,000 of mean population:—

Table 941.—Courts of Petty Sessions and Children's Courts.—Convictions.

			Numbe	er of Convic	tions,			
Year,	Against the	Against	Against Go	od Order.	Transport	Other	Total Summary	
	Person.	Property.			and Traffic.	Offences.	Convictions.	
1931 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	1,849 1,507 1,667 1,684 1,639 1,914 2,005 2,315 2,315 2,387 2,815 2,668 2,777	11,708 10,030 10,968 11,385 10,019 12,426 13,420 12,652 13,329 11,939 11,731 10,427	20,559 27,181 32,405 34,575 34,870 34,906 34,562 43,561 62,120 67,324 82,625	15,598 12,638 14,288 14,712 13,929 17,748 15,869 15,196 19,650 25,370 22,683 22,981	31,302 21,196 42,181 47,001 39,453 35,998 25,369 20,325 22,542 29,200 36,128 43,205	20,659 24,381 24,844 22,534 20,058 37,664 26,737 25,958 24,513 25,664 24,938 21,352	101,675 96,933 126,353 131,891 119,735 140,620 1118,386 111,008 125,982 157,108 165,472 183,367	

#### Number per 1,000 of Mean Population.

1931 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947	0·72 0·56 0·61 0·61 0·59 0·68 0·72 0·81 0·82 0·96 0·89	4·58 3·68 3·99 4·10 3·58 4·39 4·70 4·38 4·57 4·05 3·93 3·44	8-04 9-98 11-78 12-44 12-36 12-31 12-22 11-97 14-93 21-09 22-55 27-27	6·10 4·64 5·19 4·97 6·27 6·27 5·55 5·27 6·73 8·61 7·60 7·59	12·25 7·78 15·34 16·92 14·09 12·71 8·88 7·04 7·73 9·91 12·10 14·26	8-09 8-96 9-03 8-11 7-16 13-30 9-35 8-99 8-40 8-71 8-36 7-05	39·78 35·60 45·94 47·47 42·75 49·66: 41·42 38·46: 43·18 53·33 55·43 60·53

Convictions classified under the heading "other offences," consist mainly of breaches of administrative law, e.g., local government and suppression of gambling. A large proportion are minor breaches or are committed through inadvertence or in ignorance of the law, and are met with the infliction of a fine. As local and other administrative activities extend, such offences become more numerous. The number reached a peak in 1942, when many cases related to breaches of war-time regulations. There was a marked decline in 1943 and a further gradual decline to 1948, when the number, in proportion to population, was less than in any of the preceding ten years.

#### Coroners' Courts.

The office of Coroner was established in New South Wales by letters patent dated 1787, and is regulated by the Coroners Act, 1912, which consolidated previous laws.

Every stipendiary magistrate has the powers and duties of a coroner in all parts of the State, the Metropolitan Police District being under the jurisdiction of the City Coroner. In districts not readily accessible to magistrates, a local resident, usually a justice of the peace, is appointed coroner.

At the Coroner's discretion, inquiries are held into the causes of violent or unnatural deaths, of deaths in gaols or in mines and into the origin of fires causing damage or destruction to property. The Coroner may order any medical practitioner to attend at the inquest and may direct him to hold a post-mortem examination. On the evidence submitted, the Coroner is empowered to commit for trial persons adjudged guilty of manslaughter, murder or arson, and in such cases may grant bail.

In certain cases a jury of six persons may be empanelled to find as to the facts of the case, and on their verdict against any person he may be committed for trial. An inquest is held into the cause of every death occurring among prisoners in gaols and lock-ups; in such cases a jury of six is empanelled. Persons apprehended by the police subsequent to the decisions of coroners are charged in the Courts of Petty Sessions.

During 1948, 41 persons were committed for trial by coroners on charges of murder, 22 for manslaughter and 6 for arson.

The coroners held inquiries into the origin of 20 fires in 1948 and found that 8 fires were accidental, 7 were caused wilfully, and in 5 cases the evidence was insufficient to indicate the origin.

# Appellate Jurisdiction.

Generally speaking, appellate jurisdiction is exercised, in cases where appeals are authorised by statute, by Courts of Quarter Sessions from Magistrates' Courts, by the Supreme Court from District Courts and Magistrates' Courts, by the High Court of Australia from the Supreme Court, and (in certain cases) by the Privy Council from either of the two last-named courts. Appeal on points of law (usually by stating a case) may be made to the Supreme Court from special courts, e.g., Industrial Commission and Workers' Compensation Commission.

There is a Court of Criminal Appeal, presided over by Judges of the Supreme Court.

### Appeals to Quarter Sessions.

The right of appeal from Courts of Petty Sessions to Courts of Quarter Sessions lies against all convictions or orders by magistrates, excepting adjudication to imprisonment for failure to comply with an order for the payment of money, for the finding of sureties for entering into a recognizance, or for giving security. The Appeal Court rehears the cases, and decides questions of fact as well as of law.

#### Appeals to the Supreme Court.

Three or more Judges of the Supreme Court may sit in its various civil jurisdictions to hear appeals from District Courts or from decisions of justices in chambers, and to consider motions for new trials and kindred matters, or to hear appeals from orders and decrees made by one justice in the various jurisdictions of the court. One judge may sit in chambers to hear applications for writs of mandamus or prohibition, and to determine special cases stated by magistrates.

# Court of Criminal Appeal.

The Court of Criminal Appeal was established by the Criminal Appeal Act of 1912, which prescribes that the Supreme Court shall be the Court of Criminal Appeal, constituted by three or more Judges of the Supreme

Court as the Chief Justice may direct. Any person convicted on indictment may appeal to the Court against his conviction (1) on any ground which involves a question of law alone, or (2) with the leave of the Court, or upon the certificate of the judge of the court of trial, on any ground which involves a question of fact alone, or of mixed law and fact or any other ground which appears to the Court to be sufficient. With the leave of the Court, a convicted person may also appeal against the sentence passed on conviction. In such appeal, the Court may quash the sentence and substitute another either more or less severe. The Attorney-General may appeal to the Court against a sentence pronounced by the Supreme Court or any Court of Quarter Sessions.

In addition to determining appeals in ordinary cases, the Court has power, in special cases, to record a verdict and pass a sentence in substitution for the verdict and sentence of the court of trial. It may grant a new trial, either on its own motion or on application of the appellant.

# Appeals to the High Court of Australia.

Appeal to the High Court of Australia from judgments of the Supreme Court of New South Wales may be made in respect of any case by permission of the High Court, and as of right in cases involving a matter valued at £300 or more, or involving the status of any person under laws relating to aliens, marriage, divorce or bankruptcy, provided that appeal lay to the Privy Council in such case at the date of establisment of the Commonwealth. Such appeal may be made even if a State law provides that the decision of the Supreme Court is final.

An appeal to the High Court from the Court of Criminal Appeal may be made by special leave of the High Court.

### Appeals to the Privy Council.

Appeals from Australian Courts to the Crown-in-Council are heard by the Judicial Committee of the Privy Council by virtue of the royal prerogative to review decisions of all Courts of the Commonwealth, which can be limited only by Act of Parliament.

The cases which may be heard on appeal by the Judicial Committee were defined by Order-in-Council in 1909. Appeal may be made as of right from determinations of the Supreme Court involving any property or right to the value of £500 or more, and as of grace from the Supreme or High Court in any matter of substantial importance, including criminal cases in special circumstances. Except where the High Court consents, no appeal may be made to the Privy Council upon any question as to the limits inter se of the constitutional powers of the Commonwealth or States.

### COURTS OF COMMONWEALTH JURISDICTION.

By the Commonwealth Judiciary Act, 1903-1947, jurisdiction under Commonwealth laws is vested in the courts of the States within the limits of their several jurisdictions, as to locality, subject-matter, etc. Justices of the Peace, however, are excluded from exercising Commonwealth jurisdiction. Bankruptcy jurisdiction under Commonwealth legislation is conferred on the Supreme Court of New South Wales. A Commonwealth Court of Bankruptcy was constituted in 1928, and consists of one or two Judges appointed by the Governor-General by Commission.

There are two Commonwealth courts which possess certain jurisdiction, exclusive of State courts, viz., the High Court of Australia and the

Commonwealth Court of Conciliation and Arbitration. An account of the latter court is given in the chapter of this volume entitled "Industrial Arbitration".

The High Court of Australia, established in 1903, consists of a Chief Justice and six justices. Its principal seat is at Melbourne, Victoria, but sittings are held in the various States, and district registrars have been appointed in the capital cities. The jurisdiction of the High Court, which may be exercised in the first instance by one judge, is exclusive of the jurisdiction of the several courts of the States with regard to suits between States or between any State and the Commonwealth, matters arising directly under a treaty or matters in which a writ of mandamus or prohibition is sought against an officer of the Commonwealth or a federal court. The High Court has jurisdiction to hear certain appeals from the decisions of State courts.

#### BANKRUPTCY.

The State law in Bankruptcy was superseded by the Commonwealth Bankruptcy Act, 1924-1946, on 1st August, 1928.

The Commonwealth has been divided into bankruptcy districts which conform generally with State boundaries. Certain State courts have been vested with Commonwealth jurisdiction for bankruptcy purposes. In addition, a Commonwealth Court of Bankruptcy has been created, and this court exercises jurisdiction in the bankruptcy districts of New South Wales (which includes the Australian Capital Territory) and Victoria.

A Registrar and an Official Receiver for each bankruptcy district and an Inspector-General for the Commonwealth have been appointed.

Any person unable to pay his debts may voluntarily file his petition in the Court of Bankruptcy for the sequestration of his estate, or his creditors may apply for a compulsory sequestration, provided the debts to the petitioning creditors or creditor amount in the aggregate or singly to £50, or the debtor may surrender his estate under Parts XI or XII of the Bankruptcy Act. Provision is made for the postponement and payment by instalments of fees payable by a debtor on filing his own petition for relief against creditors pressing him in case of hardship. Upon the issue of an order for sequestration, the property of the bankrupt vests in the official receiver named in the order, and no creditor, to whom the bankrupt is indebted in respect of any debt provable in bankruptcy, has any remedy against the property or person of the bankrupt except by leave of the Court. After sequestration of his estate, a bankrupt may compound with his creditors or enter into a scheme of arrangement, subject to the approval of the Court.

The Court has power to decide questions of priorities and other questions of law affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Registrar in Bankruptcy has such duties as the Attorney-General of the Commonwealth directs, or as are prescribed, and he exercises powers of an administrative nature, delegated by the Court. He may hear debtors' petitions, make full examination of bankrupts or of persons suspected to be indebted to a bankrupt, and make sequestration orders on debtors' petitions. Stipendiary magistrates are appointed deputy registrars in country districts.

All sequestrated estates are vested in the Official Receiver, who is a permanent officer of the Commonwealth Public Service. His duties have relation to the conduct of a debtor and the realisation and administration of his estate. He acts under the general authority of the Attorney-General and is controlled by the Court.

Persons registered by the Court as qualified to act as trustees may be appointed by resolution of the creditors to be trustees of estates. In cases where a registered trustee under a deed of arrangement or composition, etc. (Parts XI and XII of the Bankruptcy Act) is removed from or vacates his office, the Official Receiver assumes the position and completes the administration of the estate unless the creditors appoint another registered trustee.

Particulars of the operations in New South Wales under the Bank-ruptcy Act of the Commonwealth are shown in the chapter "Private Finance".

#### Public Trustee.

The Public Trustee exercises administrative functions in regard to estates in terms of the Public Trustee Act, 1913-1942. The Public Trustee may act as trustee under a will, or marriage or other settlement; executor of a will; administrator under a will where the executor declines to act, is dead or absent from the State; administrator of intestate estates; and as agent or attorney for any person who authorises him so to act. In general, the Public Trustee takes out probate or letters of administration in the Probate Court in the ordinary way, but he may file an election to administer in that court in certain cases in testacy or intestacy where the gross value of the estate does not exceed £600. He may also act as manager, guardian or receiver of the estate of an insane or incapable person, or as guardian or receiver of the estate of an infant. He is a corporation sole with perpetual succession and a seal of office, and is subject to the control and orders of the Supreme Court.

Where the net value of an intestate estate does not exceed £200, the Public Trustee may pay the whole amount direct to the widow, and he may supply the share of an infant, not exceeding £500, to the maintenance of the infant. As attorney or agent, he may collect rents or interest on investments, supervise repairs, prepare taxation returns, and pay taxes, etc. Agents of the Public Trustee are appointed in towns throughout the State.

Operations are not conducted for profit; fees and commission are chargeable to provide for working expenses and may be supplemented, if necessary, by transfer from interest earnings on current accounts of estates. The accounts of the Public Trust Office are audited by the Auditor-General.

In addition to functions under the Public Trustee Act, the Public Trustee administers the funds of the Destitute Children's Asylum, the Matraville Soldiers' Settlement and the sale of land under the Local Government Act for the non-payment of rates. The Public Trustee has also the responsibility of administering the National Relief Fund of New South Wales.

The following is a summary of the transactions of the Public Trust Office during the last five years. Operations in respect of the National Relief Fund are not included.

		Year	ended 30th	June.	
Particulars.	1944,	1945.	1946.	1947.	1948.
Estates received for Administration No.	2,456	2,250	2,295	2,479	2,347
Trust Moneys— Amount Received £ Amount Paid £ Commission and Fees, etc.* £ Office Administration £ Unclaimed Money Paid into Treasury \$ Values of Estates in active Administration £	74,489 1,943	1,843,162 1,880,435 80,244 80,244 61,410 7,692,270	1,824,264 1,934,212 88,420 88,420 5,563 7,912,027	2,142,999 2,265;284 104,255 104,255 5,694 7,635,269	2,377,289 2,350,827 118,278 118,278 12,184 7,261,872

Table 942.—Public Trust Office—Transactions.

### REGISTRATION OF LEGAL DOCUMENTS, ETC.

The Registrar-General in New South Wales registers certain occurrences and transactions of special legal significance as prescribed by Acts of Parliament. Registrations are made of births, deaths and marriages; conveyances, transfers, leases, mortgages and other deeds or instruments evidencing title to land; dealings with land under the Real Property Act; liens on crops and wool, and stock mortgages; companies, business names and bills of sale; and instruments under the Newspapers and Printing and certain other Acts.

The registers and certain of the documents relating to registration in the Deeds and Land Titles Branches are usually available for inspection by the public. Fees are charged for registration and inspection. No fees are charged for registration of births, deaths and marriages, but fees are payable for certified copies of entries in and extracts from the registers, which are not available for inspection by the public.

The amount collected by the Registrar-General during 1948 was £304,777, of which £194,293 was collected by the Lands Titles Branch, £93,940 by the Deeds Branch, and £16,544 by the Births, Deaths and Marriages Branch.

REGISTRATION OF PATENTS, TRADE MARKS, DESIGNS AND COPYRIGHTS.

The registration of patents, trade marks, designs and copyrights devolves upon the Commonwealth authorities. Patents are granted under the Patents Act, 1903-1946, in respect of the Commonwealth of Australia, Norfolk Island, and the Territories of Papua and New Guinea. The term of a patent is sixteen years, subject to the payment of renewal fees, the first being due before the expiration of the fifth year of the patent and the remainder annually thereafter.

Under the Trade Marks Act, 1905-1948, a trade mark is registered for a period of fourteen years, but may be renewed from time to time on payment of the prescribed fee, and on proof of substantial use during the period of registration. Provision is made for the licensing of the use of trade marks by persons other than the registered proprietors.

<sup>\*</sup> Office Revenue.

Registration of a design under the Designs Act, 1906-1934, subsists for a period of five years, and may be extended for two further terms of five years each.

Copyright in a literary, dramatic, musical or artistic work or the performing right in a musical or dramatic work extends for the life of the author and fifty years after his death. The British Copyright Act, subject to certain modifications, is in force under the Copyright Act, 1912-1935.

It is provided in the respective Acts that application may be made to the High Court or the Supreme Court for the revocation of a patent, and rectification of the registers of trade marks, designs and copyright.

#### EXTRA-TERRITORIAL SERVICE AND EXECUTION—FUGITIVE OFFENDERS.

By the Service and Execution of Process Act of the Commonwealth, civil process commenced in any State of the Commonwealth may be served in any other State, and judgment obtained in any State may be enforced in any other State. In criminal proceedings, a warrant issued in one State for the apprehension or commitment of a person and endorsed by a Justice of the Peace in another State may be duly executed in the latter State, and is sufficient authority for the apprehension of the person named in the warrant.

Special arrangements concerning fugitive offenders as between different parts of the British Commonwealth are made in terms of the Imperial Fugitive Offenders Act, 1881 and 1915.

Extradition to foreign countries is governed by the Imperial Extradition Acts, 1870 to 1935, and the Extradition Act, 1903-1934, of the Commonwealth, or local Acts in pursuance of treaties concluded with the countries concerned by the Government of the United Kingdom, though, since 1930, the right of the Australian Government to enter into such treaties on its own account, subject to certain conditions, has been conceded.

# **POLICE**

The police force of New South Wales is organised under the Police Regulation Act of 1899-1944; it covers the whole State. The Commissioner of Police, subject to the direction of the Premier, is charged with the superintendence of police and is responsible for the organisation, discipline, and efficiency of the force. The Commissioner of Police may be removed from office for incompetence or misbehaviour by resolution of both Houses of Parliament. Superintendents and inspectors of police are appointed by the Governor as subordinates of the Commissioner. Sergeants and constables are appointed by the Commissioner, but such appointments may be disallowed by the Governor.

No person may be appointed constable unless he is at least 19 years and unider 30 years of age, of good character and reasonably educated. A high physical standard is required of recruits. Any person who has been convicted of a felony or is in other employment may not act as an officer of police.

Youths between 16 and 19 years of age may be appointed as police cadets, and a comprehensive course of training is provided for them. If satisfactory, they may be appointed as probationary constables on attaining the age of 19 years. At 31st December, 1948, there were 127 cadets in training.

Women police are recruited generally between the ages of 25 and 30 years, and are required to be of satisfactory physique and reasonable education. They perform special duties in plain clothes at places where young women and girls are subject to moral danger, and assist male police as required in criminal investigation and other duties. Women police also control traffic at school crossings and lecture school children on road safety. Thirty-three women police were employed at the end of 1948.

All police must retire at the age of 60 years, except the Commissioner for whom the age of retirement is 65 years.

Pension and gratuity rights accrue to officers who retire by reason of medical unfitness for duty or on attaining the retiring age. Where an officer is disabled or killed in the execution of his duty, an allowance may be paid to him or his dependants. Particulars of the pension fund are shown on page 948 of this volume.

The primary duties of the police are to prevent crime, to detect offenders and to bring them to justice, to protect life and property, to enforce the law, and to maintain peace and good order throughout the State. In addition, they perform many duties in the service of the State, e.g., they act as clerks of petty sessions in small centres, as Crown land bailiffs, foresters, mining wardens, inspectors under the Fisheries and other Acts, and they collect a large volume of statistical returns. In the metropolitan area and Newcastle the police regulate the street traffic. Their work in connection with motor transport is described in the chapter entitled "Motor and Qther Licensed Vehicles." An auxiliary section of special constables termed "parking police," consisting of partially disabled ex-servicemen, was established in 1946 for the enforcement of traffic parking regulations; parking police wear distinctive uniforms. There were 101 parking police at 31st December, 1948.

The police radio network permits wireless broadcasts to the police stations in Sydney and Newcastle, as well as two-way communication with the patrol cars operating in these cities and the police launches on both harbours. Direct wireless communication is maintained with the other capital cities of Australia.

## Strength of the Police Force.

Police stations in the State numbered 454 at the close of 1948. The strength of the police force, including cadets, women police, trackers, parking police, etc., was 4,458 at 31st December, 1948. A classification is shown below:—

Classification. 1939. 1943. 1944. 1946. 1947. 1945. General... 3.036 2.851 2,739 2,849 3.066 3.117 3.164 Criminal Investigation Branch 121 182 204 209 242 249 197 Others on detective work 387 397 224 252 250 256 241 Traffic ... 361 240 218 145 231 285 313 Water ... 17 23 21 28 Total of Foregoing 3,765 3,542 3,431 3,468 3,770 4,052 4,151 Cadets ... 128 121 152 194 172 129 127 Women Police 8 18 19 18 25 36 33 Matrons 4 4 4 4 Trackers and Cadet Trackers 12 20 18 17 19 21 18 Special Constables 6 30 28 30 26 25 22 Parking Police 101 Total 3,923 3,733 3,651 3,733 4,109 4,361 4,458

Table 943.—Police—Classification, 31st December.

The following statement shows for various years since 1931 the strength of the police establishment (exclusive of cadets, special constables, women police, matrons, trackers and parking police) in relation to the population:—

Table	944.—Police	Force	in	relation	to	Population.

At 31st Dec- ember.	Number of Police.	Inhabitants to each Policeman.	At 31st Dec- ember.	Number of Police,	Inhabitants to each Policeman.
1931	3,646	704	1945	3,468	840
1939	3,765	734	1946	3,770	780
1943	3,542	805	1947	4,052	742
1944	3,431	841	1948	4,151	738

The strength of the police force has been increased by 505 men since 1931, and at the end of 1948 there was about one police officer in New South Wales to every 738 inhabitants. There has been a considerable growth in the volume of administrative work done by the police apart from the extension of duties arising from the increase in the number of inhabitants.

#### Cost of Police Services.

A comparative statement of the annual cost of police services is shown below:—

	Payment	s from Consol	idated Reve	nue Fund.	Payments Transpo	<u> </u>	
Year ended 30th June.	Salaries.	Contributions to Superannuation Fund.	Other.	Total.	Contribu- tions to Super- annuation Fund.	Other.	Total Expendi- ture.
1938 1939	£ 1,102,309 1,097,043	£ 219,800 202,100	£ 347,446 352,918	£ 1,669,555 1,652,061	£ 44,100 44,100	£ 282,209 288,850	£ 1,995,864 1,985,011
$1940 \\ 1941 \\ 1942$	1,127,973	214,500	356,696	1,699,169	47,450	307,975	2,054,594
	1,131,334	218,500	348,394	1,698,228	47,450	314,725	2,060,403
	1,113,628	240,699	317,367	1,671,694	22,301	314,725	2,008,720
1943 $1944$ $1945$	1,220,890	192,550	315,135	1,728,575	47,450	284,025	2,060,050
	1,270,613	221,000	345,552	1,837,165	29,615	209,395	2,076,175
	1,231,444	236,000	380,661	1,848,105	29,615	209,395	2,087,115
1946	1,289,306	252,600	415,236	1,957,142	29,615	223,568	2,210,325
1947	1,500,626	183,500	525,995	2,210,121	37,242	299,038	2,546,401
1948	1,738,899	272,000	631 161	2,642,060	53,278	335,001	3,030,330

Table 945 .- Cost of Police Services.

Expenditure from funds administered by the Department of Road Transport, as shown above, relates to police services in the supervision and control of road traffic. Expenses under this head include salaries, cost of uniforms, contributions to the Police Superannuation Fund in respect of traffic police, etc.

# **PRISONS**

A prison may be established by proclamation of the Governor, at any premises prepared and maintained as a prison at the public expense. A Comptroller-General is appointed by the Governor for the direction of prisons and custody of convicted prisoners. Persons in custody not being prisoners under sentence for an indictable offence or adjudication of imprisonment for some offence punishable on summary conviction are held by the Comptroller-General for the Sheriff, as also are prisoners under sentence of death.

All prisons must be visited at least once a week by a stipendiary magistrate appointed to be "Visiting Justice," who may enter and inspect and report to the Minister of Justice upon any matter connected with the gaol as often as he deems necessary. Such justice may hear and determine complaints against prisoners and award a term of confinement to cell as punishment. Any judge of the Supreme Court may visit and examine any prison at any time.

At 30th June, 1948, there were 15 gaols in New South Wales. Six were classed as principal gaols, one as minor, six as special establishments and two as police gaols. The principal gaols were the State Penitentiary for men and the State Reformatory for women—both at Long Bay, Sydney—the Goulburn Reformatory, and the gaols at Parramatta, Bathurst and Maitland. Each of these gaols is used for a particular class of prisoners.

The State Penitentiary, Long Bay, is used for the detention of persons awaiting trial at metropolitan courts. The majority of prisoners convicted in the metropolitan area are lodged in the State Penitentiary in the first instance, the short sentence men being retained and those serving longer periods of imprisonment being drafted to country establishments. Facilities are provided at Long Bay for the observation and treatment of prisoners suffering from mental or physical defects. The State Reformatory is used for female prisoners of all classes. Special treatment is provided for first offenders at the Goulburn Reformatory, and prisoners convicted more than once are imprisoned at Bathurst and Parramatta.

The minor and police gaols are used for prisoners undergoing short sentences and for the detention of those who require special treatment apart from other long-sentence prisoners. The special establishments are the Afforestation Camps at Glen Innes, Oberon, and Mannus, the Emu Plains Prison Farm, Berrima Prison Camp and Grafton Gaol. At the Prison Farm, prisoners—usually first offenders under 25 years of age—are trained in farm work; at Glen Innes older men are employed on a pine plantation, and similar work is provided at the other afforestation camps for prisoners of the several classes; at Berrima, prisoners have almost completed the rebuilding of the gaol premises. At these establishments the conditions of gaol life are modified with the object of fitting the men to lead useful lives after release, and for this reason the prisoners sent to the camps are selected with discrimination. Prisoners guilty of serious misbehaviour in other gaols are sent to Grafton Gaol.

Police lock-ups are used for the detention of persons sentenced in the various districts for periods not exceeding fourteen days, whose removal to the established gaols would involve undue expense in consequence of the shortness of the term of imprisonment.

The prisoners are classified according to character and previous record, and the principle of restricted association is in operation.

Libraries in prisons contained 19,029 volumes at 30th June, 1948.

#### PRISONERS.

The number of gaol entries during various years since 1931 and the number of prisoners in gaol at the close of each year are shown below:—

	Number			Pris	soners under S	Sentence.					
Year ended	of Gaol Entries		Received	during Y	ear.	ar. In Prison at end o					
30th June,	during Year.	Males.	Females.	Total.	Per 10,000 of Population.	Males.	Females.	Total.	Per 10,000 of Population		
1931 1939 1943 1944 1945 1946 1947 1948	12,731 10,636 9,919 9,699 9,874 10,562 12,199 10,969	8,863 7,642 6,095 5,976 6,291 6,770 7,993 7,238	1,264 753 871 923 886 896 993 867	10,127 8,395 6,966 6,899 7,177 7,666 8,986 8,105	39.8 30.7 24.5 24.0 24.7 26.1 30.3 27.0	1,628 1,314 1,419 1,578 1,714 1,598 1,758 1,540	63 50 139 161 142 86 89 47	1,691 1,364 1,558 1,739 1,856 1,684 1,847 1,587	6.8 5.0 5.5 6.0 6.4 5.7 6.2 5.2		

Table 946.—Prisons-Numbers of Prisoners.

The number of gaol entries shown in the table includes convicted persons, persons awaiting trial, debtors, naval and military offenders, and persons on remand, some of whom were received and counted several times.

The number of persons received into prison under sentence in 1947-48, counted once each time received, was 8,105, viz., males 7,238 and females 867, showing a decrease of 755 in males and 126 in females as compared with the preceding year. The number of prisoners received into gaol under sentence per 1,000 of the population was 2.7 in 1947-48.

The number of distinct persons received into gaol under sentence in 1947-48 was 5,166, of whom 405 were women.

## Prisoners—Age Distribution.

The age distribution of persons received into prison under sentence (counted each time received) in 1938-39 and the last six years is shown below:—

Age Group.		Prisone	rs received d	luring year e	ended 30th J	une	
Age droup.	1939.	1943.	1944.	1945.	1946.	1947.	1948.
21 to 24 years 25 to 29 years 30 to 39 years 40 to 49 years 50 years and over	 785 882 1,059 1,919 2,074 1,664	992 796 770 1,262 1,420 1,718	978 857 853 1,266 1,381 1,560	931 879 808 1,353 1,500 1,706	1,058 1,033 911 1,472 1,518 1,674	849 1,095 957 1,605 1,935 2,351	632 835 905 1,522 1,762 2,447
Total	 8,395	6,966	6,899	7,177	7,666	8,986	8,105

Table 947.-Prisoners-Ages of Prisoners Received.

PRISONS 1115

Prisoners under the age of 25 years, counted each time received into gaol during the year, represented 19.9 per cent. of the total in 1938-39 and 18.1 per cent. in 1947-48.

#### Prisoners—Sentences.

The sentences imposed on 62 per cent. of the male prisoners, and on 81 per cent. of the females received during 1947-48, did not exceed one month. Of the total number committed to gaol, 7,106 or 88 per cent., were received from lower courts; 73, or 1 per cent., from courts martial and Commonwealth courts, and 926, or 11 per cent., from higher courts. The number of persons committed to prison in default of payment of fines was 4,055.

Particulars of the sentences imposed on prisoners received into gaol during each of the last six years are as follows:—

Sentences.		1942–43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
One week and under		2,409	2,270	2,482	2,567	3,435	3,494
Over one week to one month		1,471	1,349	1,523	1,791	2,066	1,670
Over one month to six months		1.947	1,948	1,707	1,900	2,234	1,515
Over six months to one year		339	538	447	421	394	424
Over one year to two years		284	281	489	375	268	340
Over two years to five years		142	141	116	105	141	215
Over five years to ten years		9	16	12	20	27	27
Over ten years		2 3	1	1	1	11	7
Governor's pleasure		3	1	1	4	8	10
Life		2	2 2	9		11	8
Death		6	2	4	2	5	11
Term not specified		352	350	386	480	383	384
Total		6,966	6,899	7,177	7,666	8,986	8,105

Table 948.—Prisoners—Sentences.

The daily average number of prisoners under sentence during the year ended 30th June, 1948, was 1,808.

The prisoners remaining in gaol under sentence on 30th June, 1948, numbered 1,587, including 85 serving life sentences, and 39 who had been declared habitual criminals to be detained for an indefinite period. The prison figures exclude 4 habitual criminals in mental hospitals.

Capital punishment may be inflicted in New South Wales, but executions are unusual. From January, 1918, to June, 1949, there were only seven executions—two in 1924, one in 1932-33, two in 1935-36, and one in each of the years 1937-38 and 1939-40.

The system of indeterminate sentences was introduced in terms of the Habitual Criminals Act, 1905, which empowers a judge to declare as an habitual criminal any person convicted for the third or, in some cases, the fourth time of specified criminal offences. Since 1924 the system has applied to persistent offenders convicted summarily, as well as to those convicted on indictment. In the cases first mentioned, a stipendiary magistrate may direct that an application be forwarded to a Judge of the Supreme Court or a Court of Quarter Sessions to have the prisoner declared an habitual criminal.

The habitual criminal serves the definite sentence imposed for the offence of which he has been convicted, and then is detained for an indefinite term until he is deemed fit for freedom. The indeterminate stage is divided into three grades—intermediate, higher, and special.

The cases of all habitual criminals are considered at quarterly intervals by a consultative committee appointed for the purpose, and each case is brought annually under the notice of the Minister of Justice. Releasees are required to report to the authorities at stated intervals during a period specified in the license.

The Habitual Criminals Act prescribes that while under detention as an habitual criminal every prisoner should work at some useful trade and receive a share of the proceeds of his work. As the majority of these persons have not been trained in any branch of skilled labour, facilities are afforded them, while serving the definite term, to acquire training in some remunerative employment.

Nineteen men were declared habitual criminals during the year ended 30th June, 1947, and twenty-eight in the following year. At 30th June, 1948, there were under detention 23 men who had not yet completed the definite period of their sentence and 39 men who had passed into the indeterminate stage.

Among the special classes of prisoners are those known as "maintenance confinees," who have been imprisoned for disobeying orders of the courts for the maintenance of their wives and children. Such prisoners are required to work, and the value of the work, after deductions towards.the cost of the prisoner's keep, is applied towards the satisfaction of the orders for maintenance, etc.

Maintenance confinees received into gaol numbered 368 in 1946-47 and 347 in 1947-48; the number in gaol on 30th June, 1948, was 92.

# Birthplaces and Religions, of Prisoners.

Of the prisoners received under sentence during the year ended 30th June, 1948, 66 per cent. were natives of New South Wales, 15 per cent. were born in other States of the Commonwealth, 14 per cent. came from the United Kingdom, and the remainder, 5 per cent., were chiefly other Europeans.

Particulars of birthplaces of prisoners received in 1947-48 and religions of prisoners under sentences at 30th June, 1948, are shown in the following table:—

Birthplace.		eived U nce, 194		Religion,			Serving Sentences, 30th June, 1948.			
Diffiplace.		Males.	Fe- males.	Per- sons.	Hongrom			Males.	Fe- males.	Per-
New South Wales		4,718	599	5,317	Church of England			601	20	621
Other Australian States		1,073	163	1,236	Roman Catholic			497	20	517
New Zealand		127	22	149	Methodist			69	1	70
United Kingdom		1,048	76	1,124	Presbyterian	`		51	3	54
Europe, Other		143	4	147	Other Christian			27	3	30
Asia		53	1	54	Non-Christian			9		9
America		54		54	Not stated			286		286
Other Countries	•••	22	2	24						
Total		7,238	867	8,105	Total			1,540	47	1,587

Table 949.—Prisoners—Birthplaces and Religions.

### Remission of Sentences.

Special provision is made by the Crimes Act, 1900, and its amendments, for lenience towards any person convicted of a minor offence and sentenced to imprisonment, provided such person has not previously been convicted of an indictable offence. The term "minor offence" includes offences punishable summarily and any other offence to which the court applies these provisions of the Act. In such cases the execution of the sentences is suspended upon the defendant entering into recognizance to be of good behaviour for a fixed period, which may not be less than twelve months.

The hearing of charges against female first offenders, except cases of larceny in retail shops, must be in private unless the defendant elects to be heard in open court, and reports of such cases may not be published.

By good conduct and industry, prisoners may gain the remission of part of their sentences. The regular rate of remission for good conduct varies from one-quarter of the sentence for first offenders to one-sixth for incorrigible criminals; prisoners sentenced to three months or less are usually detained for the full period. Many prisoners are released on license. The licenses operate for the unexpired portion of the sentence, and a breach of the conditions of release may be punished by the cancellation of the license and recommittal to gaol for the balance of the sentence.

#### COST OF MAINTENANCE OF LAW AND ORDER.

The following table shows particulars of expenditure by the State on the maintenance of law and order in New South Wales during 1938-39 and the last four years, as well as the amount of fines and fees and returns from prisoners' labour paid into Consolidated Revenue.

Table 950.-Cost of Maintenance of Law and Order.

		Year	ended 30th	June.	
Particulars.	1939.	1945.	1946.	1947.	1948.
	£	£	£	£	£
	EXPENDIT	URE.			
Salaries, etc., of Judiciary Administration—Department of Attorney-	78,953	67,806	63,794	70,115	77,039
General and Justice	551,724	550,742	604,785	730,147	840,128
Police (including Traffic Services)	1,985,011	2,087,115	2,210,325	2,546,401	3,030,339
Prisons Custody and Care of Delinquent Children	264,322 95,059	377,341 128,196	394,075 135,728	398,936 148,098	501,103 172,290
Custody and Care of Definquent Children		120,100	100,720	140,000	
Total Expenditure	2,975,069	3,211,200	3,408,707	3,893,697	4,620,899
	RECEIPTS.				
Fines and Forfeitures	69,214	107,233	134,523	183,326	199,342
Fees Proceeds of Prison Industries	366,814	259,411	317,474	420,654 92,919	431,096 109,717
Commonwealth Payments for Maintenance	64,278	89,297	93,895	92,919	109,714
of Prisoners in Gaol	473	16,535	23,620	9,711	3,928
Other	11,141	2,599	3,234	2,634	5,592
Total Receipts	511,920	475,075	572,746	709,244	749,575
Net Expenditure	2,463,149	2,736,125	2,835,961	3,184,453	3,871,224

Traffic license fees are not included as receipts in the table above, though the cost of police supervision and control of traffic is paid from the Road Transport funds out of the proceeds of such fees (see page 654).

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