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TWENTY-FIFTH ISSUE.



BY AUTHORITY.

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ERRATUM.

On page 509, in paragraph preceding the "Area under Cultivation" table,
read "1895-6-1904-5" in place of "1894-5-1903-4."

PREFACE.

THIS is the twenty-fifth issue of the Victorian Year-Book; and the information in regard to Victoria is brought up to the end of 1904. It is recognised that statistics are not of much practical use in every-day affairs unless they are up to date, and published as early as possible after the close of the latest period to which they refer. As each part of the work, as indicated in the table of contents, was completed, a number of copies were struck off and distributed, thus disseminating the information at the earliest possible date. On account of the early publication of these parts, some of the information referring to the other States necessarily referred to the year 1903, and many of the comparisons made were for that and previous years.

In the part relating to Constitution and Government, a few brief remarks have been added, detailing the history of the early discovery and settlement of the Australian continent; also a chapter on the Physical Geography, Geology, and Fauna of Victoria, by T. S. Hall, Esq., M.A., of the Melbourne University; and one on the Flora of Victoria, by G. Weindorfer, Esq., Chancellor of the Austro-Hungarian Consulate. The development of the Constitution of the State from the time of separation from New South Wales to the establishment of the Commonwealth is traced, and the present Constitution is given. The principles of local government in Victoria are also described.

The second part deals with the population of Victoria and the other States, estimated according to a method agreed upon at a recent Conference of Statists, and compared with previous estimates and Census enumerations. The population of Victoria for 1904 has only been increased by 1,450, *i.e.*, the natural increase of the year, 15,370, less the loss by emigration, 13,920.

The part dealing with the social condition of the people includes information regarding the Melbourne University and affiliated colleges, and particulars of the system of national education, with an interesting report by F. C. Eddy, Esq., M.A., Inspector of Schools, on the Junior Cadet System of the State. Some important statistics relating to defective children and their education are also added. Public libraries, charities, and cognate matters complete this portion.

In the part relating to Finance, information is given in regard to revenue and expenditure, trust funds, Federal, State, and local taxation, railway deficits, cost of public instruction, loan expenditure; public debts, both general and local; and municipal finance.

Matters relating to wealth and the investment thereof will be found under the head "Accumulation." The capital value of rateable property continues to show increase since 1900, fairly distributed over both urban and rural lands. With the aid of the municipal returns an estimate is given of the unimproved or ground value of the lands of the State. The condition of Victorian banking business is also indicated, and the relative values placed upon various representative Colonial stocks by the British investor are shown by a computation of the interest return to the investor, based upon the latest market quotations.

The municipal statistics are dealt with separately. The principal particulars given relate to ratepayers and rateable property of the various municipalities, their revenue and expenditure, assets and liabilities, and loan receipts and expenditure. Detailed information is furnished respecting a few of the most important of the municipalities, and of the Melbourne Harbor Trust, the Metropolitan Board of Works, and the Fire Brigades Boards.

Under "Law, Crime, &c.," the constitution of the High Court of Australia is set out, and the chief features of the Commonwealth Judiciary Act, followed by a brief exposition of the legal system of Victoria. The decline in litigation, pointed out in previous Year-Books, still continues.

In "Vital Statistics," the law relating to marriage and registration is summarized. There was no further decline in the birth rate of 1904. The rate in Victoria is below that obtaining in the other States of Australia, and New Zealand. The whole question is thoroughly discussed under the various headings of birth, death, and infantile mortality rates.

The part relating to production deals with land settlement, water supply, irrigation, agricultural, dairying, and pastoral industries, mining, and manufactures. The lands available for occupation at the end of the year are shown under each county, the conditions under which they can be obtained being fully set out. Details are furnished respecting village and closer settlement; also particulars of the various institutions connected with agricultural education. Several informative papers are also introduced treating

on matters of interest to producers. For the past year, 3,000 copies of this part have been procured and issued direct to leading agriculturists, pastoralists, manufacturers, and others interested in the producing industries of the State. It is hoped, by thus bringing directly under the notice of persons largely connected with primary production the latest information in regard thereto, to secure from them intelligent and liberal assistance in the future work of collection. The large issue of this special part also enables me to place before the public useful knowledge in regard to the resources of the State at the earliest possible moment.

The trade of Victoria, shown in part "Interchange," still continues in a satisfactory condition. It is a matter for regret that suitable arrangements are not yet completed with the central Government for the tabulation and publication of the trade statistics of the State. Generally, however, the figures for 1904 show that the conditions of Victorian trade have entirely altered since the introduction of the Federal Tariff. Consequent upon the establishment of Inter-State free-trade, Melbourne would appear to be gradually regaining its distributive trade.

A complete lexicographical index precedes the work.

W. McLÉAN,
Government Statist.

Office of the Government Statist,
Melbourne, 17th October, 1905.

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VICTORIAN YEAR-BOOK, 1904.

INTRODUCTORY REMARKS.

Records of early discoveries show a lamentable ignorance of the geography of the Southern and Indian Oceans, since the venturesome sailors who first attempted to explore these seas were not skilled in cartography, and their maps, or the maps plotted from their verbal narratives, were of necessity crude and inaccurate. A map published with the account of Frobisher's voyages in 1578 encircles the whole Southern Pole, with a vast stretch of land, separated from South America by the Strait of Magellan, and stretching further north in those regions which we now know as Australia, indicating a belief and an assurance in the existence of our continent. It is an interesting fact that in Burton's *Anatomy of Melancholy*, published in 1621, references are made to this land as *Terra Australis Incognita*.

History of
early
discoverers
and
settlers.

Frobisher reports that the Portuguese and Spaniards in their voyages to the East Indies saw and touched on the north edge of the southern continent. In 1526 the trading vessels of the former nation reached New Guinea, though their masters were unaware of the existence of the Strait which separates it from Australia. After the discovery of the sea route to India by Vasco da Gama in 1497, the Portuguese began to trade with the East Indies, and were followed by the Spaniards and Dutch, the latter largely replacing the Portuguese traders in the East.

Frobisher.

In 1606 the Dutch Governor of the Moluccas, De Houtman, dispatched an exploring party, who surveyed the east coast of the Gulf of Carpentaria, but the report of Captain Jansen, the leader of the expedition, was unfavorable, and it was many years before the Dutch again visited this territory, which at the time they believed formed part of New Guinea.

De Houtman
and Jansen.

De Quiros.

De Quiros, a Portuguese in the service of Spain, made strenuous efforts to reach the Great South Land, as he was convinced that the rumours concerning its existence were true. In December, 1605, he set sail to discover it, with Torres as captain of the second vessel of his small fleet, but his efforts proved unsuccessful. De Quiros may be regarded as the last of the Southern European explorers, whose work was now taken up by the Dutch.

Dutch exploration.

In 1595 the Dutch East India Company was formed, with headquarters at Batavia, whence ten years later Jansen was sent on a voyage of discovery, when he surveyed the south coast of New Guinea, and the east coast of Cape York Peninsula, without, however, discovering the passage between the two.

Carstens and Poole.

In 1623 Carstens coasted part of the northern shores, and again, in 1636, Poole followed the coast line of the whole of the Gulf of Carpentaria.

Van Diemen and Tasman.

In 1642 Anthony Van Diemen, Governor of the Dutch East India Colonies, selected Abel Jansen Tasman to make explorations in the South Seas. On 24th November, 1642, the west coast of Tasmania was discovered. Rounding this and the south coast, Tasman entered Storm Bay and Frederick Henry Bay, where he hoisted the Dutch flag. Naming the locality Van Diemen's Land, he sailed eastwards, and discovered New Zealand, returning afterwards to Batavia. In the following year Tasman surveyed portions of the north and west coasts of Australia, from the Gulf of Carpentaria to Sharks Bay.

Dampier.

In January, 1688, New Holland (so named by the Dutch) was visited near Roebuck Bay by Dampier, the first Englishman who sighted our shores. The description of his voyages includes his opinions respecting Australia and the people he found there, as well as of its flora and fauna. He was selected in 1699 to make further exploration of the place, to ascertain whether the land was a continent or a group of islands. He visited Sharks Bay, coasting northwards 9,000 miles, and then returned to England. His unfavorable report concerning the country suspended British exploration for many years.

Cook.

That our continent ever became a portion of the British Empire is due to the enterprise, skill, and courage of Captain James Cook. In 1768 the British Government sent a scientific expedition, under his command, to Tahiti, with permission to undertake exploration in the South Seas. Cook first visited New Zealand, and, sailing westward, land was sighted on 19th April, 1770, by Lieutenant Hicks, at a point which has since borne his name, on the Victorian coast. Cook sailed northwards, and, after seven or eight days on the water,

landed at Botany Bay, and further north at other places on the east coast, passed through Torres Strait, and, having thus demonstrated the fact that Australia was an island (although believed to be joined to Van Diemen's Land), returned home.

Cook's description of Botany Bay was so favorable that in 1787 Phillip. the British Government despatched Captain Arthur Phillip, in charge of a squadron of eleven vessels, to found a penal colony in Australia. Finding Botany Bay, which he entered on the 20th January following, unsuitable for settlement, he sailed northward to Port Jackson, where he formally took possession of the country on 26th January, 1788, in the name of His Majesty King George III.

The first landing effected in Victoria was in 1797, from a vessel Clarke. wrecked on Furneux Island, in Bass' Strait. Mr. Clarke, the supercargo, and two sailors, out of a total of seventeen, reached Sydney overland, and these were probably the first white men who landed on Victorian shores.

Notable discoveries by sea were afterwards made by Flinders, Flinders, Bass, Grant, Murray. Bass, Grant, Murray, and others, the former of whom sailed through the strait separating Australia from Van Diemen's Land, and circumnavigated the latter island, thus demonstrating it to be an island. In 1802 Port Phillip Bay was discovered by Lieutenant Murray, sent from Sydney in the *Lady Nelson*, to survey the south coast.

The first attempt to colonize Victoria, then known as the territory Collins. of Port Phillip, was made in 1803 by a penal expedition under Captain Collins, who arrived on 7th October, and landed near the present site of Sorrento. Here he remained some months, and, deeming the place unsuitable, transferred his company to Van Diemen's Land.

In 1824 the explorers, Hume and Hovell, travelled overland from Hume and Hovell. Sydney to Port Phillip, and on the journey discovered, on 16th November, the Murray River, called by them the Hume. On 3rd December they crossed the Goulburn River, which they called the Hovell, and on 16th December they reached that part of Port Phillip Bay called Corio Bay.

In 1826 an attempt was made to establish a convict settlement at Westernport Settlement. Westernport, near the site of the present township of Corinella. This was afterwards abandoned.

In 1836 another overland expedition from Sydney was undertaken by Sir Thomas Mitchell, who, after crossing the Murray, pursued his journey through the Loddon district to the River Glenelg, and finally to Portland Bay, where the first permanent settlement in Victoria had Mitchell, Dutton, Henty, Batman, Fawcner.

already been established in 1832 by William Dutton, and a year afterwards by Edward Henty. Port Phillip was also settled from Tasmania in June, 1835, the leader of the expedition being John Batman. Another party was also organized in Tasmania by John Pascoe Fawkner, which landed in Melbourne in August, 1835.

Melbourne.

On the site selected by Batman afterwards arose the present capital of the State, which, under the name of Greater Melbourne, now comprises the cities of Melbourne, South Melbourne, St. Kilda, Footscray, Fitzroy, Collingwood, Hawthorn, Richmond, and Prahran; the towns of Malvern, Brighton, Port Melbourne, Williamstown, North Melbourne, Essendon, Brunswick, Northcote, Caulfield; the boroughs of Kew, Flemington, Kensington, and Oakleigh; the shires of Coburg, Preston, Camberwell, and Boroondara; and parts of the shires of Moorabbin, Mulgrave, Nunawading, Doncaster, Templestowe, Heidelberg, Whittlesea, Epping, Broadmeadows, Keilor, Braybrook, Wyndham, and Eltham. The total area of Greater Melbourne is 163,480 acres, of which 5,322 acres are reserved as parks and gardens. At the census of 1901 there were 97,653 dwellings, containing 538,569 rooms, and housing 494,167 persons.

Port Phillip district.

Rapid progress was made by the new settlement, which up to 1851 formed a part of New South Wales, under the name of Port Phillip. On the 1st July of this year the Port Phillip district was erected into a separate Colony, and called Victoria, after Her late Most Gracious Majesty.

GOLD PRODUCTION.

Gold.

An important element in the development and prosperity of the new Colony was the discovery of gold, which took place in 1851. The precious metal was first discovered at Clunes, then at Anderson's Creek, and soon after at Buninyong and Ballarat, afterwards at Mount Alexander, and eventually at Bendigo. Large and important fields were subsequently opened up in the districts around Ararat, Stawell, Beechworth, and Maryborough, and in Gippsland. The discovery brought about a large immigration from many parts of the world. All persons were allowed to dig for gold on payment of a licence-fee of £1 10s. per month, afterwards reduced to that amount per quarter. In the early days the diggers found no difficulty in paying this fee, as they were not very numerous, and were generally successful. As time went on, however, the gold-fields population increased largely, many men were unsuccessful, and the payment of the fee became burdensome. The mode of collecting it was objectionable. The outcome of the whole matter was dissatisfaction and discontent, which culminated in a riot at Ballarat towards the close of 1854, when the diggers erected a stockade at Eureka, and set the authorities at defiance. Troops were despatched to Ballarat, and the disturbance was speedily quelled. A Royal Commission was subsequently appointed, who made recommendations for the removal of the licence-fee, and for other concessions, the carrying out of which ultimately restored peace and harmony.

Since its discovery, the quantity of gold recorded for Victoria up to the end of 1904 is 67,557,353 ounces, valued at £269,970,746, this being slightly more than half the quantity recorded for the whole of Australia.

WOOL PRODUCTION.

Important as was the discovery of gold in aiding the early development of the Colony, wool production has been hardly less notable. It is to the Tasmanian flocks of sheep that the best Victorian stock owes its origin. The original Henty flock was formed at Sussex, England, towards the close of the eighteenth century, and brought by members of the family to Tasmania, whence it was transferred to Portland, at the time Edward Henty settled there. Good Merinoes were also overlanded from the Camden flock, established in New South Wales by Captain Macarthur in 1797, with Merinoes imported from England. This strain has been preserved pure in Victoria. The first official return of sheep in this State was in 1836, when the number was 41,332. At the end of 1842 the number recorded for the Port Phillip district was 1,404,333. The herds increased year by year, until at the census of 1891 the number was 12,692,843, which, owing to dry and disastrous seasons between that year and 1901, decreased to 10,841,790.

Wool was first exported in 1837, the quantity being 175,081 lbs., valued at £11,639; in the following year 320,383 lbs., valued at £21,631, were exported; in 1839, 615,603 lbs., valued at £45,226; in 1840, 941,815 lbs., valued at £67,902; and in 1841, 1,714,711 lbs., valued at £85,735.

Soon after this time the figures of the export trade of wool from Victoria include small returns from New South Wales; but it was not until 1864 that wool to any considerable extent was exported from that Colony through Victoria. In 1862 and in 1863 the export from Victoria was about 25,000,000 lbs.; in 1864 it was nearly 40,000,000 lbs.; the increase being mainly derived from the Riverina district, which was placed in communication with Melbourne by means of the Echuca railway. Prior to 1890 no returns were prepared to show the average weight of fleeces. Since that year, however, records have been kept, and the average (sheep and lambs) for the whole period may be put down at 5 lbs. 7½ oz., and this may be taken as an indication of the suitability of Victoria in soil, climate, and natural pasturage for sheep-breeding.

GENERAL PROGRESS.

The following table has been prepared to illustrate the advance made by the Colony since 1842, the year of the introduction of representative government into New South Wales, which then included the Port Phillip district. The years 1850 and 1855 have been chosen—the former as being the year immediately preceding the separation of the Colony from New South Wales, and the latter the date of

the introduction of responsible government for Victoria. The subsequent years are census years:—

STATISTICAL SUMMARY OF VICTORIA.

	1842.	1850.	1855.	1861.	1871.	1881.	1891.	1901.
Population, 31st December	23,799	76,162	364,324	541,800	747,412	879,886	1,157,678	1,210,882
Revenue £	87,296	259,433	2,728,656	2,592,101	3,734,422	5,186,011	8,343,588	7,712,099
Expenditure from Revenue £	124,631	196,440	2,612,807	3,092,021	3,659,534	5,108,642	9,128,699	7,672,780
Public Debt .. .. . £	..	..	480,000	6,345,060	11,994,800	22,426,502	43,638,897	49,546,275
Land in cultivation acres	8,124	52,341	115,135	439,895	937,220	1,821,719	2,687,575	3,810,413
Live Stock—Horses No.	4,065	21,219	33,430	84,057	181,643	278,195	440,696	392,237
" Cattle "	100,792	378,806	534,113	628,092	799,509	1,286,677	1,812,104	1,602,384
" Sheep "	1,404,333	6,032,783	4,577,872	6,239,258	10,002,381	10,267,265	12,928,148	10,841,790
" Pigs "	..	9,260	20,686	43,480	177,447	239,926	286,780	350,370
Imports—Value £	277,427	744,925	12,007,939	13,532,452	12,341,995	16,718,521	21,711,608	18,927,340
Exports—Value £	198,783	1,041,706	13,493,338	13,828,606	14,557,820	16,252,103	16,006,743	18,646,097
Railways open miles	..	..	..	214	276	1,247	2,764	3,229
Telegraph wire .. .. . "	..	..	..	2,586	3,472	6,626	13,989	15,356
Postal business—Letters No.	97,490	381,651	2,990,992	6,109,929	11,716,166	26,308,347	62,526,448	83,973,499
" Newspapers "	147,160	381,158	2,349,656	4,277,179	5,172,970	11,440,732	22,729,005	27,125,251
Savings Bank Deposits £	..	52,697	173,000	582,796	1,117,761	2,569,438	5,715,687	9,662,006

NOTE.—In a few instances in the earlier years, where it is not possible to give figures for the exact date or period shown, those for the nearest dates or periods are given.

The population of the State at the end of 1842 was 23,799; and at the end of 1901 it had increased to 1,210,882. Prior to 1851, the net immigration was 64,545; during the decennial period, ended 1861, it was 400,045; in that ended 1871 it was 41,789; in that ended 1881 there was a loss of 15,322 by emigration; between 1881 and 1891 there was an increase of 116,950; but during the period 1891-1901 there was a loss of 111,531, making a total gain by immigration up to the census of 1901 of 496,476.

During the period 1842-1901, the revenue steadily increased from £87,296 to nearly 7 $\frac{3}{4}$ million pounds. There was no public debt until after separation. In 1855, the State indebtedness was £480,000, which steadily increased until, in 1901, it reached £49,546,275. The land in cultivation in 1842 was slightly over 8,000 acres; it now amounts to close upon four million acres; in the number of horses, cattle, and pigs there have been large increases. The value of imports in 1842 was £277,427; in 1901 it was nearly nineteen million pounds. Exports amounted to £198,783 in 1842; and in 1901 to nearly 18 $\frac{3}{4}$ million pounds. No railways or telegraphs were in existence up to the end of 1855; in 1861 there were 214 miles of railways open, and 3,229 miles in 1901. 2,586 miles of telegraph wires had been erected up to 1861, 15,356 miles up to 1901. Postal business in letters and newspapers shows a large increase; and the deposits in savings banks rose from £52,697 in 1850 to £9,662,006 in 1901.

GEOGRAPHICAL POSITION, AREA, AND CLIMATE.

Victoria is situated at the south-east extremity of the Australian continent, of which it occupies about a thirty-fourth part, and contains about 87,884 square miles, or 56,245,760 acres. It is bounded on the north and north-east by New South Wales, from which it is separated by the River Murray, and by a right line running in a south-easterly direction from a place near the head-waters of that stream, called The Springs, on Forest Hill, to Cape Howe. On the west it is bounded by South Australia, the dividing line being about 242 geographical miles in length, approximating to the position of the 141st meridian of east longitude, and extending from the River Murray to the sea. On the south and south-east its shores are washed by the Southern Ocean, Bass's Straits, and the Pacific Ocean. It lies between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. Its extreme length from east to west is about 420, its greatest breadth about 250, and its extent of coast-line nearly 600 geographical miles. Great Britain, exclusive of the islands in the British Seas, contains 88,309 square miles, and is therefore slightly larger than Victoria.

Area of
Victoria.

The southernmost point in Victoria, and in the whole of Australia, is Wilson's Promontory, which lies in latitude 39 deg. 8 min. S., longitude 145 deg. 26 min. E.; the northernmost point is the place where the western boundary of the State meets the Murray,

latitude 34 deg. 2 min. S., longitude 140 deg. 58 min. E., the point furthest east is Cape Howe, situated in latitude 37 deg. 31 min. S., longitude 149 deg. 59 min. E.; the most westerly point is the line of the whole western frontier, which, according to the latest correction, lies upon the meridian 140 deg. 58 min. E., and extends from latitude 34 deg. 2 min. S. to latitude 38 deg. 4 min. S., or 242 geographical miles.

Climate.

From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other State upon the Continent of Australia. In the forty-seven years ended with 1904, the maximum temperature in the shade recorded at the Melbourne Observatory was 111.2 deg. Fahr., viz., on the 14th January, 1862; the minimum was 27 deg., viz., on the 21st July, 1869; and the mean was 57.4 deg. Upon the average, on four days during the year, the thermometer rises above 100 deg. in the shade; and, generally, on about three nights during the year, it falls below freezing point. The maximum temperature in the sun ever recorded (*i.e.*, since 1857) was 178.5 deg., viz., on the 4th January, 1862. The mean atmospheric pressure, noted at an Observatory 91 feet above the sea-level, was, in the forty-seven years ended with 1904, 29.94 inches; the average number of days on which rain fell was 132, and the average yearly rainfall was 25.61 inches.

PHYSICAL GEOGRAPHY, GEOLOGY, AND FAUNA OF VICTORIA.

By T. S. Hall, Esq., M.A. (University of Melbourne).

PHYSICAL GEOGRAPHY.

In shape, Victoria is roughly triangular, its breadth from north to south along its western border being about one-half its length from east to west. The highlands also form a triangle, but in this case the greatest north and south measurement is in the east, while the base stretches nearly to the western boundary. This area of high land attains its greatest elevation in the east, and gradually sinks towards the west. The elevated region consists of palæozoic, and perhaps older rocks, of various ages, with, in a few cases, as at Dargo High Plains, and at Bogong High Plains, patches of older-tertiary basalts.

There are thus constituted two main drainage areas. A series of rivers flows northwards from the highlands, forming the Murray and its southern tributaries, while another series flows southwards to the sea. At the western end the Glenelg taps streams which arise both on the northern and the southern slopes. The water-parting between the north and the south flowing streams is spoken of as the Main Dividing Range, and along its course are some of the highest mountains of the State, as Mount Cobberas 6,025 feet, Mount Hotham 6,100 feet, and several others nearly as high. The average elevation of the Divide is about 3,000 feet. The highest mountains in Victoria lie to the north of the water-parting,

namely, Mount Bogong, 6,508 feet, and Mount Feathertop, 6,303 feet. On the higher mountains snow occasionally lies in sheltered localities throughout the year, but we have no permanently snow-clad mountains in Australia. The Divide, which is of considerable geological age, forms a well-marked boundary between two distinct zoological areas. The animals to the north are allied to those of Central Australia, while those to the south are almost identical with the Tasmanian.

The strike of the palæozoic rocks is, roughly, north and south, so that the direction of the Dividing Range is not due to the primary rock-folding. The Divide, owing to stream capture and general denudation, has doubtless shifted its position from time to time, but the existence of the highlands is probably, in part, due to an east and west series of folds, of which the "pitch" in the anticlines of our older rocks affords evidence.

Highlands also occur to the north of Cape Otway, rising to a height of over 2,000 feet, and also in South Gippsland. These districts are densely clothed with forests, and rich in fern gullies, the rocks consisting of fresh-water jurassic strata. Geographically isolated from the rest of the State is the rugged granitic area of Wilson's Promontory, which rises in places to about 3,000 feet.

The north-west of Victoria is occupied by a large plain which borders the highlands on the north, and sweeps west, and especially north far beyond the boundaries of the State. It represents in the main the flood-plain of the Murray and its tributaries. This area is for the most part covered by a dense growth of several dwarf species of Eucalyptus, known collectively as Mallee.

The south-west is occupied by another plain, consisting chiefly of recent basalts and tuffs. It is typically treeless, owing to the small depth of soil, and to poor subsoil drainage, but it is richly grassed, and contains some of the best and most easily worked agricultural land in the State.

As already indicated, the main river system consists of the Murray and its tributaries, the Murray itself being our only stream that is navigable for any distance, and forming an important highway. Owing to the building up of its flood plain by the river its western tributaries can no longer reach it, but spread out in times of flood into broad, shallow lakes which disappear in dry seasons.

As regards the streams to the south of the Dividing Range, the south-westerly drift bars the mouths of all which debouch into the open sea, and long continued action has built up a ridge off the Gippsland coast behind which the rivers spread out to form large shallow lakes. The volcanic plains of the west are dotted with lakes and swamps owing to the imperfect drainage of the almost level expanse, and the low barriers formed by the irregular flows of lava, and the distribution of the sheets of volcanic ash. Some of these lakes have been ascribed to sinking of the surface as a subsequent result of the volcanic outburst, while others, many of which are very deep, occupy the site of volcanic vents. Many of the western lakes have no outlet, and are salt, while those with a permanent or occasional overflow are fresh.

Rivers and
lakes.

Coastline.

From the Glenelg on the west as far eastward as the Gellibrand river, the western plains abut on the sea. Sometimes it is the volcanic rocks which reach the coast, but in most places the underlying marine tertiaries border the shore, with or without an intervening belt of sand dunes. Where the plain, as at its eastern end, reaches the height of 200 or 300 feet it is deeply eroded, and, as is the case in the area occupied by the Heytesbury forest, its essential character is not at first apparent, and the coast itself is bordered by vertical cliffs. East of the Gellibrand, and sweeping past Cape Otway to near Split Point, the highlands of the Otway Ranges with their forests, streams, and waterfalls afford a coast of great beauty. From Split Point, as far as Wilson's Promontory, the land shows no great elevation, rarely rising more than 200 feet. Sand dunes and cliffs of marine tertiaries, or of basalt, border it nearly all the way. At Cape Woolamai we have an isolated mass of granite, and about Cape Patterson the jurassic coal series forms the shore line. Near Cape Liptrap is a small, rugged outcrop of palæozoic rocks. Beyond Wilson's Promontory, with its beautiful scenery of small bays backed by lofty tree-clad ranges, and with its clusters of precipitous islets, comes the long, dune-fringed Ninety-mile-beach. Behind these dunes at their eastern end lie the Gippsland Lakes. Beyond Lakes' Entrance high ranges of palæozoic rocks and granite front the sea, and extend to Cape Howe, the most easterly point in the State.

The only good natural harbor is the land-locked basin of Port Phillip. Portland Bay, on the west, is formed under the lee of a projecting tongue of volcanic rocks. Lady Bay, Warnambool Bay, Port Campbell, and it is said Apollo Bay and Loutit Bay, owe their main outlines to the fact that they are drowned valleys. Port Phillip has itself a similar origin, its eastern side being defined by a north and south fault. Western Port, Corner Inlet, and Malla-coota Inlet are also due to subsidence. The estuaries of the Curdie, Gellibrand, Aire, Barwon, and other smaller streams were formerly inlets of a similar nature, but are now more or less filled with river-borne material.

As regards islands, we are poorly off. Lady Julia Percy Island, near Portland, is volcanic. East of this the coast, where the marine tertiaries border it, and where hard bands occur at sea-level, is fringed by stacks and precipitous islets carved out by the waves. These are absent along the Otway coast, where the jurassic rocks reach the shore. Phillip and French Islands, like those off Wilson's Promontory, are due to subsidence, the old hill tops standing above the sea, which now fills the intervening valleys.

GEOLOGY.

The triangular shape of the area occupied by the palæozoic rocks has already been pointed out. The stratified rocks of this age have a general north and south strike, and the older ones are acutely folded. The mesozoic and tertiary strata show no great crumpling, though considerable faulting has occurred in places. Their strike is in the main parallel to the coast, or east and west.

For details as to the distribution of the rocks reference may be made to the beautiful geological map of the State published a couple of years ago by the Department of Mines.

Scattered irregularly over the State are numerous outcrops of quartz-mica-diorites and granitoid rocks of various types. They are all post-silurian, and intrude the older rocks. They range from Cape Howe to beyond the Glenelg, and from Wilson's Promontory in the south to near Swan Hill in the north. Older
Plutonic
rocks.

Another series of rocks, probably older and of basic composition, is found to the north of Heathcote, and in a few other localities.

In the extreme north-east in Benambra, and in the south-west in Dundas, are two large areas of crystalline schists. Their age is in dispute. By some they are regarded as archæan, and by others as altered ordovician. A few small patches occur elsewhere. Metamor-
phic.

At Heathcote fossils have been found, which have been referred to middle cambrian age, but this reference has been disputed in favour of ordovician. At Dookie and at Waratah Bay certain other beds have been thought to be cambrian, but fossils are wanting. Cambrian.

Slates and sandstones of this age, all acutely folded, and more or less cleaved, occur. Limestones are practically absent. One large area is situated in the east, and the same rocks re-appear in the centre of the State. From Ballarat westward is a large mass of rocks having similar characters, but as no fossils have been found we cannot be certain of the age of the old rocks of even Ballarat itself, though they are generally regarded as ordovician. Recently many places which were thought to be occupied by silurian rocks have yielded ordovician fossils, as will be seen on comparing the last two editions of the geological map. Since then ordovician, in the place of silurian, has been proved on the Mornington Peninsula. Ordovician.

As regards fossils, the absence of calcareous beds greatly limits their variety. A few sponges and lower types of crustacea have been found. No trilobites occur, unless the Heathcote rocks be ordovician, and not cambrian. The dominant forms are graptolites, of which a large number are known. The series is divided into upper and lower. Of the former there is but little accurate information available. The rocks of the eastern area, a prolongation of similar beds in New South Wales, are of this age, as also are certain rocks near Matlock, Sunbury, and some other places north of Melbourne. The lower ordovician has been divided into four. These, in descending order, are typically developed at Darriwell, north of Geelong, and at Castlemaine, Bendigo, and Lancefield. Most of our auriferous quartz veins occur in the ordovician, but some are in younger, and perhaps some in older, rocks. The best studied gold-field is that of Bendigo, where the veins fill lenticular spaces arching over the anticlines. They have considerable extension along the strike, and several usually occur on the same anticline, one below the other. These veins are known as "saddle-reefs." "Pitch" of the strata, or undulation of the axis of the anticlines in a vertical direction, is a marked feature, and of considerable importance from its effect on mine working.

Silurian.

The older rocks round Melbourne, and for some distance to the north and east, are of this age. Sandstones, mudstones, and, at a few places, as at Lilydale, near Mansfield, and on the Thomson River, limestones occur. The rocks have not been subjected to the same amount of disturbance as the ordovician, and fossils are fairly common, though, except in the limestones, rarely well preserved. A large number have been recorded. Monograptus, corals, polyzoa, brachiopoda, mollusca, trilobites, and crustacea have been found. An apparent approach to a devonian facies is shown at some localities. In the neighbourhood of Melbourne the strata are much disturbed. There is an upper and a lower series, formerly known by names borrowed from British geology, though the local names, Melbournian for the lower or graptolite bearing series, and Yeringian for the upper, are now more suitably employed. The rocks are frequently auriferous.

Devonian.

A long and narrow belt of quartz-porphyrines, and allied rocks, running parallel to the Snowy River, and partly intersected by it, marks a volcanic axis. In places tuffs rest on the edges of the ordovician, and are in turn overlain by limestones rich in devonian fossils. The volcanic rocks have been referred to lower devonian, and the limestones to middle devonian. Several patches of these limestones occur widely scattered over the eastern parts of the State, the largest being at Buchan and at Bindi. Corals, brachiopods, and molluscs abound in them. A series of much-folded shales and quartzites of apparently the same age, judging by the fossils, is to be seen at Tabberabbera and Cobannah. In places overlying these highly-inclined, middle devonian beds are found nearly horizontal strata. These, as at Iguana Creek, yield plant remains. The Grampian sandstones, which form a bold range with an abrupt south-easterly fault-scarp over 2,000 feet in height, have yielded no fossils, but are provisionally regarded as upper palæozoic. The Cathedral Range, near Marysville, belongs probably to the same series.

Carboniferous.

Certain sandstones on the Avon with *Lepidodendron* are, it is considered, of this age. From here northward, across the Divide, a belt of similar rocks extends, forming very rugged mountains. A series of fossil fish from near Mansfield, at the northern extremity, has lately been critically examined, and declared to be of carboniferous age, and not devonian, as was formerly held.

Permian-Carboniferous.

At several localities occur beds of glacial origin, sometimes of considerable thickness. At Bacchus Marsh the boulder beds are associated with sandstones containing the fossil fern-like plant *Gangamopteris*, which affords a means of correlating them with beds elsewhere.

Jurassic.

About Coleraine and in the Otway district, and in South Gippsland, there are large areas of fresh-water shales and sandstones, in places conglomeratic. A few fish and fresh-water molluscs have been found; but the chief fossils are plants, of which a large number are now known, as *Baiera*, *Taeniopteris*, &c. Coal is worked in the beds in Gippsland, as at Jumbunna and Outtrim.

The rocks hitherto spoken of are confined in the main to the high-lands previously described. The lowlands are for the most part occupied by tertiary rocks of volcanic and marine origin, with, over large tracts, a cover of fluviatile, or wind-formed source. They form a belt between the Dividing Range and the sea, or the jurassic rocks, where these occur, from near the mouth of the Snowy River to beyond the western boundary of the State. They sweep round the western end of the Divide, and underlie the greater part of the Mallee district in the north-west. Where they, or the fluviatile or the aeolian deposits, overlie auriferous bedrock, the buried river channels usually contain gold. In other places lignite beds, sometimes of considerable extent and thickness, are formed, as at Deans Marsh, Altona Bay, Lal Lal, and several localities in South Gippsland. Both these types of deposit, the gold and lignite bearing, are of various ages, from oldest tertiary upwards.

The marine beds are extremely rich in fossils, and have been divided into three main groups. Owing to the difficulty, or perhaps the impossibility, of correlating them with the subdivisions of the northern hemisphere, local names are now generally applied.

Barwonian (? Eocene).—Sands, clays, and limestones composing beds of this age are widely spread, occurring about the Gippsland Lakes, and along the southern coast from Flinders to the Glenelg. Inland they underlie the western plains from Geelong to beyond Hamilton, and have been proved in bores from Stawell to beyond the Murray northwards. East of this line they appear to be bounded by a ridge of palæozoic rocks, extending northwards from the Divide, and only thinly mantled by non-marine beds. Associated with the marine beds is a series of basalts and tuffs, which are found more especially in the central and eastern parts of the State. It is claimed by some that acidic volcanic rocks were formed, as at Macedon and Mount Dandenong, at the close of the cretaceous period, and heralded an age of volcanic activity, which lasted down to quite recent times. The fauna of the marine beds is extremely rich and varied, all types being represented, and in number of species and excellence of preservation is scarcely anywhere surpassed.

Kalimnan (? Miocene).—These rocks are widely spread, though not so extensively as the Barwonian. They are well represented near Bairnsdale, Shelford, Hamilton, and, though the age is in dispute, at Beaumaris. As a rule they are more arenaceous than the lower beds, and ferruginous sands are typical. The fauna is fairly rich.

Werrikooian (? Pliocene).—Marine beds of this age are not common, but are found in the lower Glenelg district, overlying Barwonian. The fossils are almost all existing species.

After the deposit of these beds there occurred an extensive outpouring of basaltic lavas in the southern and south-western parts of the State, and large lava plains were formed, through which deep gorges have been cut by the creeks and rivers. Fine examples of volcanic cones in all stages of denudation are plentiful. In deposits, both immediately before and after this last volcanic outburst, there

are found the bones of numerous extinct marsupials, such as Diprotodon, Nototherium, and gigantic kangaroos. Raised beaches point to an elevation of some twenty feet since the previous subsidence, which formed many of our harbors.

In conclusion, it may be stated that many of the writer's sins of omission are due to the small space allotted to him, and even that small space has been exceeded.

FAUNA.

The peculiarity of the Australian mammalian fauna has often been remarked upon. Nowhere else in the world do we find representatives of the three great groups into which the class is divided, namely, the eutheria, the marsupials, and the monotremes. The last group, containing the spiny anteater (*Echidna*) and the platypus (*Ornithorhynchus*), are confined to the continent and neighbouring islands, while the marsupials exist, nowadays, only in the Australian region and America.

Of the eutheria, which comprises all mammals above the marsupials, we have but a few terrestrial forms—the dingo, a few bats, and rats and mice. The seas afford a few more, such as whales and porpoises, seals, and in certain places the dugong (*Halicore*).

In Victoria itself we find the Australian fauna typically developed. The echidna ranges over the whole continent, while its ally, the platypus, is confined to the eastern side of Australia, from Tasmania to the tropics. Both are still common in certain parts of the State.

Among the marsupials the kangaroo family (*Macropodida*) is well represented, though the larger forms are rapidly disappearing. These comprise the red, grey, and the black-faced kangaroos. The smaller forms, such as wallabies and rat-kangaroos, are still plentiful in many of the more densely forested regions. The southern wallaby (*Macropus billardieri*) is identical with the Tasmanian one, and the other common one (*M. ualabatus*) ranges far to the north of our boundaries. A few other northern forms come down south as far as the Dividing Range. The small kangaroo-rats (*Bettongia*), dwelling in thick scrub, are hard to catch sight of, and still harder to shoot.

The Australian opossum family (*Phalangerida*) comprises our so-called opossums, flying squirrels, and the native bear—unfortunate names, but the only local ones in common use. The silver opossum and the Tasmanian brown are the same species (*Trichosurus vulpecula*), the island form being a little larger and of a darker hue. This species ranges over practically the whole of Australia. They form their nests in hollow trees, or, where these are absent, as on some of the islands in Bass Straits and in Central Australia, on the ground. The ring-tailed opossum (*Pseudocheirus peregrinus*) builds a hollow, ball-like nest of grass and bark in the dense scrub. The flying opossums, or, as they are sometimes called, flying foxes (*Petaurus*) and the flying squirrels (*Acrobates*) are represented by several species, ranging from the size of a cat to that of a mouse, and are very beautiful forms. They have not the power of true

flight, but can glide for a considerable distance from a greater to a less height. The native bear (*Phascolarctos cinereus*) has a very restricted range. It does not occur in South Australia nor Tasmania, but passes north up the eastern coastal region. Despite its name, it is a harmless vegetable feeder, and its valuable skin dooms it to early extermination.

Of the wombat family we have but one representative (*Phascolomys mitchelli*), which is still common in the eastern parts of the State.

In the native cat family we have three of the spotted species, the large tiger cat (*Dasyurus maculatus*) and the common native cat (*Dasyurus viverrinus*), which occur south of the Dividing Range, and dwell also in Tasmania. The third species (*Dasyurus geoffroyi*) occurs only to the north of the Divide. The weasels (*Phascologale*) and the pouched mice (*Sminthopsis*) are numerous in species and fairly common. Some are arboreal, others terrestrial. The pouched mice are fierce little cannibals, and a few years ago about fifty were sent down alive in a case to the University. Two days after there were two living, while a few rags of fur represented the other four dozen. The survivors engaged in mortal combat in the glass jar in which they were put to be chloroformed. Examples of these small forms and of their skeletons are desiderata in the National Museum. The jumping pouched mouse (*Antechinomys laniger*), which hops like a diminutive kangaroo, comes south only into North-western Victoria, and is not well known with us.

The bandicoot family is a small one, though three species of bandicoot (*Perameles*) are found in the State. They live in grass land. The rabbit-bandicoot, or bilbie (*Peragale*) and the pig-footed bandicoot (*Choeropus castanotis*) occur in the north-west, the latter being a rare animal.

In eutheria, the higher mammals, we are, as already stated, poorly off. The dingo, apparently, got here before man arrived, and its remains are found fossil. Bass Straits was a barrier to it, and it did not reach Tasmania.

Among bats the large flying-fox (*Pteropus poliocephalus*) often does harm to the fruit in the northern parts of the State and in Gippsland. It is widely spread up the eastern sea-board of the continent. We have also several other small bats, but must pass them over.

Among rats, the golden water rat (*Hydromys chrysogaster*) is a large, handsome animal ranging all over Australia, and occurring also in Tasmania and New Guinea. There appears to be only the one species. The bush rats of the State (*Mus gouldi* and *Mus greyi*) are common, and probably others occur. They have not been satisfactorily worked out here, and specimens are needed in the Museum.

Only one species of seal, the Australian sea-bear (*Euotaria cinerea*) is now found in Bass Straits, and is protected. There are colonies on a few outlying islands and rocks. Other species occasionally stray up from the far south. The yellow-sided dolphin (*Delphinus novae-zelandiae*) is common in our waters, and whales of several species are occasional visitors.

As regards birds, we have only some two or three species practically confined to the State, the Victorian lyre-bird (*Menura superba*) being the best known. The emu is still common in the north-west. Wild fowl are plentiful, and occasionally great incursions are made from the north. Our most striking birds are the lorries and honey-eaters, which gather "the harvest of the honey-gums." Quail are common at times, and pigeons of various kinds occur. The mound-building lowan, or mallee-hen (*Leipoa ocellata*), and the bower birds (*Ptilonorhynchus violaceus* and *Chlamydotera maculata*) are remarkable for their habits, so often described, while the mutton bird (*Puffinus brevicaudus*) is of great economic value for its eggs, which are gathered, together with its young, in countless numbers. Field naturalists have investigated our birds more thoroughly than any other group of our fauna, and are now busy collecting data for the study of their migrations, an almost untouched subject here.

Turning to the reptiles, we have two tortoises, the short-necked (*Emydura macquariae*), found north of the Divide, and the long-necked (*Chelodina longicollis*) occurring both there and in South Gippsland.

As regards lizards, the most remarkable are the so-called legless forms of the family Pygopidae. They have no front legs, while the hind ones are represented by two scaly flaps usually fitting into grooves on the side of the body, and so escaping casual examination. They are the main source of the stories of snakes with legs which occasionally fill our newspapers. The large "goanna" (*Varanus varius*) derives its name from Iguana, a genus not found in Australia. It is common north of the Divide, and reaches a length of five or six feet. A smaller cousin (*Varanus gouldi*) ranges as far south as Gippsland, and as it frequents streams is dignified by the name of the Gippsland crocodile. Our other lizards are small and harmless, though some have such terrifying names as "bloodsucker" (*Amphibolurus*), and so on. Altogether we have some fifty species of lizards in the State.

Among snakes, we find the non-venomous blind-snakes (*Typhlops*), with bodies as smooth as glass, the green tree snakes (*Dendrophis*) and the carpet snake (*Python spilotes*). All these forms are commoner in the north of the State. We have about a dozen venomous species, though some from their small size are not dangerous to man. The tiger snake (*Notechis scutatus*), a handsomely marked species, is the most active and dangerous. Most of the others are timid, though quite as deadly when large. The deaf-adder of the drier parts of the State lies quite still till nearly or quite stepped on, and then strikes without warning. It is a short thick-set reptile, and to be dreaded on account of its habits.

We have about eighteen amphibians in Victoria, all of them being frogs and toads. The largest is the handsome green and gold "bull-frog" (*Hyla aurea*), very common in Southern Victoria. The sand frogs (*Limnodynastes*) are widely distributed, even far from water. All the frogs are great insect-eaters, and in their turn are a favorite food of the snakes.

In fresh-water fish we are not rich, owing mainly to our poor river development. There is a marked distinction between the forms found to the north of the Divide, and those to the south. In the Murray basin we have the Murray cod (*Oligorus macquariensis*), which occasionally reaches the weight of 100 lbs. This fish, together with the cat-fish (*Copidoglanis tandanus*), the bony bream (*Chaetoessus richardsoni*), and a few others are absent from the southern waters. The southern forms are nearly all found also in Tasmania as well, and include the blackfish (*Gadopsis marmoratus*), and the eel (*Anguilla Australis*). The voracious little mountain trout (*Galaxias truttaceus*), which rarely reaches a quarter of a pound in weight, has a similar southern distribution, while the minnow (*Galaxias attenuatus*) is said to range into the Murray waters as well, though we need specimens in the Museum to settle the point. Most of our other southern river-fish occur in the sea as well, and only pass up into the rivers for a longer or a shorter distance. Lampreys are found in our southern streams, but are not often caught.

Want of space prevents any discussion of the marine fish, which are of considerable economic value, though fish-preserving is a very small industry with us.

The treatment of our invertebrate fauna must be brief, and confined to land and fresh water forms, though of some of our marine groups, as for instance the mollusca, we now know a good deal. In shell-fish we are poorly off. There is black-shelled snail (*Paryphanta atramentaria*), about $\frac{5}{8}$ inch in diameter in our southern fern-gullies, and another snail (*Panda atomata*) about the same size in Eastern Gippsland. Most of the other species are small, and attract the eye of the naturalist only. One water-dwelling form (*Bulinus tenuistriata*), which has its shell coiled in the opposite way to the ordinary—a left-handed screw—is the temporary host of the liver-fluke of the sheep, and this is the reason why wet ground is “fluky country.”

Scorpions are very common in the warmer parts, but none are very large. Amongst the spiders, we have only one harmful species, the katipo (*Latrodectes scelio*), which is identical with the New Zealand form. It is black with a scarlet, or deep orange spot on the hinder end of its back. The so-called “tarantula,” though hideous and terrifying to most people, is quite harmless, and could not bite a human being, if it wanted to. A spider with a much larger body is found in the northern districts, and spins a very strong web from bush to bush.

Among insects, the beetles, butterflies, and moths alone have been examined with anything like thoroughness. Many of our striking beetles, while in the larval stage, are injurious to vegetation, such as the buprestids, longicorns, cetonids, and cockchafers. The lady-birds (*Coccinellidae*), are carnivorous in the larval stage, and great foes of the scale insects. We have no large butterflies such as occur in Queensland, but possess some very fine moths, some of which, in their larval stage, are plant-eaters, and work considerable damage. We have a few fine stick-insects which mimic dead twigs, and are

therefore not often detected, though when seen they always attract notice. Locusts and grasshoppers at times do considerable harm. Dragon-flies, white ants, and ant lions are common enough in certain districts. Our native bee is stingless, but is being starved out by the imported bee, which is now widely spread. The shrill deafening song of the cicada (*Cicada mærens*) in its countless thousands must be heard on a hot day to be appreciated. Hosts of other forms must be passed unnoticed, though it may be said that our bull-dog ant is the largest ant known.

Of crustacea, we can mention only the fresh-water crayfish, of which we have several kinds. The Murray cray-fish (*Astacopsis serratus*) is a spiny form growing to the length of a foot, and occasionally seen in the Melbourne market. The yabbie, or pond crayfish (*Astacopsis bicarinatus*) is found in all suitable situations, and ranges widely over Australia. It is a small species, but is eaten.

Centipedes are common, especially in the warmer parts, but do not seem to do much harm to human beings.

We are rich in earthworms, though our native species are disappearing before the imported European ones, which are now found everywhere in the State. In the Gippsland giant earthworm we have by far the largest species known. A living specimen recently measured at the University was seven feet two inches long. Gorgeously coloured planarian worms, a few inches in length, abound in the moister parts of the State, being generally found under logs.

The same localities are the home of two or three species of land-leech, which are blood-thirsty, though small. A fresh-water leech (*Limnodynella quinquestriata*), used surgically, is common enough in ponds.

Pond life generally is actively studied by our field naturalists, but an attempt to deal with it would require a volume in itself, and appeal to professed naturalists alone. Suffice it to say that it is rich and varied, and presents us with many interesting problems.

As to the origin of our fauna, much has been said and written. Briefly, the marsupials, and, perhaps, some birds, the tortoises, certain frogs, fresh-water fish, many insects, earthworms, and other animals point definitely to a former land connexion with South America, where they find their nearest living relatives. The eutheria are of Malaysian origin, as also are most of our birds, some of our land mollusca, and the fresh-water crayfishes. This incursion is of later date than the Antarctic one. It may almost be said that the fauna and flora of the Queensland and New South Wales scrubs represent an invasion in force from the north.

In conclusion, one point may be noticed, and that is the popular names given to our animals and plants. The early settlers found themselves in a new world where nearly every thing alive differed from what they had been accustomed to. In their difficulties about names they adopted a few—far too few—from the aborigines, but in the main applied the names they knew to the fresh forms they found. Some of the names came from Britain, others from America, and a small number from other countries. So we have

oaks and gum trees, box trees, and so on among plants. Among animals, we have bears, badgers, cats, bandicoots, opossums, squirrels, weasels, magpies, larks, wagtails, robins, turkeys, trout, cod, and a host of others, which are in no way related to their namesakes elsewhere. It must be confessed that many of the scientific names, when translated, are just as peculiar in their origin, and the scientist cannot afford to cast stones at the man in the street, or in the bush, who usually safeguards himself by prefixing the word "native" to his names.

THE FLORA OF VICTORIA.

By Gustav Weindorfer, Esq. (Chancellor Austro-Hungarian Consulate, Melbourne).

The flora of the State of Victoria is composed of three main divisions, the largest of which forms part of the South-Eastern Australian forest flora, and is considered to be an intermediate link between the Antarctic flora and that of the tropical East and North of the continent. The second division is formed by a part of the Central Australian desert flora, which penetrates the north-west corner of the State, constituting the "Mallee." The third and smallest division is the Alpine flora, which is restricted to the highest points of the Alpine mountains, in the north-east corner of our State. All these main divisions of course have their subdivisions, local floras, &c., but want of space will not permit enlargement on this point.

The number of species (*Phanerogamae* and *Acotyledoneae vasculares*) according to the *Key to the System of Victorian Plants*, by Baron Ferd. von Mueller, published 1887-88, is 1900, but others since recorded have not yet been compiled and embodied into a supplementary key. A work on the subject should certainly be undertaken at an early date.

In regard to the endemism (the confinement of a species, or a natural group within the limits of a particular botanical region), Victoria stands with 7.6 per cent. behind the floras of all the other Australian States, which fact may find its explanation in the prevailing climatic conditions, the south-east of Australia being favoured by a comparatively heavy yearly rainfall. The continuance of this condition since older geological periods made the duration of certain types possible, from which we may infer that the development of new forms, and with such development the endemism, has been greatly weakened. The Victorian flora shows in comparison to those of the other Australian States the greatest relationship to the floras of New Zealand and South America, and especially to that of Tasmania. Between it and the latter there is a general resemblance, particularly in those species occurring in the north-east of our State, in the high altitudes of our alpine regions, this being often looked upon as a proof of the former land connection of Tasmania with the continent.

Among the most noteworthy of our many highly interesting plant forms, the following may be mentioned:—

In the large order Dilleniaceæ, Victoria has only the genus *Hibbertia* represented, which however is almost entirely Australian, only a few species of this genus being represented in other parts of the Southern Hemisphere.

The five Victorian genera of the order Pittosporaceæ are all, with the exception of *Pittosporum* itself, limited to Australia.

The order Tremandraceæ, represented in Victoria by the genus *Tetradlea*, is strictly confined to our continent.

The order Rutaceæ, ranging over the hotter and temperate regions of the whole world, is fairly represented in Australia, and comprises in Victoria the genera: *Zieria*, *Boronia*, *Eriostemon*, *Correa*, *Geijeria*, and *Acronychia*, all of which, with the exception of the last-mentioned, are entirely endemic to Australia. Among them are many beautiful plants, which might be cultivated with advantage in our gardens.

In the Leguminosæ, the largest order of phanerogamous plants, next to the Compositæ, twenty-eight genera occur in Victoria, seventeen of which are limited to Australia. This order, distinguished elsewhere by a considerable number of its species being of high economic value, has here, in this regard, with the exception of the genus *Acacia*, no commercial value whatever. Many genera of this order, such as *Pultenæa*, *Oxylobium*, *Dillwynia*, *Bossiaea*, *Kennedyia*, and *Acacia* are admirably adapted for garden plants, but, like so many others of our native plants, have been hitherto greatly neglected.

The capsular genera of the order Myrtaceæ are chiefly Australian, but the fleshy-fruited genera which are universally distributed, appear only in one genus (*Eugenia*) in Victoria. By far the most important genus of this order, inasmuch as it comprises the largest portion of our forests, determines the characteristic aspect of our landscapes, and forms an important part of our national wealth, is the gum tree (*Eucalyptus*). Those species which have proved of highest economic value for timber purposes are chiefly the river redgum (*E. rostrata*), red ironbark (*E. leucopyxlon*), grey box (*E. hemiphloia*), blue gum (*E. globulus*), spotted gum (*E. goniocalyx*), messmate (*E. obliqua*), yellow box (*E. melliodora*), and blackbutt (*E. amygdalina*), while the extraction of the essential oil contained in the glands of the foliage of this genus has created an industry of some importance. The genus *Eucalyptus* is almost exclusively Australian, only a few species being recorded from outside the continent.

The species of many other genera of this order, always aromatic, abundant in bloom, and frequently brilliant in colour, add largely to the beauty of our landscapes, though of no economic value.

In the order Proteaceæ, fairly dispersed throughout the Southern Hemisphere, the Victorian genera *Isopogon*, *Adenanthos*, *Conosperum*, *Orites*, *Hakea*, *Telopea*, and *Banksia* are entirely endemic to Australia. The remaining genera, *Persoonia*, *Grevillea*, and *Lomatia*, are, outside the continent, represented by only a few species. The

Proteaceæ contain some of the most curious flowers in our flora, which, with their lovely and various tints, impart a special physiognomic character to certain portions of the country.

The order Composite, here in Victoria, as in all parts of the globe, boasts the greatest number of species, among which those of the genera *Helipterum*, *Helichrysum*, *Aster*, *Brachycome*, and *Senecio*, with their variously-coloured flowers, are numerous and highly ornamental.

The Goodeniaceæ are almost entirely restricted to this continent. Of its twelve genera Victoria alone possesses six. The genus *Goodea*, the richest in species, is entirely endemic to Australia.

The Candolleaceæ comprise in all four genera, which, with one exception, are also endemic to Australia. Only two, viz., *Candollea* and *Leewenhœkia*, are represented in Victoria.

The Myoporaceæ are more strongly represented in Australia than anywhere else. The order consists of only four genera, three of them Australian, two of these being represented in Victoria in *Myoporum* and *Eremophila*.

Although the order Ericaceæ is represented by only two species, *Gaultheria hispida* and *Wittsteinia vacciniacea*, both belonging to the Alpine flora, the Epacridaceæ take here the place of the heaths of the Northern Hemisphere. Among its six Victorian genera, five are entirely endemic to Australia.

Except in the long-settled districts, where foreign species have been introduced, the native members of the order Gramineæ form practically the entire bulk of our pastures, and their economic value is evidenced by the results of our dairying industry and the fine quality of our wool.

The beautiful order Filices, or ferns, abundant in all moist climates, hot or cold, and which contain a considerable number of genera and species, is represented in Victoria by twenty-two genera. The most noticeable are our tree ferns, *Cyathea*, *Alsophila*, and *Dicksonia*, the most attractive ornaments of our mountain gullies.

As the sea forms a natural border to phanerogamous plant life, let us consider first of all a type of our coastal flora which occurs on the sandy coast of Port Phillip, whose plants are composed of species which are admirably adapted to weather the inclemency of wind and wave, and, so to speak, form the outposts of the inland flora.

Perhaps the most characteristic examples of this coastal flora are the white flowering "tea-tree" (*Leptospermum leavigatum*), which usually forms a belt of dense scrub, having for companions *Acacia longifolia*, *Casuarina quadrivalvis*, *Myoporum insulare* and *viscosum*, *Banksia integrifolia*, and certain Eucalypts, while in its shade various salsolaceous plants and many orchids, more especially *Caladenia*, *Pterostylis*, *Diprïs*, &c., find the necessary conditions for their existence. Within this belt of tea-tree the vegetation is composed of entirely different species, which naturally do not accept the shelter which the tea-tree offers them close by. The prevailing species are more or less stunted in habit, having the surface area of their leaves greatly reduced, as may be observed in genera such as *Hakea*, *Acacia*, *Ricinocarpus*, *Isopogon*, *Epacris*, *Casuarina* and others. Here we

South-
Eastern
Australian
forest
flora.

also meet with *Banksia marginata*, different bright yellow flowering species of *Hibbertia*, *Dillwynia*, and *Goodenia*, the purple *Pater-sonia glauca* and white flowering *Pimeleas*. Where the soil is free from bushes or shrubs, *Hypoxis*, *Brachycome*, *Microceris*, and *Craspedia*, &c., all contribute their share to the general colour harmony.

In following the numerous water-courses which run from the mountains towards the ocean, we cross in the eastern part of our State through more or less hilly country, covered chiefly with forests of *Eucalyptus globulus*, *E. goniocalyx*, *E. virgata*, and *E. Muellieriana*. Here *Casuarinas* develop their beautiful and interesting forms, there the gracefully symmetrical *Exocarpus* stretches its slender branches. Between the high and slender stems of the forests, the soil is covered with various kinds of bushes, among which the members of the genus *Acacia* prevail. The declivities burst forth in splendour under the crimson-flowered *Tetradlea ciliata* and the pink-flowering *Bauera rubioides*. Everywhere charming thickets of *Melaleuca*, *Leptospermum*, *Hakea*, *Grevillea*, *Cryptandra*, and *Pultenæa* are festooned with the white-flowered *Clematis aristata* and the purple *Kennedyia monophylla*. All of interest, either from their pleasant forms, the lovely green of their leaves, or the peculiar formation of their flowers.

The water frontages of our rivers, which bear a number of trees of commercial value, are also the homes of *Prostanthera lasiantha*, *Bursaria spinosa*, *Hymenantha Banksii*, *Acacia dealbata*, *Cryptandra*, *Pomaderris*, *Coprosma*, and many others. All these, by means of the network of their roots, fulfil a most useful function in maintaining the banks of the rivers. By the wanton destruction of these trees, and the denuding the banks of their undergrowth, their constant erosion takes place, and with this many species of our native flora are likely to entirely disappear. It would be therefore highly advisable that all water frontages be reserved throughout the State, and the destruction of shrub life on or near the edges of the rivers strictly forbidden.

In the lower slopes of the Australian Alps the timber increases much in height and girth, and magnificent forests are met with. The banks of the innumerable gullies and creeks exhibit such a luxuriant growth of fern trees that their broad, light green fronds often completely canopy the mountain streams. Here we also find the Australian beech (*Fagus Cunninghami*), a tree of considerable economic value. Scattered throughout the forest are blackwood (*Acacia melanoxylon*), Sassafrass (*Atherosperma moschatum*), and dogwood (*Pomaderris apetala*). On moist, shadowy places, which are specially favoured by ferns of various kinds, are to be found *Lomatia Fraseri*, *Senecio Bedfordi*, *Aster argophyllus*, *Hedycaria Cunninghami*, and *Pittosporum bicolor*.

Vast forests extend along the sources of the mountain rivers, which flow towards the south and south-east. In many of them the axe of the wood-cutter has not begun the work of devastation, and it is to be hoped that these remnants of our once extensive forests may be reserved before their destruction.

The northern plains of Victoria, extending westwards from the Alps towards the Grampians, are thinly covered with open forest, with belts of *Eucalyptus rostrata*, the river redgum, following the course of the Murray River and its tributaries, grey box and Murray pines also being scattered at intervals along their banks.

The Grampians, frequently alluded to as "the garden of Victoria," possess a most interesting flora, especially conspicuous by the great variety and brilliant colouring of its flowers. The principal trees, which are dispersed over this mountain country, are *Eucalyptus obliqua*, *E. viminalis*, *E. rostrata*, *E. leucoxyton*, *E. gonicalyx*, and *E. Gunnii*, *Acacia pycnantha*, *A. melanoxylon*, and *A. decurrens*. In ascending the different gorges and gullies of the mountains a dense and luxuriant growth of fern trees, *Aspidiums*, *Lomarias*, &c., is to be met with. Along the creeks occur *Leptospermums*, *Melaleucas*, *Cryptandras*, *Grevilleas*, and *Hakeas*. The declivities are covered with *Correas*, *Dillwynias*, *Daviesias*, the dense white-flowering *Conospermum Mitchellii*, *Thryptomene Mitchelliana*, the *Epacris impressa*, with flowers ranging from dark red to the purest white, the greenish yellow *Styphelia adscendens*, and in contrast to this the bright red flowering *Styphelia Sonderi*, with the lovely *Marianthus bignoniaceus*. Besides these, nature has favoured this charming locality with *Acacias*, *Baueras*, *Boronias*, *Bossiaeas*, and many myrtaceous plants. On the highest points are *Boronia pilosa*, *Leptospermum lanigerum* var., *grandiflorum*, and our only pink flowering *Puttenæa*, *P. rosea*.

The second main division of our flora, which extends over the arid north-west corner of the State, covers an area of about 18,000 square miles, and has, owing to the want of sufficient natural irrigation, developed a flora which differs in appearance entirely from the well-watered forest flora of the south and south-east, trees of large dimensions being entirely absent. They are replaced by shrubs, chiefly of *Eucalyptus gracilis* and *Eucalyptus dumosa*, mixed with other myrtaceous shrubs, about forty different species of *Acacia*, *Cassias*, and the Murray pine (*Callitris verrucosa*). Mallee flora.

The general effect of monotony that characterizes the mallee scrub as a whole is individually seen in the foliage of its constituents; yet the scrub is very far indeed from being destitute of charms. At the fall of the first rain the barren, dusty plains become, as by magic, covered with a green carpet, gaily decorated with a wealth of flowers.

Where a permanence of water exists *Juncus*, *Luzula*, *Xerotes*, and *Neurachne* are frequently found. Under the scattered, upward striving gum trees, many shrubs, such as *Eremophila Brownii*, with its reddish brown flowers, the small pink-flowering *Bækea crassifolia*, *Thryptomene ciliata*, *Halgania cyanea*, and *lavandulacea*, with deep blue blossoms, and the scarlet-flowering *Prostanthera coccinea*, find a congenial home.

On the sandy ridges, which are natural flower gardens, *Goodenias*, *Pimeleas*, *Swainsonias* grow luxuriously; typical mallee genera, such as *Asters*, *Helichrysums*, and *Helypterums*, with their flowers of

varied colours cover the soil over immense areas. Right and left the plains are covered with grasses, such as *Panicum*, *Agrostis*, *Stipa*, *Poa*, *Festuca*, and *Anthistiria*.

Among the thick, dull scrub are frequent areas, varying in size, sparsely covered with *Santalum*, under which the valuable salt-bushes, such as *Atriplex*, *Kochia*, *Chenopodium*, and *Salsola*, cover the ground. It is these low shrubs whose bluish green leaves form a valuable and often the only fodder for cattle and sheep in time of need. Even after years of drought, when all other signs of vegetation have disappeared, the leaves and branches of these extraordinary shrubs remain fresh and green.

Alpine flora.

The tree line in the Victorian portion of the Australian Alps is at about 5,300 feet above sea level. On the western side of the mountains it is somewhat lower, the growth of the trees there being more limited by the prevailing cold westerly winds during the winter months. Above this tree line extends our true alpine flora, principally composed of genera which also occur in Tasmania. The only striking difference between the two floras is the want of endemic conifers in our Alps.

The transition from the forest to the alpine region is by no means an abrupt one. In every case a considerable overlapping of the alpine and lowland flora may be noticed. In the shade of the forest of this transition area grow numerous bushes, such as the white flowering *Helichysum rosmarinifolium*, the beautiful Proteace, *Grevillea Victoriae*, and *Orites lancifolia*, with its cream-coloured flowers, which represent a strong contrast to the dark-blue coloured flowers of *Dianella Tasmanica*. The water-courses are lined with the white flowering *Epacris heteronema* and *E. mucronulata*, *Nageia alpina*, one of our few Victorian Conifers, among which sway the cream-coloured headlets of the pompous *Pimelea ligustrina*. Where the forest is interrupted by grassy hills and plains its edges are bound by numerous bushes of the bright yellow flowering *Bossiaea foliosa*; the delicate *Goodenia hederacea* flourishes amidst stones and rocks.

The highest parts of our Alps are covered with meadows, which in their general appearance may be compared with those of the European Alps, although they are composed of entirely different genera. On Mount Bogong, the monarch of the Victorian Alps, on Feathertop, Mount Hotham, and many other mountains above 5,000 feet, a rich variety of colours in flowering plants is to be found. The small *Herpolirion Novae Zelandiae* associated with *Scaevola Hookeri*, the white flowering *Helipterum incanum*, *Veronica nivea*, with its sky-blue flowers, the crimson red *Candollea serrulata*, the pink and white flowers of *Boronia algida*, and the yellow bushes of *Oxylobium alpestre*, form a picture which must be seen to be appreciated. Fairly common in these alpine regions are *Aster celmisia*, the white and pink flowering *Helichrysum leucopsidium*, *Westringia senifolia*, *Richea Gunnii*, and *Prostanthera cuneata*. Large white patches are formed by the almost stalkless flowers of *Claytonia australasica*. Occasionally, in places where the springs are percolating the soil, *Pimelea axiflora* var. *alpina*, *Grevillea australis*, and *parviflora*, *Aciphylla*

glacialis and simplicicaulis and the fern *Lomaria alpina* are met with. At the summit of the mountains, between patches of grasses, grows a small shrub, the branches of which attain a length of three to five feet, but do not rise higher than a few inches above the soil. This is the yellow flowering and pleasantly odorous *Kunzea Muelleri*, one of our myrtaceous plants, which has there in its company the Australian "Edelweiss" (*Leontopodium catipes*).

Victoria, with its great variety of plant life, offers to the botanical student an exceedingly interesting and beautiful flora. Even to the visitor, by way of recreation, the innumerable floral specimens which abound in this country cannot fail to prove a source of interest, and this will be found specially so in the high Alps, for when summer is reigning in the lower parts of the country, in these lofty elevations the vegetation is still luxuriating in the fullness of spring, and one is thus able to compare the different stages in the growth of such plants as occur in both these regions.

PRINCIPAL EVENTS.

The following are the dates of some of the principal events connected with the history of Victoria since the establishment of the Commonwealth on 1st January, 1901. For principal events prior to that year the reader is referred to previous issues of this work:—

Principal events.

1901. January 1st—Proclamation and inauguration of the Commonwealth at Sydney, and swearing in of the Rt. Hon E. Barton, first Prime Minister, and other members of the Ministry. Representatives from different parts of British Empire present, including representatives of Imperial and Indian regiments. State departments of Customs and Excise transferred, whilst those of the Post and Telegraph and Defence followed on 1st March.
- „ January 22nd—Death of Queen Victoria. Accession of King Edward VII. His Majesty's Coronation took place on 9th August, 1902.
- „ February 15th—Despatch of Fifth (Imperial) Contingent—1,014 officers and men—for South Africa.
- „ March 31st—Eleventh census of Victoria, and third simultaneous census of Australia and New Zealand. Population enumerated:—In Victoria, 1,201,341, viz., 603,883 males, and 597,458 females; in all the Australasian States, 3,782,943, viz., 1,983,352 males, and 1,799,591 females; and in New Zealand, 772,719, viz., 405,992 males, and 366,727 females (exclusive of 43,101 Maoris).
- „ May 9th—Opening of the first Parliament of the Commonwealth of Australia, in Melbourne, by His Royal Highness the Duke of Cornwall and York, Heir-Apparent to the Throne, under commission from His Majesty King Edward VII.
- „ October 8th—Inter-State free-trade established by the introduction of a provisional tariff by resolution of the Commonwealth House of Representatives.

1902. January 20th—Conference of Statisticians of all the Australian States and New Zealand, convened for the purpose of securing uniformity in the preparation of statistical returns, met in Hobart. Conference closed 12th February. This was the first Conference of the kind since 1875.
- „ September 16th—The Commonwealth Tariff finally passed.
1903. January 2nd—Death of Lieut.-Col. Sir Fredk. Sargood, Senator, formerly M.L.C., one of the largest merchants of the Commonwealth, whilst on a trip through New Zealand. Accorded a public funeral.
- „ January 19th—Strike of coal miners of the Gippsland collieries. The immediate cause of the strike was a reduction of 1s. per day in their wages.
- „ February 7th—Re-organization of the Cabinet; reduction of the number of Ministers from 9 to 7; and amalgamation of the two Law Departments.
- „ March 4th—Appointment of Mr. Thomas Tait, of Montreal, Canada, as Chief Commissioner of the Victorian Railways, announced by the Premier in the Legislative Assembly. Mr. W. Fitzpatrick, Acting Commissioner, and Mr. C. Hudson, General Manager of the Tasmanian Railways, appointed as subordinate Commissioners.
- „ March 16th—Preferential trade. Notice of motion by Mr. Chas. McArthur, M.P., for Liverpool in the House of Commons:—“That the recent developments in the fiscal and commercial policy of foreign countries which are ousting British trade, demand the serious consideration of the Government in concert with the Colonial Governments where necessary, with a view to safeguarding the trade of the Empire.”
- „ March 17th—Manning of the British Navy. The Naval Reserve Commission, Sir E. Gray, M.P., Chairman, recommends that the Colonies should give assistance in war time, similar to that given to the army; and that a portion of the complement of every British man-of-war at a foreign station should consist of colonial reserve men.
- „ April 15th to 22nd—Conference of Premiers, held at Sydney. Temporary settlement, pending appointment of the Inter-State Commission, of the rival claims to the waters of the River Murray. The question of taking over of States' debts by the Commonwealth and several other matters were also considered.
- „ May 9th—Railway Strike. The engine-drivers and firemen left their engines at midnight on 8th May. Traffic was for several days almost entirely suspended, a few suburban trains only being run. After two or three days a modified service was provided. The immediate ostensible cause of the strike was an order by the Government that the executives of the different societies of railway employes should withdraw from affiliation with the Trades Hall, which order most of the officers concerned refused to obey.
- „ May 15th—Termination of the railway strike, the men surrendering unconditionally. The majority were allowed to resume their former duties.
- „ „ „ Preferential trade. Speech by Rt. Hon. Jos. Chamberlain, Secretary of State for the Colonies, urging the necessity of British reciprocity with respect to preferential Customs duties.

1903. July 24th—Resignation of Right Hon. C. C. Kingston, Minister of Trade and Customs, from the Commonwealth Ministry. The principal point of difference between Mr. Kingston and his colleagues, which led up to his resignation, was the non-applicability of the proposed Conciliation and Arbitration Bill to vessels trading in Australian waters.
- „ August 10th—Appointment of Lord Northcote as Governor-General of the Commonwealth officially announced.
- „ August 22nd—Announcement of future policy by the Premier, the Hon. W. H. Irvine, at Nhill. To assist the development of Victoria closer settlement would receive special attention, to aid which compulsory land resumption would, if necessary, be resorted to; and improved mining tenures were promised. The Factories Act would be extended in a modified form.
- „ September 12th—Death of the Hon. Duncan Gillies, Speaker of the State Legislative Assembly, and Premier of the colony from 18th February, 1886, to 5th November, 1890.
- „ September 18th—Preferential trade. Resignation of Rt. Hon. Jos. Chamberlain from the Imperial Ministry. Mr. Chamberlain's colleagues were not prepared to go the whole length advocated by him in regard to fiscal reform. Mr. Chamberlain resigned to avoid embarrassing the Prime Minister, and in order to educate the people in regard to the preferential trade scheme, and the tax on food involved, which he could do more effectually in an unofficial capacity.
- „ October 6th—Inauguration of the Federal High Court, and the swearing-in of Sir Samuel Griffith, late Chief Justice of Queensland, as Chief Justice, and of the Right Hon. Sir Edmund Barton, K.C., late Prime Minister of the Commonwealth, and the Hon. R. E. O'Connor, K.C., as judges.
- „ October 29th—Factories Bill. Conference between the two State Houses, to arrange a compromise. The Bill was agreed to in an amended form.
- „ October 29th—Speech at Ballarat by Hon. Alfred Deakin, new Prime Minister (formerly Attorney-General) of the Commonwealth, Opening of the election campaign and declaration of Ministerial policy. Preferential trade was fully dealt with, and the principle affirmed.
- „ November 24th—Departure of the State Governor, Sir Geo. Sydenham Clarke, he having been appointed as one of a committee of three to advise the Imperial authorities as to the re-organization of the War Office.
- „ December 16th—Commonwealth elections. Female franchise exercised for the first time in Victoria.
- „ December 24th—Prorogation of the State Parliament. This is memorable as being the last meeting of the unreformed Parliament. The new Parliament is to consist of a smaller number of members, and the constitution of the Upper House is altered, and its franchise broadened. Several other reforms have also been provided for.
1904. January 21st—Lord Tennyson left Adelaide for England. Lord Northcote sworn in as Governor-General of the Commonwealth.

1904. January 25th—Death of the Hon. Sir Graham Berry. The deceased statesman was born in 1822, and came to Victoria in 1852. He entered Parliament in 1860, and took office as Treasurer in the Macpherson Government in 1870. He became Premier in 1875, in 1880, and again in 1883. In 1887 he was appointed Agent-General for the Colony, and held the position till 1891, when he returned to Melbourne, and again entered Parliament. In 1892 he held office in the Shiels Ministry, and in 1894 was elected Speaker of the Legislative Assembly. He retired altogether from public life in 1897. For his public services he was made K.C.M.G. by the British, and Commander of the Legion of Honour by the French Government.
- „ February 1st—The British Government, acting on proposals made by the War Office (Reconstitution) Committee, consisting of Lord Esher, Admiral Sir John Fisher, and the Governor of Victoria, Sir George Sydenham Clarke, decided on important changes in the British Army, including the establishment of an Army Council, on the lines of the Board of Admiralty, consisting of four soldiers, two civilians, and the Secretary of State for War; the Commander-in-Chief to be superseded by an Inspector-General. A Secretariat, consisting of a secretary and twelve minor officials (representing the Army, Navy, India, the self-governing colonies, and the Foreign Office), as the permanent nucleus of a Defence Committee, to be instituted to consider questions of defence, and furnish advice generally.
- „ February 5th-12th—Conference of States and Federal Treasurers, to consider the question of the taking over by the Commonwealth of the States' debts, and the assets upon which loan money had been spent; the provision of a sinking fund; the arranging of future borrowings; the indemnities by the States; and the conversion and consolidation of existing loans. The proceedings of the Conference showed that the representatives of the Commonwealth and the States agreed that all debts should be transferred; that a sinking fund should be established; that the Commonwealth should control all future borrowing; that the Commonwealth should forthwith compensate for transferred properties; and that the period of ten years from the foundation of the Commonwealth, during which the States receive three-quarters of the net Customs revenue, should be prolonged after 1911. The points in dispute were the methods of inaugurating, carrying on, and safeguarding these matters; but the items which the Conference had been called to discuss were in the main agreed upon, and the adjustment of minor disagreements postponed to a future date.
- „ February 8th—War between Russia and Japan commenced.
- „ February 9th—Mr. Irvine, State Premier, resigned. Mr. Shiels (Treasurer) also retired.
- „ February 16th—Mr. Bent (Premier) and other Ministers sworn in.
- „ February 18th—Mr. Taverner appointed representative for Victoria, in London.
- „ March 2nd—Opening of first session of second Federal Parliament.

1904. March 17th—Death of H.R.H. the Duke of Cambridge. The deceased peer was a grandson of King George III., and first cousin of the late Queen Victoria. He was born in Hanover on 26th March, 1819, and succeeded his brother to the title in 1850; joined the British Army in 1837 as colonel; served in the Crimean war in 1854-6, being present at Alma, Inkerman, Balaclava, and Sebastopol; in 1866 succeeded Viscount Hardinge as Commander-in-Chief, from which position he retired in 1895. He was a strong advocate of the volunteer movement.
- „ April 8th—Signing of Convention adjusting foreign and colonial questions at issue between Great Britain and France. France renounced her exclusive right to the French shore, but retained right to fish on the Newfoundland coast; frontier between Senegal (French Colony) and Gambia (British Colony) modified, France being given access to the navigable portion of the Gambia River, at Yarbatenda; the Los Islands (near Sierra Leone) ceded to France; France given access to Lake Tchad, by modification of frontier of Northern Nigeria; the political status of Egypt to remain unaltered, and Suez Canal to remain neutral; Britain recognises French predominance in Morocco; and the French protective tariff in Madagascar; open door for thirty years in Egypt and Morocco agreed upon; the integrity of Siam guaranteed; appointment of a Commissioner to settle land disputes in the New Hebrides agreed to. This landmark in policy is believed to be largely due to His Majesty King Edward and President Loubet, and met with unqualified approval from press and public of both nations.
- „ April 21st—Federal Government defeated on Mr. Fisher's motion to amend clause 4 of the Conciliation and Arbitration Bill, providing for the inclusion in the Bill of all public servants of the Commonwealth and the States.
- „ April 22nd—Deakin Ministry resigned.
- „ April 25th—Sir Reginald Talbot landed in Victoria, and was sworn in as State Governor, at Parliament House.
- „ April 27th—Commonwealth Government—Watson (Labour) Ministry took office.
- „ April 27th—Opening of Royal Commission to inquire into the conduct of the butter export trade. The Commission decided that the proceedings should be open to the press. In June the Commission was enlarged to a Federal body.
- „ May 17th—Dissolution of State Parliament.
- „ May 20th—Dedication of memorial of 5th Victorian Contingent to South Africa, situated on St. Kilda-road.
- „ June 1st—State general elections under the Reform Act. A Government majority returned. Scripture referendum also held at the parliamentary elections. The questions submitted were:—(1) Are you in favour of the Education Act remaining as at present, strictly secular? (2) Are you in favour of such legislation as shall cause the scheme of Scripture lessons recommended by the Royal Commission on Religious Instruction to be taught in State schools during school hours to children whose parents desire the teaching (such lessons would be given subject to a conscience clause exempting teachers who object)? (3) Are you in favour of the prayers and hymns selected by the Royal Commission being used?

1904. June 20th—Wreck of R.M.S. *Australia* at Point Nepean.
- „ June 29th—Sir Henry Wrixon re-elected President of the Legislative Council, and Mr. Frank Madden elected Speaker of the Legislative Assembly.
- „ June 30th—Opening of the State Parliament.
- „ July 4th—The Marquis of Linlithgow, first Governor-General of the Australian Commonwealth, presented His Majesty the King with Mr. Tom Roberts' historical picture of the opening of the first Parliament of Australia, by H.R.H. the Duke of Cornwall and York.
- „ July 10th—Wreck of s.s. *Nemesis* off New South Wales coast, all hands lost.
- „ July 13th—Death of Paul Kruger, ex-President of the Transvaal.
- „ August 9th—House of Representatives chose Dalgety as site for Federal Capital.
- „ August 10th—Senate agreed to Dalgety site.
- „ August 12th—Defeat of the Federal (Watson) Government.
- „ August 15th—Watson Government resigned.
- „ August 16th—Mr. Bent (State Premier) appeared in the Legislative Council to explain the provisions of the Surplus Revenue Bill. Section 9 of the *Constitution Act* 1903 provides that "any responsible Minister may, with the consent of the House of which he is not a member, sit in such House for the purpose of explaining the provisions of any Bill relating to, or connected with, any department administered by him." This was the first occasion on which effect was given to this new provision of the Constitution Act.
- „ August 18th—Reid Government (Federal) sworn in.
- „ September 7th—Mr. Swinburne, in submitting the Water Acts Consolidation and Amendment Bill for the consideration of the Legislative Assembly, called attention to the great importance of the subject, in that the conservation of water was an absolute necessity for conserving the whole of the valuable waters of the State, distributing them to the best possible advantage, and obtaining the most beneficial use of them in production. As the expenditure would be very great, it was necessary that the money should be spent in the most economic manner. During the parliamentary session, the Bill received the assent of the Lower House, and was duly transmitted to the Legislative Council, whose members, however, whilst fully recognising the importance of the measure, considered it advisable to postpone its passage until the first session of 1905, to enable them to carefully examine its provisions.
- „ September 29th—First case opened in the Industrial Appeal Court, under provisions of the *Shops and Factories Act* 1903.
- „ October 4th—Victorian butter secured first prizes in Australian butter classes at Islington Dairy Show.
- „ October 10th—Councillor Charles Pleasance unanimously elected Lord Mayor of Melbourne.
- „ October 14th-21st—Exhibition of Australian manufactures and products, held in the Town Hall, Melbourne.
- „ October 21st—British fishing fleet shelled by Russian Baltic fleet, on the Dogger Bank.
- „ October 28th—High Court decided that the public officials of the Commonwealth are exempt from the operation of the Income Tax Act.

1904. November 2nd—Progress report of Butter Commission issued. Recommendations were made for the establishment of an open butter exchange; grading of butter; reduction of ocean freights on butter; and valuable suggestions are made to producers.
- „ November 3rd—High Court refuses, under section 74 of the Constitution Act, to permit appeal to be made to His Majesty in Council, in the matter of the taxation of salaries of public officials of the Commonwealth.
- „ November 6th—Cable message received notifying appointment of a Commission of inquiry into the Dogger Bank incident.
- „ November 8th—Theodore Roosevelt elected President of the United States.
- „ November 13th—Opening of the National Art Gallery and Museum on Sunday, by vote of the Legislative Assembly, confirmed by the Legislative Council. The Public Library was opened fourteen days later.
- „ November 14th—Presentation of King's colours by His Excellency the Governor-General, by command of His Majesty, to representatives of the Australian Light Horse, the Royal Australian Artillery, and the Australian Army Medical Corps.
- „ November 30th—State Parliament prorogued.
- „ December 12th—Appointment of Tariff Commission, in Federal House of Representatives, to inquire into the effect of the operation of Customs Tariff of the Commonwealth of Australia upon Australian industries, and into the working of the Tariff generally.
- „ December 15th—Federal Parliament prorogued.

CONSTITUTION AND GOVERNMENT.

Separation
from New
South
Wales.

Prior to the first day of July, 1851, the district known as Port Phillip formed part of the Colony of New South Wales. This district was, under the provisions of an Imperial Act of 5th August, 1850, entitled "An Act for the Better Government of Her Majesty's Australian Colonies," separated from New South Wales, and constituted into a self-governing colony under the name of Victoria, its territories being defined as those "comprised within the said District of Port Phillip, including the town of Melbourne, and bounded on the north and north-east by a straight line drawn from Cape Howe to the nearest source of the River Murray, and thence by the course of that river to the eastern boundary of the Colony of South Australia."

Pursuant to the provisions of the Imperial Act the Governor and Legislative Council of New South Wales passed the Victorian Electoral Act in 1851, which provided that a Legislative Council be constituted for Victoria, consisting of thirty members, ten to be nominated by the Crown, and twenty to be elected by the inhabitants of the new colony. This Act also divided Victoria into sixteen electoral districts, as follow :

1. Northern Division of Bourke County.
2. Southern Bourke County, Evelyn, and Mornington.
3. County of Grant.
4. Counties of Normanby, Dundas, and Follett.
5. Counties of Villiers and Heytesbury.
6. Counties of Ripon, Hampden, Grenville, and Polwarth.
7. Counties of Talbot, Dalhousie, and Anglesey.
8. Pastoral District of Gippsland.
9. Pastoral District of Murray, except that part included in Anglesey.
10. Pastoral District of the Loddon, formerly Western Port, except parts included in Dalhousie, Bourke, Anglesey, Evelyn, Mornington, and Talbot.
11. Pastoral District of the Wimmera.
12. City of Melbourne.
13. Town of Geelong.
14. Town of Portland.
15. United towns of Belfast and Warrnambool.
16. United towns of Kilmore, Kyneton, and Seymour.

Amongst these constituencies, the twenty members were distributed thus:—Melbourne, three members; Northern Bourke and Geelong, two each; and each other electorate, one member; the areas comprised within the towns having separate representation being excluded from the county franchise.

On 1st July, 1851, the Governor-General of the Australian possessions issued writs for the election of members to the newly constituted Victorian Council, and proclaimed the District of Port Phillip to be separated from New South Wales, and to have been erected

into a separate colony, designated the Colony of Victoria, of which Mr. C. J. Latrobe, the superintendent, was raised to the Governorship. The qualifications for electors were: (1) ownership of a freehold of the clear value of £100; (2) householding resident occupation of dwelling-house value £10 per annum; (3) holding of a pasturing licence; (4) ownership of a leasehold estate in possession, with three years to run, of the value of £10 per annum.

In December, 1852, the Secretary of State for the Colonies invited the Legislative Council of Victoria to take steps to pass a Bill more nearly assimilating the form of the colony's institutions to that prevailing in the mother country, particularly in reference to the creation of a second Chamber. This invitation was acted upon without delay, and on 24th March, 1854, a Bill was passed to establish a Constitution for Victoria. This Bill received the Royal assent on 16th July, 1855, and the new Act, denominated The Constitution Act, became law when proclaimed in the *Government Gazette* of 23rd November, 1855.

Steps leading up to responsible government.

THE CONSTITUTION OF 1855.

When the change to responsible government was made, the bicameral and cabinet systems were introduced. In the new Parliament, which met on 21st November, 1856, the members of the Legislative Council numbered 30, who were elected for ten years, and represented six provinces. This House was not to be dissolved, but five of its members were to retire every two years. The Legislative Assembly consisted of 60 members, representing 37 districts, liable to dissolution at the end of five years, or earlier, at the discretion of the Governor.

Responsible government.

Certain officers of the Government, four at least of whom were to have seats in Parliament, were to be deemed "Responsible Ministers," and any member of either House accepting a place of profit under the Crown was required to vacate his seat, but was capable of being re-elected.

The qualifications for members of the Council were, having attained the age of 30 years, being natural-born subjects of Her Majesty, and possessing freehold estate in the colony to the value of £5,000, or £500 annual value; for members of the Assembly, having attained the age of 21 years, being natural-born, or naturalized for five years, having resided in Victoria for two years previous to the election, and possessing freehold estate in the colony to the value of £2,000, or £200 annual value.

Qualifications of Members.

The Council franchise was attainment of age of 21 years, being natural-born, or naturalized for three years, having resided in Victoria for one year, and possessing freehold estate in the electoral province valued at £1,000, or £100 annual value, or a leasehold of five years' duration in the province of £100 annual value, residing in province, or being a graduate of any university in the British dominions, or a barrister or solicitor on the roll, or a medical practitioner, or an officiating minister, or an officer or retired officer of Her Majesty's land or sea forces.

Council franchise.

Assembly
franchise.

The Assembly franchise was attainment of the age of 21 years, being natural-born or naturalized, having resided in Victoria for one year, and possessing freehold estate in the electoral district valued at £50, or £5 annual value, or leasehold in the district of £10 annual value, or being a householder occupying premises of £10 annual value, or having permissive occupancy of Crown lands for which payment was made to the Crown, or receiving salary of £100 per annum.

Vote by
ballot.

Immediately preceding the inauguration of the Constitution of 1855, it was provided that electors recording their votes should do so by secret ballot. Victoria is thus the first country where, in modern times, elections were carried out on this principle. All Parliamentary and other public and quasi-public elections are now conducted by ballot.

CHANGES IN THE CONSTITUTION.

The first alteration made by the Victorian Parliament in the Constitution was the abolition of the property qualification of members of the Legislative Assembly on 27th August, 1857, and the establishment of universal manhood suffrage on 24th November of the same year. On 17th December, 1858, the number of members of the Legislative Assembly was increased to 78, to be returned for 49 electoral districts. It was not until over ten years later, viz., on the 1st January, 1869, that another change was made, when the property qualification of members of the Legislative Council was reduced from £5,000 capital value or £500 annual value to half those amounts respectively, and that of electors from £1,000 capital value or £100 annual value to an annual value of £50, if the lands were rated to that amount in some municipal district or districts. On 2nd November, 1876, the number of members of the Legislative Assembly was increased to 86, and the districts to 55. The property qualification of members and electors of the Legislative Council was further reduced, on the 28th November, 1881, to a freehold of the annual rateable value of £100, free of all incumbrances, in the case of a member, and to freehold of the annual rateable value of £10, or a leasehold originally created for not less than five years, or occupying tenancy of the rateable annual value of £25, in the case of an elector. By the same Act the number of members of the Council was increased from 30 to 42, the number of provinces from six to fourteen, whilst the tenure was reduced to six years. The final increase in the number of members was made on the 22nd December, 1888, when the number for the Council was increased to 48, and that for the Assembly to 95 for 84 districts.

Plural
voting
abolished.

On the 30th August, 1899, plural voting was abolished, it being provided that no person should on any one day vote in more than one electoral district at an election for the Assembly. Plural voting is still, however, permissible in elections for the Upper House, but owing to the large area of the provinces, it is improbable that the right is exercised to any extent.

To facilitate the exercise of the franchise in sparsely populated districts, the *Voting by Post Act* 1900 was passed on the 17th October, 1900. This measure enables any elector, who is resident, or is likely to be staying, on the polling day, more than five miles from the nearest polling booth, or who is prevented by reason of sickness or infirmity from voting personally, to obtain a ballot paper entitling him to vote by post for any candidate in his district standing for either House of Parliament. This Act came into force on 1st December, 1900, and was to continue in force for three years, and thence until the end of the next ensuing session of Parliament. The first experience of the working of this Act was at the Commonwealth Elections held in March, 1901, at which 1,269 postal ballot papers were used in eighteen out of the nineteen contested districts for the House of Representatives, being about 1 per cent. of the total votes recorded. The number of electors who voted by post for the Senate throughout the whole State was 1,227, or one in every 144 who voted. Voting by post is also provided for in the Commonwealth Electoral Act.

Voting by post at elections.

In cases where a person is entitled to become an elector and his name does not appear on the Ratepayers' or General Roll, such person could, by an Act passed in 1898, take out a Right at any time before the day of election, after giving seven days' notice, and apply to a Court of Petty Sessions for a Certificate enabling him to vote. The "Reform Act of 1903" has now, however, restricted the issue of these certificates. No certificate shall now be granted between the day of dissolution and the day of polling in the case of a Parliament dissolved before its expiry by effluxion of time; nor between 30 days before the time at which the Assembly would expire by effluxion of time, if not sooner dissolved, and the day of polling; nor between the day on which any member's seat becomes vacant and the day of polling.

Voters' certificates.

The first difficulty in the working of the Constitution of 1855 occurred in 1865, when the Government of Mr. McCulloch was anxious to pass a protective Tariff. It was certain that a majority of the Council would resist such a Tariff, that body having (unlike the House of Lords in the Imperial Parliament) power to reject Money Bills. The Assembly, fearing such a course, passed the Tariff, and tacked it to the Appropriation Bill. The Council laid aside the double Bill, and Parliament was prorogued without having passed supply. The Ministry, having no money, applied to the Governor, Sir Charles Darling, who sanctioned a levy of the new duties as passed by the Assembly, and performed the necessary executive acts to enable Ministers to negotiate loans with a bank to provide for necessaries, sanctioning also the expending of money in payment of salaries. The Governor then communicated these facts to the Secretary of State for the Colonies, Mr. Cardwell, who replied that his acts had been illegal. Meantime Parliament had been dissolved, and the electors returned a large majority in favour of the Government's protective Tariff. Great indignation was manifested on

Constitutional difficulties experienced.

account of Mr. Cardwell's missive, and the Cabinet resigned on the ostensible ground that the opposition of the Council made it impossible to carry on the Government. Attempts to form a new Ministry were unsuccessful. The old Cabinet resumed office, and the difficulty was finally met by a separation of the two Bills. Sir Charles Darling was recalled in 1866.

In consideration of the late Governor's services, the Assembly in 1867 voted £20,000 to Lady Darling, and fearing the rejection of the grant by the Council, again included the amount in the Appropriation Bill. On the Council's rejection of this Bill, the Ministry suggested a short prorogation to enable negotiations to be carried on. The new Governor, Sir J. H. T. Manners-Sutton, proposed the resignation of Ministers, that he might communicate with the leaders of the other side. He found that none of these would give him such an assurance of ability to remove the deadlock which had occurred as would justify him in asking them to become Ministers.

The Government therefore returned to office, and the Governor granted a short prorogation. When the Parliament re-assembled, the Governor dissolved it at the request of Ministers, and in 1868 the new Parliament met with a strong Ministerial following—the issue before the electors having been the independence, in matters of finance, of the Legislative Assembly. Before the meeting of Parliament, a despatch was received from Mr. Cardwell, revealing the view of the Colonial Office as to relations between the Houses and the Governor and the Home authorities, disapproving of the Darling grant being tacked to the Appropriation Bill, as tending to prevent discussion in the Council, and advising the Governor not to approve of such a grant without an assurance that the Ministry would give the Council full opportunity of discussion. Ministers complained that Imperial interference endangered responsible Government. The Governor, holding himself responsible to the Home Government, regarded his instructions, and insisted on the grant being separated from the Appropriation Bill. The Ministry resigned, and Mr. Sladen accepted office, only to be almost immediately defeated. The former Ministry returned, and the difficulty was overcome by Sir Charles Darling refusing the grant.

Again, in 1877, the Houses were in conflict. The first part of the proceedings was like the preceding cases. Payment of members had been adopted by two temporary Acts, the latter of which was about to expire, and the Government of Mr. Graham Berry included the grant (£18,000) in the Appropriation Bill, thus purposing to provide the money as an ordinary form of expenditure. The Council laid the Bill aside, and the Government proceeded to raise supplies for their service by collecting the duties voted by the Assembly in the Appropriation Bill. A decision of the Law Courts was against the Government, who were therefore unable to enforce their demands. Reductions and dismissals in the Civil Service were made. A crisis ensued, and both Houses addressed the Crown. In March, 1878, the disputed

item was withdrawn from the Appropriation Bill, and the Council accepted a separate Payment of Members Bill. The question of the removed civil servants remained. Ministers said that the Service was overmanned, and only a sufficient number would be reinstated, and the rest pensioned.

The position in regard to these constitutional difficulties has now been met by Section 30 of *The Constitution Act 1903*.

On 14th August, 1885, a very important Act was passed, constituting the Federal Council of Australasia. The first session of the Council took place at Hobart on 25th January, 1886. Seven additional sessions were held, the last at Melbourne on 24th January, 1899. The Acts passed by the Council had force only in those States which were specially legislated for, until repealed by the Federal Council. The labours of this body led up to and culminated in the establishment of the Commonwealth of Australia.

Steps leading up to Federation.

Victoria is now one of the six States forming the Commonwealth of Australia; and is still, except as regards matters dealt with by the Federal Parliament, a self-governing colony under the British Crown, empowered generally "to make laws in and for Victoria in all cases whatsoever." The powers of the Victorian Parliament have been considerably curtailed by the federation of the Australian Colonies, and the transfer of various functions to the Commonwealth Parliament. Although the matters which will ultimately be dealt with by that body will remove from the State Parliament many of its present functions, the internal development of the State still depends upon the local Parliament; the power of taxation for State purposes (other than by Customs and Excise) is retained; Crown lands, agriculture, mining, and factory legislation also remain; neither the State railways nor the public debts have yet been touched by the Commonwealth; whilst it will probably be many years before that Parliament will be able to assume all the multifarious functions assigned to it, and which must in the interim be dealt with by the States. The Victorian Parliament has delegated to municipalities, mining and land boards, fire brigade boards, the Melbourne and Metropolitan Board, irrigation and water supply trusts, the Melbourne Harbor Trust, the Tramways Trust, and other bodies, power to deal with the immediate local and special necessities of their districts. This decentralization of Governmental functions is generally permitted and exercised in regard to the minor affairs of each particular district, whose representatives legislate upon the matters within their jurisdiction.

Division of Governmental functions.

THE PRESENT CONSTITUTION.

After the establishment of the Federal Government it became abundantly evident that the representation of the States in the States' Houses was excessive, and steps were taken to reform the States' Constitutions. Accordingly an Act was passed in Victoria "to provide for the Reform of the Constitution," and reserved for the Royal assent on the 7th April, 1903. After an interval of some months

Reform Act 1903.

the Royal assent was proclaimed on the 26th November, 1903. This Act, entitled *The Constitution Act 1903*, provides for a reduction in the number of responsible Ministers from ten to eight, and their salaries from £10,400 to £8,400; in the number of members of the Legislative Council from 48 to 35, including one special representative for the State railways and public servants; but an increase in the number of electoral provinces from fourteen to seventeen, each being now represented by two members elected for six years—one retiring every three years by rotation, except at a general election, when one-half of the members are to be elected for only three years. The property qualification of members of the Council was reduced from £100 to £50 as the annual value of the freehold, and that of electors qualifying as lessees or occupying tenants from an annual value of £25 to one of £15. A reduction was also made in the number of members of the Legislative Assembly from 95 to 68—including two to be specially elected by the railway officers, and one by the State public servants, and in that of the electoral districts from 84 to 65.

Both Houses were prorogued on 24th December, 1903, being several weeks after the Royal assent to the Act had been proclaimed, Acts having been passed determining the boundaries of the new constituencies. Power is given to any Minister who is a member of the Assembly to sit in the Council—or *vice versâ*—in order to explain the provisions of any measure connected with any department administered by him. The Council is empowered to suggest alterations in any Appropriation Bill once at each of three stages of the Bill, viz.—(a) when in Committee, (b) on the Report of the Committee, (c) on the third reading. The remedy provided to meet disagreements between the two Houses is the simultaneous dissolution of both after a Bill has been twice submitted to, and rejected by, the Council—viz., once before, and once after, a dissolution of the Assembly in consequence of such first rejection.

The
Governor.

The Governor acts under the authority of Letters Patent under the Great Seal of the United Kingdom, and according to Royal instructions issued by the Colonial Office. He is the official head of the Legislature, and assents in the name of the Crown to all Acts passed by the Parliament, reserving for the Royal assent certain Bills already described. The only matters in which the exercise of any discretion is required on the part of the Governor are the assenting to or dissenting from, or reserving, of Bills passed by the Parliament; the granting or withholding of a dissolution of Parliament when requested by a Premier; or the appointment of a new Ministry.

Forming
a new
Ministry.

When a Ministry is defeated in Parliament or at the polls, its members tender their resignations to the Governor, whose duty it is to announce his intention of accepting them. The outgoing Premier generally suggests to the Governor, as his successor, the name of the most prominent of his opponents, generally the leader of the Opposition. Thereupon the Governor "sends for" the individual suggested, who, if he feels in a position to carry on the

Government, endeavours to form a Ministry. If he fails, he informs the Governor of the fact and some one else is applied to. The distribution of portfolios is first arranged by the proposed Ministers themselves, and submitted to the Governor for approval, who always adopts it, unless the list should contain the name of any one against whom very serious objections exist, or proposes a new and revolutionary arrangement.

When a Ministry finds that it is unable to carry on the affairs of the country in the manner it deems essential for the well-being of the community, or when it is defeated on a measure which it considers vital, or when it has not a proper working majority, the Premier may, instead of advising the Governor to "send for" some one else, ask for a dissolution; and the principle which decides a Governor in granting or refusing such a request is the probability of success for the Ministry in the event of its being granted. In regard to these matters, however, the instructions issued to the Governor are elaborate and definite; and it is very rarely that any personal exercise of discretion is necessary. In other matters the Governor acts on the advice of the Executive Council.

The Executive Council consists of two classes of members, viz. :
 —(a) Members forming the Ministry of the day, whether salaried or honorary; (b) all ex-Ministers who have not actually resigned or vacated their seats. These Executive Councillors take no active part, as such, in the deliberations of the Ministry, the title being merely an honorary distinction. The expression "Governor in Council," occurring so frequently in Victorian Acts, means the Governor by and with the advice of such members of the Executive Council as are included in the former category mentioned above. Even in its active phase, that of the existing Ministry, the Executive Council has two shapes, the formal and the informal. The latter, which is spoken of as the "Cabinet," is the real core and essence of the Government. In its private meetings at the Premier's office no one is admitted but the actual Ministry of the day, no records of the meetings transpire, and no official notice is ever taken of the proceedings. The former is presided over by the Governor, and attended by the Clerk of the Council, who keeps a formal record of its proceedings and deliberations, which are frequently published, with the names of its members prefixed. Here the decisions of the Cabinet are put into official form.

The number of salaried Ministers is now limited to eight, and the salaries to £8,400; and four at least must be members of the Council or Assembly, but not more than two shall be members of the Council nor more than six of the Assembly. Upon accepting salaried office a Minister vacates his seat in Parliament, but he is re-eligible, and a subsequent change from one office to another does not necessitate his re-election. Although only four Ministers are required to be members of either House, in practice all members of a Ministry are always members. The head of the Ministry—the Premier, a merely titular distinction—almost invariably fills the

Granting a
dissolution.

The Execu-
tive
Council.

Responsible
Ministers.

office either of Treasurer or Chief Secretary, but may occupy any office. The Hon. W. H. Irvine, the last Premier, during the greater portion of the last Parliament held the position of Attorney-General and Solicitor-General.

The Parli-
ament.

The Parliament consists of two Chambers, the Legislative Council and the Legislative Assembly. The general power of legislation is conferred upon "Her Majesty, by and with the advice and consent of the said Council and Assembly." By Section 56 of The Constitution Act it was provided that—"All Bills for appropriating any part of the revenue of Victoria, and for imposing any duty, rate, tax, rent, return, or impost shall originate in the Assembly, and may be rejected, but not altered by the Council." There was great difference of opinion as to the interpretation of this section, it being held by many that the words "all Bills for appropriating" (revenue) "and for imposing" (taxes) signified Bills having for their principal object the authorizing of payments or the granting of supply; whilst others contended that legislation which merely incidentally or consequentially authorizes the collection of money or the payment of officials may be dealt with as ordinary legislation by the Council. This matter has now been dealt with by Section 30 of the Reform Act of 1903, which declares that a Bill shall not be deemed for appropriating, &c., or for imposing, &c., by reason only of its containing provisions "for the imposition or appropriation of fines or other pecuniary penalties or for the demand or payment or appropriation of fees for licences or fees for services under such Bill." In regard to the latter portion of Section 56, providing that Money Bills must originate in the Assembly, and may be rejected but not altered by the Council, the new Act provides, as in the Commonwealth Constitution, that the Council may suggest alterations as mentioned previously.

It is also provided by Section 57 of The Constitution that Appropriation Bills must have been first recommended by a message of the Governor to the Assembly before they can be introduced. The Governor, of course, acts in this matter on the advice of the Ministry.

The Legis-
lative
Council.

The Council—called the Upper House—now consists of 35 members, one of whom is a representative of the State public officers and railways officers. The State is now divided into seventeen electoral provinces, each returning two members. The member in each constituency who, of the two elected, receives the highest number of votes retains his seat for six years, whilst the other member retains his seat for three years only, subject, of course, to the dissolution of both Houses in case of a deadlock, as previously described. One-half of the members will thus retire every three years. To be qualified for membership, a candidate must be a male of the age of 30 years, either a natural-born subject or naturalized and resident in Victoria for ten years, and must have been beneficially entitled to a freehold estate in Victoria of the clear annual value of £50 for one year "previously to" his election. The following male persons aged 21 or over, if they are natural-born subjects or

naturalized for three years and resident in Victoria for twelve months, are entitled to vote for the Council in that electoral division on the rolls of which their names appear:—The owner of a freehold rated at an annual value of £10; the owner of a leasehold, created originally for five years, or the occupying tenant of land rated at £15 annual value; graduates of a British University, matriculated students of the University of Melbourne, barristers and solicitors, legally-qualified medical practitioners, duly appointed ministers of religion, certificated schoolmasters, naval and military officers, active and retired. All voters, except those claiming in respect of property, must take out electors' rights in the division in which they reside.

The Assembly, commonly called the Popular or Lower House, now consists of 68 members, two of whom are special representatives of the railway officers, and one of whom is a special representative of the State public service proper, including the police and teachers of State schools. Officers employed under the Commonwealth, and temporary officers under the State still retain the ordinary franchise. Provision is also made for the reduction of the railways representation to one member in the event of the number of officers not exceeding the quota by one-half. The quota is determined by dividing the total number of electors on the rolls for the Assembly by 68. For the other 65 seats single electorates are now provided. Each Assembly expires by effluxion of time at the end of three years from its first meeting, and may be sooner dissolved by the Governor. To be qualified for election to the Assembly, a candidate must be a natural-born subject or a person who has been naturalized for five years and resident in Victoria for two years. The following persons are ineligible:—Judges, ministers of religion, Government contractors, uncertificated insolvents, holders of offices of profit under the Crown (except Ministers), and persons who have been attainted of treason, or convicted of felony or infamous offence in the British dominions. Moreover, a member vacates his seat if he resigns; is absent for a whole session without permission of the House; takes any oath or declaration of allegiance or adherence to a foreign power, or becomes a subject of a foreign State; becomes bankrupt, insolvent, or a public defaulter; is attainted of treason, or convicted of felony, &c.; becomes *non compos mentis*; or enters into a Government contract. Universal manhood suffrage is in force for the Assembly, all males over the age of 21 years, natural-born or naturalized, untainted by crime, being allowed a vote if they hold an elector's right, and their names are on a general roll, and are resident in the State twelve months and in the district one month. If a person is on a ratepayers' roll it is unnecessary to take out an elector's right or to reside in the district, although the occupying tenant is entitled to be entered as the ratepayer in priority to the owner, and is in most cases so entered. Where a tenant finds that his landlord has paid the rates in his own name, and is consequently entered as the ratepayer in respect of the premises occupied by the tenant,

The Legis-
lative
Assembly.

an elector's right must be taken out. Even where the tenant is entered on the ratepayers' roll in respect of the premises occupied by him, and the property is of the capital value of £50 or the annual value of £5, the owner may take out an elector's right in respect thereof. There are, consequently, a large number of persons on the rolls for several districts who were formerly entitled to vote in all of such districts; but, in August, 1899, plural voting was abolished in respect of the Assembly, and now a vote is allowed in only one constituency, although the elector may, if on the roll for more than one district, choose which district he shall vote in. A member of the Assembly receives reimbursement of his expenses in relation to his attendance at the rate of £300 per annum. The Assembly is presided over by a Speaker, who is elected at the first meeting after every general election, and vacates his seat by expiry or dissolution of the House, and by death, resignation, or a removing vote of the House. When the Assembly resolves itself into a Committee of the whole House to consider the details of any measure, it is presided over by a Chairman of Committees. The Assembly cannot proceed to business unless twenty members, exclusive of the Speaker, are present; and the Speaker has a casting but no substantive vote.

Limitation
of election
expenses.

By an Act (No. 1891) passed on the 24th December, 1903, it is provided that the electoral expenses (other than personal expenses of a candidate in travelling and attending election meetings) of a candidate for the Legislative Council and Assembly shall not exceed £400 and £150 respectively. A limitation is also placed upon the matters in respect of which such sums may be expended. No electoral expenses shall be incurred by or on behalf of a candidate except in respect of:—(1) The expenses of printing, advertising, publishing, issuing, and distributing addresses and notices, and purchase of rolls. (2) The expenses of stationery, messages, postage, and telegrams. (3) The expenses of holding public meetings, and hiring halls for that purpose. (4) The expenses of committee rooms. (5) One scrutineer at each polling-booth, and no more. (6) One agent for any electoral province or district.

STATE ELECTIONS, 1904.

LEGISLATIVE COUNCIL.

General
Election—
Votes
polled, &c.

At the General State Election held on 1st June, 1904, under the Reform Act of 1903, the number of provinces in which elections were contested was ten—in seven no contest took place—and the public and railway officers returned one representative. Each of the provinces returns two members, which, with the special representative of the Government service makes a House of 35 members. The total number of electors on the rolls for the electoral provinces was 172,526, of whom 5,696 were public and railway officers. The number of electors on the rolls in contested provinces was 104,865, of whom 66,182, or 63 per cent., voted. For the public officers'

representative 4,800, or 84 per cent. of those entitled exercised the franchise. Excluding public servants, the proportion was about 62 per cent. The following table shows the number of electors in each province, as well as of those who voted:—

NUMBER OF ELECTORS AND VOTES POLLED FOR THE LEGISLATIVE COUNCIL AT THE GENERAL ELECTION ON THE 1ST JUNE, 1904.

Electoral Provinces.	Number of Electors on the Rolls.	Number of Electors who Voted.
Bendigo	8,911	6,161
East Yarra	12,899	7,077
Gippsland	9,154	5,579
Melbourne	13,410	(Uncontested)
Melbourne East	10,904	5,891
Melbourne North	11,783	6,036
Melbourne South	12,843	7,767
Melbourne West	12,422	6,667
Nelson	7,467	5,210
Northern	8,438	(Uncontested)
North-Eastern	8,757	"
North-Western	9,506	4,994
Southern	9,212	(Uncontested)
South-Eastern	10,037	"
South-Western	8,716	"
Wellington	8,976	6,000
Western	9,091	(Uncontested)
	172,526	
Less uncontested provinces (7) . . .	67,661	
Totals	104,865*	61,382

PUBLIC AND RAILWAYS OFFICERS.

—	Number of Electors on Rolls.	Electors who voted—	
		Number.	Percentage to Number on Rolls.
Public Officers and Railways Officers ..	5,696	4,800	84.27

* Including Public and Railways Officers.

LEGISLATIVE ASSEMBLY.

For the Legislative Assembly there were contests in 53 of the 65 constituencies, each returning one member. In addition, the public and railways officers were entitled to return three members, thus constituting a House of 68. The number of electors on the rolls for the Assembly, including voters' certificates issued by the court, was 264,709 (of whom 41,109 were in uncontested districts), and of these 149,192 voted, being 66.72 per cent. of the number entitled. The number of electors on the roll of public officers was 3,928, of

whom 3,393, or 86.38 per cent., voted; the number on the roll of railways officers was 6,336, of whom 5,672, or 89.52 per cent., voted. All these officers voted by post, and the percentage of votes recorded by them was much higher than in any other electorate in the State. The number of electors (less public and railways officers) entitled to vote in contested districts was 213,336, of whom 140,127, or 65.68 per cent., went to the poll. The following table shows the number of electors and the votes polled in the different electoral districts, the public and railways officers being included in the various constituencies, as there is no record of their numbers in each electorate:—

NUMBER OF ELECTORS AND VOTES POLLED AT THE GENERAL
ELECTION ON THE 1ST JUNE, 1904.

Electoral Districts.	Number of Electors on Rolls at Period of General Election, including Voters' Certificates Issued by Court.	Number of Electors who Voted.
Abbotsford	4,458	(Uncontested)
Albert Park	5,056	3,468
Allandale	3,815	2,776
Ballaarat East	4,650	2,708
Ballaarat West	4,450	3,298
Barwon	3,788	2,423
Benalla	3,448	1,896
Benambra	2,786	(Uncontested)
Bendigo East	3,809	2,519
Bendigo West	4,459	2,939
Boroondara	5,016	2,771
Borong	3,207	2,233
Brighton	3,581	2,095
Brunswick	4,787	2,927
Bulla	3,894	(Uncontested)
Carlton	4,775	2,964
Castlemaine and Maldon	3,904	2,842
Collingwood	4,571	2,642
Dalhousie	3,986	2,591
Dandenong	4,146	(Uncontested)
Daylesford	3,333	"
Dundas	3,043	"
Eaglehawk	3,892	2,587
East Melbourne	4,545	2,067
Essendon	5,193	2,576
Evelyn	3,213	1,508
Fitzroy	4,642	2,953
Flemington	4,736	2,358
Geelong	4,728	2,857
Gippsland East	3,045	1,941
Gippsland North	2,995	2,054
Gippsland South	4,139	2,588
Gippsland West	3,375	(Uncontested)
Glenelg	3,367	2,224
Goulburn Valley	3,319	2,428

NUMBER OF ELECTORS AND VOTES POLLED AT THE GENERAL ELECTION ON THE 1ST JUNE, 1904—*continued.*

Electoral Districts.	Number of Electors on Rolls at Period of General Election, including Voters' Certificates Issued by Court.	Number of Electors who Voted.	
		Number.	Percentage to Number on Rolls.
Grenville	3,940	2,771	
Gunbower	3,131	(Uncontested)	
Hampden	4,244	2,697	
Hawthorn	5,736	3,420	
Jika Jika	4,644	2,583	
Kara Kara	3,529	2,752	
Korong	2,787	(Uncontested)	
Lowan	3,029	"	
Maryborough	4,401	3,206	
Melbourne	5,820	3,154	
Mornington	4,231	2,256	
North Melbourne	5,247	3,158	
Ovens	3,351	2,506	
Polwarth	3,589	(Uncontested)	
Port Fairy	3,782	2,656	
Port Melbourne	5,344	3,482	
Prahran	4,980	3,282	
Richmond	5,282	3,292	
Rodney	3,906	2,704	
Stawell and Ararat	3,674	2,438	
St. Kilda	5,024	2,850	
Swan Hill	3,294	1,724	
Toorak	4,934	3,029	
Upper Goulburn	3,825	2,467	
Walhalla	2,817	1,517	
Wangaratta	3,775	2,686	
Waranga	3,381	2,306	
Warrenheip	3,600	2,508	
Warrnambool	3,538	(Uncontested)	
Williamstown	5,723	3,450	
	264,709	140,127	
Less uncontested districts (12) ..	41,109		
Total	223,600*	140,127	

PUBLIC AND RAILWAYS OFFICERS.

	Number of Members.	Number of Electors on Rolls.	Electors who Voted.	
			Number.	Percentage to Number on Rolls.
Public Officers	1	3,928	3,393	86·38
Railways Officers	2	6,336	5,672	89·52

* Including Public and Railways Officers.

Proportion
of votes
polled,
1866 to
1904.

The following are the proportions who voted at the last sixteen general elections of the State Lower House in districts in which the elections were contested:—

PROPORTION OF VOTERS AT GENERAL ELECTIONS FOR THE
LEGISLATIVE ASSEMBLY, 1866 TO 1904.

Year of General Election.	Proportion of Electors of Contested Districts who voted. Per cent.	Year of General Election.	Proportion of Electors of Contested Districts who voted. Per cent.
1866	55·10	1886	64·70
1868	61·59	1889	66·58
1871	65·02	1892	65·12
1874	61·00	1894	70·99
1877	62·29	1897	70·33
1880 (February)	66·56	1900	63·47
1880 (July)	65·85	1902	65·47
1883	64·96	1904	66·72

Twentieth
Parliament.

The first session of the twentieth Parliament (the first Parliament elected under the Reform Act) was opened on the 29th June, and prorogued on the 30th November, 1904.

Duration of
Parliaments
and
sessions.

The following is a statement of the duration of each Parliament since the establishment of responsible government, the number of days in session during each Parliament, and the percentage of the latter to the former:

DURATION OF PARLIAMENTS AND SESSIONS, 1856 TO 1904.

Number of Parliament.	Period.	Duration of Parliament.	Days in Session.	
			Number.	Percentage to Duration.
		Days.		
1st	1856-8	991	691	69·7
2nd	1859-60	637	566	88·8
3rd	1861-4	1,091	728	66·7
4th	1864-5	378	366	96·8
5th	1866-7	686	391	57·0
6th	1868-70	1,048	734	70·0
7th	1871-3	1,049	639	60·9
8th	1874-6	1,072	700	65·3
9th	1877-9	993	684	68·9
10th	1880	49	46	93·9
11th	1880-2	926	802	86·6
12th	1883-6	1,088	543	49·9
13th	1886-9	1,091	653	59·9
14th	1889-92	1,093	636	58·2
15th	1892-4	845	524	62·0
16th	1894-7	1,089	684	62·8
17th	1897-00	1,088	586	53·9
18th	1900-02	671	358	53·4
19th	1902-3	436	300	68·8
20th (First Session) ..	1904	..	155	..

It will be seen that there was a greater percentage of working days during the nineteenth Parliament than any other since 1882. Excluding the nineteenth Parliament, the tendency of late years seems to be, according to the above figures, towards shorter sessions than formerly. The longest continuous sessions were—one of 376 days, from July, 1880, to August, 1881; 368 days, during the first session of the first Parliament in 1856-7; 366 days in 1864-5; 341 days in 1859-60; 322 days in 1877-8; 321 days in 1869; 317 days in 1875-6; and 308 days in 1862-3; whilst at no time since 1880-1 has a session lasted 300 days. The longest sessions since 1881 were—295 days in 1892-3, 284 days in 1882-3 and 1895-6, and 275 in 1886; the longest since 1895-6 being 239 days in 1899-00, 188 days in 1901, 185 days in 1896, 176 days in 1898, and 175 days in 1902-3, during the last Parliament. The session of 376 days in 1880-1 was followed by another of 142 days, with only a recess of one day, thus making an almost continuous sitting extending over 518 days, or almost eighteen months. The first session of the present Parliament extended over 155 days. The longest recess was in 1866-7, when 230 days elapsed between the closing of the second and the opening of the third session of the fifth Parliament; the next longest being 220 days in 1883-4, 214 in 1878-9, 205 in 1893-4, 189 in 1897-8 and in 1898-9, 185 in 1888-9, 181 in 1896-7, 173 in 1890-1 and 1886-7, and 169 in 1871-2.

Long sessions and recesses.

STATE ACTS PASSED, 1904.

The following is a short synopsis of the Acts passed during 1904 by the Victorian Parliament:—

Acts passed during 1904.

- | Act. No. | Date. | |
|----------|----------------|---|
| 1897. | July 12th. | —This Act applies £928,063 out of the consolidated revenue to the service of the year 1904-5. |
| 1898. | August 16th. | —The <i>Legal Practitioners Reciprocity Act 1904</i> alters the time of nomination of members of the Council of Legal Education, as determined by an Act of the previous year. |
| 1899. | August 16th. | —The <i>Railways Standing Committee Act 1904</i> amends the Act of 1893. The Standing Committee on Railways is to be appointed as soon as conveniently practicable after the commencement of the first session of every Parliament, and is to consist of six Members of Parliament, two elected by the Legislative Council from their members, and four by the Legislative Assembly from their members. No Minister of the Crown is to be a member. Four members ordinarily form a quorum, but when the Committee meet for the consideration of their report to the Legislative Assembly, the quorum is five. |
| 1900. | August 26th. | —This Act applies £32,402 out of the consolidated revenue to the service of the year 1903-4. |
| 1901. | September 6th. | —The <i>Debenture Conversion Act 1904</i> provides for converting £457,000 of the public debt of Victoria into new debentures, the money raised by the sale of these new debentures to be applied to paying off the indebtedness of the Treasurer on account of the Trust Funds. |

- | Act No. | Date. |
|---------|--|
| 1902. | September 6th.—The <i>Stamps Act</i> 1904 provides for the appointment of public servants of the State and Commonwealth and other persons as sellers of duty stamps; and for stamping of instruments after execution, upon payment of prescribed penalties. |
| 1903. | September 6th.—The <i>Local Government Act</i> 1904 amends a provision of the Act of the previous year, in regard to transfer of stock by municipal councils to the State Treasurer in payment of debentures about to fall due. |
| 1904. | September 6th.—The <i>Surplus Revenue Act</i> 1904, dating from 30th June, 1904, applies £150,000 of the surplus of the year 1903-4 to repayment of an advance made by the Savings Banks Commissioners to the Treasurer, and £390,205 to certain works set out in the Schedule to the Act. |
| 1905. | September 6th.—The <i>Statistics Act</i> 1904 provides for the collection and furnishing of Statistical returns and information. It repeals and amends the <i>Statistics Collection Act</i> of 1902, and also Part XXXV. of the <i>Local Government Act</i> of 1903. Every officer controlling a branch or department of the public service, every municipal council, trust, corporation, board, company, &c., must furnish such information and particulars of their business and transactions as the Government Statist may require. Occupiers of land and managers of factories and mines must also give particulars, the former as to their area, produce, employés, stock; the latter as to their employés, their working time and wages, the power, materials, land, buildings, machinery, and tools used, the articles produced and treated, the capital invested, and the expenditure incurred, to the Statist or persons authorized by him, or to members of the police force, who act as collectors of statistics, and who may at any reasonable time enter any land, mine, or building where persons are employed. No person engaged in the collection or compilation of these returns may divulge any information, nor may the Government Statist reveal the transactions, profits, or financial position of any person, firm, or company. |
| 1906. | September 6th.—The <i>Wharfage and Harbors Rates Act</i> 1904 repeals prior Acts in regard to goods arriving coast-wise from places in Victoria, and limits the wharfage rate to 5s. per ton, calculated by weight or measurement. |
| 1907. | September 27th.—The <i>Juries Act</i> 1904 gives a Judge power to discharge or excuse from attendance at Court any person summoned as a juror, upon reasonable grounds. Justices of the Peace may, if they so desire, be exempt from serving as jurors. |
| 1908. | September 27th.—The <i>Wild Dogs (Continuation) Act</i> 1904, dating from 31st July, 1904, revives and continues the Act of 1901 until Parliament otherwise determines. |
| 1909. | September 27th.—This Act applies £384,303 out of the consolidated revenue to the service of the year 1904-5. |

- | Act No. | Date. | |
|---------|-----------------|--|
| 1910. | September 27th. | —The <i>Declaring of Boroughs Act 1904</i> , which is to be read with the <i>Local Government Act 1903</i> , gives the Governor in Council power to declare a shire a borough, when its area does not exceed nine square miles, its population numbers 500 or more householders, and its rateable property is capable of yielding at a Shilling rate, £300 per annum. |
| 1911. | September 27th. | —The <i>Welshpool Jetty Rail or Tramway Construction Act 1904</i> authorizes the construction by the Board of Land and Works of a line of rail or tramway from Welshpool Railway Station (South Gippsland line) to the end of the jetty at Welshpool. The expenditure is limited to £3,000. |
| 1912. | October 11th. | —The <i>Carrum Advances Act 1904</i> enables seed and manure to be advanced to cultivators of land within the Carrum Irrigation and Water Supply Trust, in such quantities, not exceeding £50, as the Minister thinks fit. Security for repayment, in the form of a mortgage or preferable lien, must be furnished by the cultivator, who must also hold himself personally liable for the amount of the advance. |
| 1913. | October 11th. | —The <i>Vermin Destruction Act 1904</i> , to be construed as one with the <i>Vermin Destruction Act 1890</i> and subsequent Acts, amends the law relating to the destruction of foxes, enacting that the skin, as well as, and attached to, the brush and scalp, must be given up when claiming bonus for destruction. |
| 1914. | October 11th. | —The <i>Mysia Land Exchange Act 1904</i> provides for the exchange of certain land in the parish of Mysia for the purpose of a public park. |
| 1915. | October 11th. | —The <i>St. Arnaud Market Land Act 1904</i> excises a portion of the land permanently reserved in St. Arnaud as a market site, thereby reducing its area. |
| 1916. | October 11th. | —The <i>Lake Hindmarsh Land Act 1904</i> provides for the resumption by the Crown of the Lake Hindmarsh Aboriginal Settlement land, vested in trustees, by a deed poll of 4th November, 1861, for promoting the welfare of Victorian aborigines. The land is declared available for licence, lease, or perpetual lease, and the value of the improvements as determined by the Board of Land and Works, is to be charged to the incoming licensee or lessee. |
| 1917. | October 11th. | —The <i>Dairying Companies Act 1904</i> adds certain companies to those in the Schedules of prior Dairying Companies Acts. |
| 1918. | October 11th. | —The <i>Tungamah Race-course Act 1904</i> authorizes the sale of part of the land reserved as a site for a race-course at Tungamah. |
| 1919. | October 11th. | —The <i>Numurkah Race-course Act 1904</i> authorizes the sale of land reserved as a site for a race-course at Numurkah. |
| 1920. | October 11th. | —The <i>Municipal Endowment Reduction Act 1904</i> , dating from 1st July 1904, reduces the municipal endowment for 1904-5 to £50,000. |
| 1921. | October 11th. | —The <i>Dunolly Town Hall Land Act 1904</i> revokes the permanent reservation and Crown grant of land in Dunolly as a site for a town hall and borough offices. The land is revested in the Crown, and may be dealt with as unalienated land. |

Act No. Date.

1922. October 11th.—The *Frankston Lands Act* 1904 revokes the permanent reservation of pieces of land in the parishes of Frankston and Langwarrin. The land is revested in the Crown, and may be dealt with as unalienated land.
1923. October 11th.—The *Melbourne Benevolent Asylum Act* 1904 authorizes the Benevolent Asylum Corporation to sell, on conditions approved by the Governor in Council, the site of the Asylum at North Melbourne, in order that the work of the institution may be carried on in some less populous neighbourhood. The proceeds of the sale are to be applied in the purchase of a fresh site, within 20 miles of the Melbourne General Post Office, and in the erection and furnishing of asylum buildings thereon.
1924. October 24th.—This Act applies £683,293 out of the consolidated revenue to the service of the year 1904-5.
1925. October 24th.—The *Instruments Act* 1904 amends prior Acts. A banker carrying on business at more than one place is deemed to be a separate and independent banker at each of such places, for the purposes of that section of the principal Act which declares that a banker paying demand draft on which the indorsement may be forged, discharges the bill. Protection is also extended to a banker where a crossed cheque is credited to a customer before collection.
1926. October 24th.—The *University Act* 1904 provides for the appointment by the Governor in Council of three members in addition to the twenty elected by the Senate. One of the new members is to be a member of the Legislative Council, and two are to be members of the Legislative Assembly. Power is also given to the Governor in Council to increase the annual endowment by £11,000 for each of the ten financial years from 1st July, 1904, on condition that the University establishes schools for mining and agriculture; co-operates with the schools of mines and agricultural colleges throughout the State, by granting full recognition to their courses of work; admits students to courses for diplomas in mining and agriculture without their having passed in the full number of subjects necessary for matriculation; and takes from time to time, without fee, 80 students in these courses. An additional sum of £1,000 may also be granted by the Governor in Council in each of the same ten years, to provide for evening lectures.
1927. October 24th.—The *Wharfage and Harbors Rate Alteration Act* 1904 authorizes the Governor in Council, by Proclamation, published in the *Government Gazette*, to alter the wharfage and harbor rates leviable under the Marine Act, but so that they shall not exceed 5s. per ton, calculated by weight or measurement. The Governor in Council is also authorized to appoint persons to levy and collect the rates, and to make regulations prescribing the method by which they shall be levied and collected, and the mode in which disputes shall be decided.

- Act No. Date.
1928. October 24th.—The *Gunbower Island Land Act* 1904 revokes the permanent reservation, for the growth and preservation of timber, of land at Gunbower Island. The land is to be regarded as unoccupied Crown land.
1929. November 8th.—The *Licensing Act* 1904 amends prior Acts, providing for a Special Sitting of the Licensing Court to deal with cases of failure or neglect of licensees to apply for renewal. A sum to cover the expenses of the Special Sitting must be lodged with the State Treasurer. Sale of draught liquor to children under 16 years of age is declared illegal.
1930. November 8th.—The *Artificial Manures Act* 1904 provides that vendors of manure in quantities of 56 lbs. and over must give purchasers a certificate, showing quantity, trade mark, seller's name and address, and the proportion of nitrogen, phosphoric acid, and potash; and the parcels sold must also contain a label giving similar particulars. Official analysts are to be appointed, and samples purchased may be submitted to them for analysis, on payment of a fee. Penalties are provided if the manure does not contain the quantities stated in the invoice or on the label. The chemist of the Agricultural Department is, by virtue of his office, an official analyst, and he, or persons appointed by him, may enter premises or lands and take samples, and if these are found deficient, take proceedings against the manufacturer or vendor.
1931. November 8th.—The *Transfer of Land Act* 1904 removes doubts with regard to the validity of the practice of the Office of Titles relating to the registration of transfers of mortgages. It also enacts that when a mortgage under the general law is an encumbrance on a certificate of title under the *Transfer of Land Act* 1890, application for a foreclosure order can be made to the Commissioner of Titles, and sets out the mode of procedure upon such application. The right to bring an action for foreclosure under the general law is preserved to the mortgagee. A title to an estate of fee simple in possession of land under the Act of 1890 can be acquired by adverse possession, and application made to the Supreme Court for certificate, which is empowered to order a transfer, with or without conditions. Where the land claimed is of less value than £200, the application can be made to the Commissioner of Titles instead of to the Court. Any person claiming interest in the land, who objects to application, may lodge a caveat.
1932. November 8th.—The *Coal and Firewood Act* 1904 regulates the sale of coal and firewood, with the object of preventing frauds on buyers.
1933. November 8th.—The *Country Tramways Trust Fund Act* 1904 amends the *Tramways Act* 1890, by making the moneys standing to the credit of the country tramways trust fund, to the extent of £137,872, available for irrigation and water supply works, and for the construction of railways, electric tramways, and works connected therewith.

- | Act No. | Date. |
|---------|--|
| 1934. | November 8th.—This Act applies £100 to the services of the year 1904-5. |
| 1935. | November 8th.—The <i>Administration and Probate Duties Act 1904</i> continues the application of Part V. of the Act of 1890 as amended by the Acts of 1903, imposing the rates specified in these Acts on the estates of all persons dying in the year 1905. |
| 1936. | November 22nd.—The <i>St. Kilda Abattoirs Land Act 1904</i> revokes the Crown grant of land granted as a site for abattoirs at St. Kilda, near Point Ormond. |
| 1937. | November 22nd.—The <i>Alexandra Park Act 1904</i> provides that certain land on the south of the River Yarra may be vested in the Board of Land and Works and the City of Melbourne jointly, for the purposes of a public park, to be called the Alexandra Park. |
| 1938. | November 30th.—The <i>Income Tax Act 1904</i> declares the rates of income tax for 1905, and continues and amends the Income Tax Acts. The minimum income taxable is £157, the exemption being £100 on incomes from £157 to £500, no exemption being made for companies. Incomes from personal exertion are taxed 3d. for every pound of the taxable amount up to £500; thence up to £1,000, 4d.; thence to £1,500, 5d.; over £1,500, 6d. Taxes from incomes from property are double these rates. The tax on the income of life assurance companies is 8d., and that for other companies liable to tax 7d. for every pound of the taxable amount. The taxable amount of the income of a mining company is the total amount of the dividends declared during the year. |
| 1939. | November 30th.—This Act continues the <i>Voting by Post Acts</i> until the 31st December, 1905. |
| 1940. | November 30th.—The <i>Inebriates Act 1904</i> repeals the Act of 1890, and comes into operation on 1st January, 1905. It provides for the care, control, and treatment of inebriates. Power is given to a Judge, the Master in Lunacy, or a police magistrate, after examination and personal inspection, to make an order as to the control of an inebriate; and to direct that the expenses of such control be paid out of the property of the inebriate. Where an inebriate is incapable of managing his affairs, a Supreme Court Judge may make orders for payment of debts, and maintenance of himself and family. An inebriate who escapes from custody may be arrested. The Governor in Council is empowered to establish or license institutions for inebriates, and to make regulations in regard to them, and the Inspector-General of the Insane and his officers are to visit places where inebriates are under control. |
| 1941. | November 30th.—The <i>Shepparton Race-course Act 1904</i> revokes the reservation and authorizes the sale of land reserved as a site for a race-course at Shepparton. |

Act No. Date.

1942. November 30th.—The *Ballarat Water Commission Mortgage Ratification Act* 1904 ratifies an indenture extending the time of payment of certain moneys due by the Commission on 1st July, 1904 (on account of water-works under their control), to 1st January, 1917.
1943. November 30th.—The *Water Supply Special Funds Application Act* 1904 sanctions the issue and application of £47,000 available under the *Country Tramways Trust Fund Act* 1904 for irrigation and water supply works in country districts, which are set out in a schedule.
1944. November 30th.—The *Railway Loan Application Act* 1904 sanctions the issue and application of £235,868, available under Loan Acts, for railway works as follows:—Additions and improvements to ways and works; additional rolling-stock, equipment and machinery; and new lines.
1945. November 30th.—The *Surplus Revenue Act* 1904 (No. 2) applies the sum of £61,379, being the amount of the balance of surplus for 1903-4 (£53,126), and that for 1898-9 (£8,253), towards purposes set out in a schedule—£27,480 for construction of railway rolling-stock, and the remainder principally for public works.
1946. November 30th.—The *Railways Act* 1904 amends the law relating to Victorian Railways. It establishes a "Rolling-Stock Replacement Fund" and a "Railway Loans Repayment Fund," from the proceeds of the sales of rolling stock, materials, and structures. In addition, the Commissioners are empowered to appoint sworn weighers to weigh goods and live stock carried on the railways.
1947. November 30th.—The *Church of England Act* 1904 amends the law relating to that Church in Victoria, by substituting synods for assemblies.
1948. November 30th.—The *Railways Special Funds Application Act* 1904 sanctions the issue and application of £90,872, available under the *Country Tramways Trust Fund Act* 1904, as follows:—£19,500 for an electric street railway from St. Kilda towards Brighton; £2,000 for the survey of the Beech Forest railway extension; £43,372 for rolling-stock for railways and electric tramways; and £26,000 for the Strathmer-ton to Tocumwal railway.
1949. November 30th.—The *Melbourne Lands Exchange Act* 1904 authorizes the exchange of lands between the Commonwealth and the Corporation of the City of Melbourne.
1950. November 30th.—The *Public Service Act* 1904 repeals a provision of a prior Act, which required an officer of the 4th class to pass a qualifying examination before promotion to the 3rd class.
1951. November 30th.—The *Executors Company's Act* 1904 provides that a company may be appointed trustee, receiver, or committee of estate under Lunacy Acts, or sole guarantor or surety.

- | Act No. | Date. |
|---------|---|
| 1952. | November 30th.—The <i>Northern Suburbs Cemetery Act</i> 1904 provides for the establishment of a cemetery for the northern suburbs of Melbourne. |
| 1953. | November 30th.—The <i>Conveyancing Act</i> 1904, dating from 1st February, 1905, simplifies and improves the practice of conveyancing in land and the law of property. |
| 1954. | November 30th.—The <i>Melbourne Tramways Trust Amendment Act</i> 1904 extends the powers of the Melbourne Tramways Trust as regards investments, so that in addition to the powers of investment conferred on the trust by prior Acts, it may now invest and re-invest the moneys of its sinking fund in debentures of the Savings Banks, Melbourne and Metropolitan Board of Works, and Melbourne Harbor Trust. |
| 1955. | November 30th.—The <i>Factories and Shops Act</i> 1904 provides for the extension of determinations under the Act of 1903 to any portion of a shire, when the Governor in Council so decrees. |
| 1956. | November 30th.—The <i>St. Kilda and Brighton Electric Street Railway Act</i> 1904 authorizes the construction of a line of electric tramway from St. Kilda towards Brighton Beach. |
| 1957. | November 30th.—The <i>Land Act</i> 1904 amends the Land Acts in regard to the conditions upon which licences for agricultural and grazing allotments and for auriferous lands are held. Special conditions are imposed in the case of Lake Buloke leases of swamp or reclaimed land. A mallee perpetual lessee is given power to surrender at any time. Leases of Tyrrell Downs blocks may be granted to the Mallee Agricultural and Pastoral Company. Agricultural licences or perpetual leases may be granted to tenants of the company. Village communities' allotments are increased from a maximum of 20 acres to an area not exceeding £200 in value. The maximum advance which the Board of Land and Works may make to permissive occupants is increased from £15 to £50. The maximum period for a wattle lease is reduced from 21 to 14 years; the rent is reduced; and the area increased from 1,000 to 2,000 acres. Certain licences and leases forfeited for arrears of rent may be revived. |
| 1958. | November 30th.—The <i>Strathmerton towards Tocumwal Railway Construction Act</i> 1904 authorizes the construction by the State of a line of railway from Strathmerton towards Tocumwal. The expenditure is not to exceed £29,000, and the prices to be paid to workmen are on the average to be equal to a wage of 7s. per day of eight hours. |
| 1959. | November 30th.—The <i>Justices Act</i> 1904 amends the Act of 1890, and is to come into operation on 1st January, 1905. The powers of justices in regard to discharge or commitment, the procedure in regard to evidence and finding, and matters in connexion with recognisance and bail, are clearly defined. |

- Act No. Date. —
1960. November 30th.—This Act applies £2,228,169 out of the consolidated revenue to the service of the year 1904-5, and appropriates the supplies granted in the parliamentary session, amounting to £4,256,339, to the service of the government.
1961. November 30th.—The *Mines Act* 1904 amends prior Acts. Lands of lessees and licensees with mining conditions are not exempted from the operation of the Mines Acts. The right to occupy as a residence area is limited and clearly defined. Conditions of labour covenant are set out. Lessees are to furnish returns as to expenditure and labour. A new constitution for mining boards is provided; the new boards date from 1st January, 1905, and consist of seven members, as follow :—Inspector of mines in the district, and two representatives each of the registered companies, of the adult holders of miners' rights, and of the Amalgamated Miners' Association. Rules are also laid down for the regulation and inspection of mines and mining machinery. A board of examiners for mining managers, consisting of an inspector and two other members, is to be appointed. Principles of tribute agreements are also specified.
1962. November 30th.—The *Closer Settlement Act* 1904 deals with closer settlement. Its main provisions are outlined in part "Production."

OFFICIAL AND PARLIAMENTARY.

The following return shows the names and periods of office of Governors and Acting Governors of the State, since the first appointment of Mr. Charles Joseph La Trobe as Superintendent, in 1839 :— Governors of Victoria.

GOVERNORS OF VICTORIA.

Name.	Date of Assumption of Office.	Date of Retirement from Office.
Charles Joseph La Trobe ...	30th Sept., 1839	5th May, 1854
John Vesey Fitzgerald Foster (acting)	8th May, 1854 ...	22nd June, 1854
Captain Sir Charles Hotham, R.N., K.C.B.	22nd June, 1854 ...	31st Dec., 1855
Major-General Edward Macarthur (acting)	1st January, 1856...	26th Dec., 1856
Sir Henry Barkly, K.C.B. ...	26th December, 1856	10th Sept., 1863
Sir Charles Henry Darling, K.C.B.	11th Sept., 1863 ...	7th May, 1866
Brigadier-General George Jackson Carey, C.B. (acting)	7th May, 1866 ...	15th August, 1866
The Honorable Sir John Henry Thomas Manners-Sutton, K.C.B.	15th August, 1866...	2nd March, 1873
Sir William Foster Stawell, Kt. (acting)	3rd March, 1873 ...	19th March, 1873
Sir George Ferguson Bowen, G.C.M.G.	31st March, 1873 ...	22nd Feb., 1879
Sir Redmond Barry, Kt. (acting) ...	3rd January, 1875...	10th January, 1875
Sir William Foster Stawell, Kt. (acting)	11th January, 1875	14th January, 1876

GOVERNORS OF VICTORIA—*continued.*

Name.	Date of Assumption of Office.	Date of Retirement from Office.
The Most Honorable George Augustus Constantine Phipps, Marquis of Normanby, G.C.M.G., P.C.	27th Feb., 1879	18th April, 1884
Sir William Foster Stawell, Kt. (acting)	18th April, 1884 ...	15th July, 1884
Sir Henry Brougham Loch, G.C.M.G., K.C.B.	15th July, 1884 ...	8th March, 1889
Sir William Foster Stawell, K.C.M.G., Lieutenant-Governor (acting)	18th October, 1889	15th Nov., 1889
Sir William Cleaver Francis Robinson, G.C.M.G. (acting)	6th Nov., 1886 ...	12th March, 1889
The Right Honorable John Adrian Louis Hope, Earl of Hopetoun, G.C.M.G.	9th March, 1889 ...	17th October, 1889
The Honorable John Madden, LL.D. (acting)	16th Nov., 1889 ...	27th Nov., 1889
The Right Honorable Baron Brassy, K.C.B.	28th November, 1889	12th July, 1895
Sir John Madden, K.C.M.G., LL.D. (acting)	26th January, 1893	11th May, 1893
Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	27th March, 1895	24th October, 1895
Sir George Sydenham Clarke, K.C.M.G., F.R.S.	25th October, 1895	31st March, 1900
Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	29th December, 1896	16th February, 1897
Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	27th September, 1897	10th October, 1897
Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	23rd March, 1898	21st October, 1898
Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	15th January, 1900	10th December, 1901
Major-General Hon. Sir Reginald Arthur James Talbot, K.C.B.	10th December, 1901	24th November, 1903
	24th November, 1903	25th April, 1904
	25th April, 1904 ...	Still in office

Captain William Lonsdale, formerly of the 4th Regiment, was appointed Police Magistrate of the District of Port Phillip on the 9th September, 1836, and assumed office on the 29th of the same month. In that capacity he was in charge of the District until the appointment of Mr. C. J. La Trobe, as Superintendent. Subsequently, Captain Lonsdale acted as Superintendent during the temporary absence of Mr. La Trobe, who was called on to administer the Government of Tasmania from the 13th October, 1846, to the 25th January, 1847. Sir John Madden appointed Lieutenant-Governor, to act in the absence of the Governor, by Commission dated 29th April, 1893.

The following list shows the names of Ministers who held office from the separation of the Colony from New South Wales in 1851, up to the establishment of responsible government in 1855:—

MINISTERS PRIOR TO RESPONSIBLE GOVERNMENT.

Name of Minister.	Office.	Date of Assumption of Office.
William Lonsdale	Colonial Secretary ..	15th July, 1851
Alastair Mackenzie	Colonial Treasurer ..	
Charles Hotson Ebdon	Auditor-General ..	
Robert Hoddle	Surveyor-General ..	
Alexander McCrae	Chief Postmaster ..	
William Foster Stawell	Attorney-General ..	
Redmond Barry	Solicitor-General ..	13th April, 1852
James Horatio Nelson Cassell	Collector of Customs ..	
Edward Eyre Williams	Solicitor-General ..	

MINISTERS PRIOR TO RESPONSIBLE GOVERNMENT—*continued.*

Name of Minister.	Office.	Date of Assumption of Office.
James Croke	Solicitor-General ..	21st July, 1852
Frederick Armand Powlett	Colonial Treasurer ..	30th September, 1852
Hugh Culling Eardley Childers	Auditor-General ..	11th October, 1852
Andrew Clarke	Surveyor-General ..	1st July, 1853
John Fitzgerald Leslie Foster	Colonial Secretary ..	20th July, 1853
Hugh Culling Eardley Childers	Collector of Customs	5th December, 1853
Edward Grimes	Auditor-General ..	8th December, 1853
Robert Molesworth	Solicitor-General ..	4th January, 1854
William Clark Haines ..	Colonial Secretary ..	12th December, 1854

In the following list will be found the names of the Premiers of the several Governments from 1855 to the present date:—

Ministries,
1855 to 1904.

MINISTRIES SINCE RESPONSIBLE GOVERNMENT.

Number of Ministry and Name of Premier.	Date of Assumption of Office.	Date of Retirement from Office.	Duration of Office.
			Days.
1. William Clark Haines...	28th November, 1855	11th March, 1857 ...	469
2. John O'Shanassy ...	11th March, 1857 ...	29th April, 1857 ...	49
3. William Clark Haines...	29th April, 1857 ...	10th March, 1858 ...	315
4. John O'Shanassy ...	10th March, 1858 ...	27th October, 1859	596
5. William Nicholson ...	27th October, 1859...	26th November, 1860	396
6. Richard Heales ...	26th November, 1860	14th November, 1861	353
7. John O'Shanassy ...	14th November, 1861	27th June, 1863 ...	590
8. James McCulloch ...	27th June, 1863 ...	6th May, 1868 ...	1,775
9. Charles Sladen ...	6th May, 1868 ...	11th July, 1868 ...	66
10. James McCulloch ...	11th July, 1868 ...	20th September, 1869	436
11. John Alexander Mac- Pherson	20th September, 1869	9th April, 1870	201
12. James McCulloch ...	9th April, 1870 ...	19th June, 1871 ...	436
13. Charles Gavan Duffy...	19th June, 1871 ...	10th June, 1872 ...	357
14. James Goodall Francis	10th June, 1872 ...	31st July, 1874 ...	781
15. George Briscoe Kerferd	31st July, 1874 ...	7th August, 1875 ...	372
16. Graham Berry ...	7th August, 1875 ...	20th October, 1875	74
17. Sir James McCulloch, Kt.	20th October, 1875...	21st May, 1877 ...	579
18. Graham Berry ...	21st May, 1877 ...	5th March, 1880 ...	1,015
19. James Service ...	5th March, 1880 ...	3rd August, 1880 ...	151
20. Graham Berry ...	3rd August, 1880 ...	9th July, 1881 ...	340
21. Sir Bryan O'Loughlen...	9th July, 1881 ...	8th March, 1883 ...	607
22. James Service ...	8th March, 1883 ...	18th February, 1886	1,078
23. Duncan Gillies ...	18th February, 1886	5th November, 1890	1,722
24. James Munro ...	5th November, 1890	16th February, 1892	469
25. William Shiels ...	16th February, 1892	23rd January, 1893	343
26. James Brown Patterson	23rd January, 1893	27th September, 1894	612
27. Sir George Turner, P.C., K.C.M.G.	27th September, 1894	5th December, 1899	1,895
28. Allan McLean ...	5th December, 1899	19th November, 1900	350
29. Sir George Turner, P.C., K.C.M.G.	19th November, 1900	12th February, 1901	85
30. Alexander James Pea- cock	12th February, 1901	10th June, 1902 ...	483
31. William Hill Irvine ...	10th June, 1902 ...	16th February, 1904	616
32. Thomas Bent ...	16th February, 1904	Still in office	

Formation
of new
Ministry.

On the 16th February, 1904, the Irvine Ministry resigned, the Premier, Mr. Irvine, and the Minister of Railways, the late Mr. Shiels, retiring on account of ill-health. The Lieutenant-Governor intrusted the formation of a new Government to the Hon. Thos. Bent, who held office in the Irvine Ministry as Commissioner of Public Works and Minister of Health. The task was undertaken successfully. Mr. Bent took the offices of Treasurer and Minister of Railways in the new Ministry; Messrs. Davies, Sachse, Taverner, Murray, and Pitt retained the same positions that they held in the previous Ministry; Mr. Cameron was placed in charge of the departments of Public Health and Public Works in lieu of the Mines and Water Supply Departments then under his control; Mr. McLeod, an honorary Minister in the Irvine Government, was appointed Minister of Mines, and Mr. Thos. Langdon was selected as an honorary Minister. On the 18th February Mr. Mackey was appointed honorary Minister. On the 19th February Mr. Taverner resigned the portfolios of Minister of Lands and Agriculture (subsequently being appointed Agent-General), which were taken by Mr. Murray, then Chief Secretary and Minister of Labour, the latter offices being filled by Sir Samuel Gillott. On the 10th March Mr. McLeod was appointed Minister of Water Supply pending the arrival from England of Mr. George Swinburne, who assumed administration on the 26th April. On the 8th November Mr. Murray resigned the office of Minister of Agriculture, retaining that of Minister of Lands, and Mr. Swinburne took up the duties in addition to those of the Water Supply Department. On the same date Mr. McLeod was appointed Minister of Mines and Forests instead of Minister of Mines.

The State
Ministry
and depart-
ments.

The following were the names of, and the offices held by, the members of the State Ministry at the end of 1904:—

STATE MINISTRY.

Name.	Office.
Bent, Thomas	Premier, Treasurer, Minister of Railways, and a Vice-President of the Board of Land and Works.
Davies, John Mark, M.L.C.	Attorney-General, Solicitor-General.
Murray, John	President of the Board of Land and Works and Commissioner of Crown Lands and Survey.
Gillott, Sir Samuel ...	Chief Secretary and Minister of Labour.
Sachse, Arthur Otto, M.L.C.	Minister of Public Instruction, Vice-President of the Board of Land and Works.
Cameron, Ewen Hugh ...	Minister of Public Health, Commissioner of Public Works, and Vice-President of the Board of Land and Works.
McLeod, Donald	Minister of Mines and Forests.
Swinburne, George ...	Minister of Water Supply and Agriculture.
Pitt, William, M.L.C. ...	Honorary Minister.
Langdon, Thomas... ..	Honorary Minister.
Mackey, John Emanuel ...	Honorary Minister.

MEMBERS OF THE STATE PARLIAMENT, 1904.
(Elected under the Reform Act of 1903.)

THE LEGISLATIVE COUNCIL.

President: The Hon. Sir Henry J. Wrixon, K.C.M.G., K.C.

Name of Province.	Name of Member.	Date of Retirement.
Bendigo ..	Hon. J. Sternberg	1910
	Hon. A. Hicks	1907
East Yarra ..	Hon. J. Balfour	1910
	Hon. E. Miller	1907
Gippsland ..	Hon. E. J. Crooke	1910
	Hon. W. Pearson	1907
Melbourne ..	Hon. W. Cain	1910
	Hon. J. M. Davies (Attorney-General and Solicitor-General)	1907
Melbourne East ..	Hon. W. Pitt (Honorary Minister)	1910
	Hon. A. McLellan	1907
Melbourne North	Hon. D. Melville	1910
	Hon. F. Stuart	1907
Melbourne South	Hon. T. H. Payne	1910
	Hon. T. Luxton	1907
Melbourne West	Hon. J. G. Aikman	1910
	Hon. W. H. Edgar	1907
Nelson ..	Hon. Hans W. H. Irvine	1910
	Hon. J. D. Brown	1907
Northern ..	Hon. W. L. Baillieu	1910
	Hon. M. Cussen	1907
North-Eastern ..	Hon. A. O. Sachse (Minister of Public Instruction)	1910
	Hon. W. Little	1907
North-Western ..	Hon. R. B. Rees	1910
	Hon. J. M. Pratt	1907
Southern ..	Hon. Dr. W. H. Embling	1910
	Hon. N. FitzGerald (Chairman of Committees)	1907
South-Eastern ..	Hon. J. C. Campbell	1910
	Hon. D. E. McBryde	1907
South-Western ..	Hon. T. C. Harwood	1910
	Hon. Sir Henry J. Wrixon, K.C.M.G., K.C., (President)	1907
Wellington ..	Hon. Sir Henry Cuthbert, K.C.M.G., K.C. ..	1910
	Hon. J. Y. McDonald	1907
Western ..	Hon. W. S. Manifold	1910
	Hon. R. B. Ritchie	1907
State Employés ..	Hon. W. J. Evans	1910

Clerk of Parliaments and of the Legislative Council: Sir G. H. Jenkins, C.M.G.

Clerk Assistant: J. M. Pitts.

Usher and Accountant: R. W. V. McCall.

MEMBERS OF THE STATE PARLIAMENT, 1904—continued.

THE LEGISLATIVE ASSEMBLY.

Speaker: The Hon. Frank Madden.

Name of Electoral District.	Name of Member.
Abbotsford	Hon. Wm. D. Beazley.
Albert Park	Géo. A. Elmslie.
Allendale	Hon. Sir A. J. Peacock, K.C.M.G.
Ballarat East	Hon. R. McGregor.
Ballarat West	H. S. Bennett.
Barwon	Hon. J. F. Levien.
Benalla	J. J. Carlisle.
Benambra	A. W. Craven (Chairman of Committees).
Bendigo East	A. S. Bales.
Bendigo West	D. Smith.
Boroondara	Hon. Frank Madden (Speaker).
Borong	W. Hutchinson.
Brighton	Hon. Thomas Bent (Premier).
Brunswick	F. Anstey.
Bulla	A. R. Robertson.
Carlton	F. H. Bromley.
Castlemaine and Maldon	H. S. W. Lawson.
Collingwood	E. Wilkins.
Dalhousie	R. I. Argyle.
Dandenong	W. S. Keast.
Daylesford	Hon. D. McLeod (Minister of Mines and Forests).
Dundas	J. Thomson.
Eaglehawk	H. Kirkwood.
East Melbourne	Hon. Sir Samuel Gillott, Kt. (Chief Secretary and Minister of Labour).
Essendon	Hon. W. A. Watt.
Evelyn	Hon. E. H. Cameron (Minister of Public Health and Commissioner of Public Works).
Fitzroy	J. W. Billson.
Flemington	E. C. Warde.
Geelong	W. H. Colechin.
Gippsland East	J. Cameron.
Gippsland North	H. P. Keogh.
Gippsland South	T. Livingston.
Gippsland West	Hon. J. E. Mackey (Honorary Minister).
Glenelg	E. Cameron.
Goulburn Valley	Hon. George Graham.
Grenville	D. C. McGrath.
Gunbower	J. Cullen.
Hampden	D. S. Oman.
Hawthorn	Hon. George Swinburne (Minister of Water Supply and Agriculture).
Jika Jika	H. E. Beard.
Kara Kara	P. McBride.
Korong	Hon. Thos. Langdon (Honorary Minister).
Lowan	Hon. W. H. Irvine.
Maryborough	Hon. A. R. Outtrim.
Melbourne	J. A. Boyd.
Mornington	A. Downward.
North Melbourne	G. M. Prendergast.
Ovens	A. A. Billson.
Polwarth	C. L. Forrest.

MEMBERS OF THE STATE PARLIAMENT, 1904—LEGISLATIVE ASSEMBLY—*continued.*

Name of Electoral District.	Name of Member.
Port Fairy	J. F. Duffus.
Port Melbourne	G. Sangster.
Prahran	D. Mackinnon.
Richmond	G. H. Bennett.
Rodney	H. McKenzie.
St. Kilda	R. G. McCutcheon.
Stawell and Ararat	R. F. Toutcher.
Swan Hill	J. Gray.
Toorak	G. Fairbairn.
Upper Goulburn	T. Hunt.
Walhalla	A. Harris.
Wangaratta	J. Bowser.
Waranga	Hon. J. Morrissey.
Warrenheip	G. F. Holden.
Warrnambool	Hon. John Murray (Minister of Lands).
Williamstown	J. Lemmon.
Railway Service	{ R. H. Solly.
Public Service	{ M. Hannah.
	D. Gaunson.

Clerk of the Assembly: T. G. Watson.
 Clerk Assistant and of Private Bills: H. H. Newton.
 Clerk of the Papers and Accountant: J. H. Bowman.

FOREIGN CONSULS.

The following is a return of Consuls of foreign countries for Victoria during the year 1904:—

CONSULS-GENERAL.	
Name.	Countries Represented.
Boschart, W. L.	Netherlands.
Lyle, M.	Colombia.
Were, F. W.	Denmark
Bray, John P.	United States.
Sanders, Lewis	Liberia
Huylebraeck, F. (Acting)	Belgium.
Moore, Frederick H.	Hawaii.
Ryan, Dr. Charles	Turkey.
Smith, William Lamb	Paraguay.
Oustinoff, M.	Russia.
Bertola, Cav. C.	Italy.
CONSULS.	
Pinschof, Carl A.	Austria-Hungary.
Weindorfer, G. (Chancellor)	Austria-Hungary.
Brahe, William Alexander	German Empire.
Martin, Charles	Swiss Confederation.
McEacharn, Sir Malcolm D.	Japan.
Langdon, Charles P.	Hawaii.
Pfaff, Alfred	Peru.
Jack, W. L.	Portugal.
Webster, A.	Chile.
Gundersen, H. J.	Sweden and Norway.
Abourizk, W. (Chancellor, &c.)	Turkey.
De Possel, H.	Bolivia.
Curtain, R. J.	Greece.
Walters, H. A.	Uruguay.

FOREIGN CONSULS—*continued.*CONSULS—*continued.*

Cave, Henry	...	...	...	...	Spain.
Oldham, J.	...	...	...	...	Servia.
Assche, O. Van	Netherlands.
Medina, R.	Nicaragua.

DEPUTY CONSUL-GENERAL.

Bouton, W. K.	United States.
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VICE-CONSUL-GENERAL.

Campbell, C. C.	United States.
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VICE-CONSULS.

Gollan, Alfredo	Argentine Republic.
Belcher, George Frederick	Denmark.
Holdenson, P. J.	...	...	...	...	Denmark.
Maistre, L. P.	...	...	...	...	France.
Belcher, George Frederick	...	...	...	...	Sweden and Norway.
Gundersen, G.	...	...	...	...	Sweden and Norway.
Moore, A. E.	...	...	...	...	Liberia.
Vanderkelen, F.	...	...	...	...	Belgium.
Sheppard, H. A.	...	...	...	...	Brazil, United States of.
Bloomfield, A. S.	...	...	...	...	Paraguay.

PRINCIPAL STATE PUBLIC SERVANTS.

Appended is a list of the principal officers in the Public Service of Victoria, including the judiciary, and other officers not under the provisions of the Public Service Act. Officers in the Departments of Customs, Posts and Telegraphs, and Defence are not included, these departments having been transferred to the Commonwealth:

JUDICIARY.

Chief Justice	...	...	...	Sir John Madden, K.C.M.G., LL.D.
Puisae Judges	...	...	...	Sir E. D. Holroyd, Kt., K.C. Thomas A'Beckett. H. E. A. Hodges. J. H. Hood.
Associates	...	...	...	A. Barlow, H. H. Pearson, S. E. Holroyd, E. Wanliss, G. Williams.
County Court Judges	...	...	...	H. Molesworth. A. W. Chomley. W. H. Gaunt. W. E. Johnston. J. G. Eagleson.
Stipendiary Police Magistrates	...	...	...	J. A. Panton, Metropolitan. 18 others (1 Melbourne, 1 suburban, and 16 in country districts).

PRINCIPAL STATE PUBLIC SERVANTS—*continued.*

CHIEF SECRETARY'S DEPARTMENT.

Chief Secretary's Office	Under Secretary, G. C. Morrison. Chief Clerk, W. A. Callaway. Chief Electoral Inspector, H. E. Macdowell. Accountant, J. J. Killen.
Sub-Branches—	
Audit Office	Chief Inspecting Officer and Chief Clerk, E. T. Drake.
Executive Council	Clerk of the Council, R. S. Rogers.
Explosives, &c.	Chief Inspector, C. N. Hake.
Friendly Societies	Actuary, E. F. Owen.
Government Medical Officer	Dr. J. A. O'Brien.
Government Shorthand Writer	H. E. Wade.
Government Statist	W. McLean.
Inspection of Factories	Chief Inspector, H. Ord.
Inspection of Stores	Inspector, A. Roche.
Marine Board	Secretary, J. G. McKie. Engineer, Surveyor, and Examiner of Engineers, S. Johnson. Inspector, W. F. Deary.
Mercantile Marine	Superintendent, C. A. Parsons.
Neglected Children and Reformatory Schools	Secretary and Inspector, W. Davis.
Observatory	Government Astronomer, P. Baracchi.
Police	Accountant, F. Hemmy.
Premier's Office	Secretary to Premier, R. S. Rogers. Senior Clerk, W. C. Cave-Browne-Cave.
Public Library, Museums, and National Gallery	Chief Librarian and Secretary, E. La T. Armstrong, B.A., LL.B. Director of National Gallery, L. B. Hall. Instructor in School of Design, F. McCubbin.
Penal and Gaols	Inspector-General, E. C. Connor. Governor of Pentridge, M. J. Cody. Governor of Melbourne Gaol, T. Meagher.
Hospitals for Insane	Inspector, Dr. J. V. McCreery. Medical Superintendents—Yarra Bend, Dr. W. L. Watkins; Kew, Senior Medical Officer, Dr. W. L. Mullen; Ararat, Dr. W. H. Barker; Ballarat, Dr. John Stell; Beechworth, Dr. H. A. Samson; Sunbury, Dr. R. W. Lethbridge.

TREASURY DEPARTMENT.

Under-Treasurer	H. W. Meakin.
Accountant	T. W. Gaggin.
Chief Clerk	C. H. Wheatland.
Receiver and Paymaster, Melbourne	J. W. Stranger; (and 16 others at country offices, and 1 relieving).
Sub-Branches—	
Inspector of Charities	Inspector, F. T. Short.
Old-Age Pensions	Senior Clerk, A. B. Weire.
Tender Board	Secretary, T. M. Callan.
Income and Land Tax	Deputy Commissioner, V. E. Henderson.
Pensions Pay Office	Paying Officer, J. Hickey.
Government Printer	R. S. Brain.

PRINCIPAL STATE PUBLIC SERVANTS—*continued.*

DEPARTMENT OF PUBLIC INSTRUCTION.

Director of Education	...	...	Frank Tate, M.A., I.S.O.
Chief Inspector	...	...	S. J. Swindley.
Assistant Chief Inspector	...	...	W. Hamilton, B.A.
Senior Inspectors	...	...	J. Holland, M.A., W. M. Gamble, S. Summons, M.A., LL.B., R. F. Russell, B.A., S. Ware, M.A.
Training College	...	...	Principal, John Smyth, M.A., D. Ph.
Inspector of Drawing	...	...	P. M. Carew Smyth.
Hand and Eye and Manual Training	...	...	John Byatt.
Organizer and Instructor	...	...
Secretary	...	...	C. W. H. James.
Accountant	...	...	A. C. Witton (acting).

LAW DEPARTMENT.

Parliamentary Draftsman	...	...	E. Carlile, K.C.
Secretary	...	...	M. Byrne.
Chief Clerk and Accountant	...	...	Irvin Martin.
Crown Solicitor	...	...	E. J. D. Guinness.
Master-in-Equity's Office	...	...	Chief Clerk and Officer for Assessing Duty, J. F. Poole.
Prothonotary	...	...	Registrar of Probates, W. McDonald.
Sheriff	...	...	J. W. O'Halloran.
Registrar of County Court, Clerk of the Peace, and Chief Clerk in Insolvency	...	...	A. McFarland.
Collector of Imposts	...	...	W. S. A. Ponsford.
Registrar of Trade Marks and Copyrights	...	...	J. Davidson.
Chief Examiner of Titles	...	...	J. T. Hood.
Examiners of Titles	...	...	D. C. Rees.
Registrar-General	...	...	R. W. Chalmers, F. A. Bonner, G. H. Downer.
Titles Office	...	...	T. Byrne.
	...	...	Surveyor and Chief Draughtsman, G. W. Blandford.

DEPARTMENT OF LANDS AND SURVEY.

Secretary for Lands	...	...	J. W. Skene.
Director of Botanic Gardens and Domain, &c.	...	...	W. R. Guilfoyle.
Surveyor-General	...	...	J. M. Reed.

DEPARTMENT OF PUBLIC WORKS.

Inspector-General of Public Works	...	...	W. Davidson.
Secretary for Public Works	...	...	D. Martin.
Chief Clerk and Accountant	...	...	R. I. Cullen.
Chief Architect	...	...	J. H. Marsden.
Engineer Roads, Bridges, and Harbor Works	...	...	C. Catani.
Engineer Ports and Harbors	...	...	C. W. Maclean.

DEPARTMENT OF MINES AND WATER SUPPLY.

Secretary for Mines	...	...	W. R. Anderson.
Chief Clerk	...	...	P. Cohen.
Accountant	...	...	M. A. Minogue.
Chief Draughtsman and Mining Surveyor	...	...	G. Groube.
Chief Engineer of Water Supply	...	...	S. Murray, C.E.
Director of Geological Survey	...	...	E. J. Dunn.

PRINCIPAL STATE PUBLIC SERVANTS—*continued.*

DEPARTMENT OF PUBLIC HEALTH.

Chairman of the Board of Public Health	Dr. W. P. Norris.
Secretary of the Board of Public Health	J. W. Colville.
Health Officer, and Superintendent Quarantine Station	Dr. J. C. Johnston

DEPARTMENT OF AGRICULTURE.

Director of Agriculture	... ..	T. Cherry, M.D., M.S.
Secretary for Agriculture...	... ..	E. G. Duffus (acting).
Chemist	... ..	Dr. F. J. Howell, Ph. D.
Entomologist	... ..	C. French, sen.
Inspector of Food for Export	... ..	Dr. A. A. Brown.
Government Botanist	... ..	Vacant.
Chief Inspector of Stock	... ..	J. R. Weir.
Expert and Bacteriologist...	... ..	T. Cherry, M.D., M.S.
Dairy Supervisor	... ..	R. T. Archer.
Dairy Expert	... ..	R. Crowe.
Fruit Expert	... ..	J. Knight.
Vegetable Pathologist	... ..	D. McAlpine.
Principal Horticultural School	... ..	C. B. Luffman.
Poultry Expert	... ..	A. Hart.
Tobacco Expert	T. A. J. Smith.

OFFICE OF THE PUBLIC SERVICE COMMISSIONER.

Secretary	J. D. Merson.
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OFFICERS NOT UNDER THE PUBLIC SERVICE COMMISSIONER.

Public Service Commissioner	C. A. Topp, M.A., LL.B.
Auditor-General	... ..	F. H. Bruford.
Agent-General, London	... ..	Hon. J. W. Taverner.
Master in Equity and Lunacy, and Commissioner of Income Tax	... ..	Secretary, A. W. Arkill (acting). T. P. Webb, K.C.
Chief Clerk, Supreme Court	... ..	G. H. Neighbour, K.C.
Commissioner of Titles	... ..	E. T. De Verdon, K.C.
Chief Crown Prosecutor	... ..	C. B. Finlayson, K.C.
Coroner	... ..	S. C. Candler.
Analytical Chemist	... ..	W. P. Wilkinson.
Chief Hansard Reporter	... ..	E. B. Loughran.
Parliamentary Librarian	... ..	A. Wadsworth.
Police	... ..	Chief Commissioner, T. O'Callaghan. Inspecting Superintendent, R. Hamilton.
Curator of Estates of Deceased Persons	... ..	T. F. Bride, LL.D.
Railways	... ..	Commissioners—T. Tait (Chairman), W. Fitzpatrick, C. Hudson. Secretary, L. J. McClelland. Engineer-in-Chief, M. E. Kernot (acting). Chief Traffic Manager, R. Lochhead. General Superintendent of Transportation, S. Jones. Superintendent Passenger Train Service, J. A. Robertson. Superintendent Goods Train Service, John Richmond. Chief Accountant, Harold Kent.

PRINCIPAL STATE PUBLIC SERVANTS—*continued.*

OFFICERS NOT UNDER THE PUBLIC SERVICE COMMISSIONER— <i>continued.</i>	
Railways— <i>continued</i>	Chief Mechanical Engineer, T. H. Woodroffe. Chief Engineer for Existing Lines, C. E. Norman. Telegraph Superintendent, W. A. Holmes.
Royal Mint (under Imperial Government)	Deputy Master, E. S. Wardell. Superintendent of Bullion Office, M. L. Bagge. First Assayer, F. R. Power. Registrar and Accountant, A. M. Le Souëf. First Clerk, W. M. Robins.
Commissioners of Land Tax ...	J. M. Reed, Surveyor-General. D. Martin, Secretary for Public Works. C. A. Topp, Public Service Commissioner.
Friendly Societies ...	Registrar, G. B. Vasey, B.A., LL.B.

MELBOURNE UNIVERSITY.

Return of the Professors, Lecturers, and Demonstrators of the Melbourne University during the year 1904:—

PROFESSORS.

Office.	Name.
Mathematics ...	Nanson, E. J., M.A.
History and Political Economy ...	Elkington, J. S., M.A., LL.B.
Anatomy and Pathology ...	Allen, H. B., M.D.
Engineering ...	Kernot, W. C., M.A., M.C.E.
English ...	Vacant.
Classical Philology ...	Tucker, T. G., M.A., Litt.D.
Chemistry ...	Masson, D. O., M.A., D.Sc., F.R.S.
Mental and Moral Philosophy ...	Laurie, H., LL.D.
Biology ...	Spencer, W. B., M.A., F.R.S., C.M.G.
Natural Philosophy ...	Lyle, T. R., M.A.
Law ...	Moore, W. H., B.A., LL.B.
Music ...	Peterson, Franklin S., Mus. Bac.
Geology and Mineralogy ...	Gregory, J. W., D.Sc., F.R.S.
Physiology and Histology ...	Osborne, W. A., D.Sc.

LECTURERS.

Equity ...	Mackey, J. E., M.A., LL.B.
Law of Contracts ...	Duffy, F. G., M.A., LL.B.
Wrongs ...	Woinarski, C. J. Z., M.A., LL.M.
Law of Property ...	Guest, W. C., M.A., LL.B.
Classics and Philology ...	Allen, H. W., M.A.
Mathematics ...	Michell, J. H., M.A., F.R.S.
French ...	Maurice-Carton, F.I., M.A.
German ...	von Dechend, W.
Surgery ...	Bird, F. D., M.B., M.S., F.R.C.S.
Theory and Practice of Medicine ...	Jamieson, J., M.D.
Obstetrics and Diseases of Women...	Adam, G. R. W., M.B., C.M.
Forensic Medicine ...	Neild, J. E., M.D.
Therapeutics, Dietetics, and Hygiene	Springthorpe, J. W., M.A., M.D.
Anatomy ...	Syme, G. A., M.B., M.S.
Bacteriology ...	Cherry, T., M.D., M.S.
Mining ...	Merrin, A. H., M.C.E.
Metallurgy ...	Mills, A. L.
Surveying ...	Fowler, T. W., M.C.E.
Education ...	Smyth, J., M.A., D. Ph.
English ...	Murdoch, W. L., M.A.

MELBOURNE UNIVERSITY—continued.

DEMONSTRATORS AND ASSISTANT LECTURERS.

Office.	Name.
Chemistry	Green, W. H., B.Sc.
Biology	Hall, T. S., M.A.
Natural Philosophy	Love, E. F. J., M.A.
Engineering	Fowler, T. W., M.C.E.
Physiology	Fielder, W., F.R.M.S.
DEMONSTRATORS.	
Anatomy	Kilvington, B., M.D., M.S.
"	Mackenzie, W. C., M.D.
"	Buchanan, J. S., M.B., M.S.
Pathology	Ellis, Constance, M.D., B.S.
Bacteriology	Bull, R. J., M.D.
Drawing	Lupson, J. T.
Natural Philosophy	Campbell, Frances H., M.A.
"	Walpole, G. S., B.Sc.
OFFICE STAFF.	
Registrar	Cornwall, W. E., M.A.
Librarian	Bromby, E. H., M.A.

THE MELBOURNE AND METROPOLITAN BOARD OF WORKS.

Chairman	E. G. FitzGibbon, J.P., C.M.G.
Commissioners—	
Hon. Sir S. Gillott, M.L.A., Sir A. Snowden, W. Strong, J.P., W. Cook, A. Tait, Jacob Marks, Frank Stapley, representing the City of Melbourne.	
W. J. Mountain, J.P., J. Baragwanath, J.P., J. S. White, John Sloss, representing the City of South Melbourne.	
E. Naylor, John Turner, Hon. T. Luxton, M.L.C., representing the City of Prahran.	
J. Gahan, J.P., W. Cody, J.P., representing the City of Collingwood.	
J. G. Yager, J.P., George R. Jeffries	" " Fitzroy.
E. Crawcour, C. J. Jago	" " Richmond.
S. Jacoby, G. Connibere, J.P.	" " St. Kilda.
F. E. Shillabeer	" " Footscray.
W. Cowper, J.P.	" " Hawthorn.
T. Wilson, J.P.	" " Town of Brighton.
J. W. Fleming, J.P.	" " Brunswick.
W. J. C. Riddell	" " Caulfield.
W. J. Mountain, jun.	" " Essendon.
Alex. Cameron	" " Malvern.
Chas. Mitchell	" " Northcote.
G. Carter	" " North Melbourne.
Henry N. Edwards, J.P.	" " Port Melbourne.
W. H. Treganowan	" " Williamstown.
Jas. Raisbeck, representing the Borough of Flemington and Kensington.	
E. A. Atkins	" " Kew.
Robert Beckett	" " Shire of Camberwell and Boroondara.
A. Voice, J.P.	" " Coburg.
A. Ford, J.P.	" " Heidelberg.
C. T. Crispe, J.P.	" " Preston.
Secretary	Geo. A. Gibbs.
Treasurer	R. Richardson.
Engineer-in-Chief	W. Thwaites, M.A.
Superintending Engineer of Sewerage	C. E. Oliver, M.C.E.
" " Water Supply	W. Dowden.
Designing Engineer	C. Kussmaul.

MELBOURNE HARBOR TRUST.

Commissioners appointed by— Governor-in-Council	...	...	J. S. White; Hon. W. Pitt, M.L.C. (Chairman); J. B. Tucker; Hon. D. Melville, M.L.C.; D. Meth- ven.
Corporation of Melbourne	...	...	W. Strong, T. J. Davey.
Municipality of South Melbourne	...	...	W. J. Mountain.
" Port Melbourne	...	...	T. N. Tarver.
" Williamstown	...	...	W. H. Treganowan.
" Footscray	...	...	J. Stewart.
Shipowners registered at Mel- bourne	...	...	W. Cowper. H. C. Pigott. W. Siddeley.
Merchants of Melbourne	...	...	C. Duckett. G. Lush. W. M. McPherson.
Secretary	...	...	C. J. Clark.
Treasurer	...	...	R. P. Rudd.
Engineer	...	...	John Halliday.
Harbor Master	...	...	Thos. Sanderson.

BOARD OF PUBLIC HEALTH.

Chairman and Medical Inspector	∴	Wm. Perrin Norris, M.D., D.P.H.
Members	...	W. Burton, City of Melbourne. J. Johnston, M.D., North Yarra Group. F. G. Wood, J.P., South Yarra Group. J. H. Gearing, Eastern Country Boroughs. C. C. Shoppee, J.P., Western Country Boroughs. A. H. Smith, J.P., Eastern Shires. H. A. Austin, J.P., Western Shires.
Port Health Officers	...	J. C. Johnston, M.B., Quarantine Sta- tion, Portsea. H. R. Maclean, M.B., Port of Mel- bourne. H. Howard, M.B., Port of Melbourne. W. B. Docker, M.B., Portland. W. H. Orchard, M.B., Port Fairy. T. J. M. Kennedy, M.B., Geelong. T. J. Fleetwood, M.B., Warrnambool.

MARINE BOARD, MELBOURNE.

President	...	...	Archibald Currie.
Vice-President	...	...	W. D. Garside.
Members	...	...	C. W. Maclean, A. Agnew, R. Dickins, W. Cowper, D. Y. Syme, C. F. Orr, J. McK. Corby, G. W. Lilley, J. G. Little, H. Belfrage.
Examiner in Navigation and Seaman- ship	...	...	H. Goodrham (acting).
Examiner in Pilotage	...	...	G. Bevis.
Counsel	...	...	E. J. D. Guinness.

COURT OF MARINE INQUIRY.

President	...	...	Senior Police Magistrate presiding.
Skilled Members	...	...	J. A. Roberts, J. F. Anderson, A. Dun- bar, V. E. E. Gotch, J. Garson, G. Bevis, A. McCowan, D. Elder, J. Tozer, H. W. H. Chatfield.

LOCAL GOVERNMENT.

Amongst the various enactments which became law for Victoria on its separation from New South Wales, was a provision in the Imperial Act authorizing the Governor to incorporate the inhabitants of every county to form districts for the purpose of local government, and to establish elective District Councils, with power to frame by-laws for making and maintaining roads, establishing schools, levying local tolls and rates, &c. Many of the provisions of the Act were found to be unworkable and expensive in the details, and the District Councils therefore discontinued their meetings and practical working under the Act. Improved legislation being required, an Act was passed in 1853 establishing a central Road Board for the whole Colony, with an Inspector-General, and staff, and also providing for the creation of local Road Districts under the management of Road Boards. This Act made provision chiefly for local government in country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act. In the meanwhile suburban districts and towns were growing up, and in 1859 an Act was passed for the establishment of municipal institutions in Victoria. This Act also continued in force till 1863, when its chief provisions were merged into the Municipal Corporations Act. Further improvements and extensions have been from time to time made in the Acts dealing with local government, and it is now practically universal throughout Victoria, all but about $\frac{3}{4}$ per cent. of its whole area being divided into urban or rural municipal districts. The former are called cities, towns, and boroughs, and the latter shires.

The laws relating to local government have lately been amended and consolidated by the *Local Government Act 1903*, passed on 24th December, 1903. The councils of municipalities have power to levy rates, which, together with licence-fees, subsidies received from the State, market dues, rents, and sanitary charges, form their chief sources of income. Their principal functions are to make, maintain, and control all streets, roads, bridges, ferries, culverts, sewers, drains, water-courses, and jetties within their respective boundaries; also, under proper by-laws, to regulate the markets, pounds, abattoirs, baths, places of recreation, charitable institutions, and the arrangements for sewerage, lighting, water supply, and carrying on of noxious trades, and to act as local Boards of Health.

Any portion of Victoria, not exceeding in area nine square miles, and having no point in such area distant more than six miles from any other point therein, which contains at least 500 householders, and rateable property capable of yielding £300 upon a rate of one shilling in the pound, may be constituted a borough. Any borough having during the preceding financial year a revenue of £10,000 may be declared a town; or, having a revenue of £20,000, may be declared a city. Any portion of Victoria containing rateable property capable of yielding £1,500 on a rate of one shilling in the pound may be constituted a shire. There are 60 cities, towns, and boroughs in Victoria, and 148 shires. The Governor in Council may

Cities,
towns,
boroughs,
and shires.

unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified; may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire; and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

Townships.

On petition by twenty-five ratepayers resident in any portion, not exceeding three square miles in extent, of any shire, and distant more than ten miles from the City of Melbourne, the Governor in Council may proclaim such portion a township.

Municipal
councillors.

Each municipality existing at the commencement of the original Act—now incorporated in the Act of 1903—is allowed the number of councillors then assigned to it; but in other cases the number must be some multiple of three, not less than six nor more than 24. The number is usually nine. If the district is subdivided, the number of councillors is three for each subdivision. If at any time in any municipality there is no council or not enough councillors to form a quorum, a commissioner may be appointed by the Governor in Council to exercise the powers of the council. Male persons liable to be rated in respect of property in the municipal district of the rateable annual value of £20 at least, whether consisting of one or more tenements, are qualified to hold the office of councillor. The election of councillors takes place annually. One-third of the councillors retire each year by rotation, but retiring councillors may be re-elected. The councillors elect their own chairman, who, in the case of cities, towns, and boroughs, is called the mayor; in the case of shires, the president.

Municipal
electors.

Every person (male or female) 21 years of age or upwards, liable to be rated in respect of property within a municipal district, in respect of which all rates, made before 10th March of the year, have been paid, shall be entitled to be enrolled as a voter. Plurality of votes is allowed upon the following scale:—

IN CITIES, TOWNS, AND BOROUGHES.

Properties rated at an annual value of	under £50 ...	... One vote.
" " " " "	£50 to £100 ...	... Two votes.
" " " " "	£100 and upwards ...	... Three votes.

IN SHIRES.

Properties rated at an annual value of	under £25 ...	... One vote.
" " " " "	£25 to £75 ...	... Two votes.
" " " " "	£75 and upwards ...	... Three votes.

No person may be enrolled in respect of property rated under £5 a year, unless there is a house on the property, and he resides there. The occupier and the owner are not to be both enrolled in respect of the one property, the former having the prior right to enrolment. Corporations liable to be rated may nominate not more than three persons to be enrolled in their stead, and joint occupiers and owners, not exceeding three, are each entitled to be enrolled. If there be more than three, then the three standing first on the last

rate valuation or return are so entitled. The *Voting by Post Act* 1900 may be made applicable to the elections for any municipality on the petition of the councillors.

All land situated in a municipal district is rateable property except the following:—Crown lands; land used exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, and charitable purposes; land vested in or held by or in trust for any municipality, local governing body, or commissioners under the Water Acts; land vested in fee in the Railway Commissioners, Minister of Public Instruction, Board of Land and Works, Harbor Trust Commissioners, and Melbourne and Metropolitan Board of Works. The expression land includes, of course, all buildings and improvements thereon.

Rateable property.

Rates levied in municipal districts are of three kinds, viz:—General, extra, and separate rates. General rates are levied at least once in every year by the council of every municipality, and shall not exceed in any one year 2s. 6d. in the pound of the net annual value, or be less than 6d. in the pound of such value. Every general rate is made and levied on the occupier of the property rated, or if there be no occupier, or the occupier be the Crown or public or local body, then upon the owner of the property. Extra rates may be levied in any one or more subdivisions of a district, on requisition by not less than two-thirds of the councillors for the subdivision, provided that both rates together in any subdivision do not exceed 2s. 6d. in the pound. Extra rates are levied on all properties alike in the subdivision; but where any works or undertakings are for the special benefit of any particular portion of the municipal district, "a separate rate" may be levied, with the consent of a majority of the occupiers, and of one-third at least of the owners of the properties affected. The rates to be levied may be differential according to the benefits to be received by different properties, and the amount of the rate must be such as will, in the opinion of the council, suffice to provide for the payment of interest, and periodical repayments of, or sinking fund for, the loan raised on the security of such rate.

Rates—general, separate, &c.

Where under any Act a council is empowered to execute any work at the cost of the owners, or to require such owners to do so, a special improvement charge may be made on the properties affected, on the security of which money may be borrowed for the carrying out of such work.

Improvement charge.

Melbourne and Geelong, the latter of which was for many years of second importance in the colony, having been incorporated under special statutes prior to the establishment of municipal government on a large scale throughout the colony, are not subject to the Local Government Acts, except in a few comparatively unimportant particulars. Melbourne was incorporated as a town in 1842, and was ordained a city in 1847. Geelong was incorporated as a town in 1849.

Incorporation of Melbourne and Geelong.

Detailed particulars of the existing municipalities in 1904—their area, population, number of ratepayers, rated properties, estimated total annual value, &c.—will be found under Municipal Statistics, part General Finance.

THE COMMONWEALTH.

The Commonwealth of Australia comprises the States of Victoria, New South Wales, Queensland, South Australia, Western Australia, and Tasmania. Its area is estimated to be somewhat under three million square miles; but that area, added to the area of New Zealand, amounts to nearly three million one hundred thousand square miles. The following are the areas of the different States, as officially computed:—

AREA OF STATES AND NEW ZEALAND.							Sq. Miles.
Victoria	...	...	...	...	...	...	87,884
New South Wales	...	...	...	...	...	...	310,700
Queensland	...	...	...	...	...	...	668,497
South Australia	...	...	...	...	...	...	903,690
Western Australia	...	...	...	...	...	...	975,920
Tasmania	...	...	...	...	...	...	26,215
Total Australia							2,972,906
New Zealand							104,471
Total Australasia							3,077,377

Position of
Austral-
asian
capitals.

The following are the latitudes and longitudes of the capital cities of the different Australian States and New Zealand, the positions being the observatories at Melbourne, Sydney, Brisbane, and Adelaide, the Barracks Observatory at Hobart, the Survey Office Observatory at Wellington, and the Government House at Perth:—

POSITION OF STATES CAPITAL CITIES.

State or Colony.	Capital City.								
	Name.	Latitude S.			Longitude E.				
		°	'	"	°	'	"		
Victoria	Melbourne	37	49	53	144	58	32		
New South Wales	Sydney	33	51	41	151	12	23		
Queensland	Brisbane	27	28	0	153	1	36		
South Australia	Adelaide	34	55	34	138	35	4		
Western Australia	Perth	31	57	24	115	52	42		
Tasmania	Hobart	42	53	25	147	19	57		
New Zealand	Wellington	41	16	25	174	46	38		

FEDERAL CAPITAL.

By section 125 of the Commonwealth Constitution Act it was decreed that the capital city of the Australian Commonwealth should be in New South Wales, distant not less than 100 miles from Sydney. Until such time as the Federal Government should meet at the seat of government, Parliament was to sit at Melbourne. In August,

Site.

1904, the Parliament of the Federation proceeded to fix the permanent seat of government, the following clauses being enacted in the *Seat of Government Act 1904*:—

It is hereby determined that the seat of government of the Commonwealth shall be within seventeen miles of Dalgety, in the State of New South Wales.

The territory to be granted to, or acquired by, the Commonwealth, within which the seat of government shall be, should contain an area not less than nine hundred square miles, and have access to the sea.

Provision is also made for the amount of the compensation to be paid by the Commonwealth for any land to be acquired for the Federal site.

The site selected is a small village in New South Wales, on the eastern side of the Snowy River, 29 miles south-westerly from Cooma, the terminus of a branch railway line from Goulburn, the estimated cost of its connexion with Cooma being £142,000. The distance by railroad from Sydney is 296 miles, and from Melbourne 605 miles. The position of the site is thus described in the supplement to the Report on Sites for the Seat of Government, presented to the New South Wales Parliament:—

“The Snowy River, which for some miles has a course almost easterly until nearing Dalgety, turns sharply to the south about half a mile from that village. Within this bend of the river, and bounded on the west by a timbered hill, and on the north by the river itself, is the site chosen for the location of the Federal capital. The greater part of the area consists of undulating, treeless country, of similar character to much of the Manaro plains, with frequent outcrop of granite. The average height of the site is 200 to 300 feet above the river, the moderate slopes of the country are very suitable for laying out the city, and there is ample room for expansion toward the south. Good foundations at small depths below the surface could be obtained for all classes of buildings. It is stated that the district is a marvellous place for health, typhoid and similar complaints are practically unknown, and although pneumonia and pleurisy occur, they are less frequent than in Sydney or on the coast, while the dry atmosphere favours recovery. Influenza is, perhaps, the most common complaint, but croup and such chest complaints as attack children are not met with. A few cases of hydatids occur, traceable to usual and preventible causes.

A healthy site.

“There is a cream-coloured sandstone at Bobundara, about ten miles from the site, and a clayey sandstone at Kiah Lake, twenty miles distant. The latter is described as cutting easily, but hardens on exposure. Granite abounds in the district in the form of outcropping boulders, but no quarry has been opened. There is also plenty of basalt and bluestone. The best quarry of the latter is at Hazeldine, about twenty miles from the site, where the stone is a very dark blue, more like trachyte, and is harder than the Melbourne bluestone. The largest outcrops of limestone are about six miles north of Cooma. The stone from this place produces a

Building material.

good lime. Abundance of clay suitable for brick-making is obtainable in various parts of the district, and excellent hand-made bricks have been produced. There is plenty of good sand and other material for making concrete.

Water supply.

“The sources of water supply for the Federal city are the Snowy River and its tributaries, the Mowamba, Eucumbene, and Crackenback, all of which are permanent snow-fed streams, having their rise in the Snowy Mountains. A primary service for 50,000 people can be obtained from the Mowamba River, at an estimated capital cost of £318,000; and an annual cost of working and interest, £13,120. As the city expands, supplementary supplies will be derived from other rivers mentioned.

Cost of resumption.

“From evidence supplied, it appears that the land within the proposed city site is valued at £2 10s. per acre. The existing improvements are of small value, and the cost of resuming the site, 4,000 acres, is assumed to be about £10,000, and of the catchment area for primary source of water supply (*i.e.*, for supply to population of 50,000), £40,000.

“The area of Crown lands within the 900 square miles of the site is 200 square miles, valued at £96,000. The balance (alienated land) is valued at £307,000.”

THE CONSTITUTION.

Leading features of the Commonwealth Constitution.

The Act constituting the Commonwealth was passed by the Imperial Parliament and proclaimed in Australia on 1st January, 1901. Its leading features are as follow:—

Parliament.

Constitution indissoluble, and to come in force by Imperial Proclamation.

The Parliament is to consist of the Queen, a Senate, and a House of Representatives. Governor General appointed to act for the Queen.

Senate.

Senate to consist of six members from each State; number may be increased or diminished, but so that equal representation of the States be maintained. Qualification of electors of Senate and of Senators to be same as that of House of Representatives. Each elector shall vote only once.

House of Representatives.

House of Representatives shall have twice the number of members of the Senate and the number of members for each State shall be in proportion to population, but not less than five for any State. Qualification of electors to be that of the more numerous House in each State. Each elector to vote only once. Qualifications of a member—(a) 21 years of age, (b) to be an elector or entitled so to be, (c) resident three years, (d) natural born or naturalized five years.

Powers of Parliament

The general powers of the Parliament are 39 in number, the principal of which are to make laws for trade, taxation, bounties, borrowing, postal services, naval and military, statistics, currency, banking, insolvency, corporations, divorce, marriage, old age pensions, immigration and emigration, railways, &c. Exclusive powers in regard to the seat of Government, State departments transferred, are other matters declared by the Constitution to be within the exclusive power of the Parliament.

Money Bills.

Money Bills not to originate in, nor to be amended by the Senate, which House may, however, return the Bill requesting any omission or amendment: Equal power in all other matters. Tacking Bills prohibited.

Provision for Dead-locks.—Joint dissolution, and if again passed in lower House and rejected in Senate, a joint sitting to be held, and if passed by an absolute majority of the total members of both Houses, disputed Bill to become law. Dead-locks.

A Bill having passed both Houses the Governor-General shall either assent, withhold assent, reserve the Bill, or return it and recommend amendments.

Executive power vested in Queen and exercisable by Governor-General in Council who may appoint Ministers of State. Executive.

State departments of Customs and Excise transferred to Commonwealth on its establishment. Departments of posts and telegraphs, defence, light-houses, &c., and quarantine, on a date or dates to be proclaimed. Departments transferred.

High Court of Australia established; appellate and original jurisdiction. Judicature.

Collection of Customs to pass. Customs and Excise duties to be uniform, and intercolonial free-trade established within two years after the establishment of the Commonwealth, after which the Federal Government shall have exclusive power to levy such duties as well as bounties in the production or export of goods. Finance and Trade.

Of the net revenue from Customs and Excise not more than one-fourth to be applied by Commonwealth towards its expenditure. This provision is liable to variation or repeal after 10 years from the establishment of the Commonwealth.

Right of States to reasonable use of river waters for conservation or irrigation reserved. Water rights.

Inter-State Commission appointed to regulate trade and commerce, and prevent discriminations being made by any State which may be deemed unreasonable or unjust to any other State. Inter-State Commission.

Constitutions, powers, and laws of States protected. State Debts may be taken over. State Debts

Admission of new States provided for. Commonwealth to protect States against invasion or domestic violence. Protection to States.

Seat of Government to be fixed by the Parliament at some place in New South Wales, but at least 100 miles from Sydney, and to be federal territory. Federal Capital.

Constitution may be altered by an absolute majority of both Houses; or of one House if passed twice successively with three months interval; subject to the approval of a majority of the electors voting in a majority of the States, and in the whole Commonwealth. Alteration of Constitution.

OFFICIAL AND PARLIAMENTARY.

The Right Hon. the Earl of Hopetoun, P.C., K.T., G.C.M.G., G.C.V.S., was on the 29th October, 1900, appointed Governor-General and Commander-in-Chief of the Commonwealth, and arrived at Sydney on the 16th December. The Proclamation of the Commonwealth and the swearing-in of the Governor-General took place at Sydney on the 1st day of January, 1901, in the presence of representatives of most of the principal countries of the world, and of a vast assemblage from all parts of the Commonwealth and elsewhere. The Governor-General continued in office until the 9th May, 1902, when he was, at his own request, recalled. On 17th July, 1902, the Right Hon. Hallam, Baron Tennyson, K.C.M.G., was appointed Acting Governor-General; and on 16th January, 1903, he was appointed as Lord Hopetoun's successor. Lord Tennyson retired on 21st January, 1904, and was succeeded by the Right Hon. Henry Stafford, Baron Northcote, C.B., who was in occupation of the office on the 31st December, 1904. Governor-General and Proclamation of Commonwealth.

Governors
of Austral-
asian
States.

The names of the present Governors of the States and New Zealand and the dependencies, and the dates of their assumption of office according to the latest available official information, are as follow:—

GOVERNORS OF AUSTRALASIAN STATES.

	Name.	Date of Assumption of Office.
Victoria	Major-General Hon. Sir Reginald Arthur James Talbot, K.C.B.	25 April, 1904
	Sir John Madden, K.C.M.G., LL.D. (Lieutenant-Governor)	29 April, 1899
New South Wales	Vice-Admiral Sir Harry Holdsworth Rawson, K.C.B.	27 May, 1902
	Sir Fred. M. Darley, G.C.M.G. (Lieutenant-Governor)	29 Oct., 1900
Queensland	The Right Honorable Sir Hugh Muir Nelson, K.C.M.G., D.C.L. (Lieutenant-Governor)	
South Australia	Sir George Ruthven Le Hunte, K.C.M.G.	1 July, 1903
	Sir Samuel J. Way, P.C. (Lieutenant-Governor)	29 Oct., 1900
Western Australia	Admiral Sir Frederick George Denham Bedford, K.C.B.	24 March, 1903
Tasmania	Sir Gerald Strickland, Count Della Catena, K.C.M.G.	1904
New Zealand	The Right Honorable William Lee, Baron Plunket, K.V.O.	— June, 1904
Fiji	Everard Ferdinand im Thurn, Esq., C.B., C.M.G.	1904
New Guinea (British)	Captain Francis Rickman Barton ...	16 June, 1904

THE MINISTRY.

At the Proclamation ceremony the members of the first Commonwealth Ministry were sworn in. The following were their names and the respective offices filled by them:—

Prime Minister and Minister for External Affairs: The Right Hon. Edmund Barton, P.C.

Attorney-General: The Hon. Alfred Deakin.

Treasurer: The Right Hon. Sir George Turner, P.C., K.C.M.G.

Minister of Home Affairs: The Hon. Sir William John Lyne, K.C.M.G.

Minister of Trade and Customs: The Right Hon. Charles Cameron Kingston, P.C., K.C.

Minister of Defence: The Hon. Sir James Robert Dickson, K.C.M.G. Died January, 1901, succeeded by Sir John Forrest.

Postmaster-General: The Right Hon. Sir John Forrest, P.C., G.C.M.G. Succeeded in January, 1901, by Hon. J. G. Drake (re-arrangement of portfolios).

Honorary Ministers: Richard Edward O'Connor, Esq., K.C. (Vice-President of the Executive Council), The Honorable Neil Elliott Lewis, succeeded by the Hon. Sir Philip Fysh, K.C.M.G.

Consequent upon the resignation of the Right Hon. C. C. Kingston from the Ministry, and the subsequent appointment of the Right Hon. Sir Edmund Barton, P.C., and Mr. R. E. O'Connor,

First
Common-
wealth
Ministry.

Changes
in the
Ministry.

K.C., to the bench of the newly-constituted High Court of Australia, several changes have been made in the Ministry. The following were the members of the Ministry at the beginning of the first session of the second Commonwealth Parliament, in 1904:—

Prime Minister and Minister of External Affairs : The Hon. Alfred Deakin.
Minister of Trade and Customs : The Hon. Sir William John Lyne, K.C.M.G.
Treasurer : The Right Hon. Sir George Turner, P.C., K.C.M.G.
Minister of Home Affairs : The Right Hon. Sir John Forrest, P.C., G.C.M.G.
Attorney-General : The Hon. James George Drake.
Postmaster-General : The Hon. Sir Philip Oakley Fysh, K.C.M.G.
Minister of Defence : The Hon. Austin Chapman.
Vice-President of the Executive Council : The Hon. Thomas Playford.

On 27th April, Mr. Deakin's Ministry resigned, and was succeeded by a Ministry with Mr. J. C. Watson as Prime Minister. This Ministry consisted of the following members:—

Prime Minister and Treasurer : The Hon. John Christian Watson.
Minister of External Affairs : The Hon. William Morris Hughes.
Attorney-General : The Hon. Henry Bournes Higgins, K.C.
Minister of Home Affairs : The Hon. Egerton Lee Batchelor.
Minister of Trade and Customs : The Hon. Andrew Fisher.
Minister of Defence : The Hon. Anderson Dawson.
Postmaster-General : The Hon. Hugh Mahon.
Vice-President of the Executive Council : The Hon. Gregor McGregor.

On 18th August Mr. Watson's Ministry resigned, and was succeeded by a Ministry with the Right Hon. G. H. Reid, P.C., K.C., as Prime Minister. Mr. Reid's Ministry remained in office till the end of 1904, and was constituted as follows:

Prime Minister and Minister of External Affairs : The Right Hon. George Houston Reid, P.C., K.C.
Minister of Trade and Customs : The Hon. Allan McLean.
Attorney-General : The Hon. Sir Josiah Henry Symon, K.C.M.G., K.C.
Treasurer : The Right Hon. Sir George Turner, P.C., K.C.M.G.
Minister of Home Affairs : The Hon. Dugald Thomson.
Minister of Defence : The Hon. James Whiteside McCay.
Postmaster-General : The Hon. Sydney Smith.
Vice-President of the Executive Council : The Hon. James George Drake.

OPENING OF FIRST PARLIAMENT.

The first Parliament of the Commonwealth was opened in Melbourne on the 9th May, 1901, by His Royal Highness the Duke of Cornwall and York, K.G., K.T., K.P., G.C.V.S., who was authorized as His Majesty's High Commissioner by letters patent. Besides the Duke and Duchess and suite, the Governor-General, and Members of Parliament, there were present at this memorable function an assemblage of 12,000 people—embracing official representatives from other British Colonies, the Foreign Consuls, Admirals and Captains of visiting war ships (British and Foreign), Commonwealth and State Government officials, representatives of Provincial bodies, societies, and institutions, as well as leading Australian citizens and visitors.

Opening of
the first
Common-
wealth
Parliament.

ELECTIONS, 1903.

The Commonwealth elections, held on 16th December, 1903, are notable by reason of the fact that female franchise was, on that occasion, universal throughout the Commonwealth.

Franchise.

All persons 21 years of age, male or female, who have lived in Australia for six months continuously, are natural-born or naturalized subjects, and whose names are on the roll for any division, are entitled to vote at the election of members of the Senate and the House of Representatives. No person of unsound mind, or attainted of treason, or convicted and under sentence or subject to be under sentence for any offence punishable by imprisonment for one year or longer, shall be entitled to vote. No aboriginal native of Australia, Asia, Africa, or the Islands of the Pacific, except New Zealand, shall be enrolled, unless he is entitled to vote for the more numerous House of the Parliament of a State. No person is allowed to vote more than once at the same election. The following is a statement of the number of electors, votes polled, and percentage of the latter to the former, for the Senate and the House of Representatives:—

ELECTORS ENROLLED AND VOTES POLLED, 1903.

State.	Number of Electors.		Electors who Voted.		Percentage of Electors who Voted.	
	Total.	In contested districts for House of Representatives.	Senate.	House of Representatives.	Senate.	House of Representatives.
Victoria ..	612,472	488,223	313,487	262,789	51·18	53·83
New South Wales	687,049	578,017	324,364	282,514	47·21	48·88
Queensland ..	227,080	202,925	124,507	115,731	54·83	57·03
South Australia ..	167,775	49,645	54,785	20,122	32·65	40·53
Western Australia	116,942	69,824	33,148	21,233	28·35	30·41
Tasmania ..	82,268	82,268	37,021	37,013	45·00	44·99
Commonwealth	1,893,586	1,470,902	887,312	739,402	46·86	50·26

It will be seen that the greatest activity was displayed by voters in Queensland and Victoria, which were the only two States in which more than half the votes were polled; but in Western Australia the polling was abnormally low, less than one-third of the votes being polled. At the first Commonwealth elections, held in March, 1901, the polling was higher in every State, the percentage of electors who voted in contested districts for the House of Representatives being 66·38 in New South Wales, 60·35 in Queensland, 56·04 in Victoria, 46·99 in Tasmania, 40·76 in South Australia, and 36·95 in Western Australia.

The following are statements of the male and female electors enrolled, votes recorded, and percentage of votes to electors at the Senate and House of Representatives elections of December, 1903:—

Males and females—votes recorded.

SENATE ELECTIONS, 1903.—MALE AND FEMALE ELECTORS, AND VOTES RECORDED.

State.	Electors Enrolled.		Votes Recorded.		Percentage of Votes to Electors.	
	Males.	Females.	Males.	Females.	Males.	Females.
Victoria ..	302,069	310,403	171,839	141,648	56·89	45·63
New South Wales ..	360,285	326,764	189,877	134,487	52·70	41·16
Queensland ..	127,914	99,166	79,938	44,569	62·49	44·94
South Australia ..	85,947	81,828	35,736	19,049	41·58	23·28
Western Australia ..	74,754	42,188	26,878	6,270	35·96	14·86
Tasmania ..	43,515	38,753	23,729	13,292	54·53	34·30
Commonwealth	994,484	899,102	527,997	359,315	53·08	39·96

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ELECTIONS FOR THE HOUSE OF REPRESENTATIVES, 1903.—MALE AND FEMALE ELECTORS, AND VOTES RECORDED.

State.	Electors Enrolled		Electors Enrolled in Contested Divisions.		Votes Recorded.		Percentage of Votes to Electors.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Victoria ..	302,069	310,403	241,134	247,089	142,460	120,329	59·08	48·70
New South Wales ..	360,285	326,764	303,254	274,763	164,133	118,381	54·12	43·08
Queensland ..	127,914	99,166	114,550	88,375	74,042	41,689	64·65	47·17
South Australia ..	85,947	81,828	23,856	25,789	12,394	7,728	51·95	29·97
Western Australia ..	74,754	42,188	41,500	28,324	16,824	4,409	40·54	15·56
Tasmania ..	43,515	38,753	43,515	38,753	23,729	13,284	54·53	34·28
Commonwealth	994,484	899,102	767,809	703,093	433,582	305,820	56·47	43·50

It will be seen, by comparing the percentage of males who voted with the percentage who voted in State elections previously given, that a greater amount of interest is aroused in State elections than in elections for the Commonwealth, the percentage of votes recorded in the former fluctuating from 60 to 70 per cent. at various times. The above figures show that the female vote was exercised to a greater extent in Victoria and Queensland than in the other States, New South Wales being next in this respect; but only about one female in every seven entitled to vote in Western Australia took the trouble to do so.

Female franchise is in force in New Zealand, and in all the Australian States except Victoria and Queensland, for the State as well as the Commonwealth elections. At the last general elections in New

Zealand, held in 1902, 74.52 per cent. of the females enrolled exercised the franchise; and at the last State elections of South Australia, held in 1902, 50.72 per cent. of the females entitled to vote availed themselves of the privilege. At the last State elections of Western Australia, held in 1901, 56 per cent. of the females enrolled voted, whereas at the Commonwealth elections in the same State less than 15 per cent. of the females voted. Comparing these figures with those in the preceding table, it is seen that in New Zealand the females exercise the franchise to a far greater extent than in Australia, and that in those two States in Australia where female franchise has been exercised for both Commonwealth and State elections, the right is exercised to a much greater extent in respect of the latter.

Informal votes are included in the votes recorded, set out in the two preceding tables. The following were the number and percentage of votes which were informal for both Houses of the Commonwealth Parliament:—

INFORMAL VOTES, ELECTIONS, 1903.

State.	Senate.		House of Representatives.	
	Number.	Percentage of Votes Recorded.	Number.	Percentage of Votes Recorded.
Victoria	7,003	2.23	4,818	1.83
New South Wales ..	15,796	4.87	7,834	2.77
Queensland	4,612	3.70	3,057	2.64
South Australia ..	1,208	2.20	542	2.69
Western Australia ..	2,001	6.03	1,251	5.89
Tasmania	1,441	3.89	1,164	3.15
Commonwealth ..	32,061	3.61	18,666	2.52

No election has taken place since that of 1903.

MEMBERS OF THE SECOND COMMONWEALTH PARLIAMENT, 1904.

THE SENATE.

President: The Hon. Sir Richard Chaffey Baker, K.C.M.G., K.C.

Victoria—

Best, Hon. Robert Wallace
Findley, Hon. Edward
Fraser, Hon. Simon
Styles, Hon. James
Trenwith, Hon. William Arthur
Zeal, Hon. Sir William Austin,
K.C.M.G.

Queensland—

Dawson, Hon. Anderson
Drake, Hon. James George
Givens, Hon. Thomas
Higgs, Hon. William Guy
Stewart, Hon. James Charles
Turley, Hon. Henry

South Australia—

Baker, Hon. Sir Richard Chaffey,
K.C.M.G., K.C.
Guthrie, Hon. Robert Storrie
McGregor, Hon. Gregor
Playford, Hon. Thomas
Storv, Hon. William Harrison
Symon, Hon. Sir Josiah Henry,
K.C.M.G., K.C.

New South Wales—

Gould, Lt.-Col. Hon. Albert John
Gray, Hon. John Proctor
Millen, Hon. Edward Davis
Nield, Lt.-Col. Hon. John Cash
Pulsford, Hon. Edward
Walker, Hon. James Thomas

MEMBERS OF THE SECOND COMMONWEALTH PARLIAMENT—*continued*.
THE SENATE—*continued*.

Western Australia—	Tasmania—
Croft, Hon. John William	Clemons, Hon. John Singleton
de Largie, Hon. Hugh	Dobson, Hon. Henry
Henderson, Hon. George	Keating, Hon. John Henry
Matheson, Hon. Alexander Perceval	Macfarlane, Hon. James
Pearce, Hon. George Foster	Mulcahy, Hon. Edward
Smith, Hon. Miles Staniforth Cater	O'Keefe, Hon. David John

THE HOUSE OF REPRESENTATIVES.

Speaker: The Hon. Sir Frederick William Holder, K.C.M.G.

Victoria.

Member.	District.	Member.	District.
Cook, J. N. H.	Bourke	McColl, Hon. J. H.	Echuca
Crouch, R. A.	Corio	Maloney, Wm.	Melbourne
Deakin, Hon. A.	Ballarat	McLean, Hon. A.	Gippsland
Gibb, James	Flinders	Phillips, Hon. P.	Wimmera
Harper, R.	Mernda	Quick, Sir J., LL.D.,	Bendigo
Higgins, Hon. H. B.,	Northern Melb.	K.B.	
K.C.		Robinson, A.	Wannon
Isaacs, Hon. I. A.,	Indi	Ronald, Rev. J. B.	Southern Melb.
K.C.		Salmon, Hon. C. C.	Laanecoorie
Kennedy, Thos.	Moira	Skene, Thos.	Grampians
Knox, Wm.	Kooyong	Tudor, F. G.	Yarra
Mauger, S.	Melb. Ports	Turner, Right Hon. Sir	Balaclava
McCay, Lt.-Col. Hon.	Corinella	G., P.C., K.C.M.G.	
J. W.		Wilson, J. G.	Corangamite

New South Wales.

Chanter, J. M.	Riverina	Lyne, Hon. Sir W. J.,	Hume
Brown, Thomas	Canobolas	K.C.M.G.	
Chapman, Hon. A.	Eden-Monaro	Reid, Rt. Hon. G. H.,	East Sydney
Conroy, A. H. B.	Werriwa	P.C., K.C.	
Cook, Joseph	Parramatta	Smith, Bruce, K.C.	Parkes
Edwards, G. B.	South Sydney	Smith, Hon. S.	Macquarie
Ewing, T. T.	Richmond	Spence, W. G.	Darling
Fuller, G. W.	Illawarra	Thomas, J.	Barrier
Hughes, Hon. W. M.	West Sydney	Thomson, Hon. Dugald	North Sydney
Johnson, W. E.	Lang	Watkins, D.	Newcastle
Kelly, W. H.	Wentworth	Watson, Hon. J. C.	Bland
Lee, H. W.	Cowper	Webster, W.	Gwydir
Liddell, F.	Hunter	Wilks, W. H.	Dalley
Lonsdale, E.	New England	Willis, H.	Robertson

Queensland.

Bamford, F. W.	Herbert	McDonald, C.	Kennedy
Culpin, M.	Brisbane	Page, James	Maranoa
Edwards, R.	Oxley	Thomson, D. A.	Capricornia
Fisher, Hon. A.	Wide Bay	Wilkinson, J.	Moreton
Groom, L. E.	Darling Downs		

South Australia.

Batchelor, Hon. E. L.	Boothby	Hutchison, J.	Hindmarsh
Bonython, Sir J. L.	Parker	Kingston, Rt. Hon. C.	Adelaide
Glynn, P. McM.	Angas	C., P.C., K.C.	
Holder, Hon. Sir F.	Wakefield	Poynton, A.	Grey
W., K.C.M.G.			

MEMBERS OF THE SECOND COMMONWEALTH PARLIAMENT—*continued.*THE HOUSE OF REPRESENTATIVES—*continued.**Western Australia.*

Member.	District.	Member.	District.
Carpenter, W. H.	Fremantle	Fowler, J. M.	Perth
Forrest, Rt. Hon. Sir	Swan	Frazer, C. E.	Kalgoorlie
John, P.C., G.C.M.G.		Mahon, Hon. H.	Coolgardie

Tasmania.

Cameron, D. N.	Wilmot	McWilliams, W. J.	Franklin
Fysh, Hon. Sir P. O., K.C.M.G.	Denison	O'Malley, King Storrer, D.	Darwin Bass

Parliamentary Officers.

Senate.—E. G. Blackmore, G.M.G., Clerk of the Parliaments; C. B. Boydell, Clerk Assistant; G. E. Upward, Usher of the Black Rod.
 House of Representatives.—C. G. Duffy, Clerk; W. A. Gale, Clerk Assistant; T. Woollard, Sergeant-at-Arms.
 Reporting Staff.—B. H. Friend, Principal Parliamentary Reporter; D. F. Lumsden, Second Reporter.

COMMONWEALTH ACTS PASSED DURING 1901.

- No. 1. 25th June.—This Act grants and applies out of the Consolidated revenue fund the sum of £491,882 to the service of the period ending 30th June, 1901.
- No. 2. 12th July.—The *Acts Interpretation Act* 1901 details the methods of interpreting Acts of Parliament, and of shortening their language.
- No. 3. 12th July.—This Act grants and applies out of the Consolidated revenue the sum of £1,010,732 for the service of the year ending 30th June, 1902.
- No. 4. 7th August.—The *Audit Act* 1901 makes provision for the collection and payment of the public moneys, the audit of the public accounts, and the protection and recovery of public property.
- No. 5. 5th September.—The *State Laws and Records Recognition Act* 1901 provides for the recognition throughout the Commonwealth of the laws, the public acts and records, and the judicial proceedings of the States.
- No. 6. 3rd October.—The *Customs Act* 1901 regulates the customs, and deals with the importation, exportation, and warehousing of goods, the administration and control of the customs, duties and drawbacks, ships' stores, the coasting trade, agents and officers, forfeitures and penalties, prosecutions and settlement of cases by the Minister. This is a machinery Act, and does not impose any duties.
- No. 7. 5th October.—The *Beer Excise Act* 1901 regulates the excise on beer, the licensing of brewers, and regulation of breweries, excise supervision, duty stamps, computation and payment of duty and refunds, removal of beer from breweries, powers of officers, and prohibition and penalties. The Act does not impose the rate of duty.
- No. 8. 5th October.—The *Distillation Act* 1901 regulates distillation, stills, licences, vigneron, excise supervision, removal of spirits, computation and payment of duty, powers of officers, and prohibitions and penalties.

- No. 9. 5th October.—The *Excise Act* 1901 regulates excise generally, and deals with administration, producers, and dealers, licensing of manufacturers and regulation and supervision of factories, payment of duty and excise control, drawbacks, officers, disputes, prohibitions, and penalties.
- No. 10. 12th October.—This Act grants and applies £928,322 out of the consolidated revenue to the service of the year 1901-2.
- No. 11. 16th October.—The *Service and Execution of Process Act* 1901 provides for the service and execution throughout the Commonwealth of the civil and criminal process, and the judgments of the courts of the States and of other parts of the Commonwealth, and matters connected therewith.
- No. 12. 16th November.—The *Post and Telegraph Act* 1901 relates to the postal and telegraphic services of the Commonwealth, which were transferred from the States on 1st March, 1901, and deals with the appointment, powers, and privileges of officers, arrangements and contracts for the carriage of mails, newspapers, and packets, arrangements for money orders and postal notes, the control of telegraphs and protection of telegraph lines, prohibitions and penalties, legal proceedings, and notice of limitation of actions.
- No. 13. 12th December.—The *Property for Public Purposes Acquisition Act* 1901 provides for the acquisition of property for public purposes, for dealing with property so acquired, and for other matters connected therewith.
- No. 14. 17th December.—The *Punishment of Offences Act* 1901 makes provision for the punishment of offences against the laws of the Commonwealth, by enacting that the laws of each State respecting the arrest and custody of offenders, and the procedure for their summary conviction, or for their examination and commitment for trial on indictment or information, and for holding accused persons to bail, shall apply generally to persons charged with offences committed within that State against the Commonwealth laws.
- No. 15. 17th December.—This Act grants and applies £410,767 out of the consolidated revenue to the service of the year 1901-2.
- No. 16. 17th December.—The *Pacific Island Labourers Act* 1901 provides for the regulation, restriction, and prohibition of the introduction into the Commonwealth of labourers from the Pacific Islands. No Pacific Islander is to enter Australia after 31st March, 1904, nor, except under a licence, before that date.
- No. 17. 23rd December.—The *Immigration Restriction Act* 1901 places restriction on immigration of undesirables, and provides for the removal from the Commonwealth of prohibited immigrants. The persons whose immigration is prohibited are persons likely to become a charge upon the public, lunatics and idiots, persons suffering from infectious or contagious diseases, convicted criminals, persons living on prostitution, persons who fail to pass a prescribed education test, and persons under a contract or agreement to perform manual labour within the Commonwealth (subject to exemptions for special skill, or for crews of coasting vessels, if the wages are on a par with those ruling in the Commonwealth), and for others specially exempted by the Minister.

COMMONWEALTH ACTS PASSED DURING 1902.

- No. 1. 26th February.—This Act grants and applies £320,955 out of the consolidated revenue to the service of the year 1901-2.
- No. 2. 22nd March.—This Act grants and applies £262,415 out of the consolidated revenue to the service of the year 1901-2.
- No. 3. 15th April.—The *Coronation Celebration Act* 1902 grants and applies £23,350 out of the consolidated revenue for defraying expenses in connexion with the celebration of His Majesty's Coronation.
- No. 4. 26th April.—This Act grants and applies £282,834 out of the consolidated revenue to the service of the year 1901-2.
- No. 5. 5th May.—The *Commonwealth Public Service Act* 1902 regulates the public service. It deals with the Commissioner and the inspectors, and their respective duties; the division of the service into administrative, professional, clerical, and general, and the officers included in each; salaries and wages; appointments, transfers, and promotions; dismissals and removals; life assurance; leave of absence, holidays, and furlough.
- No. 6. 30th May.—This Act grants and applies £493,944 out of the consolidated revenue to the service of the year 1901-2.
- No. 7. 30th May.—The *Governor-General's Establishment Act* 1902 appropriates £10,000 out of the consolidated revenue fund to assist in defraying the Governor-General's expenses in connexion with the visit of their Royal Highnesses the Duke and Duchess of Cornwall and York to Australia.
- No. 8. 12th June.—The *Commonwealth Franchise Act* 1902 provides for a uniform Federal franchise. Persons above 21 years of age of both sexes, who have lived in Australia for six months continuously, are natural-born or naturalized, and who are enrolled for any electoral division, are entitled to vote for both the Federal Houses, and only one vote is permitted to each adult. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable for one year or longer, are disqualified from voting.
- No. 9. 19th June.—This Act grants and applies £448,882 out of the consolidated revenue to the service of the year 1901-2.
- No. 10. 23rd June.—This Act grants and applies £587,219 out of the consolidated revenue to the service of the year 1902-3.
- No. 11. 26th July.—The *Excise Tariff* 1902 declares the time of the imposition of uniform duties of excise, and validates the collections made under tariff proposals, and imposes the rates of excise duty on beer, spirits, starch, sugar, and tobacco.
- No. 12. 8th September.—The *Royal Commissions Act* 1902 empowers Commissions issued by the Governor-General under the Great Seal of the Commonwealth to summon any person to attend for examination on oath, and to send for books and documents.
- No. 13. 9th September.—The *Post and Telegraph Rates Act* 1902 enacts that Government telegrams and letters are to be subject to the rates in force, and declares the rates for newspapers and telegrams.
- No. 14. 16th September.—The *Customs Tariff* 1902 declares the time of the imposition of uniform duties of customs, and validates the collections made under tariff proposals, and declares the rates of duties on imports.

- No. 15. 29th September.—This Act grants and applies £1,365,597 out of the consolidated revenue to the service of the year 1902-3.
- No. 16. 10th October.—This Act grants and applies £52,497 out of the consolidated revenue to the service of the year 1901-2, and appropriates the supplies granted for the year in that session of Parliament, amounting to £4,211,348.
- No. 17. 10th October.—The *Appropriation Act* 1902-3 grants and applies £2,621,197 out of the consolidated revenue to the service of the year 1902-3, and appropriates the supplies granted for the year in that session of Parliament amounting to £3,986,794.
- No. 18. 10th October.—The *Appropriation (Works and Buildings) Act* 1902-3 grants and applies £406,092 out of the consolidated revenue for the service of the year 1902-3 for the purposes of additions, new works, and buildings.
- No. 19. 10th October.—The *Commonwealth Electoral Act* 1902 regulates Parliamentary elections, dealing with the appointment and duties of electoral officers, the partition of each of the States into electoral divisions, the fixing of polling places, the preparation of electoral rolls, the constitution and jurisdiction of special courts of revision, the issue and return of the writs, nomination of candidates, voting by post, elections, scrutiny, limitation of electoral expenses, offences and punishments, and disputed returns.
- No. 20. 10th October.—The *Parliamentary Allowances Act* 1902 fixes the dates from which the allowances of Members of Parliament are to commence.
- No. 21. 10th October.—The *Claims against the Commonwealth Act* 1902 makes temporary provision for enforcing claims against the Commonwealth.

COMMONWEALTH ACTS PASSED DURING 1903.

- No. 1. 4th July.—*Supply Act* (No. 1) 1903-1904 provides for an advance to the Treasurer of £75,000.
- No. 2. 15th July.—*Senate Elections Act* 1903 provides that the election of Senators to fill periodical and casual vacancies shall be conducted as one election, and for a casting vote by the Commonwealth electoral officer of the State in the case of an equal number of votes. The powers of the Court of Disputed Returns are added to, and other formal matters dealt with.
- No. 3. 30th July.—*Sugar Rebate Abolition Act* 1903 abolishes as from the date of this Act, the rebate of excise on sugar, provided for in the Schedule to the *Excise Tariff* 1902.
- No. 4. 30th July.—*Sugar Bounty Act* 1903 provides for a bounty to every grower of sugar-cane or beet in the production of which white labour only has been employed, at the rate of 4s. per ton on cane giving 10 per cent. of sugar, or in the case of beet, at the rate of 40s. per ton on the sugar-giving contents of the beet. Ancillary provisions are included, and regulations may be made by the Governor-in-Council.
- No. 5. 30th July.—*Supply Act* (No. 2) 1903-4 applies £595,659 for the services of the year 1903-4.

- No. 6. 26th August.—*Judiciary Act* 1903 provides for the establishment of the High Court of Australia, to consist of a Chief Justice and two other justices, to be appointed by Commission. The seat of Government shall be the principal seat of the Court, but district registries may be established in each State, where the Court shall sit when required. Chamber business, interlocutory proceedings, &c., may be dealt with by a Judge of the High Court, and (except in matters within the exclusive jurisdiction of the High Court) by a Judge of the Supreme Court of a State. Provision is made for a Full Court to hear appeals, and to grant appeals to the Privy Council. The jurisdiction, original and appellate, is fully defined and regulated. Provision is made for officers of the Court, and in regard to barristers and solicitors, those of any State being entitled to practise in any Federal Court. Suits by and against the Commonwealth and the States are regulated; and the criminal jurisdiction in regard to offences against the laws of the Commonwealth is fully regulated.
- No. 7. 28th August.—*High Court Procedure Act* 1903 relates to the procedure of the High Court, and formulates rules.
- No. 8. 28th August.—*Naval Agreement Act* 1903 ratifies an agreement entered into between the British Admiralty and the Governments of the Commonwealth and New Zealand relating to the naval force on the Australian station. The Commonwealth is to pay the Imperial Government five-twelfths and New Zealand is to pay one-twelfth of the total annual cost of maintaining the naval force on the Australian station, not to exceed £200,000 and £40,000 respectively in any year.
- No. 9. 11th September.—*Electoral Divisions Act* 1903 retains the electoral divisions determined under the State laws for the first elections.
- No. 10. 29th September.—*Supply Act* (No. 3) 1903-4 applies £658,500 to the services of the year 1903-4.
- No. 11. 13th October.—*Naturalization Act* 1903. Any resident of the Commonwealth, not being a British subject, and not being an aboriginal native of Asia, Africa, or the islands of the Pacific, who intends to settle in the Commonwealth, has resided there continuously for the preceding two years, or has been naturalized in the United Kingdom, may, at the discretion of the Governor-in-Council, be naturalized. Provision is also made as to the naturalization of women by marriage, and of children of naturalized persons; and for the recognition of persons previously naturalized under State laws; and as to the exclusive power of the Commonwealth in regard to naturalization.
- No. 12. 21st October.—*Extradition Act* 1903 relates to the extradition of criminals from the Commonwealth and from foreign States.
- No. 13. 21st October.—*High Court Procedure Amendment Act* 1903 relates to the transfer of applications to a registry where the court is sitting.

- No. 14. 22nd October.—*Appropriation Act 1903-4* issues and applies towards supply £2,648,437. This and other previous supplies granted are appropriated to the expenditure of the year 1903-4.
- No. 15. 22nd October.—*Supplementary Appropriation Act 1901-2 and 1902-3* authorizes and applies for services previously rendered £6,968 for 1901-2, and £107,997 for 1902-3.
- No. 16. 22nd October.—*Appropriation (Works and Buildings) Act 1903-4* applies and appropriates £422,283 for additions, new works, and buildings for 1903-4.
- No. 17. 22nd October.—*Supplementary Appropriation (Works and Buildings) Act 1901-2 and 1902-3* applies and appropriates £1,004 and £2,635 respectively for these two years.
- No. 18. 22nd October.—*Rules Publication Act 1903*. This Act regulates the manner in which any rules authorized to be made under any Statute, shall be made and published.
- No. 19. 22nd October.—*Commonwealth Public Service Amendment Act 1903* extends the time within which persons who have passed the entrance examination may be appointed to fill subsequent vacancies arising from nine to eighteen months.
- No. 20. 22nd October.—*Defence Act 1903*. For the purposes of administration the Governor-General in Council may appoint a General Officer Commanding the Military Forces of the Commonwealth, a similar Naval Officer, and Commanding Officers of Districts, apportion the forces amongst the districts and sub-districts, and generally appoint and promote officers, and issue commissions. The powers, duties, and tenure of certain officers is provided for; and also seniority, promotion, and reserves. A Naval and Military College may be established to impart education in the various branches of naval and military science. The defence force is to consist of the permanent and citizen forces, the latter of which is divided into Militia, Volunteer Forces, and Reserve Forces, and provision is made for the raising of the force. The permanent forces are at all times liable to be employed on active service, and the citizen forces may be called out in time of war by proclamation. The military forces are not liable to serve beyond the Commonwealth, but the naval forces are. Where the Governor of a State proclaims that domestic violence exists therein, the permanent forces may be called out. All male inhabitants (except persons specially exempt from service) aged 18 to 60 years, who are British subjects and resident six months, shall, in time of war, be liable to serve in the Militia forces. Other general provisions of a comprehensive character are also included.
- No. 21. 22nd October.—*Patents Act 1903* provides for the transfer of the administration of the State Patent Acts and for the establishment of a new system, with the saving of rights accrued under State Acts. State patents in existence may be extended to the Commonwealth. A Commissioner of Patents is to be appointed, and a Patent Office established, and the mode of registration and procedure is fully dealt with.

COMMONWEALTH ACTS PASSED DURING 1904.

- No. 1. 14th June.—The *Acts Interpretation Act* 1904 provides for the interpretation of Acts of Parliament and for shortening their language.
- No. 2. 14th June.—The *Supplementary Appropriation Act* 1903-4 grants and applies £137,216 out of the consolidated revenue to the service of the year 1903-4, and appropriates the sum so granted.
- No. 3. 14th June.—The *Supplementary Appropriation (Works and Buildings) Act* 1903-4 grants and applies £42,294 out of the consolidated revenue to the service of the year 1903-4, and appropriates it for purposes of additions, new works, and buildings, as set out in a schedule.
- No. 4. 2nd July.—The *Supply Act* (No. 1) 1904-5 provides an advance of £120,000 to the Treasurer.
- No. 5. 28th July.—The *Supply Act* (No. 2) 1904-5 grants and applies £317,387 out of the consolidated revenue fund for the service of the year 1904-5.
- No. 6. 28th July.—The *Further Supplementary Appropriation Act* 1902-3 appropriates £5,651 to the service of the year 1902-3.
- No. 7. 15th August.—The *Seat of Government Act* 1904 determines that the Seat of Government of the Commonwealth shall be within seventeen miles of Dalgety, in the State of New South Wales.
- No. 8. 25th August.—The *Supply Act* (No. 3) 1904-5 grants and applies £326,422 out of the consolidated revenue fund to the service of the year 1904-5.
- No. 9. 29th September.—The *Supply Act* (No. 4) 1904-5 grants and applies £430,421 out of the consolidated revenue fund to the service of the year 1904-5.
- No. 10. 28th October.—The *Supply Act* (No. 5) 1904-5 grants and applies £675,048 out of the consolidated revenue fund to the service of the year 1904-5.
- No. 11. 25th November.—The *Appropriation (Works and Buildings) Act* 1904-5 grants and applies £404,240 out of the consolidated revenue fund to the service of the year 1904-5, and appropriates the sum for the purposes of additions, new works, buildings, &c., as detailed in a schedule.
- No. 12. 9th December.—The *Defence Act* 1904 is to be read with the *Defence Act* 1903. The positions of "General Officer Commanding" and "Naval Officer Commanding" are abolished, and, in their stead, those of Inspector-General of the Military Forces and Director of the Naval Forces are created, the duties appertaining to the new offices being defined. A Council of Defence is substituted for the Board of Advice, and Boards of Administration for the Military and Naval Forces are constituted. Provision is also made for the appointment of commanding officers in time of war.

- No. 13. 15th December.—The *Commonwealth Conciliation and Arbitration Act* 1904 provides for the prevention of lock-outs and strikes in relation to industrial disputes. It constitutes a Commonwealth Court of Conciliation and Arbitration having jurisdiction for the prevention and settlement of industrial disputes, and for the exercise of the jurisdiction of the Court by conciliation, with a view to amicable agreement between employers and employes. In default of such amicable agreement, the Court is to exercise its jurisdiction by equitable award. States may refer industrial disputes to the Court, and the Court may call up cases under review by State industrial authorities, and may override such authorities. Its awards and orders are to prevail over theirs, and are to be binding on all parties to the dispute who appear or are represented before the Court, on all parties who have been properly summoned to appear, on all organizations and persons on whom the award is at any time declared by the Court to be binding, and on all members of organizations bound by the award. The organization of representative bodies of employers and employes, and their submission of industrial disputes to the Court is facilitated and encouraged, such organizations being registered, and preference being given to their members where other things are equal. Provision is made for the enforcement of orders and awards, and for their registration in the principal registry and in the district registry, which may be inspected by any person on payment of a fee of sixpence.
- No. 14. 15th December.—The *Sea Carriage of Goods Act* 1904, to come into operation on 1st January, 1905, declares to be null and void all clauses in bills of lading which relieve ship masters and owners from liability for loss or damage caused through negligence in loading or carelessness in stowage and custody of goods; or which lessen or destroy the obligations of ship-owners to properly man the ship, make and keep her seaworthy, and make and keep all parts of the ship where goods are carried fit and safe for their reception and preservation; or which lessen or destroy the masters' and agents' obligations to carefully handle and stow, and to preserve and properly deliver, all goods. Clauses thus declared illegal are not in future to be inserted in bills of lading. In bills of lading, a clause that the ship is seaworthy and properly manned and equipped is to be implied; as also a clause whereby, if the ship is seaworthy and properly manned and equipped at the beginning of the voyage, owners and masters are not responsible for damage resulting from errors in navigation, perils of the sea, acts of God or the King's enemies, inherent defect of the goods, or their faulty packing, or their seizure under legal process, or for omission of owner of goods or his agent, or saving or attempting to save life or property at sea.
- No. 15. 15th December.—The *Appropriation Act* 1904-5 grants and applies £2,046,008 out of the consolidated revenue fund to the service of the year 1904-5, and appropriates the supplies granted for the year in that session of Parliament, amounting to £3,915,286.

PRINCIPAL COMMONWEALTH PUBLIC SERVANTS.

JUDICIARY—HIGH COURT OF AUSTRALIA.

Chief Justice	...	...	...	The Rt. Hon. Sir Samuel Walker Griffith, P.C., G.C.M.G.
Justice	...	...	...	The Rt. Hon. Sir Edmund Barton, P.C., G.C.M.G.
"	...	...	...	The Hon. Richard E. O'Connor.
Associate to Chief Justice	...	...	...	Edward P. T. Griffith.
Associate to Justice Barton	...	...	...	E. A. Barton.
Associate to Justice O'Connor	...	...	...	H. E. Manning.
Principal Registrar	...	...	...	Gordon Harwood Castle.
Marshal	...	...	...	Walter David Bingle.

POSTMASTER-GENERAL'S DEPARTMENT.

Central Administration.

Postmaster-General	...	...	...	The Hon. S. Smith, M.P.
Secretary	...	...	...	R. T. Scott, I.S.O.
Chief Clerk	...	...	...	J. Oxenham.

Deputy Postmasters-General.

Victoria	...	...	...	F. L. Outtrim, I.S.O.
New South Wales	...	...	...	G. P. Unwin.
Queensland	...	...	...	G. H. Buzacott.
South Australia	...	...	...	Sir Charles Todd, K.C.M.G.
Western Australia	...	...	...	R. Hardman.
Tasmania	...	...	...	H. L. D'Emden.

Staff Officers, Victoria.

Chief Clerk	...	...	...	W. B. Crosbie.
Accountant	...	...	...	E. Miller.
Controller Money Order Branch	...	...	...	J. Ryan.
Superintendent Mail Branch	...	...	...	J. A. Springhall.
Manager Telegraph Branch	...	...	...	W. Croft.

DEPARTMENT OF TRADE AND CUSTOMS.

Central Administration.

Minister	...	...	...	The Hon. A. McLean, M.P.
Comptroller-General	...	...	...	H. N. P. Wollaston, LL.D., I.S.O.

State Collectors.

Victoria	...	...	...	A. W. Smart.
New South Wales	...	...	...	N. C. Lockyer.
Queensland	...	...	...	W. H. Irving.
South Australia	...	...	...	F. W. Ringwood.
Western Australia	...	...	...	C. T. Mason.
Tasmania	...	...	...	J. Barnard.

Staff Officers, Victoria.

Sub-Collector	...	...	...	R. H. Dawson.
Inspector of Accounts	...	...	...	T. N. Stephens.
Accountant	...	...	...	F. M. Wheatland.
Senior Inspector of Distilleries	...	...	...	D. Ferguson.

DEPARTMENT OF DEFENCE.

Central Administration.

Minister	...	...	...	Lt.-Col. The Hon. J. W. McCay, M.P.
Secretary for Defence	...	...	...	Capt. R. H. M. Collins, R.N., C.M.G.

PRINCIPAL COMMONWEALTH PUBLIC SERVANTS—*continued.*

DEPARTMENT OF DEFENCE—*continued.*

Military Board of Administration of Commonwealth.

President	...	...	...	Lt.-Col. The Hon. J. W. McCay, M.P.
Members	...	...	...	Col. J. C. Hoad, C.M.G. Lt.-Col. W. T. Bridges. Lt.-Col. H. Le Mesurier. J. A. Thompson.
Chief Clerk	...	...	...	S. A. Pethebridge.
Chief Accountant	...	...	...	J. A. Thompson.
Inspector-General	...	...	...	Brig.-Gen. Finn.
Staff Officer and Private Secretary	...	...	...	Capt. J. W. Niesigh.

Naval Forces.

Director of Naval Forces	...	...	...	Capt. W. R. Creswell, C.M.G.
Commandant	...	...	...	Com. W. J. Colquhoun, D.S.O.

Victoria.

Military Commandant	...	...	...	Col. P. R. Ricardo, C.B.
Assistant Adjutant-General and Chief Staff Officer	...	...	...	Brev. Lieut.-Col. G. L. Lee, D.S.O.
Naval Commandant	...	...	...	Capt. W. R. Creswell, C.M.G.

New South Wales.

Military Commandant	...	...	...	Brig.-Gen. J. M. Gordon, C.B.
Officer-in-Charge Naval Forces	...	...	...	Lt.-Com. Brownlow.

Queensland.

Military Commandant	...	...	...	Col. W. H. Plomer.
Naval Commandant	...	...	...	Capt. F. Tickell, C.M.G.

South Australia.

Military Commandant (acting)	...	...	...	Lt.-Col. C. Reade, C.B.
Naval Commandant	Capt. C. Clare, C.M.G.

Western Australia.

Military Commandant	Lt.-Col. R. Wallace.
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Tasmania.

Military Commandant	Col. H. Mackenzie.
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DEPARTMENT OF EXTERNAL AFFAIRS.

Minister	The Rt. Hon. G. H. Reid, P.C., K.C., M.P.
Secretary	A. Hunt.
Secretary to Prime Minister	...	...	...	M. L. Shepherd.
Secretary to Governor-General and Executive Council	...	...	...	G. C. T. Steward.

ATTORNEY-GENERAL'S DEPARTMENT.

Attorney-General	...	...	...	The Hon. Sir Josiah Symon, K.C., K.C.M.G.
Secretary and Parliamentary Draftsman	...	...	...	R. R. Garran, C.M.G.
Chief Clerk and Assistant Parliamentary Draftsman	...	...	...	G. H. Castles.
Secretary to the Representative of the Government in the Senate	...	...	...	A. G. Brown, B.A., LL.B.
Crown Solicitor	...	...	...	C. Powers.
Chief Clerk	...	...	...	S. McHutchison.

PRINCIPAL COMMONWEALTH PUBLIC SERVANTS—*continued.*

DEPARTMENT OF HOME AFFAIRS.

Minister	The Hon. Dugald Thomson, M.P.
Secretary	D. Miller, I.S.O.
Chief Clerk	W. D. Bingle.
Accountant	H. L. Walters.
Inspector-General of Public Works	G. T. Owen.
Superintendent of Works	J. Blackbourn.

PUBLIC SERVICE COMMISSIONER'S OFFICE.

Public Service Commissioner	D. C. McLachlan, I.S.O.
Secretary	F. Reddin.
Registrar	J. P. Bichard.
Examiner	F. J. Healy, M.A., LL.B.

DEPARTMENT OF THE TREASURY.

Treasurer	The Rt. Hon. Sir Geo. Turner, P.C., K.C.M.G.
Secretary	G. T. Allen.
Accountant	J. R. Collins.

PATENTS OFFICE.

Commissioner of Patents	G. Townsend.
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POPULATION.

At the date of the census, 31st March, 1901, the population of Victoria was 1,201,070 (excluding 271 full-blooded aborigines); on 31st December, 1901, it had increased to 1,210,882; on 31st December, 1902, to 1,211,450; on 31st December, 1903, owing to excess of emigration over immigration and natural increase, it had declined to 1,208,854; but on the 31st December, 1904, it had increased to 1,210,304.

Population,
1901 and
1904.

The particulars of the movement of the population since the census of 1901 are fully detailed in the following statement:—

POPULATION OF VICTORIA, 31ST MARCH, 1901, TO 31ST DECEMBER, 1904.

—	Males.	Females.	Males.	Females.	Total.
<i>Enumerated Population, 31st March, 1901</i> (exclusive of full-blooded aborigines) ..	..	..	603,720	597,350	1,201,070
Births, 1.4.01 to 31.12.01 ..	11,902	11,364			
Deaths „ „ ..	6,708	5,067			
Natural increase ..	..	..	+5,194	+6,297	+11,491
Migration by Sea, 1.4.01 to 31.12.01—					
Arrivals (as recorded) ..	42,909	21,689			
Departures „ ..	41,202	22,877			
Allowance for unrecorded Departures (9 per cent.) ..	3,708	2,059			
Loss Seawards ..	..	..	-2,001	-3,247	-5,248
Migration by Land, 1.4.01 to 31.12.01 (plus 10 per cent.)—					
Arrivals	10,520	5,318			
Departures	7,889	4,380			
Gain Overland ..	..	..	+2,631	+938	+3,569
<i>Estimated Population, 31st December, 1901</i> .. ..	..	..	609,544	601,338	1,210,882
Births, 1902	15,583	14,878			
Deaths „	9,152	7,025			
Natural increase ..	..	..	+6,431	+7,853	+14,284
Migration by Sea, 1902—					
Arrivals (as recorded) ..	56,984	30,573			
Departures „	62,963	34,970			
Allowance (9 per cent.) ..	5,667	3,147			
Loss Seawards ..	..	..	-11,646	-7,544	-19,190
Migration by Land, 1902 (plus 10 per cent.)—					
Arrivals	15,533	8,334			
Departures	11,825	6,568			
Gain Overland ..	..	..	+3,708	+1,766	+5,474

POPULATION OF VICTORIA, 31ST MARCH, 1901, TO 31ST DECEMBER, 1904—continued.

	Males.	Females.	Males.	Females.	Total.
<i>Estimated Population, 31st December, 1902</i> .. ..	..	..	608,037	603,413	1,211,450
Births, 1903	15,115	14,454			
Deaths „	8,626	6,969			
Natural increase .. ..	..	..	+6,489	+7,485	+13,974
Migration by Sea, 1903—					
Arrivals (as recorded) ..	33,275	19,481			
Departures „	40,803	25,356			
Allowance (9 per cent.) ..	3,672	2,282			
Loss Seawards .. ..	..	..	-11,200	-8,157	-19,357
Migration by Land, 1903 (plus 10 per cent.)—					
Arrivals	12,609	7,309			
Departures	10,574	6,557			
Gain Overland .. ..	..	..	+2,035	+752	+2,787
<i>Estimated Population, 31st December, 1903</i> .. ..	..	..	605,361	603,493	1,208,854
Births, 1904	15,313	14,450			
Deaths „	7,992	6,401			
Natural increase .. ..	..	..	+7,321	+8,049	+15,370
Migration by Sea, 1904—					
Arrivals (as recorded) ..	34,339	20,710			
Departures „	40,318	25,513			
Allowance (9 per cent.) ..	3,629	2,296			
Loss Seawards .. ..	..	..	-9,608	-7,099	-16,707
Migration by Land, 1904 (plus 10 per cent.)—					
Arrivals	12,650	7,556			
Departures	10,689	6,730			
Gain Overland .. ..	..	..	+1,961	+826	+2,787
<i>Estimated Population, 31st December, 1904</i> .. ..	..	..	605,035	605,269	1,210,304
Increase from Census, 31st March, 1901, to 31st December, 1904 .. ..	..	..	+1,315	+7,919	+9,234
Full-blooded aborigines at the date of the Census not included in the estimate ..	..	..	163	108	271

Population,
1891-1904.

The population of Victoria on 31st March, 1891, when the census of that year was taken, was 1,140,405. Although it had increased to

1,201,341 when the next census was taken, viz., on 31st March, 1901, yet the State lost by emigration during the ten years 111,577 persons. The total increase—60,936—which took place, was the excess of births over deaths, after deducting the net loss by emigration. During the remainder of 1901, the natural increase was 11,491, the loss by emigration 1,679, and the addition to the population 9,812. In 1902 the natural increase was 14,284, the loss by emigration 13,716, and the addition to the population 568. In 1903 the natural increase was 13,974, the emigration 16,570, and there was thus a loss to the population of 2,596. In 1904 the natural increase was 15,370, and the emigration 13,920; the net gain was therefore 1,450.

TABLE SHOWING THE MOVEMENT OF POPULATION SINCE THE CENSUS OF 1891.

Period.	Increase or Decrease.	Total.
Population, 5th April, 1891 .. .. .	..	1,140,405
Natural Increase, 1891 to 1901	172,513	
Loss by Emigration	111,577	
		+60,936
1901—Natural Increase, April to December	11,491	
Loss by Emigration " "	1,679	
		+9,812
1902—Natural Increase	14,284	
Loss by Emigration	13,716	
		+568
1903—Natural Increase	13,974	
Loss by Emigration	16,570	
		-2,596
1904—Natural Increase	15,370	
Loss by Emigration	13,920	
		+1,450
Total .. .. .	..	1,210,575
Less full-blooded Aborigines .. .. .	..	271
Population, 31st December, 1904 .. .. .	..	1,210,304

It is thus seen that emigration from the State has been continuous since 1891. The total loss from that time (a period of thirteen years and nine months), mostly adult men and women, was 157,462, who were replaced by 227,632 infants, being the excess of births over deaths. The total increase since the 1891 census was thus 70,170.

During the first quarter of the year 1904 the natural increase was 3,669; in the second quarter, 3,843; in the third quarter, 3,897; and in the fourth quarter, 3,961—a total of 15,370. In the same quarters the loss by sea-emigration was 6,193, 5,040, 2,979, and 2,495 respectively—a total of 16,707. A slight gain has been made by the land movement of population, the figures being 537, 428, 589, and

Movement of population, 1904.

1,233 for the four quarters—a total of 2,787 for the year. These results summarized are—

Gain by natural increase	...	...	15,370
Gain by land	...	...	2,787
Total gain	...	...	18,157
Loss by emigration	...	...	16,707
Net gain	...	...	1,450

Thus the migration by land and sea during the first twelve months involves a loss to Victoria of 5,656 persons in the first quarter, 4,612 in the second quarter, 2,390 in the third quarter, and 1,262 in the fourth quarter—a total of 13,920 for the year.

The countries which gained and lost by the movement of population to and from Victoria during the twelve months ended 31st December, 1904, are as follow:—

RECORDED GAIN AND LOSS IN POPULATION, 1904.

Countries that gained from Victoria—	No.	Countries that Lost to Victoria—	No.
New South Wales	3,365	Queensland	393
South Australia	516	Tasmania	122
Western Australia	4,937	South Africa	200
New Zealand	2,294	Foreign Ports	152
South Seas	20	New South Wales (by rail)	2,265
United Kingdom	432	South Australia (by rail) ..	225
Other British Dominions ..	85	Queensland (by rail)	44
Total	11,649	Total	3,401

Recorded loss by Migration	8,248
Unrecorded „ „ (allowance)	5,672
Total	13,920

Immigration and emigration, 1900-1904.

The recorded Victorian immigration and emigration by sea from 1900 to 1904 was:—

RECORDED IMMIGRATION AND EMIGRATION BY SEA, 1900 TO 1904.

Year.	Immigrants.	Emigrants.	Excess of Emigrants.
1900	82,157	83,684	1,527
1901	93,107	90,126	- 2,981
1902	87,557	97,933	10,376
1903	52,756	66,159	13,403
1904	55,049	65,831	10,782

The small number of migrants in 1903 and 1904, as compared with previous years, is accounted for by the fact that passengers calling at the ports of the State on their way to other places have been excluded from the records since the beginning of the former year, but were included in all previous years.

The departures exceeded the arrivals in each of the years stated, with the exception of 1901, when there was an excess of immigrants numbering 2,981. In only one other year since the first settlement of the State, viz., in 1896, did the excess of emigrants exceed that recorded in 1903.

As the Inter-State railway passenger traffic is now taken into account in framing estimates of population at the end of each year, the movement of this traffic since the date of the census is shown in the following return:—

Excess of departures, 1900-1904.

Arrivals and departures by rail, 1st April, 1901, to 31st Dec., 1904.

MIGRATION BY RAIL, 1901 TO 1904 (AS RECORDED).

Year.	Arrivals.			Departures.			Excess of Arrivals.		
	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.
1901 (from 1st April)	9,564	4,834	14,398	7,172	3,982	11,154	2,392	852	3,244
1902 ..	14,121	7,576	21,697	10,750	5,971	16,721	3,371	1,605	4,976
1903 ..	11,463	6,645	18,108	9,611	5,959	15,570	1,852	686	2,538
1904 ..	11,500	6,869	18,369	9,717	6,118	15,835	1,783	751	2,534

The net result of the recorded immigration and emigration by sea between Victoria and the neighbouring States, the United Kingdom, and foreign countries during each of the five years ended 1904 is shown in the following table. Where a minus sign (—) appears, it indicates that the immigrants exceeded the emigrants by the number against which it is placed:—

Loss by emigration to various countries and vice versa.

NET EMIGRATION FROM VICTORIA BY SEA, 1900 TO 1904.

Year.	Excess of Emigration over Immigration between Victoria and—									Net Emigration.
	New South Wales and Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand and South Seas.	South Africa.	United Kingdom.	Other British Dominions.	Foreign Ports.	
1900 ..	- 1,218	- 709	2,938	- 1,592	1,064	1,767	558	- 625	- 656	1,527
1901 ..	1,851	- 1,186	5,333	- 2,847	564	- 1,070	- 3,083	- 1,101	- 1,442	- 2,981
1902 ..	939	- 888	8,058	- 407	2,595	1,245	253	- 125	- 1,294	10,376
1903 ..	3,205	411	4,868	- 663	2,830	2,717	178	187	- 330	13,403
1904 ..	2,972	516	4,937	- 122	2,314	- 200	432	85	- 152	10,782
Total	7,749	- 1,856	26,134	- 5,631	9,367	4,459	- 1,662	- 1,579	- 3,874	33,107

Immigra-
tion and
emigration
to various
places,
1900 to
1904.

During the five years mentioned, the emigration from exceeded the immigration to Victoria as follows:—To Western Australia by 26,134 persons; to New Zealand and South Seas by 9,367; to New South Wales and Queensland by 7,749; and to South Africa by 4,459. There was a balance in favour of this State of 3,874 from foreign ports; 5,631 from Tasmania; 1,856 from South Australia; 1,579 from British dominions unspecified; and 1,662 from the United Kingdom. The net loss to Victoria amounted to 33,107 in the quinquennium.

Victorians in
each Aus-
tralian
State and
New
Zealand.

Persons of Victorian birth living in other Australian States and New Zealand numbered 136,638 at the census of 1901, as compared with 69,021 at the previous census in 1891, thus showing an increase of 67,617. The exodus to Western Australia was the principal factor contributing to this result, for whereas in 1891 there were only 1,036 Victorians resident there, in 1901 the number had increased to 39,491, as shown hereunder:—

VICTORIANS LIVING IN EACH AUSTRALIAN STATE AND NEW ZEALAND,
1901.

State in which living.	Numbers born in Victoria.		
	Males.	Females.	Total.
Victoria	428,823	447,180	876,003
New South Wales	30,358	25,661	56,019
Queensland	6,721	3,551	10,272
South Australia	5,134	5,190	10,324
Western Australia... ..	24,342	15,149	39,491
Tasmania	4,502	3,447	7,949
Australia	499,880	500,178	1,000,058
New Zealand	6,530	6,053	12,583
Total	506,410	506,231	1,012,641

It thus appears that out of the 1,012,641 Victorian-born persons resident in Australia and New Zealand, 876,003, or 86·6 per cent., were living in Victoria; 56,019, or 5·5 per cent., in New South Wales; 10,272, or 1 per cent., in Queensland; 10,324, or 1 per cent., in South Australia; 39,491, or 3·9 per cent., in Western Australia; 7,949, or '8 per cent., in Tasmania; and 12,583, or 1·2 per cent., in New Zealand.

From the census returns of 1901 it is shown that there were resident in Victoria 22,417 natives of New South Wales, 3,032 of Queensland, 21,929 of South Australia, 1,468 of Western Australia, 15,363 of Tasmania, 9,020 of New Zealand, and 885 born in Australia, the particular State being unspecified. This makes a total of 74,114 natives of other States who were resident in Victoria; and as there were 136,638 native Victorians residing in other States, there were thus 62,524 persons of Victorian birth resident in other States over and above the number of natives of other States who were resident in Victoria.

The following figures show the number of immigrants who arrived in Victoria from Western Australia and the number of emigrants who departed thereto during each of the years from 1891 to 1904:—

Immigration and emigration to Western Australia, 1891 to 1904.

MIGRATION TO AND FROM WESTERN AUSTRALIA, 1891 TO 1904.

Year.	Arrivals from.	Departures to.	Excess of Departures.
1891	344	2,304	1,960
1892	632	2,346	1,714
1893	1,922	4,177	2,255
1894	6,545	16,690	10,145
1895	6,344	17,471	11,127
1896	12,951	37,448	24,497
1897	20,580	31,775	11,195
1898	21,687	22,504	817
1899	12,403	12,299	- 104
1900	10,638	13,576	2,938
1901	11,371	16,704	5,333
1902	10,550	18,608	8,058
1903	7,986	12,854	4,868
1904	7,882	12,819	4,937
Total	131,835	221,575	89,740

The arrivals and departures cannot all be taken to represent Victorians, as passengers from the other Eastern States calling at Victorian ports on their way to the Western State were, up to the 31st December, 1902, included. A very large proportion of Victorians must, however, have emigrated to Western Australia, as the census returns of that State on the 31st March, 1901, disclosed the fact that there were no less than 39,491 natives of Victoria resident there.

Victorians in Western Australia.

The first year in which a separate record of passenger traffic from Victoria to South Africa was kept was 1895, since which date it has been as follows:—

Arrivals from and departures to South Africa, 1895 to 1904.

MIGRATION TO AND FROM SOUTH AFRICA, 1895 TO 1904.

Year.	Arrivals from.	Departures to.	Excess of Departures.
1895	136	1,524	1,388
1896	333	3,214	2,881
1897	824	1,570	746
1898	740	870	130
1899	994	1,192	198
1900	1,878	3,645	1,767
1901	4,785	3,715	- 1,070
1902	4,215	5,460	1,245
1903	794	3,511	2,717
1904	1,325	1,125	- 200
Total	16,024	25,826	9,802

It is here shown that for some time past there has been a growing tendency on the part of young Victorians to leave for South Africa. This tendency was, however, somewhat checked during 1898 and 1899, the years immediately preceding the war, but again asserted itself in 1902 and 1903. In 1904 there was a gain of 200, the total loss since 1895 being 9,802 to 31st December, 1904.

State
assisted
immigra-
tion.

The practice of assisting immigrants is at the present time in force only in Queensland and Western Australia, although the plan had been in operation in all the States in the early days. In Victoria, from 1852 to 1854, the greatest number of assisted immigrants was received—the annual average of these years being 15,500 persons. From 1873 to 1882 only 379 persons were received, and in the latter year was admitted the last assisted immigrant to Victoria. In New South Wales the practice was discontinued in 1887, but from 1888 to 1899 husbands and wives resident in that State nominated no less than 1,994 persons whose passages were partly paid by the Government. The last assisted immigrant arrived in South Australia in 1885, and in Tasmania in 1890. In New Zealand, although the practice of nominating immigrants has been discontinued since the 16th December, 1890, yet it is customary for the Agent-General to make arrangements with the shipping companies whereby men with moderate means who purpose settling in that colony may be allowed to take out passages at reduced rates. In the following table appears the number of assisted immigrants to Australia and New Zealand during the 53 years ended on the 31st December, 1903, no later figures being available:—

STATE ASSISTED IMMIGRATION TO AUSTRALIA AND NEW ZEALAND,
1851 TO 1903.

	Number of Persons.			
Victoria	140,104
New South Wales	149,011
Queensland	163,369
South Australia	95,345
Western Australia	7,453
Tasmania	21,699
				<hr/>
Australia	576,981
New Zealand	115,578

Prior to the period embraced in the table, viz., from 1832 to 1850, 62,961 assisted immigrants arrived in New South Wales. The figures for New Zealand are exclusive of the arrivals prior to 1870, of which no record is available.

Increase of
population,
1851-1904.

There is at the present time a very general demand throughout Australia for increased population, and during the past few years attention has from time to time been drawn to the question by prominent statesmen and in the leading journals of the Commonwealth. In the early days of Australia immigration—which practically ceased towards the close of the decennial period, 1881-1891—played a very

important part in increasing the population, as will be seen from the following return:—

COMMONWEALTH OF AUSTRALIA: INCREASE OF POPULATION BY IMMIGRATION AND NATURAL INCREASE, 1851 TO 1904.

Period.	Increase by Excess of Immigration over Emigration.	Natural Increase (i.e., Excess of Births over Deaths).	Total Increase.
1851-61 (Census period) ..	576,328	168,660	744,988
1861-71	176,880	335,357	512,237
1871-81	195,245	391,987	587,232
1881-91	386,900	537,083	923,983
1891-1901	5,480	589,089	594,569
1901 (from 1st April) ..	9,492	42,994	52,486
1902	2,094	54,708	56,802
1903	-7,249	51,150	43,901
1904	-3,125	60,472	57,347
Total	1,342,045	2,231,500	3,573,545

It seems to be not only necessary, but very desirable, that some explanation should be offered of the continued exodus of men and women from our State since 1891. Many reasons have been assigned for their emigration, and without doubt the progress of gold mining in Western Australia is one of the most important, as at the census of 1901 there were no less than 39,500 persons of Victorian birth in that State. In Victoria gold production has remained almost stationary since 1895, at about 800,000 oz. per annum; while in Western Australia the production has increased from about 231,000 oz. in that year to nearly two and a half million ounces at the present time.

The economic condition of this State, so far as regards employment, has also been an important factor in bringing about this emigration. The constantly recurring droughts experienced in recent years have largely affected the prosperity and progress of the agricultural, pastoral, and manufacturing industries.

Owing to the small quantity of suitable land now available for occupation in localities conveniently situated to good roads, railways, and markets, many men have undoubtedly endeavoured to better meet their requirements in other States of the Commonwealth, in New Zealand, and in South Africa.

The collapse of the land boom in 1891 had a prejudicial effect upon our banking business generally, though during later years it is pleasing to note that an excellent recovery is exhibited, dividends having been increased, both as regards amounts and rates. The number of depositors in Savings Banks has increased year by year, though not to the same extent as prior to 1891; and building society transactions since 1893 have almost ceased, so far as regards new business, though a slight improvement has taken place since 1902.

Probable causes of emigration from Victoria.

The almost total cessation of borrowing, and consequent stoppage of large public works, has also to some extent influenced migration from this State. In recent years, notwithstanding severe droughts and depression of general business resulting therefrom, New South Wales has managed to retain its people without loss by emigration, the increase which has taken place in that State being almost entirely due to excess of births over deaths, and this result must to some extent be accounted for by a large expenditure of loan money. In the five years ended 30th June, 1903, New South Wales spent nearly sixteen and a half millions of loan money, and Victoria during the same period only about four and a quarter millions.

There have doubtless been other factors operating to bring about this emigration from Victoria, but it is now hoped that it may be largely arrested by legislation providing for the purchase of large private estates suitable for closer settlement, and their subdivision into small allotments, equal to the reasonable requirements of a family. The success which has already attended the efforts made in this direction at the Wando Vale, Walmer, Eurack, and Whitfield estates, which were purchased in 1900 and 1901, may be regarded as evidence of the soundness of the principle underlying this scheme of settlement of people on our land.

At the present time the rural holdings in Victoria are excessively large, and, in view of the scarcity of labour, the scarcity of land, and the strong tendency of the people to leave the rural and take up their life's work in the urban districts, they cannot but be indifferently cultivated. In Victoria in 1904, 31,077,212 acres of land were in possession of 49,000 occupiers, used for agricultural, pastoral, and dairying purposes. This gives an average holding of 630 acres to each of the 49,000 occupiers.

It is certain that in any successful occupation of the lands of Victoria, settlers will have to do with very much less land than they at present occupy—perhaps with not much more than 100 acres each. Very little more can be offered to them on the closer settlement areas which it is intended to purchase.

The Closer Settlement Act which was passed last year, providing for voluntary and compulsory purchase of private estates and their subdivision into small allotments, should, if successfully administered, prove of very great aid in retaining our population. There should be no difficulty whatever in the purchase of suitable estates that are offered voluntarily at reasonable prices to the Crown, but delay and difficulty may reasonably be anticipated in procuring estates under a system of compulsory purchase, as under these circumstances—*i.e.*, when compulsory purchase is resorted to—it may, and possibly will, in all cases, become necessary to obtain a resolution of both Houses of Parliament in order to effect a purchase; and further, mortgaged estates, however suitable they may be for the purposes of closer settlement, can only be procured by payment of the full amount of the mortgage money, with added interest to date of purchase—a condition which renders their purchase almost impossible, as many of these estates are mortgaged greatly in excess of their present market value.

By successful administration of this Act, we may not only be able to prevent further emigration, but also hold out an inducement to many of those who have already gone away to return; it would also be a means of encouraging suitable immigrants from Europe, holding out to them as it would an assurance of settlement on suitable blocks of land immediately on their arrival.

The comprehensive scheme of irrigation submitted by the Government for the consideration of Parliament, when placed on the statute-book, should be of incalculable benefit, more especially in connexion with intense cultivation on closer settlement areas, on which the bulk of the agricultural people of this State must eventually depend for a livelihood.

In view of the necessity of increased population for Australia, the following table will be of interest, illustrating as it does the distribution of population throughout the whole of the British Empire, the increase which has taken place in the intercensal period 1891-1901, and its density. The figures for Europe and Australasia may be taken as correct. The others are mostly estimates:—

BRITISH DOMINIONS, AREA, AND POPULATION.

Territory.	Estimated Area, Square Miles, 1901.	Total Population.		Population per Square Mile, 1901.
		1891.	1901.	
EUROPEAN.				
England and Wales	58,324	29,002,525	32,527,843	558
Scotland	29,796	4,025,647	4,472,103	150
Ireland	32,605	4,704,750	4,458,775	137
Isle of Man and Channel Islands	302	147,842	150,599	499
Total United Kingdom	121,027	37,880,764	41,609,320	344
Gibraltar	2	25,869	26,830	13,415
Malta	117	165,662	190,000	1,624
Total	121,146	38,072,295	41,826,150	345
ASIATIC.				
British India	1,087,404	221,266,569	231,898,807	213
Feudatory Native States	679,393	66,047,487	62,461,549	92
Ceylon	25,332	3,007,789	3,578,333	141
Straits Settlements	1,542	512,342	572,249	371
Protected Malay States	26,500	412,440	678,595	26
British North Borneo	31,000	120,000	120,000	4
Sarawak	41,000	300,000	500,000	12
Labuan	30	5,853	8,411	280
Hong Kong	32	221,441	287,975	8,999
Weihaiwei	285	..	150,000	526
Cyprus	3,584	209,291	237,022	66
Other British Possessions	1,727	62,000	75,000	43
Total	1,897,829	292,165,212	300,567,941	158

BRITISH DOMINIONS, AREA, AND POPULATION—*continued.*

Territory.	Estimated Area, Square Miles, 1901.	Total Population.		Population per Square Mile, 1901.
		1891.	1901.	
AFRICAN.				
Mauritius and Dependencies ..	880	377,986	381,357	433
Cape Colony	276,995	1,527,224	2,501,635	9
Natal	29,200	702,349	925,118	32
Orange River Colony ..	50,000	207,503	207,503	4
Transvaal Colony	111,700	768,000	870,000	8
Basutoland	10,293	218,902	264,047	26
Bechuanaland Protectorate ..	386,200	60,000	130,000	·34
British Central Africa Protectorate	42,217	..	900,000	21
British East Africa Protectorate	750,000	..	4,000,000	5
Uganda Protectorate	86,000	..	2,000,000	23
Zanzibar	640	115,000	200,000	312
Somaliland	60,000	240,000	153,000	3
Rhodesia	750,000	..	574,000	·77
Nigeria	500,000	20,000,000	25,000,000	50
West African Colonies (including Protectorates)	186,739	2,235,000	4,153,000	22
Other African Possessions	217	17,229	29,487	136
Total	3,241,081	26,469,193	42,289,147	13
AMERICAN.				
Canada	3,619,818	4,833,239	5,371,315	1·48
Newfoundland and Labrador ..	160,200	197,934	220,974	1·38
Bermudas	20	15,123	17,535	877
Honduras	7,562	31,471	37,489	5
West Indies	13,107	1,353,324	1,558,000	119
British Guiana	104,000	278,328	302,172	3
Falkland Islands	6,500	1,789	2,043	·31
Total	3,911,207	6,711,208	7,509,528	1·92
AUSTRALASIAN.				
Commonwealth of Australia ..	2,972,906	3,183,237	3,782,943	1·27
New Zealand	104,471	626,658	772,719	7·40
Total	3,077,377	3,809,895	4,555,662	1·48
OCEANIC.				
Fiji	7,740	125,402	120,124	16
Tonga	390	19,250	18,959	49
Total	8,130	144,652	139,083	17
GRAND TOTAL of British Dominions	12,256,770	367,372,455	396,887,511	32

This shows that in the British European territories the population increased from 38 millions in 1891 to nearly 42 millions in 1901; in British Asiatic territories, from 292 to 300½ millions; in British

African territories, from 26 to 42 millions (partly due to territorial extension); in British American territories, from $6\frac{3}{4}$ to $7\frac{1}{2}$ millions; and in Australasia, from $3\frac{3}{4}$ to $4\frac{1}{2}$ millions; while in Oceania a slight decline is shown. Australia has thus been participating in the increase of population that has been general all over the Empire during the decade; the average for the Empire has been 8 per cent., and in Australia nearly 20 per cent. The densities of population in British possessions are respectively 345 persons to the square mile in Europe, 158 in Asia, 13 in Africa, nearly 2 in America, and $1\frac{1}{2}$ in Australasia.

The enumerated population at the five census years, the estimated population in 1904, and the increases, numerical and centesimal, are as under:—

Increase of population at five decades and in 1904.

POPULATION OF VICTORIA (INCLUDING ABORIGINES) AT FIVE CENSUS PERIODS, AND IN 1904.

Year of Census or Estimate.	Both Sexes.			Males.			Females.		
	Popu-lation.	Increase since last Census.		Popu-lation.	Increase since last Census.		Popu-lation.	Increase since last Census.	
		Numeri-cal.	Centesi-mal.		Numeri-cal.	Centesi-mal.		Numeri-cal.	Centesi-mal.
1861	540,322	129,556	31·54	328,651	64,317	24·33	211,671	65,239	44·55
1871	731,528	191,206	35·39	401,050	72,399	22·03	330,478	118,807	56·13
1881	862,346	130,818	17·88	452,083	51,033	12·72	410,263	79,785	24·14
1891	1,140,405	278,059	32·24	598,414	146,331	32·37	541,991	131,728	32·11
1901	1,201,341	60,936	5·34	603,883	5,469	·91	597,458	55,467	10·23
1904	1,210,575	9,234	·77	605,198	1,315	·22	605,377	7,919	1·33

The increase between 1891 and 1901 was the smallest since 1861, being only 60,936 persons, as against 278,059 between 1881 and 1891, and 130,818 and 191,206 respectively in the two decennial periods prior to 1881. Small as was the increment to the population in the ten years, 1891 to 1901, it was larger on the average than in the three and three-quarter years from 1st April, 1901, to 31st December, 1904, when it amounted to only 9,234 persons.

Population, 1861-1904.

The increase in the number of males between 1891 and 1901 has been very small, only 5,469, or less than 1 per cent., as compared with 146,000, or 32 per cent., in the previous decade. This decline in the increase of the male population still continues, as in 1904 the increase was only 1,315, or about $\frac{1}{4}$ per cent.; whereas in the female population the increase was 7,919, or about $1\frac{1}{3}$ per cent. On 31st December, 1904, the population of females exceeded the population of males, the former being 605,377, and the latter 605,198.

Small increase of males, 1891-1904.

The proportion of sexes at the five census enumerations, and in 1903 and 1904 was—

Proportion of sexes.

Year.	Females to 100 Males.	
1861	...	64'41
1871	...	82'40
1881	...	90'75
1891	...	90'57
1901	...	98'04
1903	...	69'68
1904	...	100'04

Uniformity
of sexes.

The number of females has thus gradually approximated to that of males, until in 1904 the sexes were about equal in number. The emigration of males has been the principal factor in contributing to the large proportionate increase of females during the last intercensal period, when the excess of departures over arrivals was for men 73,674, and for women only 37,983.

Density of
population,
houses, &c.

In the following return the persons and dwellings to the square mile, persons and rooms to a dwelling, and persons to a room, are shown for the five census years 1861-1901:—

DENSITY OF POPULATION.—RETURN FOR FIVE CENSUS YEARS.

Year of Census.	Persons to the Square Mile (exclusive of Persons in Ships).	Inhabited Dwellings to the Square Mile.	Persons to the Inhabited Dwelling (exclusive of Persons in Ships).	Rooms to a Dwelling (Inhabited and Uninhabited).	Persons to a Room.
1861 ..	6·126	1·470	4·16	2·96	1·35
1871 ..	8·298	1·714	4·84	3·89	1·18
1881 ..	9·791	1·935	5·06	4·44	1·08
1891 ..	12·948	2·549	5·08	5·10	·92
1901 ..	13·643	2·747	4·97	5·25	·90

The population returned at the census of 1901 furnishes a proportion of 13·6 persons to the square mile. In 1891 the proportion was 12·9; in 1881, 9·8; in 1871, 8·3; and in 1861, 6·1. There were 497 persons to every 100 inhabited dwellings in 1901, a smaller number than in 1891 and 1881, when the numbers were 508 and 506 respectively, but greater than in 1871 and 1861, when the numbers were 484 and 416.

Population of Australian States and New Zealand, 1904.

The estimated population of each Australian State and New Zealand at the end of 1904, prepared on the same basis as in Victoria, the increase of population since the census, and the number of persons to the square mile are as follow:—

POPULATION OF AUSTRALIA AND NEW ZEALAND,
31ST DECEMBER, 1904.

State.	Estimated Population, 31st December, 1904.			Increase since Census, 1901.			Persons to the Square Mile.
	Males.	Females.	Total.	Males.	Females.	Total.	
Victoria ..	605,035	605,269	1,210,304	1,315	7,919	9,234	13·77
New South Wales ..	770,783	686,463	1,457,246	60,778	41,622	102,400	4·69
Queensland ..	287,799	233,856	521,655	10,796	12,730	23,526	·78
South Australia ..	187,906	180,746	368,652	..	..	10,306	·97
Proper							
" Northern Territory ..	3,452	578	4,030	..	..	- 781	·01
Western Australia ..	144,247	98,003	242,250	31,372	26,754	58,126	·25
Tasmania ..	93,158	87,042	180,200	3,534	4,191	7,725	6·87
Australia ..	2,092,380	1,891,957	3,984,337	..	..	210,536	1·34
New Zealand ..	453,989	403,544	857,533	47,997	36,817	84,814	8·19

During the three years and nine months from the date of the last census to the end of 1904, the population of the Commonwealth of Australia increased by nearly 211,000, New South Wales contributing nearly one-half, and Western Australia nearly 28 per cent. of that number. The increase in Victoria, which was the smallest in any of the States except Tasmania, was only 9,234 persons. On the other hand, New Zealand has made good progress, the addition of nearly 85,000 to her population being second only to that of New South Wales.

The increase of population per cent. from the 31st March, 1901, to 31st December, 1904, was as follows in the different States:— Western Australia, 31·66; New Zealand, 10·98; New South Wales, 7·56; Tasmania, 4·48; Queensland, 4·72; South Australia Proper, 2·98; and Victoria, ·77. In the Northern Territory there was a decrease of 12·35 per cent.

The following table shows the population of each Australian State and New Zealand at each census from 1851 to 1901, and an estimate for 1904:—

POPULATION OF THE SIX STATES OF AUSTRALIA AND NEW ZEALAND, 1851-1904.

State.	1851.	1861.	1871.	1881.	1891.	1901.	1904.
Victoria ..	77,345	540,322	731,528	862,346	1,140,405	1,201,070	1,210,304
N. S. Wales } Queensland }	191,099	350,860	503,981	751,468	1,132,234	1,354,846	1,457,246
		30,059	117,960	213,525	393,718	498,129	521,655
S. Australia	63,700	126,830	185,626	279,865	320,431	363,157	372,882
W. Australia	5,886	15,100	25,270	29,708	49,782	184,124	242,250
Tasmania ..	70,130	89,977	101,020	115,705	146,667	172,475	180,200
Australia..	408,160	1,153,148	1,665,385	2,252,617	3,183,237	3,773,801	3,984,337
New Zealand	22,108	84,536	257,810	489,933	626,658	772,719	857,533

Immigration from outside Australia to the Australian States ceased about the year 1891, and since that time we have had to depend solely upon the excess of births over deaths for any increase that has taken place in the population.

In Victoria, since 1891, the loss by emigration has been continuous; in New South Wales the population has not only been maintained, but increased by 22,300; in Queensland a gain of about 10,500 has been made; but in South Australia and Tasmania, like Victoria, the loss has been constant year after year. In Western Australia there has been an addition of no less than 162,527 by immigration in the 13½ years from 1891. Part I. of the following table

Increase in different States, 1901-1904.

Proportionate increase from census, 1901, to 31st Dec., 1904.

Population of Australia and New Zealand, 1851-1904.

Australian States—Movements of population.

contains all necessary particulars as to movement of population by immigration and emigration since 1851: —

TABLE SHOWING INCREASE OF POPULATION IN AUSTRALIAN STATES SINCE 1851.

Period.	Increase by Excess of Immigration over Emigration.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
PART I.							
1851-61 (Census period)	400,045	126,314		35,750	6,510	7,709	576,328
1861-71 "	41,789	48,247	68,581	17,060	6,386	- 5,183	176,880
1871-81 "	- 15,322	107,536	58,904	45,032	- 135	- 770	195,245
1881-91 "	116,950	164,424	114,835	- 28,275	12,973	5,993	386,900
1891-01 "	- 111,577	223	16,693	- 16,121	118,441	- 2,179	5,480
1901 (from 1st April)	.. - 1,679	4,058	1,278	- 1,299	7,585	- 451	9,492
1902 ..	.. - 13,716	6,903	- 3,103	- 3,706	15,809	- 93	2,094
1903 ..	.. - 16,570	4,539	- 1,598	- 2,394	9,716	- 942	- 7,249
1904 ..	.. - 13,920	6,627	- 2,707	- 1,496	10,976	- 2,605	- 3,125
Total ..	386,000	468,871	252,883	44,551	188,261	1,479	1,342,045
Natural Increase (i.e., Excess of Births over Deaths).							
PART II.							
1851-61 (Census period)	62,932	63,506		27,380	2,704	12,138	168,660
1861-71 "	149,417	104,874	19,320	41,736	3,784	16,226	335,357
1871-81 "	146,140	139,951	36,661	49,207	4,573	15,455	391,987
1881-91 "	161,109	209,705	65,358	68,841	7,101	24,969	537,083
1891-01 "	172,513	226,676	87,718	58,294	15,901	27,987	589,089
1901 (from 1st April)	.. 11,491	16,338	6,537	3,875	2,400	2,353	42,994
1902 ..	.. 14,284	21,189	8,012	4,633	3,409	3,181	54,708
1903 ..	.. 13,974	19,469	6,275	4,557	3,911	2,964	51,150
1904 ..	.. 15,370	23,277	8,832	5,355	4,320	3,318	60,472
Total ..	747,230	824,985	238,713	263,878	48,103	108,591	2,231,500
Total Increase.							
PART III.							
1851-61 (Census period)	462,977	189,820		63,130	9,214	19,847	744,988
1861-71 "	191,206	153,121	87,901	58,796	10,170	11,043	512,237
1871-81 "	130,818	247,487	95,565	94,239	4,438	14,685	587,232
1881-91 "	278,059	374,129	180,193	40,566	20,074	30,962	923,983
1891-01 "	60,936	226,899	104,411	42,173	134,342	25,808	594,569
1901 (from 1st April)	.. 9,812	20,396	7,815	2,576	9,985	1,902	52,486
1902 ..	.. 568	28,092	4,909	927	19,218	3,088	56,802
1903 ..	.. - 2,596	24,008	4,677	2,163	13,627	2,022	43,901
1904 ..	.. 1,450	29,904	6,125	3,859	15,296	713	57,347
Total ..	1,133,230	1,293,856	491,596	308,429	236,364	110,070	3,573,545

The subjoined tabulation shows, according to the census of 1901, the number of persons at the supporting and dependent ages, in each of the Australian States and in New Zealand, in every 10,000 of the population:—

Effective strength of population in Australasia.

STRENGTH OF AUSTRALASIAN POPULATION, 1901.

State or Colony.	Numbers in every 10,000 Persons living.		
	At Supporting Ages (15 to 65 Years).	At Dependent Ages.	
		Under 15 Years.	65 Years and upwards.
1. Western Australia ...	6,920	2,899	181
2. New Zealand ...	6,255	3,389	406
3. New South Wales ...	6,055	3,601	344
4. Queensland ...	6,048	3,693	259
5. Victoria ...	6,030	3,418	552
6. South Australia ...	6,024	3,564	412
7. Tasmania ...	5,877	3,716	407

Western Australia stands, as might be expected, far ahead of all the States in the relative strength of its population, and this is undoubtedly due to the development of gold mining there and the consequent large immigration of adult males from all the adjoining States. New Zealand occupies second position, and Victoria, which ten years before was second only to Western Australia in this respect, has fallen to fifth place on the list. Tasmania has relatively the weakest population of any of the States, *i.e.*, a larger proportion of persons at the dependent ages under 15 years.

Relative strength of population of Australasia.

Victoria has the largest proportion of old people in its population, *viz.*, 552 per 10,000, and is followed in this respect by South Australia with 412, Tasmania with 407, and New Zealand with 406. In New South Wales, Queensland, and Western Australia the proportion is much lower.

Old persons in Australasia.

The number of women at ages between 15 and 45 years, and the proportion they bore to the total female population of each State at the census of 1901, were:—

Women at reproductive ages in Australasia.

NUMBER OF FEMALES 15 TO 45 YEARS OF AGE IN AUSTRALASIA, 1901.

State or Colony.	Women between the ages of 15 and 45 Years.	Number in 10,000 Females Living.
1. Western Australia	37,816	5,307
2. New Zealand	183,387	5,001
3. Victoria	295,278	4,942
4. New South Wales	313,824	4,853
5. South Australia	85,132	4,778
6. Tasmania	39,033	4,711
7. Queensland	104,217	4,670

States with greatest proportion of women at reproductive ages.

Western Australia and New Zealand had the greatest proportion of women at ages ranging from 15 to 45 years, and the progress of New Zealand in this respect since the 1891 census has been most marked. Tasmania was the only Australian State with a lower proportion than New Zealand on that date.

Chinese and Aborigines in Victoria.

The population of Victoria, distinguishing Chinese and Aborigines, was at the five census enumerations:—

POPULATION OF VICTORIA DISTINGUISHING CHINESE AND ABORIGINES AT FIVE CENSUS PERIODS.

Year of Census.	Total Population—including Chinese and Aborigines.			Chinese.			Aborigines.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
1861	540,322	328,651	211,671	24,732	24,724	8	1,694	1,046	648
1871	731,528	401,050	330,478	17,935	17,899	36	1,330	784	546
1881	862,346	452,083	410,263	12,128	11,869	259	780	460	320
1891	1,140,405	598,414	541,991	9,377	8,772	605	565	325	240
1901	1,201,341	603,883	597,458	7,349	6,740	609	652	367	285

Decrease of both races.

Since 1861 there has been a gradual decrease of Chinese. In that year they numbered 24,732; in 1901 they totalled only 7,349—a falling off which is due mainly to Acts of the Legislature imposing severe restrictions on Chinese immigration. At the 1901 census there were enumerated 652 Aborigines, consisting of 271 of pure blood and 381 half-castes. These figures indicate that the race is gradually but surely dying out, for, although the half-castes have increased by 133 since 1891, the pure race shows a decrease of 46 in the ten years. From the report of the Aborigines Board, dated 4th October, 1904, it would appear that the majority of the pure race and half-castes are under the care of that body, in the following mission stations:—

NUMBER OF ABORIGINES UNDER CARE AT MISSION STATIONS IN VICTORIA, 1904.

Station.	Area of Reserves.	Total Number under care.
	Acres.	
Coranderrk	2,400	79
Condah	2,000	45
Ramahyuck	750	40
Lake Tyers	4,000	62
Framlingham	548	27
Colac and Lake Moodemere	48	..
Industrial Schools and Orphanage Depôts .. .. .	..	9
	..	103
Total	9,746	365

During the course of the year the Ebenezer Station, near Lake Hindmarsh, was finally closed, and the whole of the land belonging to the reserve will be handed back to the Lands Department for disposal.

During the twelve months under review sixteen deaths took place, three at Coranderrk, three at Condah, three at Ramahyuck, two at Lake Tyers, and five at the Depôts. There were six births, four at Coranderrk and two at Ramahyuck. One marriage took place, at Framlingham. The total amount expended in the maintenance of these institutions during the year was £4,407; £1,117 at Coranderrk; £268 at Framlingham; £580 at Condah; £590 at Tyers; £560 at Ramahyuck; £186 at Ebenezer; and £1,046 at depôts, orphanages, and industrial schools. The value of the produce raised was £623, at Coranderrk, which was paid into the Treasury.

Of the 287 Aborigines not enumerated in the table, some are residing elsewhere than at the mission stations, but they receive supplies of food and clothing when they call; some prefer to lead a wandering life about the country, and but rarely come under the notice of the Board.

The following is a statement of the number of Chinese and Aborigines in each Australian State and New Zealand at the census of 1901:—

Chinese and Aborigines in Australasia.

CHINESE AND ABORIGINES IN AUSTRALIA AND NEW ZEALAND, 1901.

State.	Chinese.		Aborigines.			
	Males.	Females.	Full Blood.		Half-caste.	
			Males.	Females.	Males.	Females.
Victoria	6,740	609	163	108	204	177
New South Wales ..	10,590	673	2,451	1,836	2,108	1,885
Queensland	8,783	530	13,000	12,137	773	760
South Australia ..	3,280	175	14,076	12,357	349	341
Western Australia ..	1,526	43	2,933	2,328	492	459
Tasmania	536	72	..	..	79	78
Australia	31,455	2,102	32,623	28,766	4,005	3,700
New Zealand	2,825	32	21,418	18,592	1,694	1,439

There are more Chinese in New South Wales and Queensland than in the other States, but they appear to be steadily diminishing in Australia as a whole. With the exception of Queensland and Western Australia, the number enumerated in 1901 was smaller than in 1891—the total decrease in Australasia in the decade amounting to about 6,100 persons. In Western Australia they increased from 917 to 1,569, and in Queensland from 8,574 to 9,313 in the same period.

Decrease of Chinese in Australia.

Aborigines
in Aus-
tralia.

The enumeration of Aborigines, owing to their nomadic habits, was incomplete. In Victoria the number returned is believed to be correct, but in some of the other States—for example, Queensland—the figures given are only a rough approximation. The aboriginal race is extinct in Tasmania—the last male having died in 1869, and the last female in 1876. The Maoris enumerated in New Zealand show an increase of 3,289 over those returned in 1896, but this increase is believed to be more apparent than real, as, although some slight increase has probably taken place in the quinquennium, averaging the results of the different enumerations since 1878, the authorities in New Zealand state that they convey the idea of a stationary population.

Arrivals and
departures
of Chinese.

During the last two years a greater number of Chinese left than entered Victoria, but in the three years 1900 to 1902 the reverse was the case, the net increase in the Chinese population in the five years mentioned in the table by excess of immigration over emigration being 593. The figures for each year are:—

CHINESE IMMIGRATION AND EMIGRATION, 1900 TO 1904.

Year	Immigrants.	Emigrants.	Excess of— Arrivals (+). Departures (-).
1900	569	385	+ 184
1901	864	471	+ 393
1902	614	434	+ 180
1903	408	503	- 95
1904	372	441	- 69
Total	2,827	2,234	+ 593

Immigration
and emi-
gration of
coloured
persons,
1901 to 1904.

The numbers of coloured persons other than Chinese who entered or left the State since the date of the census are contained in the following table:—

IMMIGRATION AND EMIGRATION OF COLOURED PERSONS (OTHER THAN CHINESE) FROM THE 1ST APRIL, 1901, TO 31ST DECEMBER, 1904.

Year.	Immigrants.	Emigrants.	Excess of— Arrivals (+) Departures (-)
From 1st April, 1901, to 31st Dec., 1901	609	483	+ 126
1902	307	525	- 218
1903	96	92	+ 4
1904	48	75	- 27
Total	1,060	1,175	- 115

Coloured
persons in
Victoria,
1901 and
1904.

The number of coloured persons in Victoria was ascertained at the census of 1901, and the information then collected gives a total of 7,349 Chinese and 1,273 other coloured persons at that time. It is believed that these numbers have not materially altered up to the

end of 1904, the Chinese being then estimated at 7,150, and other coloured persons at 1,158.

NUMBER OF PERSONS OF COLOURED RACES (EXCLUSIVE OF ABORIGINES) IN VICTORIA AT THE CENSUS OF 1901.

Birthplace.		Persons.	Birthplace.		Persons.
Chinese—			Other Asiatic countries—		
Born in	China	6,160	British India		772
„	Hong Kong	49	Syria		344
„	Singapore	8	Japan		55
„	Victoria	1,091	Others		81
„	other British colonies	39			
„	at Sea	1	Total other Asiatic countries		1,252
Unspecified		1			
			Polynesia		2
Total Chinese		7,349	Africa		19
			Grand Total Coloured Persons		8,622

Aliens who desire to obtain the rights and privileges of citizens must take out letters of naturalization. The native countries of those who did so during the years 1900-1904 were:—

NATURALIZATION, 1900 TO 1904.

Native Places.	Numbers Naturalized in Each Year.				
	1900	1901.	1902.	1903.	1904.
France	11	19	17	11	9
Belgium	4	7	2	...	...
Austria	10	13	10	11	8
Germany	154	233	194	149	132
Russia	18	24	19	25	9
Norway and Sweden	73	108	75	57	53
Other European Countries	102	141	146	121	101
United States	8	11	16	14	6
Other Countries	12	18	21	9	1
Total	392	574	500	397	319

No less than 601 Chinese in 1884, and 1,178 in 1885, took out letters of naturalization, but after the latter year the Government, in view of the increasing number of Chinese applying for such papers, determined to issue no more "unless a sufficient reason was assigned," with the result that only 173 were issued in 1886, and 16 in 1887, since which year none have been issued.

The following return has been prepared, showing the population of Greater Melbourne in 1891, 1901, and 1904, the totals of these three years being respectively 490,896, 496,079, and 508,450. There was a falling off in the cities of Melbourne, Fitzroy, Collingwood, and Richmond from 1891 to 1901, but a slight recovery from the latter year to 1904. In Prahran and Hawthorn alone of the cities there has been a continued increase; whilst in South Melbourne and Footscray there has been a continued decrease. The population of St. Kilda increased slightly up to 1901, but had fallen off again in 1904. Of the towns, Port Melbourne fell away up to 1901, and

slightly recovered to 1904. There was a continued increase in Brunswick, Essendon, Northcote, Brighton, Malvern, and Caulfield, and a continued decrease in North Melbourne and Williamstown. In the three boroughs, Flemington and Kensington, Kew, and Oakleigh, the increase has been continuous. The same remark applies to the shires of Camberwell and Boroondara and Coburg; but in the shire of Preston there was an increase to 1901, followed by a slight falling off to 1904. In the parts of shires included in the Greater Melbourne area, the population was 14,217 in 1891; 15,445 in 1901; and 16,240 in 1904. Figures showing the emigration from Melbourne to other States of the Commonwealth during the years indicated in the table have not been procurable. There can, however, be no doubt that Melbourne suffered a large exodus of its inhabitants owing to depression of various kinds, the cessation of large public works, and the general stagnation in the building trade. The small increase that appears between 1891 and 1904—17,554—may be ascribed entirely to natural increase, *i.e.*, excess of births over deaths.

RETURN SHOWING THE POPULATION OF GREATER MELBOURNE IN
1891, 1901, AND 1904.

Municipal Districts.	Population.		
	1891 (Census).	1901 (Census).	1904 (31st Dec.)
Cities—			
Melbourne	73,361	68,374	69,600
Fitzroy	32,453	31,687	32,160
Collingwood	35,070	32,749	33,620
Richmond	38,797	37,824	38,200
Prahran	39,703	40,441	42,100
South Melbourne	41,724	40,619	40,250
St. Kilda	19,838	20,542	20,220
Hawthorn	19,585	21,430	22,500
Footscray	19,149	18,318	17,500
Towns—			
North Melbourne	20,997	18,120	17,650
Brunswick	21,961	24,141	25,340
Essendon	14,411	17,426	18,500
Northcote	7,458	9,677	10,640
Williamstown	15,960	14,052	13,840
Port Melbourne (Borough 1891)	13,067	12,176	12,450
Brighton	9,858	10,047	10,400
Malvern (Shire 1891)	8,136	10,619	12,400
Caulfield (Shire 1891)	8,005	9,541	10,200
Boroughs—			
Flemington and Kensington	9,958	10,946	11,100
Kew	8,462	9,469	9,600
Oakleigh	1,236	1,273	1,300
Shires—			
Camberwell and Boroondara	6,204	8,602	9,450
Preston	3,569	4,059	3,900
Coburg	5,752	6,772	7,560
Parts of Shires, forming remainder of District	14,217	15,445	16,240
Shipping in Hobson's Bay and River	1,965	1,730	1,730
Total	490,896	496,079	508,450

The following table shows for Greater Melbourne its estimated area in acres, its estimated population, the number of persons to the acre at the end of 1904, also the estimated mean population during that year in the various municipalities:—

Population of Greater Melbourne, 1904.

POPULATION OF GREATER MELBOURNE, 1904.

Sub-District.	Estimated Area in Acres.	At End of 1904.		Mean Population, 1904.
		Estimated Population.	Persons to the acre.	
Melbourne City	6,005	69,600	11·6	68,980
North Melbourne Town	565	17,650	31·2	17,670
Fitzroy City	923	32,160	34·8	32,080
Collingwood City	1,139	33,620	29·5	33,830
Richmond City	1,430	38,200	26·7	38,100
Brunswick Town	2,722	25,340	9·3	24,490
Northcote Town	2,850	10,640	3·7	10,440
Prahran City	2,320	42,100	18·1	41,550
South Melbourne City	2,311	40,250	17·4	40,130
Port Melbourne Town	2,366	12,450	5·3	12,350
St. Kilda City	2,046	20,220	9·9	20,390
Brighton Town	3,288	10,400	3·2	10,280
Essendon Town	4,000	18,500	4·6	18,350
Flemington and Kensington Borough	1,088	11,100	10·2	11,050
Hawthorn City	2,400	22,500	9·4	22,290
Kew Borough	3,553	9,600	2·7	9,570
Footscray City	2,577	17,500	6·8	17,400
Williamstown Town	2,775	13,840	5·0	13,800
Oakleigh Borough	1,858	1,300	·7	1,300
Caulfield Town	6,080	10,200	1·7	10,150
Malvern Town	3,989	12,400	3·1	12,170
Camberwell and Boroondara Shire ...	8,320	9,450	1·1	9,320
Preston Shire	8,800	3,900	·4	3,850
Coburg Shire	4,800	7,560	1·6	7,530
Remainder of District	85,275	16,240	·2	16,160
Shipping in Hobson's Bay and River	...	1,730	...	1,730
Total, including Shipping ...	163,480	508,450	3·1	504,960

Fitzroy is the most thickly populated municipality, with about 35 persons to the acre; North Melbourne is next, with 31; Collingwood has 30; Richmond 27; Prahran 18; South Melbourne 17; and Melbourne City about 12. There are large areas devoted to parks, gardens, and other reserves in many of the municipalities, so that the population is really living closer together than these figures indicate. Melbourne City contains 1,643 acres of such reserves, Kew 634, South Melbourne 482, Williamstown 456, Flemington and Kensington 307, St. Kilda 250, Caulfield 236, Richmond 204, and Brighton 167 acres. There are smaller areas in other districts, but they do not appreciably affect the question of density of population. The total area of all the reserves is 5,323 acres, and if these be excluded, the

Density of metropolitan population.

number of persons to the acre in the places named would be as follows:—Richmond 31, South Melbourne 22, Melbourne City 16, Flemington and Kensington 14, St. Kilda 11, Williamstown 6, Kew 3, and Brighton 3; but in Caulfield the proportion would remain about the same.

Urban and rural population, 1904.

In the following return, Victoria is divided into three districts, the first being the metropolitan (Greater Melbourne), extending in all directions for a distance of 10 miles from the centre of the city; the second, the other urban districts, including the total space embraced in cities, towns, and boroughs (present or former) outside the limits of Greater Melbourne; and the third, rural districts, including the remaining portions of the State. The population at the end of the year 1904, the average population during the year, the ratio of the population of each district to that of the whole State, and the number of persons to the square mile were as follow:—

URBAN AND RURAL POPULATION, 1904.

Districts.	Estimated Area in Square Miles.	Estimated Population at end of 1904.			Mean Population, 1904.
		Total.	Proportion per Cent.	Persons to the Sq. Mile.	
Metropolitan	255	508,450	42·01	1,994	504,960
Other Urban	376	205,548	16·98	547	205,767
Total Urban	631	713,998	58·99	1,132	710,727
Rural	87,253	496,306	41·01	5·7	496,810
Total State	87,884	1,210,304	100·00	13·8	1,207,537

At the end of 1897 the rural population of the State was 44 per cent. of the total population; but during the last three years, 1902, 1903, and 1904, it remained almost stationary at 41 per cent.

Proportion of metropolitan population.

The urban is greater than the rural population, and the population of the metropolis alone is equal to 42 per cent. of the whole State.

PROPORTION OF POPULATION OF GREATER MELBOURNE TO THE WHOLE OF VICTORIA.

Year.	Per cent.
1900	41·3
1901	41·5
1902	41·7
1903	41·5
1904	42·0

Population of chief extra metropolitan towns.

Outside Melbourne and suburbs, the most important towns in Victoria are Ballarat, comprising three municipalities; Bendigo, two; Geelong, three; Castlemaine, two; Warrnambool, Maryborough, and Stawell, one each. The enumerated populations of these, with their

immediate suburbs, according to the census of 1901, and an estimate brought to about September, 1904, were as follow:—

POPULATION OF CHIEF TOWNS IN VICTORIA, 1901 AND 1904.

Name of Town.	1901 (Census).	1904 (Estimated).
Ballarat	49,414	49,202
Bendigo	42,701	42,660
Geelong	25,017	25,957
Castlemaine	7,912	8,018
Warrnambool	6,404	6,650
Maryborough	5,622	5,848
Stawell	5,318	5,200

The enumerated population of Australian capital cities during the past 43 years is shown in the following table. Melbourne during that time has made good progress, more especially in the decennial period, 1881-91, when the increase was 73 per cent. Since the latter year, however, the population has remained almost stationary—the increase to the end of 1904 only amounting to about 3½ per cent. Sydney, which since 1902 has been the most populous city in Australasia, in 1904 had 518,000 inhabitants. These two cities contain about 26 per cent. of the population of the Commonwealth. Perth has made a remarkable advance since 1891, when the enumerated population was about 8,500, which had increased to nearly 50,000 in 1904.

Population of Australasian Capital Cities, 1861-1904.

POPULATION OF AUSTRALASIAN CAPITAL CITIES, 1861 TO 1904.

Capital City (with Suburbs).	Enumerated Population at the Census of—					Estimated Population, 31st December, 1904.
	1861.	1871.	1881.	1891.	1901.	
Melbourne	139,916	206,780	282,947	490,896	496,079	508,450
Sydney	95,789	137,776	224,939	383,283	481,830	518,570
Brisbane	6,051	15,029	31,109	101,554	119,428	125,672
Adelaide	18,303	42,744	103,864	133,252	162,094	168,066
Perth	3,507	5,445	5,822	8,447	36,274	49,600
Hobart	24,773	26,004	27,248	33,450	34,604	34,949
Wellington	4,176	7,908	20,563	34,190	49,344	53,573

The populations of Adelaide and Wellington relate to the 31st December, 1903, no later information being available.

The population of the principal towns in Australia and New Zealand are given in the following statement. In most cases the immediate suburbs are included. The figures for Victoria and Western Australia relate to the year 1904; for New South Wales, South Australia,

Population of Principal Towns in Australia and New Zealand.

and Tasmania, to the year 1903; and for Queensland and New Zealand to 1901.

POPULATION OF PRINCIPAL TOWNS IN AUSTRALIA AND
NEW ZEALAND.

VICTORIA.			QUEENSLAND—continued.		
		Population.			Population.
Melbourne	...	508,450	Bundaberg	...	9,666
Ballarat	...	49,202	Mount Morgan	...	8,486
Bendigo	...	42,660			
Geelong	...	25,957	SOUTH AUSTRALIA.		
Castlemaine	...	8,018	Adelaide	...	168,066
Warrnambool	...	6,650	Port Pirie	...	9,078
Maryborough	...	5,848	Mount Gambier	...	3,302
Stawell	...	5,200	Walleroo	...	3,260
NEW SOUTH WALES.			WESTERN AUSTRALIA.		
Sydney	...	511,030	Perth	...	49,600
Newcastle	...	58,620	Fremantle	...	25,700
Broken Hill	...	27,160			
Parramatta	...	12,600	TASMANIA.		
Goulburn	...	10,560	Hobart	...	34,917
Maitland	...	10,340	Launceston	...	21,606
Bathurst	...	9,380	Queenstown	...	5,293
Orange	...	6,650	Zeehan	...	5,252
Albury	...	6,390	Devonport	...	2,774
Lithgow	...	6,130	Beaconsfield	...	2,658
Tamworth	...	5,820			
Grafton	...	5,700	NEW ZEALAND.		
Wagga Wagga	...	5,030	Auckland	...	67,226
QUEENSLAND.			Christchurch	...	57,041
Brisbane	...	119,428	Dunedin	...	52,390
Charters Towers	...	20,976	Wellington	...	49,344
Rockhampton	...	19,691	Invercargill	...	10,637
Townsville	...	15,506	Napier	...	9,015
Ipswich	...	15,246	Wanganui	...	7,334
Gympie	...	14,431	Nelson	...	7,167
Toowoomba	...	14,087	Palmerston North	...	6,534
Maryborough	...	12,900	Timaru	...	6,486

SOCIAL CONDITION.

MELBOURNE UNIVERSITY.

The University of Melbourne was incorporated and endowed by an Act of the Governor and Legislative Council of Victoria, to which the Royal assent was given on 22nd January, 1853. The University buildings, together with those of the affiliated colleges, are situated on 106 acres of ground, in the southern part of Carlton. The University consists of a Council and Senate, and is incorporated and made a body politic with perpetual succession. It has power to grant degrees, diplomas, certificates, and licences in all faculties except divinity. The Council consists of twenty members elected by the Senate for a term of five years, together with three members appointed by the Governor in Council. It elects two of its members to be Chancellor and Vice-Chancellor respectively. The Senate consists of all male persons who have graduated doctor or master in the University. It elects a Warden annually from its members. Control and management are in the hands of the Council. Council and Senate conjointly make statutes and regulations. There is no religious test for admission. The Governor of Victoria for the time being is the Visitor, and has authority to do all things which appertain to Visitors. By Royal letters patent of 14th March, 1859, it is declared that the degrees of the University of Melbourne shall be as fully recognised as those of any University in the United Kingdom. Scholarships, exhibitions, and prizes are provided in all the principal subjects, the cost being defrayed partly out of University funds and partly by private bequests. In the matter of endowment by private persons, the Melbourne University does not, however, compare favorably with others. The Act provides for an endowment of £9,000 annually for maintenance and management. Additional grants have been voted annually by Parliament for maintenance, and from time to time for building purposes. Since 1853 the total amount received from the Government was £731,762—£154,012 for building and apparatus, £468,000 endowment under "Special Appropriation Act," 16 Vict. 34, and £109,750 additional endowment by annual votes of the Legislature. By Act No. 1926 of 1904 an additional endowment of £11,000 annually is provided for a period of ten years, conditionally on the University undertaking teaching in agriculture and mining, and granting a number of free scholarships to pupils from the primary schools. In addition, the Council derives income from the fees paid by students for lectures, examinations, certificates, and diplomas. These are charged as follow:—

For the degree of Bachelor of Arts, £12 12s. per annum.
For the degree of Bachelor of Science, £21 per annum.

For the degree of Bachelor of Laws, £12 12s. for each of the 1st and 2nd years; £25 4s. for each of the 3rd and 4th years.

For the degree of Bachelor of Medicine and Surgery, £21 per annum.

For the degree of Bachelor of Civil Engineering, Bachelor of Electrical Engineering, Bachelor of Mining Engineering, £18 18s. for the 1st year; £21 for the 2nd year; £25 4s. for each of the 3rd and 4th years.

For the degree of Bachelor of Music and Diploma in Music, £12 12s. per annum.

For the course for Diploma of Education, £6 6s. per annum.

For single subjects, special fees are charged, ranging from £3 3s. each annually for Art subjects to £21 for Science subjects, in which laboratory work plays a great part.

For admission to degrees, £5 5s. is payable by bachelors, £10 10s. by masters, £5 5s. for any *ad eundem* degree.

For any diploma, £3 3s. is the fee.

For certificates of matriculation, attendance upon lectures, &c., special small fees are charged.

Matricula-
tion and
attendance
at lectures.

The number of students who presented themselves for the matriculation examination, the number that passed, as well as those matriculated, who entered the Melbourne University as undergraduates, and the number attending lectures, in each of the five years 1900 to 1904, were:—

MATRICULATION AND ATTENDANCE AT LECTURES, 1900 TO 1904.

Year.	Number Presented for—		Students who passed the Matriculation Examination.		Number Matriculated and Admitted as Under-graduates.	Number attending Lectures.
	Matriculation Examination.	Less than Required number of Subjects.	Number.	Percentage.		
1900	1,479	320	443	38·2	101	647
1901	1,438	302	511	45·0	137	584
1902	1,415	368	490	46·8	124	621
1903	1,566	367	478	39·9	111	628
1904	1,532	370	490	42·2	131	615

The number of candidates in 1903 was greater than in any year since 1892. Of the 615 students who attended lectures in 1904, 107 attended in Arts, 50 in Laws, 57 in Engineering, 249 in Medicine, 15 in Science, 103 in Music, and 34 in Education.

Degrees.

The number of degrees taken in 1904 was 157, 152 of which were direct and five *ad eundem*, as against a total of 742 for the five preceding years, or an average of 148 per year. The direct graduates numbered 713, and the *ad eundem* degrees 29 in the five preceding years. Of the total number of 3,657 degrees conferred, 270 were conferred on women, 268 of which were direct and two *ad eundem*; and 140 of which were the degree of Bachelor of Arts, 59 Master of Arts, 28 Bachelor of Medicine, one Doctor of Medicine, 24 Bachelor of Surgery, two Bachelor of Laws, one Doctor of Science, nine Bachelor of Science, five Master of Science, and one Bachelor

of Music. The following table shows the number of degrees conferred at the University between the date of its first opening and the end of 1904—the years 1903 and 1904 being shown separately:—

DEGREES CONFERRED.

Degrees.	Prior to 1903.			During 1903.			During 1904.			Total.		
	Direct.	Ad eundem.	Total.	Direct.	Ad eundem.	Total.	Direct.	Ad eundem.	Total.	Direct.	Ad eundem.	Total.
Bachelor of Arts ...	775	107	882	22	...	22	26	...	26	823	107	930
Master of Arts ...	425	155	580	19	2	21	15	3	18	459	160	619
Bachelor of Medicine	569	13	582	28	1	29	38	...	38	635	14	649
Doctor of Medicine ...	77	98	175	12	1	13	10	1	11	99	100	199
Bachelor of Surgery	483	3	486	30	...	30	34	...	34	547	3	550
Master of Surgery ...	9	...	9	2	...	2	3	...	3	14	...	14
Bachelor of Laws ...	302	9	311	9	...	9	9	...	9	320	9	329
Master of Laws ...	59	3	62	1	...	1	...	...	...	60	3	63
Doctor of Laws ...	15	20	35	...	...	...	...	...	...	15	20	35
Bachelor of Engineering	116	2	118	5	...	5	6	...	6	127	2	129
Bachelor of Mining Engineering ...	...	...	...	1	...	1	2	...	2	3	...	3
Master of Engineering	64	...	64	1	...	1	2	...	2	67	...	67
Bachelor of Science ...	29	3	32	2	...	2	6	...	6	37	3	40
Master of Science ...	12	...	12	4	1	5	...	...	...	16	1	17
Doctor of Science ...	1	3	4	...	...	...	1	1	2	2	4	6
Bachelor of Music ...	3	2	5	...	...	...	...	...	...	3	2	5
Doctor of Music ...	...	2	2	...	...	...	...	...	...	2	...	2
Total ...	2939	420	3359	136	5	141	152	5	157	3227	430	3657

AFFILIATED COLLEGES.

The permission accorded by the "University Act of Incorporation" for the establishment of affiliated colleges has been taken advantage of by the clergy and people of the Church of England, and of the Presbyterian and Methodist Churches of Victoria. Substantial colleges have been built upon the sites reserved for this purpose, which are situated in the northern portion of the University grounds, fronting Sydney-road and College-crescent, Carlton. These colleges, which admit students without regard to their religious beliefs, are also training seminaries for the ministers of the respective denominations. There are efficient staffs of lecturers assisting the masters in teaching the principal subjects in each of the University courses. The Roman Catholic body has not yet erected a college upon its site in Madeline-street.

The
affiliate
colleges.

Trinity
College.

The Anglican Church was the first to avail itself of the right. In 1869, Bishop Perry (then Lord Bishop of Melbourne), assisted by Professor Wilson and others, undertook to raise the funds required for the college buildings. Their efforts were crowned with success, and the building of Trinity was commenced in the following year. Its progress was remarkably rapid, and in 1877 it was found necessary to increase the accommodation for students. In 1883 the Clarke buildings were erected by Sir W. J. and Mr. Joseph Clarke, and additions have been repeatedly made since that time. In 1886, Trinity College Hostel, a house of residence for women students of the college, was established by the present Warden, and was carried on until 1890 in houses rented by him. In 1890, mainly through the munificence of Janet Lady Clarke, the hostel was supplied with a permanent building, erected within the college precincts, and named "The Janet Clarke Buildings." The hostel forms an integral part of Trinity College, and the women students of the college consequently enjoy all its educational advantages on equal terms with the men students. The hostel is open to students of all religious denominations. The college buildings consist of a chapel, dining hall, chemical and biological laboratories, lecture-rooms, libraries, and students' common-room, in addition to apartments for the warden, tutors, and students. The Warden of the college is Dr. A. Leeper, M.A., LL.D., late of Trinity College, Dublin, and of St. John's College, Oxford, who is assisted by a staff of ten tutors and lecturers. The college annually holds an examination for open scholarships and exhibitions.

Ormond
College.

In 1877, the General Assembly of the Presbyterian Church in Victoria appointed a committee to take charge of the site in its interests. Shortly afterwards it was resolved to raise subscriptions to obtain the Crown grant for the land, and to proceed with the erection of a college. When £6,000 was subscribed for the purpose, Mr. Francis Ormond offered £10,000, provided that the Church obtained £10,000 from other sources, and in less than a year the Council were in a position to receive Mr. Ormond's subscription. The buildings were at once commenced, and the college opened in March, 1881. It was then announced that Mr. Ormond would bear the whole expense of the structural part of the building, so that the remaining subscriptions could be entirely devoted to payments for fittings, improvements, repairs, &c. In 1883 the buildings were enlarged. In 1887 Mr. Ormond erected the Victoria wing, in honour of the late Queen's Jubilee. The buildings comprise lecture and reading-rooms, common-room, and masters', tutors', and students' quarters. Mr. Ormond's benefactions, amounting to £41,780 during his lifetime, were increased under his bequest to a sum which will ultimately amount to £67,000. The college bears the name of this generous donor. The master is Dr. J. H. McFarland, M.A., LL.D.

Queen's
College.

The Conference of the Wesleyan Church in Victoria, in 1878, appointed a committee to arrange for the building of a college. A request for donations met with a generous response, the first donor being Sir William McArthur, who made a gift of £1,000. The

work of erecting the college was not, however, commenced until 1887. It was formally opened in March, 1888. The strenuous efforts of the Rev. W. A. Quick, in the establishment of the college, entitle him to the honour of being practically its founder. In 1889 large additions were made to the buildings, which now comprise fully equipped lecture-rooms, laboratories, library, reading-rooms, and apartments for the master, tutors, and students. The master is the Rev. E. H. Sugden, M.A., B.Sc.

UNIVERSITY EXTENSION.

The system of local lectures and classes, known as University Extension, which has been in vogue in England for nearly 40 years, and has more lately been introduced into the countries of Europe and the United States, was organized in Victoria in 1891, under a board appointed by the Melbourne University. The system aims at bringing teaching of the scope and standard of that given at the University itself within the reach of the numerous and constantly growing class of people whose position in life prevents them from attending lectures there, but who wish to devote their leisure to systematic reading and study. To these, material assistance is given by formal lectures, illustrated, where the subject requires it, by demonstrations and experiments, informal classes and discussions, checking written essays, and examinations, by men of special training. By thus systematizing the knowledge of the extension students, guiding their reading, and suggesting new methods and new directions of inquiry, the higher education is imparted to them. The lectures are not of the ordinary popular kind. Their primary object is education, they seek to instruct and stimulate rather than to entertain; at the same time, they endeavour to avoid pedantry and dullness. The lectures are delivered in courses, and thus fairly wide subjects are able to be treated with some approach to thoroughness. The work is carried on by local committees, both in Melbourne and suburbs, and in urban centres, acting in conjunction with the Central Board. This body supplies a list of suitable courses of lectures by competent and approved lecturers, and the local committee chooses the lecturer and subject. Since 1891, 169 courses of lectures have been delivered, and 20,125 students enrolled. In 1904 there were eight centres, eight courses of lectures, and 950 students enrolled.

University extension.

THE STATE EDUCATION SYSTEM.

The present system of "free, compulsory, and secular" education came into operation on the 1st January, 1873, the Act having been passed the previous year, and being now, with two Amending Acts passed in 1876 and 1889, consolidated in the *Education Act* 1890, which in turn has been amended by Act No. 1777, passed in December, 1901. Before the inception of the present system, several different systems were tried. Prior to 1848 education was left to private enterprise; but in that year a denominational system was introduced and administered by a Board, subsidy being granted by

The education system of Victoria.

the State. Under that system, religious as well as secular instruction was imparted by the teachers—the former being given according to the principles of the denomination to which the school was attached, the clergy of which also exercised control over the instruction imparted. On the separation of Port Phillip district from New South Wales in 1851, a Board of National Education was established in the new Colony of Victoria “for the formation and management of schools to be conducted under Lord Stanley’s National System of Education, and for administering the funds in connexion therewith.” There were thus two systems of education under separate boards in operation at the same time, which duplicate system continued in force until 1862, when it was abolished as being cumbrous and costly. The *Common Schools Act* 1862 transferred the powers of both boards to a single Board of Education, provided a limit to the distance between which schools might be established, and fixed a minimum of scholars a school must have in order to entitle it to State aid; it prescribed, moreover, that four hours each day would be set apart for secular instruction, and that no child should be refused admission to any school on account of its religious persuasion. Although this Act caused some improvement, it was not designed to abolish denominationalism, nor did it reduce the number of small schools to any appreciable extent. It continued in force, however, for ten years, when it was repealed by the present Act in 1872. Under these systems, a fee ranging from 6d. to 2s. 6d. weekly was charged to all children except those whose parents were in destitute circumstances. Under the Act of 1872, education was made free to all willing to accept it; compulsory, in the sense that, whether accepted or not, evidence must be produced that all children are educated up to a certain standard; and secular, no teacher being allowed to give other than secular instruction in any State school building. Every facility is, however, afforded to the clergy of any denomination to assemble any of the children of the parents who desire it in a school-room and impart religious instruction.

Main details
of the
system.

In each school four hours at least are set apart during each school day for secular instruction, two hours of which are to be before, and two hours after, noon. Secular instruction, in the case of children over nine years of age, includes the teaching of some recognised lesson-books on the laws of health and lessons from some recognised temperance lesson-books.

Compulsory
clauses.

Parents and custodians of children not less than six nor more than thirteen years of age, are required to procure such children to attend a State school at least two hours before or after noon for at least 75 per cent. of the days on which school is open. Non-attendance may be excused for either of the four following causes:—(1) If the child is receiving efficient instruction in some other manner; or (2) has been prevented from attending by sickness, fear of infection, temporary or permanent infirmity, or any unavoidable cause; or (3) is twelve years of age and has been educated up to the standard, or has been excused by a general or particular order of the Minister; or (4) that there is no State school within one, two, two and a half, or three miles

in the case of children under seven, between seven and nine, between nine and eleven, and over eleven years of age respectively. In regard to the latter cause, however, in cases where schools are closed through low average attendance, or where the number of children would warrant the department in establishing a school, allowances are made by the department for the conveyance of children to the nearest school. The amount of the allowance is 3d. per day for children over six and under twelve who reside between two and a half and three miles from the nearest school, or 4d. per day for all children over six and under thirteen who reside three miles or over from the nearest school. Parents and custodians who fail to make a child attend as provided may be summoned and fined 5s. for the first, and between 5s. and £1 for each subsequent offence, or in default seven days' imprisonment; and truant officers are appointed to see that the compulsory provisions are carried out.

There are at present 374 school districts, in each of which a Board of Advice is elected every three years by the ratepayers in the district, the members of such boards being seven or five according to the size or importance of the district. The main functions of a Board of Advice are:—To report on the condition of schools and premises, whether new ones are required, and as to books, furniture, gymnastic appliances or other requirements; to suspend teachers for misconduct, and report cause to the Minister; to visit schools, record the number present, and its opinion as to the general condition and the management of the schools in the district; and to endeavour to induce parents to send their children regularly to school, to compare the attendance with the roll, and report names of parents who fail to comply with the compulsory clauses.

The following are the subjects instruction in which is absolutely free:—Reading, writing, arithmetic, grammar, geography, history, drill, singing, drawing, elementary science, manual training, gymnastics, and swimming where practicable; lessons on the laws of health and on temperance previously mentioned; and sewing, needlework, cookery, and domestic economy for girls. Pupils buy their own books and material. To cover the cost of the latter for paper work and cardboard modelling, 1d. per week is charged, and for woodwork 2d. per week. For instruction in other branches, fees are charged to the parents, and the teacher is entitled to such fees if the inspector is satisfied with the instruction imparted.

In the latter half of 1902, a revised programme of free instruction was issued, the provisions of which are such as to secure a more realistic treatment than formerly of the essential subjects of school education, and a larger share of attention to the training of the hand and eye through manual instruction in various forms. The requirements from teachers of infants were also made such as to secure methods of teaching in accord with the principles enunciated by Froebel, the founder of the kindergarten system. Great activity has been displayed in the training of teachers for the new work. In January of each year (during the past five years), hundreds of country teachers have been instructed, at the University and Training College, in such

Boards of Advice.

Free subjects.

New free subjects.

subjects as drawing, brush-work, paper-work, cardboard modelling, kindergarden, experimental science, and nature-study; while, at centres throughout the State, during the past three years, Saturday classes have been held in several of these subjects.

Drill,
swimming,
school gar-
dens, &c.

There were, on the 30th June, 1904, 18 Sloyd centres in operation, having accommodation for 3,740 boys; and eleven cookery centres, having accommodation for 1,430 girls. Military drill receives a large share of attention, and the bigger boys of the larger schools are enrolled in corps and provided with light rifles. The teaching of swimming is organized when practicable, the children being formed into swimming clubs, which hold annual competitions at Melbourne and Geelong. The cultivation of school gardens and the study of the elements of agriculture are warmly encouraged by the Department's officers; and every facility is made for the holding of arbor days.

Extra
subjects.

The following are the extra subjects and the fees chargeable:—Latin, French, German, and painting, for which the fee must not exceed one shilling weekly; natural science, Euclid, algebra, trigonometry, fancy work, elocution, shorthand, and typewriting, fee not exceeding sixpence weekly; and bookkeeping and calisthenics, fee not exceeding threepence weekly; and such other subjects as may be approved by the Director. The instruction in extra subjects must not be given so as to interfere with the ordinary free instruction.

Standard of
education.

Yearly examinations are held to determine the quality of the work done by teachers, and to award merit certificates, and to grant certificates of exemption from compulsory attendance to children who present themselves. The subjects of examination for the latter certificates are:—Reading, writing, spelling, composition, and arithmetic; and any child over 12 years of age who wishes exemption from further compulsory attendance may be so exempt on passing this test. Half-yearly examinations are also held for the examination of children not attending State schools who desire to prove that they are educated up to the standard.

Teachers'
remunera-
tion and
classifica-
tion.

Male teachers are divided into eight classes and female teachers into seven classes, there being no female teachers in the first class. The salaries for males, excluding pupil teachers, range from £70 to £288, and those for females, excluding pupil teachers and sewing mistresses, £56 to £138. In addition to these fixed salaries, a sum equal to one-half the amount of each salary is obtainable by way of results; the efficiency of the instruction imparted by the teacher being gauged by an inspector's examination of every scholar who has attended the school during any part of the two weeks preceding the visit, the examination being restricted to the free subjects. It was intended to abolish the system of payments by way of results by Act No. 1777, which provided for the repeal as from 31st August, 1902, of the provision contained in sec. 23 of the principal Act, empowering the Governor in Council to make regulations for these payments. A substitute was provided by a subsequent Act, which, however, was afterwards withdrawn. The repeal of the power to make regulations for these payments did not affect the validity of the regulations then

in force, and these payments are being continued for the present. In addition to the head and assistant teachers, there are four classes of male and female pupil teachers, with salaries ranging from £30 to £60 and £24 to £48 respectively, and monitors are appointed, males receiving £12 and females £10 per annum. Sewing mistresses receive £30 yearly.

The following statement shows the progress as regards State schools, teachers, and scholars since 1872. The figures relating to the number of schools and teachers refer to 30th June, and those relating to the number of scholars to the financial year ended 30th June, for the last three years, and to the 31st December for all previous years:—

State schools, teachers, and scholars, 1872 to 1904.

STATE SCHOOLS, ENROLMENT AND ATTENDANCE, 1872 TO 1903-4.

Year.	Number of Schools.	Number of Instructors.	Number of Scholars.		
			Enrolled during the Year.	In Average Attendance.	Distinct Children (estimated).
1872	1,049	2,416	136,055	68,456	113,197
1880	1,810	4,215	229,723	119,520	195,736
1890	2,170	4,708	250,097	133,768	213,886
1898	1,877	4,618	238,357	134,976	212,164
1899	1,892	4,808	239,732	143,844	214,522
1900	1,948	4,977	243,667	147,020	218,240
1901-2	2,041	5,066	257,355	150,939	228,241
1902-3	1,988	5,037	251,655	150,268	224,178
1903-4	1,928	4,797	241,145	145,500	214,822

The falling off in the number of schools in 1898, as compared with 1890, was due to the closing of a number of small schools and the amalgamation of others. The decrease in the scholars enrolled during the same period was entirely due to the non-enrolment since 1892 of children under 4½ years of age, and to payments for conveyance being restricted to those between the ages of 5 and 13. From 1898 to 1902 there was an annual increase in the number of schools, and a very satisfactory annual increase in the number of scholars. During the year 1902-3, however, the reduction of 53 in the number of schools, as compared with the previous year, is due to the closing of some, and to the making of others into half-time schools, two of the latter being counted as one school. A further reduction of 60, due to the same causes, took place in the year 1903-4. The reduction in the scholars enrolled, and in the attendance during the year 1902-3, instead of an increase, as in the preceding four years, is mainly due to the severity of the drought in that year, which caused the removal of families from drought-stricken areas, and a consequent decrease in the attendance. A further reduction in enrolment and average attendance is observed for the year 1903-4, probably, to some extent, due to the same causes, and to migration from

Increase of schools and scholars.

the State. A reduction has also taken place in the number of instructors employed from 5,037 to 4,797.

Ages of
State
school
scholars.

The following are particulars of the number and percentage of distinct children attending State schools, below, at, and above the school age (6 and under 13), during the year 1903-4:—

AGES OF DISTINCT CHILDREN.

Ages.	Distinct Children Attending—					
	Day Schools.		Night Schools.		Total.	
	Number.	Per-centage.	Number.	Per-centage.	Number.	Per-centage.
Under 6 years ...	10,042	4·70	...	...	10,042	4·67
6 to 13 „ ...	162,054	75·86	...	...	162,054	75·44
13 years and upwards ...	41,526	19·44	1,200	100	42,726	19·89
Total ...	213,622	100·00	1,200	100	214,822	100·00

Net
enrolment.

In the following return will be found a comparative statement for the year 1903, showing, for the various States of the Commonwealth and New Zealand, the mean population, the net enrolment of children in State and private schools, and the percentage of such enrolment to the population. The percentage in the Commonwealth is 20·63 (16·97 per cent. in State, and 3·66 in private schools), and in New Zealand 18·78 (16·42 per cent. in State, and 2·36 in private schools). The highest enrolment in State and private schools is in Victoria, 22·08 per cent., New South Wales coming next with 21·36:—

NET ENROLMENT OF SCHOLARS IN STATE AND PRIVATE SCHOOLS IN AUSTRALIAN STATES AND NEW ZEALAND, 1903.

State.	Mean Population.	Net Enrolment of Scholars —all Ages.			Percentage of Population.		
		State Primary Schools.	Private Schools.	Total.	State Primary Schools.	Private Schools.	Total.
Victoria ..	1,208,880	224,178	42,695	266,873	18·55	3·53	22·08
New South Wales ..	1,418,516	243,516	59,473	302,989	17·17	4·19	21·36
Queensland ..	512,690	90,025	15,721	105,746	17·56	3·07	20·63
South Australia ..	366,588	62,036	9,330	71,366	16·92	2·55	19·47
Western Australia ..	221,278	24,532	6,757	31,289	11·09	3·05	14·14
Tasmania ..	177,547	18,596	8,843	27,439	10·47	4·98	15·45
Total Australia ..	3,905,499	662,883	142,819	805,702	16·97	3·66	20·63
New Zealand ..	820,217	134,748	19,331	154,079	16·42	2·36	18·78

The cost of primary instruction in the Commonwealth and in New Zealand for the year 1903 is set out below. The average cost per scholar in Australia is £4 19s. 3d., and in New Zealand £4 15s. 2d. A general increase in all the States has taken place since 1899, but it has not been constant :—

COST OF PRIMARY INSTRUCTION IN AUSTRALIA AND NEW ZEALAND, 1903.

State.	Scholars in Average Attendance.	Administration and Maintenance.	Buildings.	Total.	Per Head of Scholars in Average Attendance.
		£	£	£	£ s. d.
Victoria ..	150,268	674,076	39,369	713,445	4 14 11
New South Wales ..	152,830	760,589	100,955	861,544	5 12 9
Queensland ..	69,759	268,053	9,006	277,059	3 19 5
South Australia ..	42,782	145,425	13,677	159,102	3 14 5
Western Australia ..	20,283	120,279	37,280	157,559	7 15 4
Tasmania ..	13,866	58,126	5,959	64,085	4 12 5
Total Australia	449,788	2,026,548	206,246	2,232,794	4 19 3
New Zealand ..	113,047	442,880	94,991	537,871	4 15 2

The items taken into consideration in compiling this average are :—instruction in day and night schools in primary subjects, as defined by Acts of Parliament, cost of training, cost of administration, cost of buildings, and pensions and gratuities.

Private schools, 1872 to 1903-4.

The number of private schools, instructors in same, and individual scholars in attendance in 1872, the year before the adoption of the present secular system, for a number of subsequent years, and for the latest year available, was :—

PRIVATE SCHOOLS AND ATTENDANCE, 1872 TO 1903-4.

Year. (4th quarter.)	Number of Schools.	Number of Instructors.	Number of Individual Scholars.
1872 ...	888	1,841	24,781
1880 ...	643	1,516	28,134
1890 ...	791	2,037	40,181
1898 ...	945	2,440	43,926
1899 ...	901	2,417	48,854
1900 ...	884	2,348	48,483
1901-2 ...	872	2,379	43,182
1902-3 ...	798	2,369	42,695
1903-4 ...	787	2,360	42,214

On comparing the number of scholars with the number attending schools, it is seen that 16 per cent. of the scholars attending school during 1903-4 attended private schools, and the balance, 84 per cent., attended State schools.

Scholars attending State and private schools.

Ages of
scholars
at private
schools.

Of the 42,214 scholars attending private schools during 1903-4, 28,915, or 68 per cent., were at the compulsory school age (6 and under 13); 4,154, or about 10 per cent., under 6; and 9,145, or 22 per cent., were 13 and upwards. As compared with the ages of State school scholars shown in a preceding table, it will be seen that there is a larger percentage under and above the compulsory age, but a smaller percentage at that age.

THE VICTORIAN JUNIOR CADET SYSTEM.

By Major F. C. Eddy, M.A., Inspector of Schools, Victoria.

(From the Report of the Proceedings of the Federal Educational Congress, held in January, 1901.)

One of the most important branches of the educational training of boys in the primary schools should be that of physical culture. Such culture, under systematic and legitimate restrictions, should go hand in hand with the development of the mental powers, so as to fit the lads for the struggle of life, and make them, in the strict acceptance of the word, ideal citizens of the Commonwealth.

In all countries a place is found for physical culture in the ordinary curriculum of primary schools, and such culture is carried out with more or less success by some form of disciplinary exercises; but in no country in the world is there such a unique, scientific, systematized, and useful means of imparting physical education to boys, as that which obtains under the establishment of the Victorian Volunteer Cadet Corps.

Before entering upon any statement as to the history, aims, and operations of the Victorian Junior Cadet system, it may be as well to give some information as to the practice elsewhere respecting the military training of boys.

No cadet organization exists in connexion with the elementary schools of Great Britain and Ireland, but most of the renowned British public schools like Eton, Harrow, Winchester, and Wellington, have corps attached to the school, and these public school corps are the acknowledged recruiting grounds for officers in the army. There is, however, no central authority, each school having its own regulations, providing its own funds, and acting, as regards ordinary parades, quite independently. In some cases, however, these school corps take part in camp training and in field work with the local volunteers.

During the last few years junior cadet companies and battalions have been established in England, formed of lads twelve years of age and upwards.

The companies are attached to and must wear the same uniform as the local volunteer corps, but are not allowed to bear any special designation. One honorary officer with no higher rank than that of captain may be appointed, and this officer is nominated by the officer commanding the local volunteer corps.

Senior cadet corps, independent of volunteer corps, are also in process of establishment for youths of not less than fourteen and not

more than seventeen years of age, but the officers of these corps are not granted substantive commissions, that is, they have no military standing.

In Switzerland military training forms a portion of a school-boy's course, fitting him on leaving school to take his place at once in the ranks of the State militia. In the primary schools, which are open to boys between six and twelve years of age, squad drill without arms and gymnastics are effectively taught, and this form of drill is proceeded with in the continuation schools, where boys attend part of their time for technical and general instruction, and during the rest of the term are employed in earning their livelihood. In the secondary schools, *i.e.*, for boys over fourteen years, military drill with arms is compulsory, special efforts being made to promote a love for rifle shooting. In these schools the boys are prepared for all branches of the military service.

In New South Wales there is an admirable cadet force in connexion with the primary schools, but the organization rests, not on the military, but on a school department basis. Its head is not the General commanding the land forces, but the Inspector-General of schools who may, or may not, be a man of pronounced military instincts. In some measure the cadet systems of Victoria and the mother colony have had a similar aim. These States have established and encouraged the cadet movement with the idea that it is the most effective and most economical mode of training the majority of the male population to a patriotic love of arms.

In South Australia, the example of Victoria in regard to the cadet movement is being followed.

It may also be mentioned here that the establishment of cadet corps in connexion with the primary schools of England and Scotland, on the lines of the system in vogue in Victoria, is now engaging the earnest attention of the military and educational authorities.

For many years previous to the establishment of the Victorian volunteer cadet system attempts had been made in a spasmodic way to drill the boys in the State schools on military lines, but no well-defined action was taken by the State until Sir Frederick Sargood, K.C.M.G., became a member of the Service Cabinet. In 1884, as Minister of Defence, he availed himself of the opportunity of legislating for, and establishing a cadet system, which appeared to him from his military training here, and from his personal observations abroad, as most desirable and beneficial to introduce. He made provision for the formation of detachments of boys of certain age and stature in State schools, colleges, and public schools, wherever there was a sufficient number of pupils, and appointed a committee of teachers of public, private, and of State schools to draw up regulations and to deal with the question of uniform.

The uniform chosen by the committee was a plain peaked cap, and a coat and trousers of blue serge. The coat collar was lined with red cloth, so that, turned down, it did for civilian dress, and when turned up, as a makeshift uniform. Some few months ago a proposal was made that this nondescript uniform should be again

used, because it was economical from the parents' point of view, and consequently, the numerical strength of the cadet force would be largely increased. It was well that no definite action was taken as regards this matter, because, in the opinion of all the officers who have had lengthened experience, had such a proposal been carried out, it would have resulted in irreparable injury to the prestige and efficiency of the cadet corps as a military organization. If there is one commendable feature, as far as the boy is concerned, and which increases his self-respect as a cadet, it is the fact that he wears the uniform of a "Soldier of the Queen."

After the detachments had been formed, the next necessary step was to arm and equip the cadets. Old carbines with wooden barrels were first used for drill purposes, but Sir Frederick Sargood soon arrived at the conclusion that if the system were to be of any practical utility the lads should have proper facilities for rifle practice with a rifle suited to their strength. The light small-bore Francotte was ultimately selected, and this arm has proved to be eminently serviceable. The total number of Francotte rifles in the colony at the present time exceeds 4,000.

The Cadet Corps Committee, owing to the rapid growth of the movement, asked the Defence Department to take control of the various detachments. This request was acceded to, and accordingly the Victorian Cadet Force became a properly constituted military organization under the Discipline Act; and the success of the movement is entirely due to the fact that, while it has been fostered and encouraged by the Education Department and the Principals of the public schools, its true and enduring strength lay in its military basis. It is fervently hoped that, now that the various defence forces are federated, there will be no attempt to tack the cadet system under the control of the Education Department, because the result of such action would only court disaster in time. Any supporters of such a proposal are mistaken friends of the cadet cause.

On the military authorities taking over charge, substantive officers were appointed. The first commanding officer was Lieutenant-Colonel (then Major) Snee, with Lieutenant (now Colonel) Hoad, as Staff Officer. On the promotion of the latter Lieutenant (now Lieutenant-Colonel) Henry became Staff Officer, and on the retirement of Lieutenant-Colonel Snee, Lieutenant-Colonel Henry became the commanding officer. Lieutenant-Colonel Henry still attempts to carry out the duties of the position, when he is not called away to perform duties that are quite foreign to cadet business.

The first brigade parade (912 strong) was held in August, 1886, in the presence of Sir Henry Loch and the Commandant.

About this time, too, the Education Department gave official sanction to teachers and boys to attend parade and rifle practice, and consequently the movement grew by leaps and bounds, there being at the end of 1886 over 2,000 cadets distributed throughout the length and breadth of the colony, while at the present time there are enrolled and in uniform over 4,000 young soldiers, prepared to do their duty to King and country.

In order that the various corps should be officered by suitable men, apart from those who already had commissions, classes for the instruction of teachers were established, and from these classes candidates were examined by the then Commandant, Colonel Brownrigg (one of the best officers who ever held command in Victoria), in both theory and practice, and received commissions from the Defence Department.

Amongst this number was Mr. (now Major) Gamble, who, by his enthusiasm and zeal for what he believed to be a national movement, and by his enlistment of inspectors of schools to act as battalion commanders, so that the vexed question of seniority could be settled, though he cannot be styled the father of the movement (which title belongs of right to Sir Frederick Sargood), yet deserves the greatest credit as one of the pioneers of the cadet cause.

The first encampment was held at Elsternwick in 1887, the muster being 1,843 of all ranks, and the rifle matches in connexion with this encampment were fired at the contiguous butts at Elwood. Colonel Disney reviewed the boy soldiers, and awarded great praise on the camp arrangements and the discipline generally.

In 1888, 1889, and 1890 camps were held at Langwarrin, and much improvement was shown by the lads in their military duties.

Since 1890, owing to merciless retrenchment, no general encampment has been held; but in October, 1900, the second battalion, composed of boys from the public and private schools of Melbourne and Geelong, went into camp at Langwarrin, and the results of the training there received were most satisfactory.

The expenses of the camp were borne by the officers and boys themselves, the Defence Department providing only transport and tents.

In view of the trend of military matters generally throughout the world, it would appear to be both politic and economic to have the encampment of junior cadets as a permanent fixture of each year's military arrangements.

Up to 1889, Colonel Brownrigg, who was then Commandant, took the most active and zealous interest in the growth of the cadet corps, and to that officer the greatest credit is due for his praiseworthy efforts to give permanent impetus to this national movement.

After Colonel Brownrigg came General Tulloch, who introduced the present uniform. Finding such a diversity in uniform, he gave orders that the whole junior forces should wear khaki, with soft felt hats, a numeral on the shoulder straps, and in the case of secondary schools, a school badge on the collar. He also allowed the motto (*Pro Deo et Patria*) to be used.

The strength of the cadet force rose to 4,000 in 1891, but through depression a ruinous policy of questionable retrenchment (which involved the abolition of any effective allowance) the numbers enrolled dwindled away, and in December, 1894, the muster roll of officers and boys (including the so-called senior cadets) was under 3,000. About that time it was seriously proposed to disband the cadets, but fortunately wiser counsels prevailed, and a great and irretrievable disaster (as proved conclusively by after events) was averted.

For some years, however, the cadet corps was starved, and it was only kept alive by teacher officers, who, without remuneration or suitable recognition in high places, remained loyal at their posts. A special meed of praise is due to the officers who stood steadfastly at the helm during the black years of retrenchment.

At the present time the Victorian Volunteer Cadet Corps is divided into two branches, viz., the senior cadets and the junior cadets. These are jointly under the command of Lieutenant-Colonel Henry. In addition to their duties in connexion with cadet work, these officers are expected to examine and inspect the military drill of all the first, second, and third class State schools. Other military duties at head-quarters are also assigned to them. The senior cadet battalion is about 400 strong, and consists of youths between 15 and 19 years of age, of a minimum height of 5 feet 4 inches. Although they are called cadets, these young men have nothing whatever in common with the junior, that is, the school cadets. The battalion drills at night, goes with the militia into camp, and appears on all ceremonial parades as an adult unit. It is in reality a junior militia, and should be, as in England, attached to a volunteer or militia regiment, and its recruiting should be encouraged and fostered in every possible way, both from a civilian and military point of view.

The force at present consists of a splendid body of young fellows, under good discipline, and should be commanded, not by a staff officer, but by its own volunteer officers.

The cadets, properly so-called, *i.e.*, the pupils of the public, private, and State schools, on the 30th December, 1900, had a muster-roll of 146 officers and 3,379 cadets in uniform. To this list may be added 21 officers and 540 boys, who, though their detachments have been gazetted, have not as yet received their equipment.

This practically means, in round numbers, 4,000, and the time is not far distant when, with reasonable assistance from the State, the numbers might with ease be increased to a numerical strength greater than all the other military forces in Victoria taken together.

There are at present eight battalions in existence—three in the metropolis, and the remainder in the country. The second battalion consists of cadets from the leading public and private schools of Melbourne and Geelong. This battalion, owing to the size and age of the boys, could, with some degree of propriety, be styled the senior cadet battalion, in contradistinction to the junior cadet battalion of State schools.

From these remarks as to the present strength and disposition of the Victorian Volunteer Cadet Corps, it must be clear to all who take an interest in the matter that the present staff is utterly inadequate to do the work required to keep the various detachments in a high state of efficiency.

At present, owing to his multifarious duties, Colonel Henry is unable to visit the detachments with sufficient frequency. For the well-being of the movement it is absolutely essential that the staff should be materially strengthened, a permanent sergeant-major, or even two, should be appointed, and clerical

assistance provided for to relieve the staff officer from the voluminous routine clerical work that now demands so great a portion of his official time.

The total cost of the whole cadet system for the present year (1901) is £2,783. Of this amount, £763 is paid in salaries to the permanent staff; £1,000 in effective allowance; £600 in free ammunition; and the rest goes in incidental expenses. Of the £1,000 effective allowance, the senior cadets—numbering about 400—absorb £450, while the balance, £550, is distributed amongst the 91 detachments of junior cadets, numbering, as stated before, between 3,000 and 4,000. This means, in plain words, that the youthful army of junior cadets, who must ultimately be the fighting line of the State, only costs the Defence Department about £500 a year. In the year 1890-91, the amount voted for the cadet system was £6,400; the effective allowance being about £2,500. It is earnestly hoped that the Government will see its way clear to place such a sum again on the Estimates, in order that this truly national protection movement may be organized, and carried on in a thoroughly effective manner.

Cadet detachments may be established in any school where there are at least twenty boys of twelve years of age and upwards, and of a minimum height of 4 feet 6 inches. There must, in every case, be some qualified person willing to take charge, and to become responsible for the Government equipment issued. At least one hour's drill with arms must be given each week, and the various battalions must parade not less than six times a year. The uniform of all detachments must be the same. Officers are first appointed as acting-lieutenants, and on passing the prescribed examination, after six months' service, are gazetted lieutenants. In each battalion two senior lieutenants, after three years' service, may be promoted to be captains on passing a practical examination in battalion drill. The commissions of cadet officers rank the same as, but junior to, other commissioned officers. No one in the cadet force is sworn in. The musketry course consists of twenty-five rounds individual, and twenty rounds volley firing with ball, besides a preliminary practice of twenty rounds with blank ammunition. The effective allowance to officers in charge of detachments is £3, and to each detachment of cadets, £3 only per year. All ranks provide their own uniform. The equipment issued by the Defence Department consists of Francotte rifle, brown leather accoutrements, and waterproof cape, the cost of all which amounts to £3 15s. In addition to the above, each officer who is a teacher in the Department now receives £5 per annum from the Education Department.

The primary and ostensible object of the Victorian cadet system is to train the whole male population to arms, so as to lay the foundation of the largest possible defence force of reserves at the minimum of cost, both to the State and to the individual.

Another object is to permeate the schoolboy's mind with the best results of military discipline, and to teach prompt obedience, self-restraint, order, and respect for constituted authority. In addition, it affords a great measure of physical training and healthful exercise. It is true hand and eye education. The boy's physique is improved,

while the wearing of the national uniform elevates his ideas of self-respect and responsibility. Those facetious critics, who, not discerning the serious purpose of the cadet movement, talk of "playing at soldiers," fail to perceive that, apart from its high moral influence on the character of the boy, it becomes the readiest and most economical way of preparing him, when a man, to take his place in the ranks as a defender of the rights and liberty of his native country. The voluntary enlistment of the cadet system practically supplies the place of the conscription system, prevailing amongst European nations, and for this reason alone should commend itself to the patriotism of the loyal and law-abiding citizens.

In addition to the purely military aspect, it also has moral, healthful, and educational results of the highest value. Observation has shown that lessons of obedience, respect, subordination, such as these cadets obtain in their course of training, are of paramount importance in the formation of character, and it is confidently asserted that, both in public, private, and State schools, the tone and discipline of those which possess cadet detachments is superior to that of schools where there is no corps. The physical benefit is self-evident. Setting-up drill, gymnastic practice, manual and firing exercises, and military evolutions in the open air, strengthen the body and improve the mental energies—while some of the educational good derived in other ways is shown by the fact that, as a rule, the cadet boys, although giving so much time to drill and shooting, pass just as well, if not better, at examination, than other pupils not similarly circumstanced.

Another important feature in connexion with the cadet system is that a love for rifle-shooting is inculcated, which must result in inestimable benefit to the nation in case of war.

In addition to the ordinary musketry course specified by regulation, cadet rifle matches are held annually, and weekly competitions take place all over the State between town and country detachments.

At the last matches in December, more than 1,000 cadets competed in team and individual shooting, and in battle firing.

Results.

In the light of recent events, the following letter, sent to Lieut.-Col. Henry in 1893, by the late J. B. Wilson, M.A., for more than a quarter of a century head master of the Geelong Grammar School, reads marvellously like a prophecy:—"I regret to observe a tendency in certain quarters to decry the cadet force as a mere useless and expensive luxury—a thing to be retrenched out of existence. I regard it as educationally of the greatest value. Habit forms character, and where drill is thorough and efficient, as in such a corps as ours, the habits of prompt attention and subordination to authority are so ingrained as in after life not to be readily thrown aside. Then, as regards the colony in general, the disbandment of our cadets would be a short-sighted and mistaken policy. Can we ever tell in these days how soon and how unexpectedly a great war may burst out upon us? Can we rely so securely on our geographical position that our means of defence may be safely restricted to a handful of men to work the guns of our forts, or to man the gun-boats in our bay? In case of war, we should rejoice to know that we had thousands of

young men, the very flower of the colony, who could be rapidly formed into efficient soldiers. In comparison with such advantages, what, I ask, is the paltry cost of the cadet force?" The war in South Africa has conclusively shown the *raison d'être* of the cadet force as an important auxiliary arm of the State military defence system.

Not only Australia, but the Empire itself, owes an everlasting debt of gratitude to the Victorian Cadet Corps, for it has been ascertained that, of the various contingents sent from here who have fought so nobly for their country, at least 60 per cent. acquired their early military training, and their love for soldiering, in the ranks of the cadets.

Apropos of this subject, the remarks of Colonel Bingham, R.A., fit in appropriately here as illustrating the effectiveness of the force from an Imperial point of view.

It has been his duty to go through the papers for enrolment in the various contingents. He found that in probably two-thirds of them the candidates, in reply to questions as to previous service, answered that they had been so many years in the cadets. We see that these young men considered this was a recommendation. They had been cadets in the various schools, and afterwards were proud of the fact. He had seen men of all sorts, in all sorts of turn-outs, assemble in the barrack-square. He had noted how they had lined up without confusion, and how a sergeant-major had stepped forward, the order was given—"From the right, number," "Form fours, right," "Quick march," and off they went, as an organized drilled body. Visitors or Imperial officers and others had expressed surprise at this, and wondered how it came about. His reply had been that they had learnt the elements of drill in the cadet corps. He thought they had hardly grasped the possibilities of the cadet system as they had it in Victoria. He would have it that even in the small and remote schools, as far as possible, there should be at least a nucleus of boys who should be brought in touch with military training, each boy so trained would be a centre of influence, and would carry on the tradition of patriotism and loyalty and readiness to defend his country.

When the citizens seriously cogitate upon these facts, and when they learn that at least 25,000 young men are in the country who have served a course of at least two years of efficient drill and regular rifle shooting, they will not fail to recognise the immense economic value of the cadet corps to the State, and will also see the imperative necessity of rendering it encouragement and liberal assistance in every possible way.

In May, 1901, in connexion with the visit of the Prince and Princess of Wales (then Duke and Duchess of Cornwall and York), the V. V. Cadet Corps played a very prominent part in the various functions, which were celebrated during that time. At the Fleming-ton parade, 5,000 cadets from town and country were present, and their march past and their general efficiency evoked great enthusiasm and admiration and deeply impressed the Duke and the visitors from other countries.

Since that memorable time, the system continued in the same lines until the Federal Defence Bill was passed, and then the

Victorian Cadets were attached to the Federal Forces, under the District Commandant.

A Federal committee was selected to report on and devise a scheme for the federalization of the cadets in all the States.

Their report has been furnished to the Minister, and he proposes to adopt the general principles laid down therein, which are mainly formulated on the Victorian system.

DEFECTIVE CHILDREN.

Among those attending the State and private schools is a section of children who, by reason of their mental or physical deficiencies, are unable to benefit by the normal methods of instruction, and respecting the similar class in the schools of the United States the following is extracted from the Report of the Education Bureau of that country for 1891-2:—"There are a large number of children who may be called feeble-minded, and who often become destitute and degraded, and for whom it is difficult to provide. They are not imbeciles or idiots, but are dull or backward in their studies, and the causes of these conditions are for the most part physical. Their future is very uncertain. They may fall under the care of good people, or more frequently become the inmates of charitable institutions, which, if they leave—as they often do—they are liable to become injured or abused; and if they are girls or young women to fall into disgrace or ruin. How to prevent these unfortunate cases and protect the feeble-minded from distress and danger, has been much considered and acted upon by a number of societies and associations in England. Their general conclusion is that 'feeble-minded children should be separated from ordinary scholars in public elementary schools in order that they may receive special instruction; and that the attention of school authorities be particularly directed towards this object.'"

These remarks introduce the results of Dr. Francis Warner's examination of 50,027 English school children, made at the instigation of a joint committee of the British Medical Association and the Charity Organization Society. Dr. Warner's statistics are too voluminous to be inserted in this work, but the following table—extracted from the *Statistical Journal* of March, 1893—shows the number of cases that appeared to require special care and training on grounds of physical or mental condition amongst the 50,027 children examined, of whom 26,884 were boys and 23,143 were girls:—

Conditions on account of which Children were included as requiring Special Care.	Boys.	Girls.	Total.
Cases defective or exceptional in mental status ..	124	110	234
Epileptic, or with history of fits	36	18	54
Crippled, paralyzed, or maimed, &c.	155	84	239
Cases defective in development and of low nutrition, with abnormal nerve-signs and reported dull ..	192	157	349
	507	369	876
Some children appear in more than one of the classes given above, the actual number of children was	473	344	817

From this it would appear that 1·8 per cent. of the boys, 1·5 per cent. of the girls, and 1·6 per cent. of the total are cases requiring special methods of instruction. But these figures, as will be subsequently seen, are somewhat too high.

In 1896 a committee was appointed by the British Government for the purposes of—

- (a) Inquiring into the existing systems for the education of feeble-minded and defective children not under the charge of guardians, and not idiots and imbeciles, and to advise as to any changes, either with or without legislation, that may be desirable.
- (b) Reporting particularly upon the best practical means for discriminating on the one hand between the educable and non-educable classes of feeble-minded and defective children; and on the other hand between those children who may properly be taught in ordinary elementary schools by ordinary methods and those who should be taught in special schools.
- (c) Inquiring and reporting as to the provision of suitable elementary education for epileptic children, and to advise as to any changes that may be desirable.

In Dr. Warner's evidence before this committee a table was exhibited showing the number of mentally or physically defective children actually seen in the public elementary schools. The total number of children examined was 86,378. Of these there were found to be the following defectives:—

	Boys.	Girls.
Imbeciles, not epileptic or cripples	17	6
Imbecile and epileptic, but not crippled	2	2
Imbecile and crippled, but not epileptic	2	1
Feebly gifted mentally, but not crippled or epileptic	92	76
Feebly gifted mentally and epileptic, but not crippled	8	7
Feebly gifted mentally and crippled, but not epileptic	3	4
Feebly gifted mentally and blind, or nearly so	—	2
Mentally exceptional, not epileptic or crippled	7	9
Epileptic, but not mentally defective or crippled	39	43
Epileptic and crippled, but not mentally defective... ..	3	1
Crippled, but not mentally defective or epileptic	142	99
Children blind, dumb, or with chorea	4	5
Children dull, delicate, with defect in development, and abnormal nerve signs, but not given above as "exceptional children"	197	180
Total number of children who require special care and training	516	435

Thus there was a total of 951 children out of 86,378, or 1·1 per cent., who were defective either physically or mentally. It is clear, however, that those included under the first three headings should not have been found in schools at all. Further evidence by Dr. Warner gave 563 as the total number of mentally defective children—not idiots nor imbeciles and not epileptics—who are to be classed as requiring special care and training. This gives a percentage of 65.

But to this number must be added the number of feeble-minded children not in attendance at school at the time of the inquiry. Statistics were also obtained from Brunswick, Germany, where it was found that out of 13,176 children in the municipal schools 124, or '95 per cent., were pupils in the classes for defective children. Other estimates, based upon more or less reliable statistics, vary from '8 to 1'2 per cent. It is, therefore, safe to assume that approximately about 1 per cent. of the population of school age can be regarded as needing special instruction on account of mental or physical deficiencies.

As the outcome of the British Committee's Report, an Act was passed (62 and 63 Vict. c. 32) enabling school authorities to establish special schools and classes for children certified by the medical officer as "not being imbecile and not being dull and backward, yet by reason of mental or physical defect, incapable of properly benefiting by ordinary school instruction." Dr. Shuttleworth writes: (*Proceedings of the Third International Congress for the Welfare and Protection of Children 1902, page 248*)—"This Act, which is permissive only, has been adopted by a considerable number of school boards throughout the country, and a recent list issued by the Board of Education shows that not far short of 5,000 school places have been provided in special schools in different parts of the country, of which about 3,000 are for the mentally and physically defective children of London, where there are now more than sixty centres of special instruction." Provision for guides and conveyances is also made under certain conditions for those children otherwise unable to attend the schools.

In Germany there are two types of schools for feeble-minded children. 1st. Fully organized schools specially set apart for their use; 2nd. Special classes attached to the ordinary schools. In all large towns—except Berlin—the former is the rule. In an article by R. E. Hughes, M.A., B.Sc., on "*The Making of Citizens—A Study in Comparative Education*" it is stated that the essentials for the success of those special schools are:—

1. Small classes (never more than twenty children).
2. Special and appropriate premises and equipment.
3. Special methods of instruction and discipline.
4. The most skilful and sympathetic of teachers.

Also from the same article: "In Germany children are sent to these special schools only when, after having attended the ordinary school for two years, they show inability to profit by the instruction. They are then medically examined, and while attending the school a very minute and careful record is kept of their daily routine, health, and general behaviour. It is the duty of the schoolmaster to inform the school inspector of any such defective in his school. The children remain in the special school until they are about fourteen years of age, when, if they have reached the proficiency of an ordinary child of twelve, they may be dismissed. At the end of each term the special teacher informs the inspector whether any of his scholars are

fit to return to the ordinary school, and quite a number are so returned." As illustrating the high value of the work which the German schools for defective children have accomplished, the following table (taken from the article previously quoted) is given:—

Town.	Able to Gain their own Living.	Partly able to Earn their own Living.	Incapable of Gaining their own Living.	Total Number of Scholars.
Cologne	152	20	15	274
Frankfurt	the majority	..	10	127
Düsseldorf	90	9	5	119
Dresden	114	57	29	204

The balance, it is presumed, are held over for further observation. It is added, "It must not be forgotten that every child so saved is an enormous gain to the State, for, as Mr. Douglas Morrison has pointed out in his book on *Juvenile Offenders*, it is from the defective class that the criminals of the country are recruited. These young prisoners are almost invariably mentally and physically defective. Of children in reformatories, only some 13 per cent. are able to read or write with reasonable fluency, or, as Mr. Morrison puts it, 'had received an ordinary School Board education.'"

An effort was made by the Education Department of Victoria in 1900 to ascertain the number of children of school age not receiving instruction by reason of some mental or physical infirmity. This inquiry appears to have extended only to State schools in Melbourne, Ballarat, Bendigo, and Geelong. The number of children so returned was 2,781, of whom 2,462 were stated to have been provided with reasonable excuses, such as receiving efficient instruction in some other manner; prevention from attending school by sickness, fear of infection, temporary or permanent infirmity, or any unavoidable cause, &c. The Department, however, estimated that 670 in those districts were of the class suffering from some form of mental or physical infirmity, and concluded on this basis that there could only have been about 1,000 of such children in the whole State. To these, of course, must be added the dull and backward children, who were in actual attendance at the schools. It must, however, be admitted that the inquiry was not sufficiently exhaustive to furnish a fair estimate of the number who would be benefited by special instruction. According to the Victorian census of 1901, there were 198,487 children of school age, *i.e.*, from age 6 to 13 years. It would be preferable to accept for Victoria the estimate of 1 per cent., which has been found to prevail elsewhere, and this would indicate that about 2,000 children require special instruction on account of mental or physical defects.

It would be impracticable in Victoria, on account of the comparative sparseness of population, to establish special schools or classes to the same extent as in England or Germany, but something might be done in the large centres of population. The success which has attended special instruction elsewhere in equipping so large a

proportion of deficient children, who otherwise might become criminals and encumbrances upon the State, either wholly or partly, to earn their own living, justifies serious consideration of this question of special instruction, if not from a humanitarian, at least from an economic point of view.

Efforts have been made by private individuals to collect and train in special schools such defective children as now find their way to State schools, where they cannot possibly receive the amount of individual attention which is so essential to their condition, but as their efforts have been necessarily of a limited character, the results can afford no criterion of what might be achieved upon a national basis.

Hitherto the State has taken charge of those children only whose condition renders their care in an institution necessary, and respecting whom Dr. McCreery furnishes the following:—

Defective
children
in institu-
tions.

There is a separate institution in the grounds of the Asylum at Kew, where idiots and imbeciles are maintained and trained. All are certified under the provisions of the Lunacy Act. On the 31st of December, 1904, there were 182 males and 136 females in this institution, and of these 36 males and 48 females were epileptics. Industrial, mental, and moral training is provided for all the children who possess any capability of improvement, which is about two-thirds of the whole number. The means of training are a modified kindergarten school and drill-room, work shops for carpentering, shoe, mat, and basket making, gardens, and ornamental grounds. These occupations, with kitchen and general work, furnish ample employment for the boys. Useful work is found for the girls in the laundry, sewing-room, and in domestic duties. A very considerable number of the children improve, some to a marked degree, and these are often removed by their friends or relations. A few of the inmates who become dangerous as they grow up are transferred to other institutions. The remainder are allowed to stay in this institution without any age limit. The necessity of a separate home for adult idiots and imbeciles will have to be considered in the future, but its need is not at present urgent.

The total number of cases admitted since the institution was opened in the year 1887 was 695 (396 males and 299 females). Of this number 377 have been taken off the books, as follows:—

7 males and	6 females recovered.
31 males and	23 females relieved.
25 males and	23 females not improved.
151 males and	111 females died.

The number remaining on 31st December, 1904, as before stated, being 182 males and 136 females, a total of 318.

TRAINING COLLEGE

College for
training
teachers.

There is a college for the training of teachers, studentships entitling classified teachers and first-class pupil teachers to free instruction on competitive examination. The course of instruction in the Training College extends over two years, and includes education, history, English language and literature, history of the British

Empire, mathematics, Latin, science, music, drawing, manual training, domestic economy, and gymnastics. Holders of studentships are allowed to reside at the Training College upon the payment of £12 per annum towards the expense of their board and residence. Holders of studentships who may reside at home are entitled to an allowance of £18 per annum towards board and residence. Holders of State school exhibitions may be granted a studentship for any two years during the currency of their exhibition, but without allowance for board and residence (other than that payable to them as exhibitors). Studentships, not exceeding five in number in any one year, may be granted to persons who have passed the matriculation examination of the Melbourne University, or an approved equivalent, who are at least eighteen years of age, and who have been classed as meritorious in the competitive examination above mentioned. Such students will be entitled to tuition in the course of instruction at the college free of expense, but without any allowance for board and residence. Every student will be required to enter into an agreement, by himself and an approved surety, not to relinquish his course of training without the permission of the Minister, and for four years after the termination of his studentship to teach in any school to which he may be appointed. Persons other than students may, on payment of a fee of £10 10s. per annum, be admitted to the course of instruction at the Training College, or, on payment of a fee of £4 4s. per annum, to the course of instruction in education only.

SCHOLARSHIPS AND EXHIBITIONS.

Any person may collect, raise, or give a sum of money towards founding a scholarship or exhibition in connexion with any particular State school; and money or land, or both, may be bequeathed for that purpose. By an amended regulation of 13th December, 1904, the Minister of Public Instruction may annually award eighty scholarships, each tenable for three years. Of these, forty are open to State school pupils, for the purpose of facilitating their higher education; and forty to pupils of State or other schools, to enable them to proceed to a diploma or degree in mining or agriculture at the University. The scholarship holders are to become students in a State continuation school, or an approved secondary school or college, and to obtain at the end of each year a satisfactory report of conduct and progress. Under specified conditions, cost of transit (not exceeding £5 per annum) may be allowed to a student who resides with his parents or guardians more than five miles from the school. Where it is impracticable for the student to reside with his parents or guardians, the Minister may make an allowance of £26 for board and residence, instead of the transit allowance. Scholars attending approved secondary schools and colleges will be granted an allowance of £8 per annum toward the expenses of their tuition. Holders of scholarships will be admitted free of cost as pupils in continuation schools, and receive instruction in such subjects as the Minister determines. The Minister may cancel any scholarship where the conditions are not observed, or where the scholar is guilty of disorderly or immoral conduct. Examination of State school

Scholarship
and exhibi-
tions.

pupils for scholarships, offered by secondary schools and colleges, may be held under the supervision of the department, provided that the conditions under which such scholarships are to be offered have been previously approved by the Minister. Holders of these scholarships will be eligible to compete for exhibitions, subject to the conditions of the regulation relating thereto. Examinations were held in December last. Those candidates returned as meritorious will be permitted to make such arrangements as they please with the teachers of secondary schools, and with satisfactory progress reports and examinations, they will, in due course, be eligible to attend examination for an exhibition. The holders of scholarships under 17 years of age, who have attended regularly at an approved secondary school or college for the preceding two years, from the authorities of which good reports have been obtained, and who have passed the matriculation examination at the University, are eligible to compete for twenty exhibitions annually awarded by the department. The exhibitions are allotted on competitive examination in English, algebra, and geometry, and any two of the four following languages:—Latin, Greek, French, or German; the examination being on the basis prescribed for the preceding matriculation. Each exhibition is of the annual value of £40, tenable for three years at technical schools, or for four years at the Melbourne University.

CENSUS RETURNS.

Education of
the people,
census
1901.

The following statement, taken from the returns of the census of 1901, shows the number and percentage of persons (excluding Chinese and aborigines) in the State at different ages who could read and write, who could read only, or who were unable to read:—

EDUCATION OF THE PEOPLE, 1901.

Ages.	Numbers living in 1901.				Number in every 100 living at each age in 1901.		
	Able to read and write.	Able to read only.	Unable to read.	Total.	Able to read and write.	Able to read only.	Unable to read.
Under 6 years ..	4,811	5,237	146,796	156,844	3·07	3·34	93·59
6 to 13 ..	175,797	8,046	11,251	195,094	90·12	4·12	5·76
13 ,, 15 ..	50,547	65	220	50,832	99·44	·13	·43
15 ,, 25 ..	222,076	239	1,245	223,560	99·34	·10	·56
25 ,, 35 ..	187,879	288	1,512	189,679	99·05	·15	·80
35 ,, 45 ..	155,206	650	1,994	157,850	98·32	·41	1·27
45 ,, 55 ..	76,480	1,120	2,350	79,950	95·66	1·40	2·94
55 ,, 65 ..	52,808	1,986	2,994	57,788	91·38	3·44	5·18
65 years and upwards	54,809	3,776	4,865	63,450	86·38	5·95	7·67
Unspecified adults ..	1,647	27	45	1,719	95·81	1·57	2·62
All ages ..	982,060	21,434	173,272	1,176,766	83·46	1·82	14·72
15 years and upwards	750,905	8,086	15,005	773,996	97·02	1·04	1·94
21 ,, ,, ,,	613,018	7,936	14,335	635,289	96·49	1·25	2·26

The number of children from 6 to 13 years of age includes those children whose ages were not specified, the total figures exclude those whose educational attainments were not returned, and in the ages 15 years and upwards are included the adults whose ages were unspecified.

The numbers of persons in every 10,000 of the population who could read and write, and who were unable to read, at the last two enumerations, were as follow:—

	In 1891.	In 1901.	
At all ages	8,318	8,528	could read
..	8,029	8,346	could write
..	1,682	1,472	could not read
Between 6 and 13 (school age) ..	9,389	9,424	could read
..	8,769	9,012	could write
..	611	576	could not read
At 15 and upwards	9,771	9,806	could read
..	9,573	9,702	could write
..	229	194	could not read
At 21 and upwards	9,728	9,774	could read
..	9,491	9,649	could write
..	272	226	could not read

Education
1891 and
1901.

A marked improvement is noticeable at all ages, and in regard to children at school age the proportion entirely illiterate was only 576 per 10,000.

Education
of boys and
girls 1891
and 1901.

A comparison of the results of the censuses of 1891 and 1901 in every 10,000 children of school age, *i.e.*, between 6 and 13 years of age, indicates that the educational attainments of both boys and girls had materially improved, as there were proportionately more children able to read in 1901 than there were in 1891. This will be readily seen by an examination of the following figures:—

1891.		1901.		
Boys.	Girls.	Boys.	Girls.	
9,357	9,421	9,398	9,454	could read
8,686	8,852	8,971	9,056	could write
643	579	602	546	could not read

It is always a noticeable fact that in Victoria girls are much more forward in regard to the rudiments of education than are boys. Whether it is owing to the fact of a closer application to lessons, of less distractions caused by sports and games, or of quicker natural abilities, it is hard to determine. This relative backwardness of boys is not a condition peculiar to Victoria, but is just as noticeable in the other States.

Education of children of different sects.

The degree of education of children differs somewhat according to religious denomination, as will be seen by the following figures taken at the census of 1901:—

EDUCATION OF CHILDREN OF DIFFERENT DENOMINATIONS, 1901.

Religious Denominations.	Number aged 5 to 15 years.			Proportion per cent.		
	Able to read and write.	Able to read only.	Unable to read.	Able to read and write.	Able to read only.	Unable to read.
Church of England ..	84,406	4,797	9,914	85·16	4·84	10·00
Presbyterian ..	36,808	2,032	4,232	85·46	4·72	9·82
Methodist ..	40,769	2,036	4,102	86·92	4·34	8·74
Other Protestants ..	18,022	858	2,028	86·20	4·10	9·70
Total Protestants	180,005	9,723	20,276	85·72	4·63	9·65
Roman Catholics ..	46,468	2,849	6,253	83·62	5·13	11·25
Jews ..	1,026	56	79	88·37	4·82	6·81
Residue ..	3,657	198	497	84·03	4·55	11·42
Total ..	231,156	12,826	27,105	85·27	4·73	10·00

In addition to these, there were 5,770 children between the ages of five and fifteen whose education was unstated.

Education of children at census, 1901.

At the census of 1901 the number of children at school age (over 6 and under 13 years) resident in Victoria was 197,704, and of these 184,200 were receiving instruction, whilst the balance, 13,504, were not under instruction nor receiving any education whatsoever. There were also 43,353 children either above or below the school age, making a total of 241,057 children under instruction. Of every 1,000 of these, 783 were educated at State schools, 33 at colleges and grammar schools, 72 at denominational schools, 63 at private schools, and 10 at unspecified schools, whilst the balance of 39 were educated at home. Of the 13,504 at school age who were returned as not receiving any instruction at all, 4,608 were in Melbourne and suburbs, 2,209 in country cities, towns, and boroughs, and 6,687 in rural districts. Of the children at school age resident in Melbourne and suburbs, 6·13 per cent., of those in the country towns, &c., 7·03 per cent., and of those in rural districts 7·34 per cent. were not receiving instruction.

Education of children. Progress and comparison with other States.

As a measure of the progress of education under the free, compulsory, and secular system, it may be mentioned that 90·12 per cent. of children of school age (6 to 13 years) at the census of 1901 were able to read and write, as against 87·69 at that of 1891, 81·70 in 1881, and 65·60 in 1871, just before the introduction of the system. The percentage just mentioned as being able to read and write at the census of 1901 (viz., 90·12) is considerably higher than that in any other State in the Commonwealth, the percentage being,

at the 1901 census, 84·42 in Queensland (Australian born children only), 82·05 in Western Australia, 82·00 in South Australia, 80·35 in New South Wales, and 78·77 in Tasmania.

STANDARD OF EDUCATION.

The proportion of either sex who showed their want of elementary education, by signing the marriage register with a mark instead of in writing, is given in the following table for each fifth year from 1875, and for the years 1898 to 1904:—

SIGNING THE MARRIAGE REGISTER WITH MARKS, 1875 TO 1904.

Year.	Men.		Women.		Mean.	
	Per cent.		Per cent.			
1875	..	5·48	..	9·43	..	7·46
1880	..	4·18	..	4·09	..	4·13
1885	..	2·56	..	2·62	..	2·59
1890	..	1·50	..	1·53	..	1·52
1895	..	·89	..	·67	..	·78
1898	..	·73	..	·62	..	·67
1899	..	·85	..	·68	..	·76
1900	..	·66	..	·85	..	·76
1901	..	·56	..	·50	..	·53
1902	..	·67	..	·54	..	·60
1903	..	·69	..	·50	..	·59
1904	..	·65	..	·40	..	·52

It will be observed that in proportion to the total numbers married, a very satisfactory increase has taken place during the 20 years ended with 1895 in the numbers of both sexes signing the marriage register in writing, in that nearly every year, as compared with its predecessor, a smaller proportion of persons signed with their marks. Since 1895, this proportion remained at a somewhat uniform level, until the last three years, when it was the lowest. It is probable, however, that the irreducible minimum has almost now been reached, for a certain residuum of the proportion will remain illiterate even under the compulsory system of education which prevails in Victoria. This is confirmed by the results of the census of 1901, which show that the percentage of males aged 21 years and upwards (exclusive of Chinese and aborigines) who could not write was 3·18, and that of females aged 15 years and upwards, 3·23; whereas at the age groups fifteen to twenty, immediately following the school period, the percentage was ·81 for males and ·45 for females, so that the persons at all ages now marrying in Victoria are not only far better instructed than the general population, but are quite as well educated as those who have just completed their school life.

Increased numbers signing in writing.

Compared with England and Wales, Scotland, and Ireland, where the proportions signing with marks were 2·70, 2·37, and 8·45

respectively, the elementary educational standard is very high in this State, which in this respect occupies the highest position in Australasia.

Religions of the people. The following table shows the principal religions of the people as ascertained at the census of 1901:—

RELIGIONS OF THE PEOPLE OF VICTORIA AT THE CENSUS OF 1901.

Religion.	Number.	Per cent. of Population.
Protestant Churches—		
Church of England (including Protestant, so stated)	432,704	36·52
Presbyterian Church of Victoria	190,725	16·09
Free Presbyterian	778	·07
Methodist	180,272	15·21
Independent or Congregational	17,141	1·45
Baptist	32,648	2·75
Evangelical Lutheran	13,935	1·18
Unitarian	788	·07
Church of Christ	10,682	·90
Welsh Calvinistic Methodist	1,257	·11
Society of Friends	251	·02
United Brethren or Moravian	144	·01
Australian Church	964	·08
Seventh Day Adventists	1,086	·09
Free Christian Church	71	·01
Other Protestant Churches	12,658	1·06
Total Protestant Churches	896,104	75·62
Roman Catholic Church	263,710	22·26
Other Denominations—		
New Church (or Swedenborgian)	146	·01
Catholic Apostolic Church	460	·04
Christian Israelites	258	·02
Spiritualists	913	·08
Salvation Army	8,830	·74
Greek Orthodox Church	367	·03
Jews	5,907	·50
Other Religions	3,293	·28
Sceptics	4,969	·42
Total specified	1,184,957	100·00
Unspecified	16,384	..
Grand Total	1,201,341	..

Protestants and Roman Catholics. The total number of Protestants of all denominations in 1901 was 896,104, as against 836,857 in 1891. In 1901 the Roman Catholics numbered 263,710; in 1891, 248,591. The rate of increase of each of these bodies in the ten years was, therefore, about the same as that of the population.

The Presbyterians, Methodists, and Baptists have improved their positions relatively to the total population since 1891. The proportion of members of the Church of England has remained almost stationary. The Independents have decreased from 22,100 to 17,141. Protestant sects.

In 1891 the adherents of the Salvation Army were enumerated at 13,521, but they numbered only 8,830 in 1901. Salvation Army.

At the end of 1903 there were 2,701 regular churches and chapels, and 1,842 other buildings, where religious services were held—a total of 4,543 places of public worship throughout the State—attended by 1,581 regular clergymen; the denominations represented being Protestant, with 890 clergymen, and 3,716 churches and other buildings; Roman Catholic, 242 clergymen and 671 churches; Swedenborgians, 1 clergyman and 2 buildings; Catholic Apostolic, 3 clergymen and 1 building; Christian Israelites, 1 clergyman and 1 building; Spiritualists, 2 clergymen and 2 buildings; Salvation Army, 434 officers and 142 buildings; Greek Church, 2 clergymen and 2 buildings; and the Jews, 6 ministers and 6 buildings. Ministers and churches.

The Sunday schools of the various religious bodies numbered 2,767, the teachers 20,408, and the number of scholars in attendance 213,451. The number of each sex cannot be stated, as some of the denominations are unable to furnish this information. Sunday schools.

Information for 1904 is not yet available.

TECHNICAL EDUCATION.

In June, 1899, a Royal Commission was appointed to inquire into the mining, agricultural, trades, and art schools of the State, and to report as to the best methods of carrying on technical instruction in such schools; to consider the advisability of the affiliation of the mining schools with the University; to report as to the adoption in the State schools of elementary instruction in sciences pertaining to mining, agricultural, dairying, and manufacturing pursuits; and generally to recommend what means should be adopted for the better provision of a systematic course of technical instruction. The Commission was under the presidency of Mr. Theodore Fink, M.L.A. Many sittings were held, and, after the issue of five progress reports, the final report was presented in August, 1901. This report deals fully with the strides made in technical education in Germany and the principal European countries, and contains a survey of the systems in force in those countries, in the United Kingdom, the United States, Canada, Japan, the Australian States, and New Zealand. A synopsis, historical and general, is also given of the system in vogue in Victoria. Some of the principal recommendations made by the Commission are:—The establishment of State continuation schools, in view of the need for some form of preparatory education bridging the gap between the State and technical schools, the aboli- Technical education, Royal Commission.

tion of the existing local councils of technical schools, and the substitution of committees representative of the best educational thought of the localities—such committees to be represented on a General Council of Education; the establishment in the suburbs of Melbourne of classes to afford working tradesmen a knowledge of drawing, geometry, and other subjects applied to their trades; a liberal provision for scholarships; the introduction of legislation for fixing the period of apprenticeship in different trades, and for affording facilities for attending technical classes during the earlier years of apprenticeship; the appointment of skilled tradesmen to supervise and report upon the instruction afforded in trade subjects; the establishment of a Central Technical Art School to afford instruction having the widest application to the various industries of the country, and of a Technical Art Museum in connexion therewith; the establishment of systematic courses in commercial education, and of a School of Domestic Economy at the Working Men's College, and the encouragement of science teaching by the secondary schools.

TECHNICAL SCHOOLS.

Technical schools.

All the technical schools, under which name are included the Schools of Mines, Working Men's Colleges, and Schools of Art and Design, are managed by local councils elected by subscribers. The Education Department, however, retains the general direction of technical education, and decides when schools are to be opened. Regulations are issued defining the powers of the councils, allotting the Government grants, and providing for the instruction and examination of the students. In the schools of art and design, the subjects taught comprise practical geometry, mechanical and architectural drawing, perspective, model, and freehand drawing. The schools of mines, which have been established at the principal mining centres, provide both theoretical and practical instruction, not only in all the subjects in any way connected with mining pursuits, but also in the arts and sciences generally; whilst a wide range of subjects is taught at the working men's and other colleges. In 1903-4, there were altogether 17 technical schools in the State. Five of these afforded instruction in science, art, and trade subjects; five in art and science; two in art and trade; while five schools confined their teaching to art. Five schools, viz., the Working Men's College, Melbourne, and the Schools of Mines at Ballarat, Bendigo, Bairnsdale, and Stawell, are classed as certified science schools, and are eligible to receive State school exhibitioners. The schools, as a whole had, during 1903-4, an average enrolment of 3,123 pupils for each term; whilst the fees per term ranged in the different schools from 3s. to £8 15s. The Government expenditure on all the institutions in 1903-4 amounted to £16,278. Of this, £15,075 was the ordinary Government grant for maintenance, which was supplemented by £833 for miscellaneous expenditure; and £370 was for buildings, furniture, &c. The students paid in fees £11,251, and subscriptions and donations amounted to £918.

The following is a statement showing the Government expenditure on each technical school during the financial year 1903-4:—

GOVERNMENT EXPENDITURE ON TECHNICAL SCHOOLS, 1903-4.

Name.	Maintenance.	Inspection, Expenses of Examination, Apparatus, Fittings and Furniture, &c.	Total.
<i>Schools of Mines and Technical Schools.</i>			
	£	£	£
Bairnsdale	750	29	779
Ballarat	3,000	66	3,066
Bendigo	1,600	67	1,667
Castlemaine	400	..	400
Daylesford	275	..	275
Maryborough	350	10	360
Stawell	650	33	683
Kyneton	200	..	200
Sale	600	..	600
<i>Schools of Art.</i>			
Ballarat East	450	..	450
Echuca	100	..	100
Warrnambool	125	..	125
Nhill	150	..	150
Ballarat West	700	..	700
Gordon Technical College, Geelong ..	500	..	500
<i>Working Men's Colleges.</i>			
Melbourne	5,000	165	5,165
Horsham	225	..	225
Miscellaneous Expenditure ..	..	833	833
Total	15,075	1,203	16,278

SCHOOLS OF MINES AND TECHNICAL SCHOOLS.

The Bairnsdale District School of Mines was founded in 1890 for the purpose of giving instruction in such subjects as pertained to local industries. With this object in view, classes in chemistry, the principles of agriculture, metallurgical, and mining subjects, as well as drawing classes for artisans, were established. It was soon found that the metallurgical industry needed the greatest amount of attention, and in order that the school might be of real use to the community, a metallurgical plant for the treatment of auriferous and other ores was found to be necessary. This plant was erected, and has fulfilled its purpose, showing, as it did, that ores from East and North Gippsland, which were previously regarded as incapable of successful treatment in Australia, could be dealt with at the

Bairnsdale District.

school. The result has been that mines carrying refractory ore are now dealt with at a large profit. The students do all the work, and are thus trained not only in the principles, but also in the practice of metallurgy; and after having served what practically amounts to an apprenticeship for from three to four years, obtain diplomas, when they are capable of immediately taking charge of works. With the limited staff and accommodation available, it was not found possible to carry on the agricultural classes, although these, in the early days of the school, were very successful. Attention is now devoted principally to the mining and metallurgical courses, these courses having been fixed by the Education Department, which issues certificates on examination. Drawing, as far as it relates to technical subjects, is taught, and classes are conducted daily, and in the evenings for those who take up separate subjects, such as chemistry, mechanics, and mathematics. The students from the school have been very successful in after life. Many are now engaged in professional work in Victoria; others are in New South Wales, Queensland, Western Australia, Tasmania, and South Africa.

Ballarat.

This is the oldest established School of Mines in Australasia, having been founded in 1870 "to impart instruction in the various branches of science relating to mining." It was established on the initiative of the public spirited and enlightened mining men of Ballarat—the resolution of the Mining Board (dating from 6th October, 1869. After consultation with Sir Roderick Murchison—at that time of the Royal School of Mines, London—and other educational and mining authorities, the plan was decided upon which the institution was to be modelled. With the old court-house rented from the Government as a building nucleus (to which laboratories were immediately afterwards added, supported by public subscription, and assisted by a modest Government grant), the first classes assembled on 23rd January, 1871, and the school was launched upon its career. Since that date, its income, which has steadily increased, has been drawn from students' fees, public subscriptions and donations, private bequests, and an annual grant from the Government. The four-acre block which the school already possesses, centrally situated as it is, constitutes an ideal site for a mining institution. From west to east it has a fall of 60 feet, well adapted for the battery and concentration plants, whilst one corner of the ground is within a few yards of the creek, allowing of the easy disposal of tailings. The general efficiency and usefulness of the school have recently been greatly promoted by extensive additions to the buildings and plant, and numerous improvements in the chemical, metallurgical, engineering, and mining departments. In the chemical laboratories—of which there are four—provision is made for upwards of 200 students. The assay laboratory, to which four weighing rooms are attached, contains upwards of thirty furnaces. This laboratory has been fitted with an experimental steam engine and boiler, and other apparatus of the most modern form. The engineering department is well supplied with theodolites, levels, and a quantity of

other surveying apparatus. The extensive new buildings erected as a mining laboratory continue to prove of eminent value to the school, where the most advanced systems of treating free and refractory gold ores have been introduced. The primary object of this laboratory is for the instruction of students in the large scale treatment of test parcels of ore for the public. This department also contains a furnace for roasting pyrites and provision for milling, concentrating, and chlorinating, and a model mine with ample equipment. In the department of geology and mineralogy, the students have the advantage of a well supplied lecture and demonstration room, where the determination of minerals by blowpipe tests, and the examination of rocks and minerals by microscopical tests, are made. The school has always concentrated its resources and energies upon mining education, aiming to do this one thing well rather than to risk loss of efficiency through diffuseness of effort. The aim is to make the instruction eminently practical, and so to train up the young mine managers and metallurgists that by the time they leave the school they shall be prepared at all points to complete their education at the mine and metallurgical works, and thus become, with the least possible delay, capable and trusted metallurgists and mine managers. The school has, however, since its commencement, acted the part of an information bureau upon subjects connected with mining, and is at present freely consulted upon questions associated with mining engineering, metallurgy, mining, geology, electrical technology, and similar subjects. It is greatly aided in this work by its being situated not only in a thriving city, but in the centre of a large mining and agricultural district, and of an interesting geological area full of varied and instructive features. Many mining claims are within sight of the buildings, and the deep alluvial fields of Allendale and Loddon are near at hand. Quartz vein mining, shallow and deep alluvial—illustrating a wide range of treatment from primitive methods up to the most approved processes—dredging plants, chlorination and cyanide works of latest patterns, besides foundries and engineering works, are all within easy reach. Regular visits of inspection are made to these and other objects of scientific interest by the school classes. These inspections are supplemented by holiday excursions much further afield. The directorates, mine managers, and works superintendents of the district greatly assist by affording ready facilities for the inspection of their works and mines, and by engaging students who are required to complete a prescribed course of practical work—one or two years as the case may be—before they can obtain their diplomas.

The entire mining district, with its mines and works, thus constitute one vast permanent object lesson for the school's use, and an ever active source of inspiration to the student. Practice in the laboratories and workshops of the school is made a special feature of the instruction, every candidate being required to pass an appointed time in one or more of these laboratories, according to the diploma or certificate he seeks.

The school draws its students from every Australian State, and from countries beyond the boundaries of the Commonwealth, whilst

its associates and certificated students are to be found occupying important and lucrative positions in most of the mining fields of the world. A very pleasing feature is the readiness with which students obtain suitable employment in mines and metallurgical works, either as chemists, metallurgists, mining engineers, assayers, officers in charge of cyanide plants, or mining managers. The school offers instruction to all persons who shall have entered their names and paid the prescribed fees, and these persons are admitted to examination in any particular subject. In the case of students taking single subjects, or such courses as that for certificate as mine manager, or for a certificate as assayer, no entrance examination is required. Students desirous of qualifying for one or more of the associated courses are expected to have a preliminary education up to matriculation standard, and to attend all the prescribed courses of instruction, unless they can produce to the satisfaction of the Board of Examiners evidence of having attained elsewhere the degree of proficiency required in any subject or subjects. In such cases students may be excused from attendance or examination, or from both, in such subject or subjects, on a certificate from the Board of Examiners. The number of associate students—those taking a three or four years' course of special training—has been well maintained. Besides these, there are a number who have taken the assayers' course, which includes chemistry, assaying, metallurgy, and mineralogy, and is usually taken by those who cannot afford the time necessary to complete for a full associateship, or who desire to specialize in assaying. The total fees for lectures and practical work for an associate course is one hundred guineas, payable in yearly, half-yearly, or quarterly instalments.

Lectures on electricity and magnetism are given weekly to the scholars of State schools. Members of these classes, on passing a satisfactory examination, are admitted to the ordinary lecture classes of the school at a much reduced fee. The Council have now adopted a scheme suggested by the Director of Education, to train 150 of the senior boys from the local State schools.

The museum, library, and reading rooms are necessary adjuncts, and are open daily to the public. The museum, rich as it is in geological and mineralogical specimens, is of great aid to the students and to those interested in these and cognate branches of science.

The Scientific and Literary Society holds regularly, at the school, their fortnightly meetings, when highly interesting and instructive papers are read and much information given. That such a society is needed is shown by the large attendance at meetings and the interest displayed.

The Ironworkers' Association continues to hold its meetings at the school. Lectures are delivered weekly to its members and the public, and its library, containing upwards of 2,000 books, all of a scientific and technical character, is recognised as being one of the best selected scientific libraries in the State.

This school originated in 1873, as an offshoot of the local Mechanics' Institute. It was conducted as an independent institution until last year, when the two establishments were amalgamated under the control of the council of the School of Mines. The aims of the school are to impart sound instruction, chiefly in the various branches of science connected with mining operations, and to instruct students in the theory and practice of mining, in geology, mineralogy, physical geography, meteorology, in physical, natural, and applied science, electricity, chemistry, metallurgy, assaying, arithmetic, algebra, mathematics, surveying, astronomy, drawing and painting in their various branches, lithography, wood engraving, the theory and practice of the mechanical trades, modelling and carving, shorthand, telegraphy, and allied subjects, and such other subjects as may from time to time be deemed desirable by the Administrative Council. Examinations are held twice each year, and are conducted by the Education Department, Government certificates being issued to the successful candidates. Two scholarships of the value of £25 each are given by the Bendigo City Council in mining engineering and metallurgy. Five free scholarships are given by the council of the school to *bonâ fide* miners of the district in the course for mining managers' certificate. The establishment contains a large collection of casts of the figure and ornament from the Classic, the Gothic, and the Renaissance styles, and later work, together with many other objects and appliances. A reference library and reading-room contains many volumes of useful books, to which students have free access.

In October, 1887, a branch of the School of Mines was established in Castlemaine in a building which was granted for the purpose by the Government of the day. Classes in art subjects, as well as in chemistry, assaying, telegraphy, carpentry, languages, mathematics, and botany were at once commenced in a temporary school. In 1890 the permanent building was opened. Classes in metallurgy, electricity, geology, mineralogy, mining mechanics, engine-driving, surveying, shorthand, harmony, violin, elocution, physiology, and dress-cutting have since been instituted, and the instruction in art, amplified and extended. Scholarships have been founded by local residents and institutions, and are of great aid to the students. A complete cyaniding plant is being installed, and instruction in the subject has already been added to the programme. A branch School of Mines has also been formed at Maldon, teachers visiting that centre from the main institution in Castlemaine.

The Daylesford Technical School was founded in 1889, with the object of providing facilities for students to continue their school education, and removing the difficulties experienced by young miners in getting technical instruction in the various branches of their occupation. The borough council gave a building for the institution, where a commencement was at once made, a substantial new building taking the place of the old one in the course of the following year. The objects are defined as follow:—To foster and develop a knowledge of handicrafts, arts, and sciences, and all subjects

related directly and indirectly to scientific education, by the establishment of classes, workshops, laboratories, and museums. By this means the higher education is attainable in the district at a comparatively small cost.

Mary-
borough.

The Maryborough Technical School was established in 1888. The present building was opened in 1891. The number of students attending during 1904 was 106. J. La Gerche, B.A., is science instructor and registrar, and Andrew E. Anderson is art instructor. On the science side, classes are open in all branches of chemistry, metallurgy, mathematics, geology, and kindred subjects, and students enter for special courses in assaying, metallurgy, and electrical engineering. The art curriculum deals mainly with the technical side of art, and includes freehand drawing in all its branches, wood carving, modelling, machine and architectural drawing, design, &c. The school is managed by a local council, elected by subscribers of £1 1s. or over.

Stawell.

The Stawell School of Mines had its origin in 1882, when a School of Design was established by a number of citizens of Stawell enthusiastically working together and obtaining assistance from those anxious to have such an institution. The first classes were held in the Mechanics' Institute, and it was not until 1890 that the present buildings were occupied. During the interim the School of Design had been superseded by the School of Mines, in consequence of a greater demand for instruction in things appertaining to mining. Since that time there have been great alterations both in the school itself and its constitution, its work, and its success. For a number of years following 1890 it was prosperous, but when the mining industry waned the school began to lose touch with the people. It is now, however, recovering from its long quiescence, and the efforts that have been made of late years to revive the interest of the people have at last had the effect, it is hoped, of placing the school on a sound basis. The school is primarily intended to give thorough training in mining engineering and metallurgical work. A new branch of technical art work was introduced in 1904, and promises to be a success. The results achieved in the other branches during 1902, 1903, and 1904 have been very satisfactory; those in the former two years being exceptionally good.

As Stawell is essentially a mining town, this institution is of inestimable value to the people. With the other mining towns in Victoria, it is capable of much further development in regard to mining operations; and it is only by higher training in such subjects as are taught in schools of mines that hope for improvement in the direction of up-to-date methods of mining can be entertained.

Kyneton.

This school was established in 1888 by a few of the principal townsmen, who were influenced by the then prevailing wave of feeling with regard to the useful influence of technical education, and who desired to offer the younger members of the community some of the advantages which had hitherto been one of the attractions of the metropolis. They more especially desired to encourage an appreciation and cultivation of the arts and crafts; but science,

trade, and other classes have also received due attention. A large proportion of the youth of both sexes have passed through the school, and its influence has been marked in many ways. Some of the students have been enabled to occupy positions of importance where knowledge, art, and science are requisite. In the trade classes valuable work has been achieved, more especially in the engine-driving class, which has been phenomenally successful. The work of the school has always been as practical as possible, such subjects as the drawing and projection of plans of all kinds, modelling and casting, wood carving, and the necessary designing have been the most prominent in the art section. Mining men have been the principal science students, and, together with factory hands, have chiefly constituted the engine-driving class. Altogether over 100 pupils have passed through the various courses.

A School of Design was in existence in 1885, but the institution ^{Sale.} was projected on its present basis in 1889 under the title of School of Mines, Art, and Technology, which two years ago was changed to "Technical School." From its inception the management has been in the hands of the Mechanics' Institute committee, and two-thirds of the present building is used by the school classes, the remaining third being the institute proper. The old Mechanics' Institute, in which instruction was first given, was quite unfitted for the purpose in view, and in 1889 the committee resolved that an effort should be made to erect a suitable building. At a public meeting held that year, an appeal for funds resulted in a collection of £100. Induced by the interest shown, and by the promise of a subsidy from the Government, the committee erected the present commodious buildings in York-street at an ultimate cost, including site, of £5,000. To meet this outlay, the Government has contributed a building grant of £2,634, and the public, by bazaars, donations, &c., the remainder, and the building is now free of debt. The object of the school is to facilitate the attainment of a knowledge of the various handicrafts, arts, and sciences, and especially to improve the education of craftsmen and craftswomen by the establishment of classes, workrooms, laboratories, libraries, and museums. The classes are open to all who pay the prescribed fees, and pledge themselves to obey the rules of the institution. Since 1890, 835 students have been entered on the general register. The art department contains a general art and antique room, a modelling and wood-carving room, and a painting life room, with necessary appliances and accessories. Comprised in the school equipment is an extensive and costly collection of casts of ornaments, plant form, and figure from masterpieces of ancient art, the Italian Renaissance, Gothic, and French work, &c.; also a good collection of still life properties, weapons, and drapery. The subjects taught on the art side embrace engineering, drawing, architecture, perspective, geometry, building construction, industrial design, clay modelling, artistic anatomy, wood and chip carving, embossed leather work, ornamental lettering and illuminating, inlaid gesso work, freehand and model drawing, figure composition, drawing for reproduction, drawing and painting (all branches, including the life), cabinet-making, wood-turning, &c.,

and special courses for all artisans. The science department has been furnished at a cost of £1,500, and the subjects taught embrace agricultural chemistry, technical chemistry, botany, mineralogy, geology, mining geology, assaying, metallurgy, and mathematics. For 1904 the number of individual students for the whole school was 118 (72 males and 46 females), and the average attendance was 81.

SCHOOLS OF ART.

Ballarat
East.

This school, which is governed by the council of the Ballarat Public Library, has well maintained its high standard during the past year, both in the number of students and the high percentage of passes gained at the examinations held by the Education Department. The individual students for the year reached 345, and, as far as the examination results are available, out of 66 entries 61 passes have been gained, many students securing excellent results.

Echuca
Technical
Art School.

This school was originated for the purpose of educating the working classes in the various handicrafts, and in art. No record has been retained of the successes of the school, but many of its pupils have been enabled, through the instruction which has been imparted, to obtain positions of trust and responsibility. The school is also a drawing centre for training State school teachers.

Warrnam-
bool.

The Warrnambool School of Art was opened in 1883. The subjects taught are drawing, wood-carving, modelling, and life study. During the year 37 students passed through the school, and their examination results were very satisfactory. The school is of value to the State school teachers of the district, who attend on Saturdays. Several of the students have been successful in the matriculation examination of the Melbourne University.

Nhill.

The Nhill School of Art and Technical College was formed, about ten years ago, by leading residents of the district, to impart instruction in the art of drawing, painting, practical geometry, building and engineering, drawing and construction, and general designing, &c., to those far removed from centres where these very necessary subjects were taught. An average of 45 students have annually availed themselves of the benefits of the institution. In addition, the State school teachers of the district have, in recent years, been afforded special facilities of free instruction by an accredited art instructor in the subjects they are required to teach in the State schools. Amongst the local craftsmen in the building and iron-workers' trades, carriage builders, smithwrights, mill hands, signwriters, painters and decorators, &c., are many former students. Some of these are now in positions of responsibility and trust, and carrying out the practical work which they had been taught in the school. A few are in business for themselves, and are still attending the school.

The usefulness of the institution is now further enhanced by the introduction of carpentry, joiners' and cabinet-makers' work, detailing drawings, and mensuration of quantities, modelling and carving, decoration in all branches, and designing for practical purposes.

In December, 1887, proposals were submitted for the establishment of a central art training school in connexion with the Public Art Gallery. Premises were secured by the council of the Art Gallery Association in 1891, and suitably equipped with funds provided by the Government. Mr. P. M. Carew-Smyth, who had received his training at South Kensington, was appointed director, a position which he retained till 1898, when he was appointed Government art inspector of Victoria. Under his supervision the school was opened in 1891, with an attendance of 19 students, which increased so rapidly that in 1893 larger premises had to be secured. Comprised in the school equipment is an extensive and costly collection of casts, both ornament and figure, including examples of the Elgin marbles, and many full-length antiques—works of the Italian Renaissance by Michael Angelo and Donatello; Gothic and French work, &c.; a good collection of still-life properties, weapons and draperies, the nucleus of a collection of costumes of various historic periods, and every requisite for the most elementary or advanced study. A special and—in Victoria—unique adjunct of the school is its art library and reading-room, containing the standard and latest works on architecture and technology, drawing and painting, sculpture and modelling, applied art and decoration, with the leading English and American monthly magazines devoted to these subjects. Many of these works being beyond the means of the average individual student, the facilities thus afforded for their perusal are invaluable. As showing their appreciation, it may be added that, except for some little outside assistance, the library is the result of the combined efforts of the students themselves. Their subscription thereto is 1s. per term, and quarterly meetings of members are held, at which papers are read on topics of interest to art students.

The work of the school is carried out in four main divisions—one is devoted to a general course, and embraces a thorough education in art drawing, painting, and modelling; the second is a technical and applied art division, and includes not only a regular technical art course, which can be varied to suit the needs of individual students, but also special courses of instruction for painters and decorators, wood-carvers, modellers, and others; the third is an architectural division for architects and architectural draughtsmen, builders, and carpenters; the fourth division is set apart for the training of art teachers—so many students of the school having been appointed to fill positions as teachers in technical and private schools in Victoria, a special feature has been made of the work of the school in this direction. A sketching club, with junior and senior divisions, is in active operation throughout the year, subjects being given in the junior division and criticised by the director once a fortnight. Public exhibitions of the year's work are held annually, and examinations at the end of each year by the Education Department, certificates being awarded to successful candidates on payment of a small fee.

The "Art Workers' Guild," formed by students in the applied art classes, under the former director, for the execution of commissions for work in carved wood, art needlework, *repoussé*, or decorative design, has lately merged into an Arts and Crafts Society under

the auspices of the Art Gallery Association, and now numbers some 70 members. Most of its active workers are local art-craftsmen, one-third of the entire number being past or present students in the school. Monthly meetings of the society are held therein, at which highly instructive lectures are delivered by its members, accompanied by more or less practical demonstrations.

Further measures to provide for the specific requirements of local trades will be given effect to shortly, and, encouraged by past successes, the council looks forward with confidence to a marked and growing extension of the popularity and practical usefulness of the institution, and a wider recognition of its inestimable value to the community in the near future.

GORDON TECHNICAL COLLEGE.

Gordon
Technical
College,
Geelong.

The idea of establishing a technical college in Geelong was first taken up early in 1885 by a few citizens, who were stimulated to adopt a more extensive system of technical instruction than that hitherto in operation at the local School of Design, the very limited means of which naturally hampered the prospect of anything further than the drawing classes being thought of. About this time the lamentable news of the death of General Gordon came to hand, and this was thought to be a favorable opportunity for the erection of a fitting memorial in his memory, and the establishment of a much-needed institution. In November, 1887, the first portion of the building was opened, and before the end of the following year operations were commenced for further additions, which have been added to from time to time, the total expenditure to date being £9,234.

The college, which stands in Fenwick-street, Geelong, occupies a central position, both for town and country students. The subjects included in the time-table are—Freehand and model drawing and decorative design, perspective, geometry, painting, oil and water colour, architectural drawing and building construction, artisans' drawing, mechanical drawing, applied mechanics, steam engines, engine-driving, galvanism and electricity, chemistry, mathematics, modelling, wood-carving, carpentry and junior carpentry, plumbing, wool-sorting, dressmaking, commercial course (embracing arithmetic, bookkeeping, writing and correspondence, typewriting, shorthand), elocution, cookery, and French. From this it will be seen that the curriculum includes classes for art, science, trade, commerce, and domestic economy. A leading feature of the work of the institution is the trade classes. A large sum has been expended in providing accommodation for these classes, and the council has met with great encouragement in so doing. The local Builders' and Contractors' Association endow four scholarships per annum for trade classes, and within recent years have devoted special attention in the matter of encouraging apprentices to attend the school. The same can be said as regards other sections of the building trade. The value of the institution to apprentices to the engineering trade is evidenced by the large number

attending the classes bearing on engineering. The engineering firms of the town, it is pleasing to note, make it compulsory for their apprentices to attend certain of the classes. The chemistry department of the institution is largely used by employes connected with the various manufacturing industries of the town and district, and the value of this class is being recognised by proprietors of such industries. Perhaps one of the most important classes in connexion with the institution is that of wool-sorting. A special building was recently erected for conducting this class, full facilities being provided for practical work in wool-sorting and classing and wool-washing. Students are drawn from all over the State.

The total enrolments for the various subjects for 1904 were 1,174; an average of 293.5 per quarter. The total number of individual students for the year in question was 401, the fees received totalling upwards of £485, and the subscriptions from the public £61.

The following is the expenditure to date in connexion with the building, &c.:—Cost of building, £9,235; furniture and apparatus, £1,266; payments to instructors, £7,799. Total receipts to hand are as follows:—Subscriptions, £2,902; fees from students, £5,435; general receipts, £1,811. Government grants to date are as follows:—Building grant, £6,685; appliances, £31; subsidy, £8,605; general, £4.

THE WORKING MEN'S COLLEGE, MELBOURNE.

The Working Men's College is a technical institution and school of mines, founded in 1887. It is open to all classes and both sexes, and supplies high-class instruction. Its revenue is obtained from students' fees, supplemented by a Government grant. Working Men's College, Melbourne.

All fees are payable in advance, and no refund is allowed. Fees.
 Students under 18 years of age, and those under 21 in receipt of less wages than 25s. per week, and indentured apprentices, are admitted at reduced fees to many of the classes. Examinations are held in July and December, and entrance to these examinations is free to students of the college attending the classes in which they present themselves for examination, provided they have made the necessary attendances.

FEES PAYABLE.

Subject.	Fee.
Mechanical, Electrical, Marine, and Mining Engineering—	
First year	£5 per term
Second year	£6 "
Third year	£8 "
Metallurgy—	
First year	£5 "
Second year	£6 "
Third year	£8 "
Applied Chemistry—	
First year	£5 "
Second year	£6 "
Third year	£7 "
Fourth year	£8 "

FEES PAYABLE—*continued.*

Subject.	Fee.
Arithmetic	} Various amounts ranging from 3s. upwards per term.
Algebra	
Practical Geometry	
Freehand Drawing	
Architecture	
Applied Mechanics	
Applied Electricity	
Building Construction	
Woolsorting	
Chemistry	
Cookery	
Millinery	
Dressmaking	
Mechanical Drawing	
Science, Art, Trade, Commercial, and Mining, and numerous other Subjects	

Prizes. Special prizes are awarded to students annually. The Magee prize is of the annual value of £3, and is awarded to the student who obtains highest marks at examination in the work of the senior mechanical drawing class. The Sir George Verdon prize is of an annual value equal to the interest on the amount of the donor's endowment of £210, and is awarded for excellence of design and workmanship in any technical or trade subject. The Turri prizes, awarded for original inventions of students, consist of one prize of £10 10s., two prizes of £5 5s., and five prizes of £1 1s. each. The Government grant in 1904 was £5,000, together with a sum of £165 towards inspection, examination, apparatus, &c.

By F. A. Campbell, Esq., Director.

Over 100 classes are held in the following departments:—Commercial, Elocution and Music, Mathematics, Engineering, Architecture, Chemistry, Mining and Metallurgy, Photography, Art and Applied Art, Rural Industries, Household Economy, and Trade Courses. The work is divided into—(1) day courses, and (2) evening courses and classes. In the day courses the lower technical school prepares for the higher technical school, and also gives boys after they have left school a course of practical training, fitting them to enter intelligently on any line of industrial work. The higher technical school prepares students for the higher positions of industrial life, and has the following complete courses:—(1) Mechanical Engineering, (2) Electrical Engineering, (3) Marine Engineering, (4) Mining Engineering, (5) Sanitary Engineering, (6) Municipal Engineering, (7) Metallurgy, and (8) Applied Chemistry. To students who complete any of the above courses, pass the necessary examinations, and produce evidence of having obtained twelve months' approved practical experience, the Diploma of "Associateship" of the College is issued.

In the evening school, the following courses are in operation for Experts' Certificates:—(A) carpenters, (B) fitters and machinists, (BA) marine engineers, (C) cabinet-makers, (D) plumbers, (E) house decorators, (F) modellers and terra cotta workers, (G) lithographic

artists and draughtsmen, (H) photographers, (I) electricians, (J) assayers, (K) geologists, (L) metallurgists, (M) municipal engineers, (N) commercial, (O) wool. The following figures indicate the comparative amount of work done at the college during the years 1900 to 1904:—

STUDENTS AT WORKING MEN'S COLLEGE, 1900 TO 1904.

	1900.	1901.	1902.	1903.	1904.
Students enrolled—					
Average per term	2,100	2,162	2,364	2,182	2,239
Males over 21	482	564	455	437	417
" under 21—Apprentices	127	146	147	145	166
" " Others	949	979	1,164	1,135	1,182
Females	542	473	598	465	474
Fees received during the year £	5,396	6,236	7,485	7,050	7,288
Average fee per student	51s. 3d.	57s. 8d.	63s. 8d.	65s. 7d.	65s. 1d.
Number of classes	134	156	161	163	167
" instructors	49	51	53	55	58
Salaries paid instructors	£ 5,408	6,106	7,479	6,392	7,512

HORSHAM WORKING MEN'S COLLEGE.

This college was founded in 1890, and met first in the State school, and afterwards in the hall at the Mechanics' Institute. In 1894 the present building—a roomy wooden structure—was erected at a cost of £820, £200 of which was raised locally. In addition to the main building, there is an outer building, containing the carpenter's workshop, a potters' kiln, gas generating plant and apparatus. The late Dr. Young, who was for years president, was untiring in his efforts to promote the welfare of the college, which he liberally supported. From the time of its initiation until his death he conducted the chemistry classes. When the college was first inaugurated, classes were held in arithmetic, bookkeeping, botany, chemistry, French, German, music, pottery, shorthand and telegraphy, in addition to the science subjects. The latter was abandoned when the subsidy for science subjects was withdrawn by the Government.

The present director, Mr. J. R. Tranthim-Fryer was appointed in June, 1904, since when the work of the college has been conducted on similar lines to the up-to-date technical colleges in the old world, where he was trained.

There are now over 100 students on the rolls, and the subjects taught include geometry, perspective, freehand and model drawing, painting in oil and water colours, modelling, moulding, and casting, *repoussé* work, wood carving, architectural and mechanical drawing, and drawing in black and white for reproduction. In addition to these, there are classes in typewriting and shorthand, carpentry, and dressmaking, all well attended. Classes for cooking, bookkeeping, and wood-turning are in course of formation. A photographic club is attached to the college, and demonstrations in printing, toning, and enlarging are given, and are well attended. A teachers' drawing class is held on Saturdays, which any teachers in the district may attend free of charge.

Horsham
Working
Men's
College.

LIBRARIES.

PUBLIC LIBRARY OF VICTORIA.

Public
Library of
Victoria.

The buildings of the Public Library, Museums, and National Gallery of Victoria cost £218,357. These funds were provided by the Government, as also were further moneys expended on maintenance, amounting, with the sum just named, to a total of £1,008,801. At the end of 1904 the library contained 156,237 volumes. It is open to the public without payment on week days (Christmas Day and Good Friday excepted), between the hours of 10 a.m. and 10 p.m., and on Sundays from 2 p.m. to 5 p.m., and was visited during the year by 356,162 persons. The Library consists of three distinct sections, viz.:—The Library, the Lending Library, and the Country Lending Library. The librarian reports that 4,616 volumes were purchased, 1,906 volumes presented, 215 volumes obtained under the "Copyright Act," and 41,773 newspapers were added to the Reference Library during the year. The Lending Branch, which is also free to the public, issued 181,325 volumes during 1904, and the number of persons to whom the books were lent was 8,731. Of these volumes, 60 per cent. related to fiction, 13·8 to history, 6·9 to general literature, 10 to religion, philosophy, natural science and art, 6·5 to arts and trades, and 2·8 per cent. to social science. The number of volumes in the Lending Library at the end of 1904 was 21,546, of which 1,029 were added during the year.

Following on the establishment of the Melbourne Public Library, libraries were founded in many of the larger urban towns. The attention of the original trustees of the Melbourne Library was directed to these institutions, and to the vast number of people whom the distance prevented from reaching the building. They, therefore, established a scheme by which the larger country centres should have the benefit of the collection, and forwarded cases of books on loan for fixed periods. To the country towns of less importance cases were also sent, and in many instances the nucleus of a local library was thus formed. This travelling library system, as it is called, thus greatly stimulated the library movement in those places where it had begun, and inaugurated it in many places to which as yet it had not spread. At the present time loans are made up to 300 volumes at a time to the committees of free libraries and mechanics' institutes, and to the councils of municipalities, for a period of one year, with a further extension of time if required. The books are selected with a view to meeting the special requirements of the district to which they are to be forwarded, publications on mining being sent to mining centres, and those relating to agricultural and pastoral pursuits to those districts where these industries are carried on. Although this scheme is now in operation in many countries, research among library records does not reveal the existence of anything similar prior to its establishment in Melbourne, so that the credit of starting it seems to belong undoubtedly to the original trustees of our library. Many of the local libraries are now in a position to supply all the wants of their patrons without having recourse to these loans.

The National Gallery at the end of 1904 contained 17,530 works of art, viz., 466 oil paintings, 3,493 objects of statuary, &c., and 13,571 water colour drawings, engravings, photographs, &c. It is open from 10 a.m. to 5 p.m. daily on week days (Christmas Day and Good Friday excepted), and on Sundays it is open from 2 p.m. to 5 p.m. The school of painting in connexion with this institution was attended in the year by 6 male and 17 female students, and the school of design by 24 male and 58 female students. The students are encouraged to paint original works, by which means it is hoped the foundation may be laid of a school of art of purely Australian subjects.

National Gallery.

The Industrial and Technological Museum adjoins the National Gallery, and was opened on the 7th September, 1870. At the end of 1904 it contained 55,208 specimens. It is open from 10 a.m. to 5 p.m. daily on week days (Christmas Day and Good Friday excepted), and on Sundays from 2 p.m. to 5 p.m.

Industrial Museum.

The collection in the National Museum, formerly kept in a building situated on the grounds of the Melbourne University, is now located in the Public Library Buildings. It comprises natural history, geology, and ethnology. The National Museum is open to the public free of charge on all week days throughout the year, except Thursdays, Christmas Day, and Good Friday, from 10 a.m. to 5 p.m., and on Sundays from 2 p.m. to 5 p.m. In 1904 the expenditure for specimens, furniture, material, &c., was £528. The payments for salaries and wages during the year amounted to £2,153.

National Museum

SPECIAL LIBRARIES.

There is a free library attached to the Commonwealth Patent Office, Melbourne. This contains about 7,500 volumes, consisting of the patent records of Great Britain, Victoria, New South Wales, South Australia, Queensland, New Zealand, Canada, the United States, France, Italy, Germany, &c., and other works relating to Science, Patents, and Trade Marks. The approximate value of the books is £3,500. The library is open to the public on each week day, except Saturday, between the hours of 10 a.m. and 4.30 p.m., and on Saturday from 10 a.m. until noon.

Patent Office Library.

The Supreme Court Library at Melbourne has eighteen branches in the assize towns. It is free to members of the legal profession between the hours of 9 a.m. and 4 p.m., except on Saturdays, when it closes at noon. It is supported by fees paid under Acts of Parliament and rules of court for the admission of barristers and attorneys.

Supreme Court Library.

FREE LIBRARIES.

Most of the suburban and country libraries were in the habit of receiving Government aid up to 30th June, 1903. Of these, twenty-five are situated within 10 miles of Melbourne, and the remainder are to be found in the most important country towns throughout the State. The conditions under which the Government subsidize these institutions are as follow:—

Free Libraries.

Any of these institutions claiming to participate in the grant must be a free library solely, or a free library combined with a mechanics'

institute, athenæum, or country museum, as the case may be, or a country museum solely; but strict compliance is required with the following regulation:—"That where the free library is part of or connected with a mechanics' or other institution all the books of such institution or all the articles in the museum, as the case may be, are to be available to the public in the free library or museum on all occasions when they are available to subscribers."

Grants are allotted for four purposes:—(1) Reduction of debt, (2) building, (3) books, and (4) maintenance.

(1) "Reduction of debt" will be the reduction of the existing debt of any institution.

(2) "Building" will comprise the erection of or repairs to and painting of buildings, fencing-in of the land, and providing furniture.

(3) "Books" will comprise the purchase of books, periodicals, and newspapers, and the binding of the same.

(4) "Maintenance" will comprise salaries, fuel, light, water, cleaning, and incidental expenses, but not more than thirty-three per centum of the total revenue (including the grant in aid) of any institution shall be expended under this head without the special permission of the Chief Secretary.

No institution shall receive from the grant more than the sum of £20 a year.

During the year 1903-4 no provision was made by the Government for the purpose of aiding the funds of these institutions. At the end of the year, however, the Treasurer found himself in possession of a revenue surplus, out of which £3,000 was distributed amongst 324 libraries for the year 1904-5. Under an Appropriation Act, further sums of £1,000 for building, and £1,000 for general purposes, are provided, but these amounts are not yet distributed.

An effort has been made to obtain from each of the libraries throughout the State, a classified list of its books. Returns, however, have only been received from 265 libraries; but these serve to indicate fairly well the class of literature in general use by the public for reading and reference. The information received is tabulated as follows:—

	Volumes.
Fiction	313,414
History (including Philosophy, Social Science, and Economics)	26,099
Biography	14,661
Travel	17,319
Poetry and the Drama	8,680
General Literature	56,663
Theology and Religion	6,877
Natural Science	12,273
Fine Arts	2,028
Arts and Trades	5,788
Periodical Literature	7,626
Total number of volumes	471,428

It thus appears that works of fiction are on the shelves of the free libraries of the State, to the extent of 66·5 per cent. ; historical works, 5·6 per cent. ; biography, 3·1 per cent. ; travel, 3·7 per cent. ; poetry and the drama, 1·8 per cent. ; general literature, 12·0 per cent. ; theology and religion, 1·5 per cent. ; natural science, 2·6 per cent. ; fine arts, 4 per cent. ; arts and trades, 1·2 per cent. ; and periodical literature, 1·6 per cent. ; thus showing that the stock of books of fiction in country libraries approximates to the issue of the same class of works through the lending branch of the Melbourne Library.

This library was established in 1878, on a site situated at the corner of Sturt and Camp Streets, which was at the time occupied by the Mining Board, the District Mining Surveyor, and Registrar of Births and Deaths. These officials were, however, compensated by the founders of the library to the extent of £600. With the aid of donations from some of the citizens, gifts of books from others, and loans of books from the Melbourne Public Library, the Committee were enabled in course of time to thoroughly establish the institution. In 1901-2, a sum of £3,000 was expended on a new library and reading-rooms. The total cost of the buildings including repairs up to the 31st December, 1904, was £7,151. During the year 1904, the Government grant was £25 ; the municipal grant, £50 ; private contributions, £192 ; and from all other sources, the sums received amounted to £498. The library now contains 9,280 volumes on science, history, travels, and other subjects, besides a supply of reviews, magazines, and newspapers of Great Britain and the Commonwealth. The number of visitors during the last twelve months was 24,500. Further important additions and improvements are now in contemplation whereby the general usefulness of the institute will be greatly enhanced.

City of
Ballarat
Free
Library.

This institution was established in 1863 by a number of the prominent citizens of Ballarat, and since that time its progress has been most satisfactory. It is governed by a president and fifteen members of council. With assistance from the Government, town council, and local residents, very fine premises have been erected for the use of the general public. The library, which is open from 9 a.m. to 9 p.m. daily, except Sundays, contains 17,098 volumes, and adds to its stock about 300 new works each year. It is also liberally supplied with the most important newspapers and periodical literature. Its progress during the past twelve months has been satisfactory, and it is gratifying to note that the public appreciate the facilities which it offers. The card system for issuing books to subscribers was adopted in May last, and has proved very successful, not only in the saving of book entering, but in cost. Three hundred and sixty-two new books in every department were added to the library during the year. The total cost of the buildings to 31st December, 1904, was £10,998. For the year 1904, £25 was received from the Government, £125 from the municipal council, £94 by private contributions, and £113 from all other sources. The number of visits paid to the library during the year was 30,000.

Ballarat
Public
Library.

Castlemaine
Free
Library
and
Mechanics'
Institute.

This institute was established on a very small scale in 1855, but from that time onward it has continued to make steady and satisfactory progress. Up to the end of 1904 the buildings erected cost £5,004. For additions to the Hall, which is used for general entertainments and meetings, accommodating 600 persons, a sum of £1,100 has been borrowed. There are at the present time 250 subscribers to the institution, which contains suitable and commodious reading and other rooms for the use of the general public, well equipped with books on various subjects, numbering at the end of the year 9,910 volumes, also magazines, newspapers, and illustrated papers. The income for the year from all sources was £439, the expenditure £405. The total number of visits was 25,000.

Geelong
Free
Library
and
Museum.

The Geelong Free Library and Museum is located in a handsome building, originally built as the Chamber of Commerce at a cost of about £20,000. It was purchased in 1876 from that body for £3,200, for the purposes of the library and museum, which, as an institution, had been in existence since 1854. The total cost of buildings to date was £5,263. It has been mainly supported by residents of the town, and amply supplies all requirements. The average daily attendance is about 450. The library contains 5,715 books, comprising works of fiction, poetry and the drama, educational, scientific, geological, religious, biographical, classical, and other works, together with daily, weekly, and monthly publications. The museum contains an interesting collection of geological and mineralogical specimens, native weapons, and objects of natural history. In the art gallery are several excellent oil paintings, which add largely to the attraction of the institution. In 1904 the receipts were £185, and the expenditure £190.

Sandhurst
Mechanics'
Institute
and Free
Library.

This institute was established in 1854. It consists of two sections—the public and lending libraries—which are open to the public daily from 10 a.m. to 10 p.m. There is connected with it a reading-room for members of either sex, also a special reading-room for ladies. The library contains about 11,000 volumes, and a liberal supply of periodical literature is kept up to date. The cost to date of building, &c., is £10,131. The institute is maintained by members' subscriptions, grants by the City Council, rents, and a subsidy from the Government, amounting altogether to £251. The institute has now been taken over by the Bendigo School of Mines, the council of which is carrying on both the subscribing and the free libraries as heretofore.

Stawell Free
Library
and
Mechanics'
Institute.

This library dates its origin as far back as 1858, when the inhabitants of the Reef, Pleasant Creek, opened a building for the purpose of a mechanics' institute, circulating library, and reading room, which served the needs of the people until 1866, when it was destroyed by a fire. It was replaced by a two-story structure, which, in addition, provided space for lodge and lecture rooms. This building was burnt in 1875, and replaced by the structure now known as the Stawell Free Library and Mechanics' Institute, the cost of which was about £4,000, and at the present time there is upon it an outstanding debt of £500. The library contains 6,500 volumes

of various classes of literature, and is well supplied with newspapers, magazines, journals, and illustrated papers. The institute is managed by a committee of sixteen, six members being elected each year by the public, and six by the subscribers for the same term; three being trustees or permanent members of the committee, and the Mayor of Stawell is, *ex-officio*, its president. The receipts during 1904 were £397.

In October, 1853, a public meeting was held at Warrnambool for the purpose of petitioning the Government to reserve a block of land for the purposes of a mechanics' institute building site. The site then obtained was given up some years later, and that upon which the building now stands was obtained in its stead. It was not, however, until after the lapse of some years, in August, 1871, that the committee were in a position to erect buildings thereon. In this year a reading-room was erected, at a cost of £340, and in the September of the following year four additional rooms were added. In 1885, a large art gallery and museum was added, and opened free of all encumbrance, the total cost of the building to date being £3,307. Valuable works of art, curiosities, and historical relics were gradually collected by the curator. In 1889, the museum was transferred to the town council, which body removed the collection to the old court-house building, thus leaving the hall free for works of art, many of which were purchased at the Melbourne Exhibition of 1888. Though not quite free from debt, the position of the institution is fairly satisfactory. It comprises a large reading-room furnished with the leading newspapers and magazines; a library, containing over 7,000 volumes; an art gallery, and school of art.

Warrnambool
Mechanics'
Institute
and Free
Library.

EXHIBITION BUILDINGS.

The Exhibition Buildings, which are situated in the Carlton Gardens, Melbourne, when first opened, in October, 1880, occupied a total space of 907,400 square feet. The original cost of the permanent structure was £132,951, of the temporary annexes, £83,111; gardens, £18,481; machinery, £5,715; organ, £5,560; and miscellaneous expenditure, £547—making a total of £246,365. After the close of the exhibition, on the 30th April, 1881, the annexes were removed, and the permanent building was vested in trustees. Another exhibition was opened in the building on the 1st August, 1888, to commemorate the hundredth anniversary of the foundation of the first Australian Colony. On this occasion, a further sum of £125,178 was expended upon the re-erection of the annexes; £30,986 upon additions, alterations, and decorations to the permanent building; £4,854 upon the gardens; £16,471 upon machinery; £77,128 upon electric lighting; and £8,337 upon gas and gas fittings—making a total of £262,954. At the close of the exhibition, there was realized from the sale of various materials, including temporary annexes, a sum of £56,904. The property again reverted to the trustees, who report, for the year 1904, that all the buildings are in a good and substantial condition, the gardens well maintained, the oval improved, the aquarium and insectarium museums extremely useful, both from educational and

Exhibition
Buildings,
Aquarium,
and
Museum.

scientific points of view. The receipts for the year amounted to £6,746, consisting of an advance from the Treasury of £300; rents, £1,722; and aquarium and other receipts, £4,724. The expenditure totalled £4,669, viz., £2,465 for wages, advertisements, feed, live stock, and miscellaneous items; and £2,204 for maintenance and improvement of the building and gardens, insurance, and sundry expenses. The deposits and balances in banks to the credit of the trust amount to £2,116.

THE MELBOURNE BOTANIC GARDEN.

Botanic
Garden.

The Melbourne Botanic Garden is situated on the south side of the River Yarra, and is at a distance of about a mile and a half from the city. The area of the garden proper, including lawns, groups, &c., is 88 acres, whilst that of the lake, including the added elbow, or bend of the River Yarra, amounts to 12 acres in addition. This now historic garden, together with the Government House grounds (62 acres), and the Domain (150 acres), comprises a total of 312 acres. The facts as to the commencement and progress of the establishment, having been compiled from the most reliable sources, are to be found in the new illustrated "Guide Book," as published by the Government Printer in 1901-2, from which the accompanying quotation has been taken:—

"The first site chosen for a Botanic Garden was an area of 50 acres, near to where the Spencer-street railway station is situated, and was selected by Mr. Hoddle, Surveyor-General, in 1842. Afterwards various other localities were proposed, but finally, owing mainly to the discrimination and taste of the Hon. Charles Joseph La Trobe, first Government Superintendent (afterwards Lieutenant-Governor) of the province of Port Phillip, a portion of the present site was decided upon for the purpose. In September, 1845, Dr. Nicholson presented a petition, signed by three or four hundred of the citizens, headed by the Mayor, praying for the immediate establishment of the Botanic Garden, and the sum of £750 was thereupon voted—1845-6—for its maintenance. The first superintendent, or curator (Mr. John Arthur), was appointed 1st March, 1846, and he at once fenced in a 5-acre paddock, that portion of the gardens at present known as the Anderson-street Lawn, sloping towards the tea-house on the edge of Lake, in which he made good progress both as to cultivation and planting. Mr. Arthur, however, whose labours were much appreciated at the time, died in January, 1849. Mr. John Dallachy succeeded Mr. Arthur as curator, and insured such good results that, at the end of 1851, a progress report submitted to the Legislature showed that, in addition to an extension of cultivated ground, many kinds of exotic plants had been added to the collection, and also that the native vegetation had received attention. The various shows of the Horticultural Society were at that time held in the gardens. For several years prior to the retirement of Mr. Dallachy, a scientific arrangement of plants in a part of the gardens was undertaken by the then Government Botanist, Dr. Ferdinand Mueller (subsequently Baron Sir F. von Mueller), who had accompanied the Gregory Expedition in search of Leichhardt, the explorer. After the Baron had received the appointment as Director (1857), Mr. Dallachy was re-employed for several years as a collector of seeds and herbarium specimens for the gardens, and discovered many new and beautiful species in Queensland. The Baron held office as Director until 1873, when, with the view of enabling him to give undivided attention to his scientific labours as Government Botanist, he was relieved of control of the Botanic Gardens, and Mr. W. R. Guilfoyle was appointed to the position. Since 1873 the gardens have been entirely remodelled by him and their area extended by more than 30 acres.

The present features of the garden are its extensive undulating lawn areas and broad sweeping paths with varied groupings and marginal beds of ornamental trees, flowering shrubs, and useful plants. Large specimens of Australian and exotic trees and other vegetation are effectively disposed about the grounds. At suitable spots, rockeries and mounds have been formed and planted. Along the western and southern boundary fence an interesting plantation of Australian vegetation has been made, which contains many hundreds of representative trees and shrubs of the Continent.

When the present Director took charge of the gardens, about 2,500 species of plants were growing there, and these, having been added to during the past 30 years, now represent no less than 14,000 species. Many of the most valuable additions are large palms in great variety, arborescent and other ferns—as for instance, those in the rather extensive “Gully,” which has a thousand feet of winding pathway running through its centre. There are, besides, hundreds of rare ornamental and utilitarian plants, and a large collection of medicinal herbs.

An extensive “System Pavilion” was also formed, the plants all in large pots, classified in their natural orders, and, like the various collections in the outer grounds, conservatory, &c., have labels attached—giving both their scientific and common names, their orders, native countries, &c.

The “Museum of Botany and Plant Products” established by Mr. Guilfoyle contains many thousands of fully-named herbarium specimens; seeds in their seed vessels (or pods), fibres, and woods; products of food, medicinal, and other plants. Both the system pavilion and museum are largely visited by students connected with botanical classes in colleges and schools.

The grounds are almost encircled by a much-used carriage way, which, having been inter-connected, comprises the Alexandra Avenue and the South Yarra Drive, and now makes one wide promenade of $2\frac{3}{4}$ miles in length. Adjacent to the two entrances from the Alexandra Avenue, and on one of the highest points, close to Government House, has been erected a large domed structure with ten columns, which is known as the Temple of the Winds. This has been dedicated by the Director to the memory of the Hon. Charles Joseph La Trobe, the first Governor of Victoria, who selected the site for the Botanic Gardens in 1845-6. The Temple is very attractive to visitors, as from it, very fine views of the Gardens, Yarra Improvements, City, Eastern Suburbs, and the Dandenong and Healesville Ranges are to be obtained.

It will be seen by the facts quoted that the Melbourne Botanic Garden has now had an existence of 60 years, and as a favorite resort has become increasingly popular, being attended by many thousands of people on Sundays and holidays, whilst being on week days much used by citizens and others, including visitors from other States, Colonies, &c., Great Britain, and other countries.

The gardens of the Zoological and Acclimatisation Society of Victoria are situated in the centre of Royal Park, on the northern side of the city, distant nearly two miles from the Post Office,

Zoological
and Acclimatisation
Gardens.

and can be reached by the tramcars starting every few minutes from the lower end of Elizabeth-street, or by rail. The ground enclosed contains 50 acres, rather more than half of which is laid out as a zoological garden and the rest in deer paddocks, and are admittedly the finest zoological gardens in Australia. The present director of the society is Mr. D. Le Souëf.

ROYAL HORTICULTURAL SOCIETY OF VICTORIA.

By W. R. Church, Esq., F.R.H.S.V.

The initiation and progress of the horticultural interests in this State may justly be considered as due to the efforts of this society, which, as the Horticultural Society of Victoria, was started in the year 1849. Its pioneer members have by this time all passed away, but there remain a few who were members of the society in the early fifties and whose interest in the work of popularizing the growth of plants, flowers, and fruits still manifests itself.

Some few years after its establishment, the society undertook the responsibility of forming and maintaining experimental gardens at Burnley—the park of which it formed a part being known as Survey Paddock—and Mr. Clarkson was intrusted with the direction of the work, acting for many years as honorary director. Upon his resignation in 1882, Mr. George Neilson took charge as curator and remained in that position until his much lamented death a few years ago. During all this time, the society was rendering most valued assistance to growers, especially in the establishment of the most complete and reliable type collection of fruits ever seen in Australasia. Horticulturists from all parts of Australia and New Zealand readily availed themselves of this magnificent collection in order to settle disputed questions of nomenclature of fruits, as very great pains were taken to insure absolute correctness of name of every variety planted among the collection. In 1885, Her Majesty the late Queen Victoria issued the warrant for the society to use the name of "Royal," and it has since worked under the full title of Royal Horticultural Society of Victoria.

The years of depression following the crash of the land boom had their full effect on the society, many of the most liberal donors to its funds being compelled to relinquish the financial support they had in past years generously accorded the committee. In 1891, the Government of the day undertook the establishment of a School of Horticulture, and the balance due to debenture-holders on the handsome show pavilion erected in the gardens having been paid by the Government, the estate was handed over to the management of the Department of Agriculture, Mr. Neilson continuing as curator under the direction of a Board of Horticultural Advice to whose personnel the Government appointed three, the society three, with the Secretary of the Department of Agriculture as Chairman. This arrangement worked with the utmost satisfaction until the death of the curator. Some years after that event, the Minister made a new departure by dissolving the board and placing the School of Horticulture under the sole auspices of the Department.

Since relinquishing the sole control of the Gardens, the society has set itself the task of giving instruction by means of lectures and exhibits at monthly meetings of members, and by imposing fruit and floral displays, all of which attract large attendances.

The President of the society is the Hon. William Anderson, of Southern Cross, in the Koroit district. He has held the position uninterruptedly for the past twenty years, which is sufficient to indicate the warm attachment of the members to one who bears the honored name of the "Grand Old Man of Horticulture."

The membership subscription is low enough (10s. per annum) to be within the reach of all lovers of horticulture, and as a consequence the list of members is an encouraging evidence of the society's popularity.

The business of the society is vested in a committee, consisting of the president, two vice-presidents (one amateur and one professional), an honorary treasurer, and sixteen members (eight amateurs and eight professionals), the administrative work being conducted by the secretary, Mr. W. R. Church, at offices in Prell's Buildings, corner of Collins and Queen streets, Melbourne.

There are 27 other horticultural societies in the State, situated at Ballarat, Bendigo, Castlemaine, Kyneton, Mildura, Terang, Traralgon, Warrnambool, and other centres. The Government provided £251 in aid of these associations during the year ended 30th June, 1904. Other Societies.

METROPOLITAN PUBLIC RESERVES.

Greater Melbourne is amply supplied with public reserves and parks, the total area devoted to such purposes being 5,331½ acres in 1904, as against 5,226 in 1899. The following list of these reserves, together with a statement of their respective areas, has been supplied by the Lands Department:— Public reserves in Greater Melbourne.

AREA OF PARKS AND GARDENS IN MELBOURNE AND SUBURBS, 1904.

Municipality.	Name of Reserve.	Area.
		Acres.
Melbourne City	Royal Park	425
"	Yarra "	155
"	Prince's "	97
"	Fawkner "	102
"	Flinders "	17
"	Park (Model Farm)	81
"	Botanic Garden and Domain	178
"	Zoological "	55
"	Carlton "	63
"	Fitzroy "	64
"	Spring "	21
"	Flagstaff Garden	18
"	Argyle Square	3¼
"	Curtain "	3½
"	Darling "	2
"	Lincoln "	3¼

AREA OF PARKS AND GARDENS IN MELBOURNE AND SUBURBS,
1904—continued.

Municipality.	Name of Reserve.	Area.
		Acres
Melbourne City ...	Macarthur Square	1
" ...	Murchison "	1
" ...	University "	3½
" ...	University Grounds	106
" ...	Friendly Societies' Grounds	25
" ...	Industrial Schools and Board of Health Depot	47
" ...	Melbourne Cricket Ground	9½
" ...	East Melbourne "	7
" ...	Scotch College "	7
" ...	Richmond Cricket Ground	6
" ...	Carlton "	5
" ...	Parliament Reserve	10
" ...	Ornamental Plantations	5
" ...	General Cemetery	101
" ...	Old Cemetery	8½
" ...	Military Parade Ground	5
" ...	Recreation (Brown's Hill)	7½
North Melbourne Town ...	Recreation	9½
Fitzroy City ...	Edinburgh Park	34
" ...	Recreation	7
Collingwood City ...	Mayor's Park	6
" ...	Recreation	7
" ...	Darling Gardens	16
" ...	Victoria Park	10
Richmond City ...	Richmond Park	156
" ...	Horticultural Gardens	33
" ...	Barkly Square	7
" ...	Municipal Reserve	7½
Northcote Town ...	Jika Park	5½
" ...	Recreation	7
South Melbourne City ...	Albert Park (part of)	464
" ...	St. Vincent Gardens	7½
" ...	Ornamental Plantations	2½
" ...	Cricket and Recreation (Warehousemen's)	8
Port Melbourne Town ...	Cricket Ground	7½
" ...	Park and Garden... ..	58
" ...	"	2
" ...	Ornamental Plantations	17
Prahran City ...	Toorak Park	7
" ...	Victoria Gardens	4
" ...	Gardens (Grattan-street)	2
St. Kilda City ...	St. Kilda Gardens	16
" ...	Albert Park (part of)	106
" ...	Recreation (Point Ormond)	54
" ...	"	1½
" ...	"	4½
" ...	"	11
" ...	"	15½
" ...	" Dandenong Road	22½
" ...	Cemetery	20
Brighton Town ...	Elsternwick Park	85
" ...	Recreation (Elsternwick)	14½
" ...	Beach Park	67
Essendon Town ...	Recreation	10½

AREA OF PARKS AND GARDENS IN MELBOURNE AND SUBURBS,
1904—continued.

Municipality.	Name of Reserve.	Area.
		Acres.
Essendon Town ...	Recreation	5½
" ...	Agricultural Society's Yards	30
" ...	Queen's Park	22
" ...	Water Reserve	11½
Flemington and Ken- sington Borough	Race-course	301
" ...	Recreation	5¾
Hawthorn City ...	"	15
Kew Borough ...	Studley Park	203
" ...	Lunatic Asylum	384
" ...	Cemetery	31
" ...	Recreation	16
Footscray City ...	Public Gardens and Recreation	10½
" ...	"	2¼
" ...	Cricket Ground, &c.	5¾
" ...	Recreation (Yarraville)	5
" ...	" (Footscray West)	15
Williamstown Town ...	Park	36
" ...	"	20
" ...	Recreation	9¾
" ...	Beach Park	20
" ...	Cemetery	15
" ...	Rifle Range	332
" ...	Cricket Ground	6¼
" ...	Public Garden	3½
" ...	Recreation (Newport)	13
Malvern Town ...	Park and Garden	8
" ...	Recreation	4½
" ...	Park and Garden (Waverley-road)	16
Caulfield Town ...	Race-course	144
" ...	Park	62
" ...	Park (East Caulfield)	17
" ...	Recreation	13
Oakleigh Borough ...	Recreation	8
" ...	Park and Garden	21
" ...	Park and Recreation	5
" ...	Cemetery	10
Outside urban muni- cipalities	Yarra Bend Asylum	350
	Camberwell Gardens	7
	Williamstown Race-course	190
	Total	5,331½

Public
Reserves in
Country
Towns.

Most of the large towns throughout the State also possess public gardens, parks, and reserves for recreation purposes. In the following tables are particulars respecting the most important of these:—

NUMBER AND AREA OF PARKS AND GARDENS OF COUNTRY TOWNS
IN VICTORIA, 1904.

Town.	Number of Reserves.	Area.
		Acres.
Ararat	2	35½
Bairnsdale	3	149
Ballarat	1	1,041
Ballarat East	10	172½
Beechworth	4	131
Bendigo	7	129
Castlemaine	3	109
Clunes	5	62½
Colac	1	38
Creswick	2	43
Daylesford	3	133
Eaglehawk	1	40
Echuca	3	249½
Geelong	5	240
Hamilton	4	46
Horsham	3	142¼
Kyneton	1	14
Korumburra	2	31½
Maldon	4	156
Maryborough	3	142
Portland	4	73
Port Fairy	1	26
Queenscliff	1	60
Sale	1	40
Sebastopol	1	36
Shepparton	3	73
St. Arnaud	2	63
Stawell	3	69¾
Wangaratta	2	110
Warrnambool	8	440

FRIENDLY SOCIETIES.

Valuations
of Friendly
Societies.

Friendly societies are regulated under the *Friendly Societies Act* 1890 and amendments thereof in the Acts of 1891, 1896, and 1900, which, amongst other provisions, prescribe that each society shall furnish returns annually to the Government Actuary for Friendly Societies, and once in every five years shall cause its assets and liabilities to be valued to the satisfaction of that officer. The fees for valuation have purposely been fixed low, and average no more than threepence per member, the result being that, although it is competent for the societies to employ outside valuers if they desire it, as a matter of fact they very rarely do so, and all the valuations are now made by the Government Actuary for Friendly Societies, Mr. Evan F. Owen, A.I.A.

The following is an epitome of the particulars furnished respecting friendly societies for the five years, 1899 to 1903:—

Friendly
Societies.

FRIENDLY SOCIETIES, 1899 TO 1903.

—	1899.	1900.	1901.	1902.	1903.
Number of societies ...	29	29	29	28	25
Number of branches ...	1,105	1,111	1,132	1,146	1,155
Average number of members	91,213	95,819	99,360	101,574	102,040
Number of members sick	21,083	18,007	20,832	20,708	19,133
Weeks for which ailment was allowed	165,616	157,235	169,289	168,830	171,327
Deaths of members ...	993	976	1,036	1,023	1,021
Deaths of registered wives	442	424	393	427	408
	£	£	£	£	£
Income of sick and funeral fund	186,547	203,569	202,394	202,044	209,799
Income of incidental fund	159,879	164,849	169,406	167,900	170,384
Total Income ...	346,426	368,418	371,800	383,763	380,183
Expenditure of sick and funeral fund	153,519	151,226	153,478	156,024	153,472
Expenditure of incidental fund	155,057	161,934	167,579	167,441	169,305
Total Expenditure...	308,576	313,160	321,057	337,284	322,777
Amount to credit of sick and funeral fund	1,166,184	1,218,527	1,267,443	1,313,463	1,369,790
Amount to credit of incidental fund	45,626	48,541	50,368	50,827	51,906
Amount invested—sick and funeral fund	1,103,433	1,141,678	1,205,151	1,249,809	1,311,823
Amount invested—incidental fund	36,026	36,784	39,522	41,793	43,086
Total invested ...	1,139,459	1,178,462	1,244,673	1,291,602	1,354,909

During the quinquennium ended with 1903, the number of members in friendly societies increased by 12,991, or by about 14½ per cent., the amount to the credit of the sick and funeral fund by £236,634, or nearly 21 per cent., and the total amount invested by £264,076, or over 24 per cent.

Growth of
Friendly
Societies.

In proportion to the number of effective members of Friendly Societies, the amount of sickness experienced in 1903 was about the average of recent years. The days per effective member for which ailment was allowed were equal to an average of 12'0 in that year, 12'0 in 1902, 12'0 in 1901, 11'3 in 1900, and 13'0 in 1899, but the average was only 10'5 during the sixteen years ended 1898. The death rate in 1903 was slightly below the average—the death rate per 1,000 members being 10'02 in 1903, 10'09 in 1902, 10'45 in 1901, 10'21 in 1900, 10'92 in 1899, and 10'60 for the 26 years ended 1903.

Sickness
and death
rates.

OCCUPATIONS.—CENSUS RETURNS.

Occupations, 1901.

The occupations of the people in 1901 were ascertained at the census. The various divisions of employment, under 28 heads, were :—

OCCUPATIONS OF THE PEOPLE, 1901.

	Males.	Females.	Total.
Ministering to—			
Government, Defence, &c.	6,719	165	6,884
Religion, Charity, Science, Education, &c. Board, Lodging, and Attendance	13,664	14,676	28,340
13,129	53,686	66,815	
Dealing in—			
Money and Real Property	10,039	2,760	12,799
Art and Mechanic Productions	3,720	934	4,654
Textile Fabrics, Dress and Fibrous Materials	6,374	2,452	8,826
Foods, Drinks, Narcotics, and Stimulants	18,217	3,428	21,645
Animals, and Animal and Vegetable Sub- stances	3,977	198	4,175
Metal or Minerals (other than those used for Fuel and Light)	2,044	162	2,206
Minerals, &c., mainly used for Fuel and Light	2,794	34	2,828
Engaged in—			
General Dealing and Mercantile Pursuits	16,091	4,446	20,537
Speculating on Chance Events	284	1	285
Storage	1,093	..	1,093
Transport and Communication	30,318	1,198	31,516
Manufacturers of—			
Art and Mechanic Productions	20,676	1,748	22,424
Textile Fabrics, Dress and Fibrous Materials	10,664	28,450	39,114
Foods, Drinks, Narcotics, and Stimulants	10,251	1,402	11,653
Animal and Vegetable Substances	5,281	85	5,366
Metals and Minerals (other than those used for Fuel and Light)	14,315	88	14,403
Materials used for Heat, Light, or Energy	1,035	37	1,072
Constructors of Buildings, Roads, Railways, Earthworks, &c.	27,392	17	27,409
Engaged in Disposing of the Dead or Refuse Ill-defined Industrial Workers (chiefly Labourers)	1,260	24	1,284
22,653	855	23,508	
Engaged on Land or with Animals, and in Obtaining Raw Products from Natural Sources	140,149	24,998	165,147
Persons—			
Of Independent Means	7,242	2,824	10,066
Dependent upon Natural Guardians	203,279	444,931	648,210
Dependent upon the State or upon Public or Private Support	7,701	6,444	14,145
Occupation not stated (chiefly Breadwinners)	3,522	1,415	4,937
Total	603,883	597,458	1,201,341

The number of breadwinners and dependents were:—

BREADWINNERS AND DEPENDENTS, 1901.

Breadwinners and dependents, 1901.

—	Males.	Females.	Total.	Percentage.		
				Males.	Females.	Total.
Breadwinners	389,381	144,668	534,049	65	24	45
Dependents ...	210,980	451,375	662,355	35	76	55
Total ..	600,361	596,043	1,196,404	100	100	100

The proportion of breadwinners was 100 to every 124 dependents, which was almost the same as at the previous census, when 100 breadwinners supported 125 dependents. It will be seen, too, that nearly one-fourth of the females in Victoria were returned as earning their own living.

Proportion of breadwinners and dependents.

Provision was made in the census schedules for ascertaining the number of persons unemployed for more than a week prior to the enumeration. The information then collected shows that 13,795 male and 2,647 female wage-earners were returned as idle at that time.

Unemployed, 31st March, 1901.

FACTORIES AND SHOPS.

There are now nine Factories and Shops Acts in force in this State, viz.:—The “Factories and Shops Act 1890,” and eight amending Acts. The amending Acts have been passed for limited periods, and, on the 10th September, 1902, lapsed altogether owing to the sudden ending of the session of Parliament without any Act being carried to continue the Acts in force. The Acts and Regulations, and the determinations of the great majority of the Boards were, however, revived, and continued in force, by the “Factories and Shops Continuance Act 1902,” until the 31st October, 1903. On the 30th October, 1903, the “Factories and Shops Act 1903” was passed, and continued all the amending Acts in force until the 31st December, 1905. A factory is defined to mean any place in which four or more persons other than a Chinese, or in which one or more Chinese are employed in any handicraft, or in preparing articles for trade or sale; or any place in which one or more are employed, if motive power be used in the preparation of such articles, or where furniture is made, or where bread or pastry is made or baked for sale. The expression handicraft includes any work done in a laundry or dyeworks. Provision is made for the registration of factories; and inspectors are appointed to inspect and examine them in order to see that the health requirements and other provisions of the Acts are complied with. A record is to be kept in every factory of the names, work, and wages of all employés, and the ages of

Factory legislation.

those under 16. The employment of persons under 13 is debarred, and a strict limitation is placed on the hours of employment for other young persons; and there are special provisions to guard against accidents, for the inspection of boilers, and against the employment of uncertificated persons to control them. All shops, except chemists, news agents, eating houses, &c. must close at seven p.m. on week days, and at ten p.m. on Saturdays; but municipal councils are empowered to make by-laws permitting all shops of a particular class to remain open later, or providing that such shops be closed for one afternoon in each week, on petition by a majority of the shop-keepers of the same class; but the Act provides that all shop assistants shall have a half-holiday in each week. The working hours of Chinese are specially restricted, in order to try to prevent or lessen unfair competition. Every employé in a factory must be paid at least 2s. 6d. per week. This provision is, of course, intended as a protection for juvenile workers.

Wages
Boards.

The most important provision contained in the Act of 1896, and extended by subsequent Acts, is in regard to the formation of Boards to fix the rates of wages and piece-work in various trades, for which purpose it is provided that, to determine the lowest prices or rates to be paid, the Governor-in-Council may appoint special Boards, if a resolution in favour of creating a Board for any process, trade, or business has been carried in both Houses of Parliament, consisting of from four to ten members (half elected by employers and half by employés), who are to nominate some outside person as chairman; or if no agreement can be arrived at as to such nomination, then the Governor-in-Council shall appoint the chairman. The Board so appointed may fix piece-work rates which may be paid, and also the lowest wages rates, and may also determine the number of improvers under 21 years of age who may be employed. There are thirty-eight Special Boards now in existence, affecting over 38,000 operatives.

Effect—
Rise in
earnings.

The Chief Inspector of Factories reports that determinations, made by thirty-seven Boards appointed under the Act, were in full operation during 1903, and furnishes figures showing the increase in average earnings consequent thereon. For instance, the average weekly wage for all employés (including boys) in the bread-making trade was £1 12s. 6d. in 1896, prior to the Wages Board being in operation, and £2 2s. 1d. in 1903, when its determination was in full force. Likewise, the average wage of persons employed in the clothing trade increased from £1 in 1896 to £1 2s. 2d. in 1903; the average wage in the boot trade from £1 3s. 2d. to £1 7s. 3d.; and in the furniture trade from £1 9s. 1d. to £1 18s. 2d. In 1900, the average wage of persons engaged in the engraving trade was 36s. 11d., and in 1903, when the determination was in force, it was £2 3s. 7d., or an increase of 6s. 8d. In the pottery trade the average wage was £1 8s. 1d. in 1900, before the Wages Board fixed the rates, and in 1903, when the determination was in operation, it had risen to £1 15s. 8d., or an average increase of 7s. 7d. for each employé engaged in the trade.

GOVERNMENT LABOUR BUREAU.

Prior to the 1st October, 1900, two labour bureaux were administered by the Railway Department. One registered men in search of work, and distributed all Government work, each Department paying the cost. The other was a Railway Staff Office, regulating and distributing all temporary and casual railway employment. Both these are now administered by a bureau under the control of the Public Works Department, where applicants are registered for temporary or casual employment principally as artisans and labourers on Government works, including railways. Men are supplied when work is available according to their order of registration, subject to fitness. This bureau also undertakes to supply workmen for private employment, and advances railway tickets to deserving applicants who may themselves have obtained employment in country districts, which they would be otherwise unable to reach, these advances being subject to orders for repayment out of earnings.

The following is a summary of the operations of the bureau in respect to registrations and applicants sent to employment for the year 1904:—

GOVERNMENT LABOUR BUREAU.

Year and Month.	Number of Applicants for Work as Registered at the End of each Month.	Number of Men for whom Employment was Obtained.
1904—January	1,119	} 1,329
February	1,460	
March	1,263	
April	1,385	
May	2,052	
June	2,055	
July	2,489	
August	2,472	
September	2,224	
October	1,698	
November	1,359	
December	Figures not available	

During the year 1904 the number of railway tickets advanced was 532, valued at £430, of which £208 was refunded.

CHARITIES.

The total number of organizations administering charitable relief throughout the State which forwarded returns to the Government Statist for the year 1904 was 218. The number of these which received aid from the Government was 206 and the amount paid, including lunatic asylums, gaols, reformatories, and old-age pensions, was £523,520. The following is a list of the institutions and organizations which received no aid from the Government;—

BENEVOLENT INSTITUTIONS.

Convent of the Little Sisters of the Poor.
Nazareth House, Ballarat.
Freemasons' Charitable Homes.
Distressed Actors' Homes.
Old Colonists' Homes.

ORPHAN ASYLUMS.

Nazareth House, Ballarat.
Livingstone Home, Cheltenham.

FEMALE REFUGE.

Magdalen Asylum, South Melbourne.

BENEVOLENT SOCIETIES.

Jewish Philanthropic Society, Ballarat.
Ladies' Benevolent Society, Brighton.
St. Vincent's, Bendigo.
Church of England Seamen's Mission.
Charity Organization Society.

Charitable
and Reformatory
Institutions.

In the following table will be found a summary containing full particulars of all these charitable and reformatory institutions, showing the number in each class, the daily average number of persons under care in institutions, the total number of distinct cases receiving outdoor relief, together with receipts and expenditure:—

CHARITABLE AND REFORMATORY INSTITUTIONS—INMATES, RECEIPTS, AND EXPENDITURE, 1903-4.

Name of Institution, &c.	Number of Institutions.	Daily Average Indoors	Outdoor Relief Distinct Cases.	Receipts.			Expenditure (Including Building Expenses for Year).
				From Government.	From Other Sources.	Total.	
HOSPITALS.							
General Hospitals	45	2,064	59,701	£ 47,211	£ 88,224	£ 135,435	£ 124,787
Women's Hospital	1	77	1,080	2,000	6,035	8,035	8,261
Children's Hospital	1	87	14,643	500	9,646	10,146	10,292
Queen Victoria Hospital for Women and Children	1	15	3,689	427	1,202	1,629	1,531
Consumptive Sanatorium	1	40	..	165	2,759	2,924	4,057
Convalescent Homes	2	44	..	370	1,121	1,491	1,422
Deaf and Dumb, Blind, and Eye and Ear Institutions	3	218	5,559	3,260	8,894	12,154	10,804
Hospitals for Insane and Idiot Asylum	10	4,606	..	119,819	17,844	137,663	137,663
Foundling Hospital	1	43	4	84	321	405	464
Total	65	7,194	84,676	173,836	136,046	309,882	299,281

CHARITABLE AND REFORMATORY INSTITUTIONS—INMATES, RECEIPTS,
AND EXPENDITURE, 1903-4—*continued.*

Name of Institution, &c.	Number of Institutions.	Daily Average Indoors.	Outdoor Relief Distinct Cases.	Receipts.			Expenditure (including Building Expenses for Year)
				From Government.	From Other Sources.	Total.	
BENEVOLENT ASYLUMS AND SOCIETIES.							
				£	£	£	£
Benevolent Asylums	8	2,464	2,330	20,462	13,693	34,155	35,032
Old Colonists' Association	1	50	15	..	6,918	6,918	2,887
Freemasons' Home	1	15	..	..	704	704	499
Old Actors' Home	1	5	21	..	607	607	569
Benevolent Societies	81	..	13,226	5,254	14,914	20,168	19,339
Orphan Asylums	9	1,394	..	5,710	14,777	20,487	20,508
Infant Asylum	1	63	31	350	2,097	2,447	1,300
Total	102	3,901	15,623	31,776	53,710	85,486	80,134
REFORMATORY INSTITUTIONS.							
Neglected Children and Reformatory Schools	20	324	4,945	61,932	1,443	63,375	63,375
Female Refuges	10	642	..	2,015	17,916	19,931	21,208
Salvation Army Rescue Homes	6	138	..	566	4,128	4,694	4,514
Discharged Prisoners' Aid Society	1	..	484	95	586	681	676
Gaols and Penal Establishments	9	995	..	51,372	..	51,372	51,372
Total	46	2,099	5,429	115,980	24,073	140,053	141,145
MISCELLANEOUS.							
Old-Age Pensioners .. .. .	..	..	11,609	201,688	3,495	205,183	205,183
Night Shelters (Dr. Singleton's)	2	..	..	60	28	88	118
Charity Organization Society	1	..	..	..	1,295	1,295	1,390
Free Dispensaries	2	..	5,583	180	380	560	728
Total	5	..	17,192	201,928	5,198	207,126	207,419
Grand Total	218	13,284	122,920	523,520	219,027	742,547	727,979

During the year which ended on 30th June, 1904, the Government granted £91,082 in aid of charitable institutions other than those solely under Government control—£89,368 for maintenance, and £1,714 for special purposes. These charities embrace 55 hospitals, including institutions for the blind, deaf and dumb, &c., which received £54,017; 102 benevolent homes and societies, which received £31,776; 17 reformatory institutions, which received £2,676; and there were other societies and associations organized for the distribution of relief (including old-age pensions) which received £201,928. The daily average number under care throughout the year in these and the Government institutions was 13,284, and there were 122,920 distinct cases of outdoor relief. The total cost of maintenance was £727,979.

With regard to the outdoor relief, it has been ascertained that in some institutions the "distinct cases treated" represent the actual number of persons treated; in others, they represent the actual cases of illness, accident, or disease; but in these latter cases, the books of the institutions do not furnish the necessary particulars as to the number of distinct persons. Again, it is considered probable that some obtained relief at more than one establishment, and that some,

in the course of the year, became inmates of one or other of our institutions. There is no available information upon which an estimate of these duplications can be based.

An effort was made during the course of last year to obtain from the heads of the various denominations throughout Victoria particulars of organizations under their control for the purpose of distributing the charity of the churches. The few returns which were received in response to this request have been tabulated with the general charities, but there is very little doubt that there are others respecting which no information has been forwarded—probably in many instances it is not available for want of records.

In addition, there were 2,403 neglected children for whom homes were found, either with private persons or in institutions, registered for the purpose.

Part VIII. of the *Neglected Children's Act 1890* deals with the committal of neglected children to the care of private persons or institutions approved by the Governor in Council, and also provides for the wardship of the children, and for their transference if found unfitted for such care, to the control of the Department for Neglected Children. The following return shows the societies and persons registered under the provisions of this part of the Act, and particulars respecting the children under their care during 1904:—

WORK OF SOCIETIES AND PERSONS REGISTERED UNDER PART VIII.
OF THE "NEGLECTED CHILDREN'S ACT."

Name of Society or Person	Number of Children under Supervision on 31.12.03.	Admissions during 1904.			Number of Children under Supervision on 31.12.04.
		Court Commitals.	Transfer of Guardianship.	Voluntary Admissions.	
Presbyterian and Scots' Church Neglected Children's Aid Society	342	12	19	19	348
Victorian Neglected Children's Aid Society	788	1	10	77	823
Clifden Home, Wedderburn	92	..	..	9	100
Gordon Institute, Melbourne	150	5	24	23	160
Try Society, Surrey-road, Hawksburn	62	2	..	62	68
Burwood Boys' Home	58	..	13	6	41
Geelong Try Boys' Brigade	137	..	..	53	186
Latrobe-street Ragged School Mission	86	1	2	67	106
Mrs. Ida Berry (Rescue Home, Ballarat)	11	1	1	..	10
Rev. G. H. Cole Central Methodist Mission	17	..	14	5	30
Church of England Neglected Children's Aid Society	69	3	3	2	77
Western Neglected Children's Aid Society	226	33	6	13	264
Fitzroy Streets Mission	25	*	*	*	25
Mrs. Gold-pink, 235 Rathdown-street, Carlton	113	14	10	32	163
Total	2,176	72	102	368	2,403

* The admissions during 1904 are unknown.

Reviewing the whole question of our charities, their number, organization, management, and expense, and the constant appeals to the

Government, the churches, and the public for aid in their maintenance, it would seem to be a matter deserving of careful consideration, that some effort should be made in the direction of centralization of management and systematic control. A Royal Commission was appointed in 1891 to consider the whole question of the charities. Recommendations made, however, came to nothing; but the opinion of the Commission, then expressed, that there was waste of energy and funds in the unnecessary multiplication of collectors, managers, secretaries, &c., applies in even greater degree to-day. A scheme by which the labour of the officials could be economized, and the funds of the generous benefactors disposed of to the very best advantage over all our charitable institutions, would probably be the means of improving the management and materially reducing the cost of maintenance.

Particulars relating to the most important of the various classes of charitable institutions in the State are as follow. The information relates to the year ended the 30th June, 1904, except for the Hospitals for the Insane, the Idiot Asylum, and the Neglected Children and Reformatory Schools, in which cases it relates to the calendar year 1904. Of the general hospitals, six are in Melbourne, the remainder in country towns, nine of the latter being also benevolent asylums. The accommodation available for indoor patients was as follows:—

Charitable institutions
—accommodation.

AMOUNT OF ACCOMMODATION, 1903-4.

Description of Institution.	Number of Institutions.	Dormitories.		Number of Beds for Inmates.	Number of Cubic Feet to each Bed.
		Number.	Capacity in Cubic feet.		
General Hospitals ...	45	406	4,129,265	3,008	1,372·8
Women's Hospital ...	1	25	144,450	102	1,416·2
Children's Hospital ...	1	17	141,815	113	1,255·0
Eye and Ear Hospital ...	1	8	54,680	60	911·3
Queen Victoria Hospital for Women and Children	1	6	24,864	16	1,554·0
Foundling Hospital ...	1	6	...	45	...
Consumptive Sanatorium...	1	15	56,000	95	589·5
Hospitals for the Insane ...	9	1,210	2,898,316	4,100	706·9
Idiot Asylum ...	1	20	114,288	305	374·7
Benevolent Asylums ...	8	211	1,732,574	2,741	632·1
Convalescent Homes ...	2	30	69,000	61	1,131·1
Blind Asylum ...	1	5	91,318	112	815·3
Deaf and Dumb Asylum ...	1	4	75,872	74	1,025·3
Orphan Asylums ...	9	79	731,032	1,338	546·4
Neglected Children and Reformatory Schools	20	97	326,785	723	452·0
Infant Asylum ...	1	3	15,336	52	294·9
Female Refuges ...	10	133	500,527	706	709·0
Salvation Army Rescue Homes	6	27	90,643	180	503·6
Total ...	119	2,302	11,196,765	13,831	809·5

The regulations of the Board of Public Health require an allowance of 1,200 cubic feet for each inmate in hospitals, and the above statement shows that, with two exceptions, this requirement has been complied with.

The following statement shows the number of inmates and of deaths in these institutions:—

INMATES AND DEATHS, 1903-4.

Description of Institution.	Number of Inmates.		Number of Deaths.	Proportion of Deaths to Total Number of Inmates.
	Total during the Year.	Daily Average.		
General Hospitals	21,876	2,064	2,204	10·1
Women's Hospital	2,100	77	42	2·0
Children's Hospital	1,531	87	127	8·0
Eye and Ear Hospital	704	52	1	·1
Queen Victoria Hospital for Women and Children	278	15	9	3·2
Foundling Hospital	96	43	16	16·7
Consumptive Sanatorium	185	40	3	1·6
Hospitals for the Insane	5,242	4,295	320	6·1
Idiot Asylum	347	311	18	5·2
Benevolent Asylums	3,860	2,464	433	11·2
Convalescent Homes	1,243	44	...	...
Blind Asylum	105	96	...	...
Deaf and Dumb Asylum	78	70	...	...
Orphan Asylums	1,777	1,394	6	·3
Neglected Children and Reformatory Schools	5,872	5,269	39	·7
Infant Asylum	108	63	8	7·4
Female Refuges	1,032	642	5	·5
Salvation Army Rescue Homes	540	138	4	·7
Old Colonists' Association	54	50	3	5·6
Old Actors' Home	5	5	...	...
Total	47,033	17,219	3,238	6·9

By comparing the above table with that preceding it, overcrowding seems to exist in the Hospitals for the Insane, the Idiot Asylum, the Infant Asylum, and the Orphan Asylums, as the daily average number of inmates in those institutions is greater than the number of beds provided.

In addition to the inmates shown above, there were 52 mothers of infants in the Infant Asylum, 105 infants in the Female Refuges, and 114 infants in Salvation Army Homes during the year.

The total receipts of all charitable institutions in the year 1903-4 amounted to £485,288, of which considerably more than one-half was contributed by Government, and the expenditure amounted to £470,925. Of the Government contribution, £181,751 was expended on the Hospitals for the Insane, the Idiot Asylum, and the Neglected Children and Reformatory Schools, which are Government institutions.

Charitable institutions—inmates and deaths.

Charitable institutions, receipts and expenditure.

CHARITABLE INSTITUTIONS.—RECEIPTS AND EXPENDITURE, 1903-4.

Description of Institution.	Receipts.			Expenditure.
	From Government.	From other Sources.	Total.	
	£	£	£	£
General Hospitals	47,211	88,224	135,435	124,787
Women's Hospital	2,000	6,035	8,035	8,261
Children's Hospital	500	9,646	10,146	10,292
Eye and Ear Hospital	800	2,992	3,792	3,567
Queen Victoria Hospital for Women and Children	427	1,202	1,629	1,531
Foundling Hospital	84	321	405	464
Consumptive Sanatorium	165	2,759	2,924	4,057
Hospitals for the Insane Idiot Asylum	119,819	17,844	137,663	137,663
Benevolent Asylums	20,462	13,693	34,155	35,032
Convalescent Homes	370	1,121	1,491	1,422
Blind Asylum	1,640	3,579	5,219	3,808
Deaf and Dumb Asylum	820	2,323	3,143	3,429
Orphan Asylums	5,710	14,777	20,487	20,508
Neglected Children and Reformatory Schools	61,932	1,443	63,375	63,375
Infant Asylum	350	2,097	2,447	1,300
Female Refuges	2,015	17,916	19,931	21,208
Salvation Army Rescue Homes	566	4,128	4,694	4,514
Old Colonists' Association ... ..	...	6,918	6,918	2,887
Old Actors' Home ... ..	...	607	607	569
Discharged Prisoners' Aid Society	95	586	681	676
Charity Organization Society ... ..	...	1,295	1,295	1,390
Benevolent Societies	5,254	14,914	20,168	19,339
Free Dispensaries	180	380	560	728
Dr. Singleton's Night Shelters	60	28	88	118
Total	270,460	214,828	485,288	470,925

The following statement shows the average number of inmates of the respective institutions, the total cost of their maintenance, and the average cost per annum of each inmate:—

Charitable institution—average cost per inmate.

COST OF MAINTENANCE, 1903-4.

Description of Institution.	Daily Average Number of Inmates.	Total Cost of Maintenance.	Average Cost of each Inmate per annum.
		£	£ s. d.
General Hospitals	2 064	114,426	55 8 9
Women's Hospital	77	7,205	9 11 5
Children's Hospital	87	8,432	96 18 5
Eye and Ear Hospital	52	3,484	67 0 0
Queen Victoria Hospital for Women and Children	15	1,461	97 8 0
Foundling Hospital	43	464	10 15 10
Consumptive Sanatorium	40	2,783	69 11 6

COST OF MAINTENANCE, 1903-4—*continued.*

Description of Institution.	Daily average Number of Inmates.	Total Cost of Maintenance.	Average cost of each Inmate per annum.
		£	£ s. d.
Hospitals for the Insane ...	4,606	137,663	29 17 9
Idiot Asylum ...			
Benevolent Asylums ...	2,464	34,282	13 18 3
Convalescent Homes ...	44	1,345	30 11 4
Blind Asylum ...	96	3,349	34 17 9
Deaf and Dumb Asylum ...	70	3,123	44 12 3
Orphan Asylums ...	1,394	17,494	12 11 0
Neglected Children and Reformatory Schools	5,269	63,375	12 0 7
Infant Asylum ...	63	1,247	19 15 10
Female Refuges ...	642	17,346	27 0 4
Salvation Army Rescue Homes ...	138	3,980	28 16 10
Old Colonists' Association ...	50	1,856	37 2 5
Old Actors' Home ...	5	569	113 16 0
Total ...	17,219	423,884	24 12 4

In calculating the average cost of each inmate per annum, the cost of treating out-patients is necessarily included, as there is no available information showing the cost of in-patients and out-patients separately.

The institutions showing the lowest average cost per inmate are the Foundling Hospital, Neglected Children, and Reformatory Schools, the Orphan Asylums, and the Benevolent Asylums. As many of the children of the Industrial and Reformatory Schools cost the State nothing—maintaining themselves at service or being supported by relatives—the cost of maintenance per head shown above is somewhat misleading, the true cost per head of those supported by the State being about £17 2s. The average cost per inmate of the Infant Asylum, Female Refuges, and Salvation Army Homes would be reduced if allowance were made for mothers of infants in the first-named institution, and for infants in the two latter groups of institutions.

Melbourne
Hospital.

The origin of this institution belongs to the very earliest days of Melbourne. Five years from the foundation of the city, the great desirability, and even necessity, of providing some establishment for the receipt, nursing, and treatment of the sick poor, and for the relief of victims of accidents, was apparent. A public meeting, presided over by the Superintendent of the Province, Mr. Latrobe; and attended by the leading people of the settlement was held on 1st March, 1841, and resolutions were unanimously and enthusiastically agreed to in favour of the foundation of a hospital where the best medical advice and the most skilful surgical treatment available should be at the service of those who were in indigent circumstances,

as well as those who should be admitted as paying patients. The severity of the struggle for existence in those early days, and the poverty of the people of the settlement, retarded for a time the collection of subscriptions. In a year, only £300 had been received; but urgent requirements were met by the establishment of a dispensary in a small brick cottage in Little Collins-street rented for the purpose. The grant in aid, which had been fully expected, was refused by the Government in Sydney; but the charitable work was not thereby doomed, and private donations enabled larger premises, in Bourke-street west, to be engaged for hospital purposes. It was intimated that no more than £500 could in any event be expected from Sydney, and the indignation and disappointment in Melbourne culminated in a meeting of prominent colonists at the house of Dr. Palmer, afterwards President of the Legislative Council under responsible Government. Strong representations were made to the Governor, Sir George Gipps, who promised the memorialists a site for the hospital, and a money grant by way of building fund and endowment. In February, 1845, two sites were offered, namely, the hay and corn market reserve, between Flinders-lane and Flinders-street, on the east side of Collins-street, and a block, in a then sequestered corner of the town, bounded by Lonsdale, Little Lonsdale, Swanston, and Russell streets. The latter was ultimately chosen, and upon it the building of the hospital was commenced.

As an intimation had been received from Sydney, that the Government was prepared to advance £1,000 if a like amount was subscribed in Melbourne, immediate steps were taken to fulfil the condition. £265 was raised at the meeting, where also a governing body was appointed. The first entertainment raised nearly £60, and was given by some gentlemen amateurs who had formed themselves into a philharmonic society. In January, 1846, tenders were called for. The foundation stone was laid on the same day as that of the original Prince's-bridge. Early in 1848, the building was ready for occupation, a staff was appointed, and in March of that year, two patients were admitted, and four out-patients treated. By July, 1848, all the beds, 21 in number, were occupied, and even at that early date, applications for admission exceeded the available accommodation, and additions had therefore to be made. The original building now forms the east wing of the main building. From that time up to the present day continual additions and alterations have been made in order to meet the growing demands of an increasing population, and equip the institution for the position it has held as the principal general hospital of Victoria, and the chief medical training school for University students. The wards now contain over 300 beds, in which between 4,000 and 5,000 in-patients are treated annually.

In the out-patients' department, 18,451 persons were treated last year, including 7,639 casualty cases. The aggregate number of attendances was 76,632.

As far as has been possible in an institution, the greater part of which was built over half a century ago, the hospital has been improved in accordance with the latest views of hospital construction,

and the requirements of modern science. A fine new operating theatre was built a few years ago, and last year the old original theatre was reconstructed and brought thoroughly up-to-date. In these two theatres during 1904, no fewer than 1,770 operations were performed. There is a most effective system of steam supply and hot-water pipes installed at this hospital, whereby the operating theatres and some of the wards are heated, the sterilizers are supplied with steam at a high temperature, and the theatres are provided with absolutely sterilized water.

Some years ago an excellently-equipped mortuary was added to the hospital, and a fine large lecture-room for University students. Other important additions have been two new wards for septic cases. These are the most up-to-date wards in the hospital, and have proved highly satisfactory. Another department of the institution which has been excellently equipped is the X rays room. A generous donation from the trustees of the estate of the late Edward Wilson recently provided for this highly useful department the latest and best equipment.

The usefulness of the Melbourne Hospital since its inauguration may be judged from the work carried out. The in-patients treated up to date number 180,467; the out-patients, 795,704.

In 1903-4, the Government granted £10,000 towards maintenance; the municipal grants were £773; private contributions amounted to £4,001; proceeds of entertainments, £434; legacies, bequests, &c., £11,100; Hospital Sunday, £1,802; payments and contributions by in-door patients, £1,724; fees, £1,173; and £3,237 was received from all other sources. The total receipts for the twelve months were £34,244.

Alfred
Hospital.

For many years before the establishment of this institution, the necessity for a second general hospital in Melbourne was recognised. It was not, however, until 1868, that it was finally resolved that a charitable institution should be erected as a memorial of the providential escape of H.R.H. Alfred, Duke of Edinburgh, from assassination during his visit to Sydney. A site of 13 acres within the municipality of Prahran was secured, and the foundation stone was laid in March, 1869, by His Royal Highness, after whom the hospital was named. In May, 1871, the establishment was opened, and additions were made in 1885. In 1888, a fire occurred, which entirely destroyed a portion of the original buildings. During the year 1901-2, further additions were made. This hospital is recognised by the Melbourne University as a clinical school for medical students, and, in addition, a training school for nurses was established in 1880, the term of instruction decided upon being one year, but this was subsequently increased to three years. The pupils are of two grades—the first pay an entrance fee and a fixed sum monthly for maintenance, &c., whilst the second receive a small and progressive salary after six months. Since the opening in 1871, 44,870 in-patients were treated, and of these 4,917 died in the establishment. The out-patients numbered 87,020, and the casualty cases 50,061. For the year ended 30th June, 1904, the daily average number of in-patients was 167.5. The total revenue from all sources was £11,852; £3,600

from the Government; £435 municipal grants; £1,643 private contributions; £821 proceeds of entertainments; £1,894 legacies, bequests, &c.; £732 Hospital Sunday; £1,456 contributions by in-door patients; £650 by out-door patients; and £621 all other receipts. The total expenditure was £10,917.

This institution was first established in 1869 as a dispensary, in Spring-street, Melbourne. In 1876, the buildings were enlarged, and founded as a hospital for the treatment of both in and out-patients. In 1881, owing to annually increasing demands for the treatment of in-patients, it was decided to remove the institution to its present site on St. Kilda-road, and the northern wing and administration quarters were then erected. In 1890, the southern wing, which is reserved for surgical cases, was added, the cost being met by a gift of £9,000 made by Mr. James S. Hosie, of Melbourne. Since the institution was first opened, up to 30th June, 1904, 125,321 patients have received treatment. During the year ended on that date, 7,928 patients were treated. The visits of out-patients during the same period were 20,053. The average stay of in-patients was 17 days for males and 18 days for females, which is an exceedingly low average. 899 operations were performed by the visiting honorary surgeons, and 1,497 casualty cases were attended to. The establishment has attached to it a school for training nurses, who have to serve a period of three years, and pass prescribed examinations. Visitors are admitted on Sundays and Wednesdays, between the hours of 2 and 4 p.m. The income for the year was £4,496, made up of £1,200 Government grant; £253 municipal grants; £729 private contributions; £38 proceeds of entertainments; £851 legacies, bequests, &c.; £232 Hospital Sunday; £594 contributions by in-door, and £454 by out-door patients; and £145 from all other sources. The expenditure was £4,214—£275 for buildings; £3,844 for maintenance; and miscellaneous items, £95.

Homœo-
pathic
Hospital.

During the past year two important additions have been made to the institution by the erection of a new operating theatre, equipped with all the latest appliances, and lighted by electric light, also a new casualty-room for the reception of urgent cases, towards which Mr. James Mason, J.P., of Brighton-road, St. Kilda, donated the sum of £500.

The institution now contains sixteen dormitories, with 84 beds. On 30th June, 1904, there were remaining under care 24 men and 31 women.

This hospital for incurables, the only one of its kind in Victoria, is situated on a block of 17 acres at Heidelberg. Its origin belongs to the year 1880, when Mrs. Thomas Austin, of Barwon Park, Winchelsea, offered £6,000 for the purposes of the institution. Other donations quickly followed, and the Government of the day granted the present site. The hospital was opened in August, 1882, and provided accommodation for 66 patients. In 1884, a wing, containing sixteen beds for the reception of cancer patients, was opened, and in 1900 another wing was added for consumptives, containing 41 beds. Alterations in 1897 increased by eight the accommodation for cancer

Austin
Hospital
for
Incurables.

patients. The Nurses' Home, with accommodation for 30 nurses and women servants, was erected and furnished in 1897. In 1901, the children's wing was erected, and a laundry has since been added. Up to 30th June, 1904, 1,985 patients were admitted; of this number 1,356 died in the institution, 485 were discharged, and 144 were occupying beds in the various wards. The patients treated have been all of the one class, *i.e.*, chronic or incurable, many of them reaching the hospital in a dying condition. Amongst the number set out as having been discharged, a fair percentage, say, 45 per cent., have benefited very considerably from the treatment received in the institution, the remaining 55 per cent. having left of their own accord, many of them preferring to die amongst their friends and relatives. Practically no cures have been effected at the establishment. The patients treated during the year 1903-4 numbered 264, of whom 124 were new admissions, and the daily average was 140. The institution is well supported by the public.

Of the total expenditure, £7,120, £1,217 was spent on buildings; and £5,903 on maintenance and other expenses. The revenue was £6,755; made up of £1,000 Government grant; £224 municipal grants; £2,189 private contributions; £92 proceeds of entertainments; £1,558 legacies and bequests; £568 Hospital Sunday; £466 contributions from in-door patients; and £658 miscellaneous collections. The institution now contains 23 dormitories with 146 beds. There were 85 men and 59 women under care on 30th June, 1904.

St. Vincent's
Hospital.

This hospital was founded in 1893, and is conducted by the Sisters of Charity; but, though associated with the Roman Catholic Church, the work of the institution is carried on upon entirely unsectarian lines. The site is in Victoria-parade, Fitzroy. The utility of the hospital causes applications for admission from patients urgently needing treatment to be greatly in excess of the means of complying with them, and the construction of a new building is being carried on. During the year ended 30th June, 1904, 401 patients were admitted, which, with 27 remaining from the previous year, makes 428 treated. There were 379 discharged, cured or relieved; 25 died; leaving 24 remaining on 30th June, 1904. The number of out-patients who received treatment was 9,700. The total receipts were £2,711, made up of £700 Government grant; £81 from municipalities; £805 private contributions; £153 proceeds of entertainments; £130 legacies and bequests; £211 from Hospital Sunday; £329 payments by in-door, and £248 by out-door patients; and £54 from other sources. The expenditure was £3,017—£201 on buildings, and £2,816 on maintenance and miscellaneous expenses. The hospital contains sixteen dormitories with 36 beds.

Ballarat
District
Hospital.

The foundation stone of this hospital was laid on the 25th December, 1855, and on the 1st January following a memorial stone was laid to commemorate the completion of the main building. On the Queen's Birthday, 1869, the foundation stone of the Prince Alfred Memorial Ward was laid. This building provides accommodation for 75 beds. On 23rd March, 1897, a public meeting of the

ladies of the district was held, when it was decided to collect funds for the purpose of building wards to accommodate 50 female patients, and on 21st June, 1897, was laid the foundation stone of the Queen Victoria Women's Ward, in commemoration of the Jubilee of Her Majesty, the late Queen Victoria, and this building was completed and opened on 26th October, 1900. The establishment is now fully equipped for the accommodation of 170 patients, and its work and usefulness are of a high character. The receipts for 1903-4 were £5,562, made up by £2,300 Government grant; £334 municipal grants; £899 private contributions; £570 proceeds of entertainments; £360 legacies, bequests, &c.; £112 Hospital Sunday; £260 contributions by in-door, and £144 by out-door patients; and £583 miscellaneous receipts. The expenditure was £5,522, £270 on buildings, and £5,252 on maintenance and miscellaneous expenses. There are twelve dormitories, and in the 170 beds there were 117 persons under care on 30th June, 1904.

This establishment was founded in 1853, upon a site of 10 acres, which was permanently reserved in 1856, when the main portion of the present building was erected to provide accommodation for 60 patients, the Bowen wing having been subsequently added. This hospital, through the munificence of Mr. George Lansell, has the right to six beds for patients from the district in the Austin Hospital for Incurables, at Heidelberg. The hospital now contains a detention ward of five rooms for male and female insane patients, where they are kept under observation for limited periods prior to discharge or transfer to a public asylum. There is also a special cottage set apart for contagious diseases, which, however, is not adequate to meet the wants of the district, and local effort is now being made to raise the necessary funds whereby this cottage may be enlarged. The buildings provide accommodation for 172 patients, but during the last ten years the daily average has only been 118. The number of patients received during the year was 1,493, which, with 113 remaining at the close of the previous year, yields a total of 1,606 treated. The out-patients numbered 2,391, and their attendances 7,173. The receipts for 1903-4 were £6,732, comprising £2,600 Government grant; £337 municipal grant; £1,200 private contributions; £582 proceeds of entertainments; £293 legacies and bequests; £434 Hospital Sunday; £691 contributions by in-door, and £108 by out-door patients; and £487 from all other sources. The expenditure was £6,724—£193 on buildings, and £6,531 on maintenance and miscellaneous expenses. The institution is endowed to the extent of nearly £11,500 (£2,500 of which is in real estate); but, from the report of the past year, it would appear that this fund is in a stationary condition, the balance remaining much the same as at 30th June, 1902. It is managed by a committee of fifteen, two of whom are medical men; the staff comprises two resident medical officers, matron, night matron, three male and twenty-five female nurses, a resident secretary, and a working staff of five male and thirteen female servants. The institution contains 27 dormitories. There were 108 patients under care on 30th June, 1904.

Bendigo
Hospital

Castlemaine
Hospital.

There are no official records in existence dealing with the formation and early history of this hospital. Many attempts have been made by members of various committees in the past to obtain reliable data and original documents to enable them to do so, but unfortunately, without success. During 1903, however, some important private documents have been discovered which throw some light upon the subject. From these it appears that a public meeting was convened at Castlemaine on the 17th February, 1853, when it was resolved that a hospital should be established for (1) the reception of sick persons who are totally destitute; (2) for accidents; and (3) for those who are able to pay to be attended by their own medical men if desired. On the 24th May, 1853, the hospital appears to have been opened in a good building, 30 feet long by 20 feet wide, with a detached surgery, kitchen, and men's room. The first resident surgeon was appointed to the institution about the middle of 1853. Cases of leprosy were treated early in the sixties, in a tent specially set apart for the purpose, but, in 1870, the patients were all removed to Melbourne, and there strictly isolated. In 1903-4 394 patients were admitted, 362 were discharged cured or relieved, 37 died, and 54 remained at the close of the year. The institution contains eight dormitories with 75 beds. The average number under care for the year was 50. The total receipts were £1,971, made up of £1,000 Government grant; £101 municipal grant; £324 private contributions; £91 proceeds of entertainments; £98 legacies and bequests; £38 Hospital Sunday; £250 contributed by in-door, and £31 by out-door patients; and £38 miscellaneous receipts. The expenditure was £2,188; £41 being spent on buildings, and £2,147 for maintenance and other expenses.

Geelong
Infirmary
and
Benevolent
Asylum.

This institution was opened on the 23rd April, 1852, and during the remainder of that year 150 patients were treated in the Infirmary and seven inmates were admitted to the Benevolent Asylum. It is managed by a president, assisted by a committee of 22 persons, who meet once a month for the transaction of business. The staff consists of a resident surgeon and assistants, a matron, wardman, and women nurses and probationers. A nurses training school is a special feature of this establishment, twelve nurses being constantly under tuition, the course of instruction extending over a term of three years. The buildings, being now over 50 years old, are showing signs of age, but everything is done to keep the wards in an up-to-date condition. There is a handsome new out-patients' department which is kept quite apart from the general hospital. It contains an operating theatre, with all modern appliances. It is proposed to erect a ward for the separate treatment of infectious diseases on land at rear of the present hospital in the near future. The only question that is delaying its erection is that of maintenance, which the municipal bodies are asked to guarantee, as they are responsible for the treatment of these cases. A sum of £1,264 is in hand towards the cost of this building. The laundry is fitted up with the latest steam washing machines, everything being washed and sterilized on the premises. There is also a plant in use for the manufacture of aerated waters.

The number of beds is 197, the average number occupied 152. During 1904, no less than 2,188 cases—917 in-door and 1,271 out-door—received relief, and there were 168 under care in the asylum at the close of the year. The total income from all sources for the twelve months ended 30th June, 1904, was £5,669 (including the grant in aid received from the Government, £2,560), and the total expenditure was £5,726.

Within spacious grounds, tastefully laid out, this hospital is an imposing structure, the grounds and buildings covering an area of 5 acres. The laudable objects of such an institution are well carried out, and a temporary home is provided for the sick and wounded, where the best medical advice and nursing are at the service of the sufferers. The hospital was established in a modest way in the early days of gold-mining in the fifties, when there were few houses in the district, and few of the gentler sex to minister to the sick. Fever was rife, and with the dearth of home comforts of any sort, the hospital came as a great boon to gold diggers. Since its establishment, it has increased in importance and dimensions, and many hundreds of people have regained health and strength under its auspices. There is a house surgeon, several honorary physicians, a dispenser, a matron, and a capable staff of nurses. The main building now contains eight dormitories with 77 beds, and a detached contagious diseases ward (a fine brick building recently erected by the municipalities of the district, assisted by the Government) contains ten beds. On the 30th June, 1903 there were 53 patients under care, and during the year 503 were admitted, giving a daily average of 51. The number remaining in the hospital on 30th June, 1904, was 67. The number of out-patients was 696, and their attendance, 2,572. The receipts during the year were £2,170—£930 Government grant; £87 municipal grant; £422 private contributions; £373 proceeds of entertainments; £48 legacies, bequests, &c.; £52 Hospital Sunday; £123 contributed by in-patients, and £110 by out-patients; and £25 miscellaneous collections. The expenditure was £1,856—£56 for buildings, and £1,800 for maintenance, &c.

Mary-
borough
Hospital.

The Pleasant Creek Hospital was established in 1858, and its inauguration was brought about through the desire of the benevolent people of the district to establish a charity where the accidents and sicknesses incidental to the mining industry, which the discovery of gold had developed, might be successfully treated. The bark huts and small calico tents in which the bulk of the community then resided were altogether unfit to accommodate the victims of accidents, or the sufferers from the prevalent dysentery and enteric, and the nearest hospital was 80 miles away, at Ballarat. A number of the residents therefore, decided to arouse public sympathy, and obtain assistance in the establishment of a district hospital, and after much display of energy and many meetings, the institution was formally organized on 7th August, 1858, under the style of the Pleasant Creek Hospital. The committee decided, in the urgent interests of the suffering, to erect a temporary hospital, and a building of wood, canvas, and iron,

Stawell
Hospital
and
Benevolent
Asylum.

capable of accommodating twenty patients, was constructed. In February, 1859, this temporary hospital was opened, and before the end of that year 67 patients had been admitted. It was at once perceived that the hospital was of immense value, meeting, as it did, the requirements not only of the gold-fields population, but receiving and treating the sick and wounded of the whole of that part of the western portion of the State, the large pastoral districts extending northwards to the Mallee and westwards to the South Australian border. In 1861, the permanent building was opened, on the admirable site of 19 acres, which the Government had granted. Numerous additional wards have from time to time been constructed, and in 1883 the scope of the operations of the charity was widened by the incorporation with the hospital of a benevolent asylum; its name also was altered to the Stawell Hospital and Benevolent Asylum. The buildings are now capable of accommodating 47 patients in the hospital and 16 inmates in the benevolent asylum. A special ward with six beds has lately been set apart for consumptive patients from any part of the State. A new building is now being constructed for the purpose of an Infectious Diseases Hospital, and will provide for twelve patients. It will be designated the W. H. Syme ward, its whole structure, furnishing, and equipment being generously provided as a free gift by the widow of the late Dr. W. H. Syme, who for many years was an honorary surgeon of the institution. The relief afforded during the year ended 30th June, 1904, was as follows:—In-patients, 368; out-patients (new cases), 405; number of attendances of out-patients, 1,937; daily average of in-patients, 42·7. The total revenue for the year was £2,116, made up of £910 Government grant; £103 municipal grant; £320 private contributions; £17 entertainments; £405 legacies, bequests, &c.; £63 Hospital Sunday; £169 payments by in-patients, and £29 by out-patients; and £100 miscellaneous. The expenditure was £1,825—£22 for buildings, and £1,803 for maintenance, &c.

Warrnam-
bool
Hospital
and
Benevolent
Asylum.

This institution was incorporated in 1872. During the year ended 30th June, 1904, 359 cases were treated—259 were discharged cured or relieved, 33 died, and 67 remained on 30th June. The total attendance of out-patients was 1,001. An isolated building in the hospital grounds has been set apart for the reception and treatment of contagious cases. The receipts for the year were £2,913, made up of £1,000 Government grant; £247 municipal grants; £307 private contributions; £774 legacies, &c.; £190 Hospital Sunday; £247 from in-patients; and £148 other receipts. The expenditure was £2,569—£177 on buildings, and £2,392 on maintenance and other expenses. There are ten dormitories containing 06 beds. The number of inmates at the end of the year 1903-4 was 286.

Women's
Hospital.

The necessity for establishing an institution of this kind forced itself upon the attention of the benevolent ladies of Melbourne nearly fifty years ago. In 1856 it was definitely founded, its original title being the Melbourne Lying-in Hospital and Infirmary for Diseases of Women and Children, and it was the first institution of this special

nature erected in Australia. The work was first carried on in Collins-street, Eastern Hill, but a permanent site was eventually granted by the Government in Madeline-street, Carlton, where the hospital was opened in 1858, its title being altered in 1868 to Women's Hospital, the name it now bears. Important and improved additions have since been made, including the Genevieve Ward Wing, constituting the largest portion of the midwifery department, nurses' quarters, and the infirmary and midwifery operating theatres. The institution, early in its career, attained a high reputation for the efficient help it afforded, and the accommodation had to be augmented from time to time to meet increasing demands. It is a special training school in gynecology and midwifery for medical men and nurses, and the excellent work carried on is fully recognised. Up to 30th June, 1904, the number of patients admitted was 41,879, and the attendances of out-patients 179,507. During the year ended on that date, 2,012 patients were admitted, which, together with 88 remaining in at close of previous year, gives a total of 2,100 treated. There were also in the same period 4,313 attendances of 1,080 out-patients. There is now accommodation for 102 in-patients, each bed having the most liberal allowance of space. It is governed by a committee of 15 ladies and 6 gentlemen, on whom falls the responsibility of the effective working of the whole establishment. The professional work devolves chiefly on an honorary staff. The receipts were £8,035, made up of £2,000 Government grant, £289 municipal grant; £1,649 private contributions; £106 proceeds of entertainments; £2,182 legacies and bequests; £432 Hospital Sunday; £707 from patients; and £670 other receipts. The total expenditure was £8,261—£1,091 for buildings and £7,170 for maintenance and miscellaneous expenses. Every patient that passes through the wards is seen and spoken to by some lady or ladies of the Committee—many of them before admission, but all before leaving. No patient is discharged without inquiries being made as to her home, &c., and, where possible, want in this matter is also supplied. To prevent abuse of the charitable trust, certain ladies each week give much of their time to interviewing applicants for admission to inquire into their circumstances.

In this establishment, 10 patients remained under care on 30th June, 1903. During the year, 268 were admitted, making a total of 278 treated; 254 were discharged cured or relieved, seven of them at their own request. The deaths numbered 9, and 15 were under care at the end of the year. The in-patient accommodation consists of 16 beds. The total number of cases of out-patients treated was 3,689, the attendances numbering 14,225. The income for 1903-4 was £1,629, made up as follows:—Government grant, £427; municipal grant, £94; private contributions, £192; proceeds of entertainments, £63; legacies and bequests, £70; Hospital Sunday, £130; out-patients' contributions, £455; in-patients' contributions, £135; and miscellaneous receipts, £63. The expenditure was £1,531 for maintenance, &c.

The Children's Hospital, Melbourne, was established in 1870 for the purpose of treating the general and peculiar ailments of children. The patients treated come in from almost every part of the State,

Queen
Victoria
Memorial
Hospital.

Children's
Hospital,
Melbourn

over 100 districts being tabulated as those whence the in-patients came, including places so widely apart as Swan Hill and Yarram, Camperdown and Rochester. Every infantile ailment is treated—febrile, constitutional, and developmental troubles being dealt with in large numbers. Numerous cases of accidents and casualties are also admitted. Many of the cots have been endowed by the generosity of private donors or of public bodies. On 8th May, 1903, the Princess May Pavilion—a wing of the building containing 40 beds—was opened, thus affording accommodation for over 500 children during the year. Babies' wards have also been instituted. The hospital had 89 in-door patients at the commencement of the financial year. During the twelve months ended 30th June, 1904, there were 1,442 additional in-door patients admitted, of whom 1,320 were discharged relieved, 127 died, and 84 remained at the close of the year. The attendances of 14,643 out-door patients for the year were 80,158. The total attendances of 213,733 out-door patients since the foundation were 1,012,508, and of in-door patients treated 20,500. The hospital is situated in Rathdown, Pelham, and Drummond Streets, Carlton, and connected with the institution is a convalescent home at Brighton Beach, containing 22 cots. The number of convalescent children passing through this establishment during the year 1903-4 was 365. The cost of maintenance was £8,491, which, with £1,801, expended on buildings, gave a total expenditure of £10,292. The receipts were £10,146—made up of £500 Government grant; £388, municipal grant; £1,638, voluntary contributions; £1,790, proceeds of entertainments; £2,963, bequests; £1,448, Hospital Sunday; £508, contributions by out-patients, and £480, by in-patients; and £431, interest and miscellaneous expenses.

Eye and Ear
Hospital.

The Victorian Eye and Ear Hospital deals not only with the diseases which, as the name of the institution implies, fall to be treated there, but also with diseases in parts adjacent to the eye and ear, viz., the nose, pharynx, naso-pharynx, and larynx. Thus classes of ailments are treated in this institution which not only are the cause of extreme suffering in themselves, but also, when unchecked, the means of producing much helplessness and poverty, arising from deafness, blindness, &c., and entailing a heavy burden on the community. It places within the reach of all persons, without distinction of creed or country, every attainable means for the relief or cure of diseases of the eye and ear. The patients treated are distributed throughout the whole of the Commonwealth; New Zealand also contributing its quota. The in-patients received during 1904 numbered 666, making, with 38 in the institution at the commencement of the year, a total of 704 treated. The patients discharged numbered 659, of whom 624 were stated to be cured or relieved, and 32 to be incurable. Three were discharged at their own request, and 1 died. Besides these, there were 5,559 out-patients treated, 98 of this number being from the other States and New Zealand. The total number of attendances was 28,734, and of operations 893. The hospital buildings are situated on a fine site in Victoria Parade, East Melbourne, but the accommodation is quite insufficient, and negotiations for the acquirement of the adjoining land belonging to the Melbourne and Metropolitan

Board of Works, have so far been unsuccessful. The receipts for the year 1903-4 were £3,792—made up of £800 Government grant; £270, from municipalities; £822, private contributions; £215, legacies, bequests, &c.; and £1,685, other sources. The expenditure was £3,567—£3,395 for maintenance, &c., and £172 for buildings.

ROYAL VICTORIAN INSTITUTE FOR THE BLIND.

By J. Thurston Hogarth, Esq., Superintendent and Secretary.

The Royal Victorian Institute for the Blind occupies a site on the St. Kilda-road, Melbourne. The institution is strictly undenominational in its character, and its objects are to give a suitable scholastic and religious education to the young blind of the State, and to teach them trades or professions by means of which they may earn an independent livelihood. It is further intended, as far as the exigencies of trade will permit, to give employment in its industrial department to blind people, who, having completed their term of training, may be unable to get work elsewhere. This, however, is restricted to the demand for the goods made. The institute is not in any sense a benevolent asylum for the indigent blind, who can not only be maintained cheaper, but can be better cared for in the ordinary institutions for the care of the destitute. The scholastic education is similar to that in the State schools, varied only in the apparatus and means employed; and examinations are held annually by the Education Department, the percentage gained at the last being 100. Music is an important part of the education of the blind, and those who display exceptional talent are trained for the musical profession, and the skill of the pupils is utilized as a means of raising revenue for the institution by means of concerts and band performances in various parts of the State. In the industrial branch, pupils are trained in the trades of brush, basket, mat, and matting making, the period of training varying from two to five years; and employment is then given to non-resident ex-pupils, who are paid wages at piece-work rates ruling in the various trades. Some less proficient workers have their wages supplemented by a bonus. Its outside workers are assisted in times of sickness by "The Blind Workers' Sick Benefit Society." Its funds are maintained by weekly contributions by its members, and it is subsidized by a grant from the board of management equal to the amount of the members' contributions. This society is managed by a committee of its members, assisted by the principal of the institution, and the accountant, who acts as honorary treasurer. It contains 5 dormitories, with 112 beds. There were under care on 1st July, 1903, 95 persons; 10 were admitted during the year; 10 were discharged at their own request, leaving 95 at the end of the financial year. The total amount received for goods manufactured was £4,825. There is now no debt on the institution. The total number of pupils and workers on the roll is 91; classified as follows:—Resident pupils, 46; day pupils, 4; journeymen and non-resident workers, 41. The total receipts in 1903-4 were £5,219, comprising—£1,640, Government grant; £194, municipal grant; £1,348, private contributions;

£1,167, legacies and bequests; and £870 from all other sources. The expenditure was £3,808—£61 for buildings, and the balance maintenance and miscellaneous expenses.

VICTORIAN DEAF AND DUMB INSTITUTION.

By John Adcock, Esq., Superintendent and Secretary.

Deaf and
Dumb
Institution.

The Victorian Deaf and Dumb Institution occupies a site on the St. Kilda-road, and is a Home and School combined for deaf children from all parts of the State, irrespective of creed or nationality. At the beginning of the year there were 67 pupils on the roll. During the year 11 new pupils were admitted, and 4 discharged, thus leaving 74 pupils on the roll on the 30th June, 1904, viz., 31 boys and 43 girls. Since the year 1862, when the institution was fairly launched, 433 deaf children have enjoyed its benefits. The combined oral and manual system of teaching, which is used in the majority of similar institutions throughout the world is also used here, with very satisfactory results. In addition to the ordinary school work, many of the boys are taught boot-making and gardening, and the girls dressmaking, plain and fancy needlework, and all kinds of domestic duties. The receipts for the year amounted to £3,143—made up of £820, Government grant; £197, municipal grant; £950, private contributions; £214, legacies and bequests; and £962, from all other sources. The expenditure was £3,429—£422 for buildings, and £3,007 for maintenance, &c. £337 has been added to the endowment account, the total to the credit of which fund is now £12,367—most of which is invested in Government stock, the interest only being available for maintenance purposes.

BENEVOLENT ASYLUMS.

Benevolent
asylums.

In addition to the nine Benevolent Asylums connected with general hospitals, there are eight other of these institutions in the State; two are situated at Ballarat, one each at Bendigo, Beechworth, and Castle-maine, the remaining three being in Melbourne. The number of inmates on the 1st July, 1903, was 2,507; the number admitted during the year 1,353; the total discharged cured, relieved, or otherwise, and died was 1,382; leaving under care on 30th June, 1904, in all the institutions, 2,478. The Government grant in aid for the year 1903-4 was £20,462; from municipalities a sum of £1,161 was received; private contributions amounted to £3,191; proceeds of entertainments, £1,351; legacies, bequests, and special donations, £922; Hospital Sunday collections, £1,177; payments by patients, £1,869; from all other sources, £3,099 was received, making a total income of £33,232. The expenditure was £35,037.

Benevolent
societies.

Eighty-one benevolent or philanthropic societies furnished returns for the year ended 30th June, 1904. These associations are for the relief of distressed or indigent persons, and are generally managed by ladies. The names of two of the societies indicate their connexion with the Jewish body, but no distinctive denomination is perceptible in the titles of any of the others, with the exception of the Central Methodist Mission, and Church of England Seamen's Mission. The

distinct adult individuals relieved during the year numbered about 13,226; the receipts amounted to £20,168, of which £5,254 was from Government, £1,417 from municipalities, and £13,497 from private sources; the expenditure was £19,339.

There are nine of these establishments in the State, situated at Ballarat, Geelong, Cheltenham, and Melbourne. The number of children under care on the 1st July, 1903, was 1,361; the number admitted during the 12 months was 416; the total discharged and died, 406, leaving under care on 30th June, 1904, 1,371. This shows overcrowding to a very slight extent, as the daily average in attendance was 1,394, and the number of beds only 1,338. In two of these establishments the Nazareth Home at Ballarat, and the Livingstone Home at Cheltenham, the particulars respecting cost of maintenance, &c., cannot be furnished, as the managements, on the score of economy, keep no books of accounts. In the other seven institutions, the total expenditure was £19,455—made up of £5,710, Government grant; £419, municipal grants; £3,694, private contributions; £729, proceeds of entertainments; £4,164, legacies and bequests; £317, Hospital Sunday contributions; £2,376, payments on account of orphans maintained; and £2,046, other receipts. The total expenditure was £5,145—£3,026 for buildings, and £2,119 for maintenance and other expenses.

Orphan
asylums.

There are two consumptive sanatoriums, situated at Echuca and Macedon, with 95 beds. On 1st July, 1903, there were under care 21 males and 16 females, and 83 males and 65 females were admitted during the year; 50 males and 41 females were discharged cured or relieved; 24 males and 11 females were discharged incurable, and 3 males and 6 females were discharged at their own request; 2 males and 1 female died, leaving under care on 30th June, 1904, 25 males and 22 females. The Government grant in aid was £165; municipal donations amounted to £139, private contributions to £496, proceeds of entertainment £114, legacies, bequests, &c., £541; Hospital Sunday distribution, £292; relatives contributed £1,027; interest amounted to £116; and all other charges to £34, making a total of £2,924. The expenditure on buildings was £1,243; on maintenance and miscellaneous expenses, £2,814—a total of £4,057.

Sanatoriums
for Con-
sumptives.

In addition to the hospitals, there are two convalescent Homes—one for men, situated at Cheltenham, and the other for women at Clayton—with accommodation for 61 inmates. The number of inmates at the beginning of the year 1903-4 was 43; 1,200 were admitted, and 1,196 were discharged during the year, and 47 remained under care on the 30th June, 1904. The Government grant in aid of these institutions amounted to £370; municipal grants, £92; private contributions, £276; proceeds of entertainments, £19; legacies, bequests, &c., £255; Hospital Sunday, &c., £281; from relatives, £90; and from interest and other sources, £108—a total of £1,491. The expenditure was £77 on buildings, &c.; £1,345 on maintenance—a total of £1,422.

Convales-
cent homes.

Two free dispensaries furnished returns for 1904—the Collingwood and Fitzroy Free Medical Dispensary, and the Richmond General Dispensary. The individuals treated during the year ended 30th June, 1904, numbered 5,583. The visits to or by these persons

Free dis-
pensaries.

numbered 20,328. The total receipts amounted to £560, of which £180 was from Government and £380 from other sources. The total expenditure was £728.

Broad-
meadows
Foundling
Hospital.

This hospital was established on the 1st April, 1901. The original cost of the buildings was £2,200, and £1,320 has been expended since that time in additions and improvements. Since its establishment, 101 mothers have been admitted, and on 31st December last there were 17 remaining under care. The total number of infants admitted was 175; 54 deaths have occurred, 11 of the infants have been adopted, 19 have been boarded out, and 39 taken by relatives, while 52 were under care at the end of the year. The institution contains 7 dormitories and 52 beds. It is supported chiefly by donations and collections. It is managed by the Sisters of St. Joseph, whose aim is to protect infant life, procure suitable homes for the children, and afford shelter to destitute mothers. The present condition of the establishment is satisfactory.

Victorian
Infant
Asylum.

The objects of the Victorian Infant Asylum and Foundling Hospital are the prevention of infanticide, the saving of infant life from the many evils arising from baby-farming, and the rescuing of mothers of illegitimate children from further degradation. Every child admitted must be brought by the mother or some authorized person, who must enter the child's name and the date of birth in a register kept for the purpose, and must undertake to contribute something towards its support. During the year ended 30th June, 1904, the number of infants admitted was 44, besides which 64 were under the care of the institution at the commencement of the year. The number who died during the year was 8; 38 were discharged or adopted; thus the number remaining under the control of the institution at the end of the year was 62, of whom 32 were boarded out. Besides the infants, there were 52 mothers under the care of the institution during the year, of whom 37 were discharged, and 15 remained at the close of the year. The receipts amounted to £1,495, of which £350 was from Government, and £1,145 from private sources; and the expenditure was £1,264. During the year, many applications for the admission of infants had to be refused for want of accommodation. Plans for a new building have been approved, and the committee hope that before long a new wing will be added, which will give accommodation to a larger number.

Refuges for
fallen
women

The general objects of these institutions are—(1) To provide a refuge for women who have fallen into vice and who are desirous of return to the paths of virtue; (2) to reclaim such women from evil courses and fit them to become useful members of society; (3) to assist in procuring situations or in other ways providing for them on leaving the institutions. At the present time these refuges are ten in number, the Magdalen Asylum at South Melbourne furnishing returns for the first time this year, and are all situated in or near large centres of population. A Commission, which made an investigation of these charities in 1891, expressed opinion that there was waste of energy and funds in their management and maintenance, and that they might be advantageously worked together with economy and efficiency. The Commission advocated the removal of all the inmates

to one central establishment in the country where the general surroundings would be more home-like, and thereby tend to further the reformation of the women. Nothing has, however, been done in this direction up to the present time. During the year ended 30th June, 1904, the Government subsidized these establishments to the extent of £2,015; in addition, they received £80 aid from the municipalities; £1,278 from private contributions; £31 from Hospital Sunday and Church collections; £737 from legacies, bequests, and special donations; £15,406 from the labour of the inmates; £110, contributions on behalf of patients; and £274 from all other sources; making a total of £19,931. The total expenditure was £21,208, made up of £2,169, buildings and extraordinary repairs, £195 ordinary repairs, and £18,844 maintenance of inmates and miscellaneous expenditure.

There were 1,032 female inmates in these institutions during the year ended 30th June, 1904; 27 were in the Ballarat Home, 14 in the Bendigo Rescue Home, 81 in the Elizabeth Fry Retreat, South Yarra, 19 in the Geelong Female Refuge, 469 in the Magdalen Asylum at Abbotsford, 66 in the Carlton Refuge, 58 in the South Yarra Home, 85 in the Temporary Home for Fallen and Friendless Women, at Collingwood, 18 in the House of Mercy, at Cheltenham, and 195 in the Magdalen Asylum, South Melbourne. In addition, there were 105 children in the institutions with their mothers; 12 at Ballarat, 10 at Bendigo, 9 at Geelong, 52 at Carlton, 1 at South Yarra Home, and 21 at Collingwood. During the year 10 children were born in the Ballarat Home and 6 at Geelong. The total number under care in all the institutions on 30th June, 1904, was 650 women and 50 children; 203 women and 31 children were either placed in service or restored to friends; 2 women were married; 94 women left voluntarily; 15 (one accompanied by a child) were expelled for misconduct; 54 woman and 3 children were sent to other institutions; homes were found for 13 children; 9 women and 9 children left otherwise; and 5 women and 13 children died during the year. The total discharges numbered 382 women and 71 children.

The women while under care in these institutions are expected to work to the best of their ability, a suitable share of labour being allotted to each, laundry work is the chief means of providing employment, whilst sewing, art needlework, embroidery, &c., also provide occupation to a limited extent.

There are six of these establishments controlled by the Salvation Army at Abbotsford, Ballarat, Bendigo, Brunswick, Fitzroy, and Geelong. The establishments contained 180 beds on 1st July, 1903, when there were under care 135 adults and 19 children. During the year 405 adults and 95 children were admitted; 326 were placed at service or restored to friends; 15 were discharged at their own request; 12 were sent to hospitals and other institutions; and there were 42 adults discharged for various reasons, with 71 children. The Army received £566 from the Government, in aid of these institutions; £173 from private contributions, £3,457 from the proceeds of the labour of the inmates, and £498 from all other sources—a total of £4,694. The

Salvation
Army
Rescue
Homes.

total expenditure was £4,514, made up of £536 for buildings and repairs, £3,955 for maintenance, and £23 for miscellaneous expenses.

Night shelters.

At Dr. Singleton's Night Shelters, Collingwood, 16,873 cases were accommodated during the year 1903-4, viz., 8,120 men, 8,484 women, and 269 children. The expenses were £118, which were defrayed out of the "General Charity Fund," but there were also numerous contributions in the shape of food. This charity is truly a boon, affording as it does a clean quiet haven of rest for the homeless, after the weariness of a day out of doors.

Victorian Discharged Prisoners' Aid Society.

Since 1872 a society has been in existence for the purpose of affording assistance to discharged prisoners, and offering them inducements to return to the paths of honesty and industry. Relief is afforded by gifts of money, clothes, blankets, and other necessaries, railway passes, and various kinds of tools of trade; and those who desire it are supplied for a time with board and lodging in Melbourne, or are provided with means to go into the interior, or to leave the State. The society also takes charge of and distributes the sums earned by the prisoners whilst under detention. The work is aided by honorary correspondents in country centres. Very valuable aid is given in connexion with the moral reformation of the young offender. The improvement of the hardened criminal is a matter of great difficulty, but the society is a valuable help to those who have not become confirmed in careers of crime and wrong doing, and minimizes the tendencies of drifting into the criminal class of those who have formed vicious and evil habits. The number of individuals relieved in 1903-4 was 484. The receipts were £680, including grants from the Government and the Penal Department, and contributions from private sources; and the expenditure was £676.

St. John's Ambulance Association.

This association was established in Victoria in 1883. Its objects are to instruct all classes in the preliminary treatment of the sick and injured. Since the inception of the association, its influence has been steadily increasing, and the number of people instructed is growing larger every day. The total number who have been instructed to date is 14,096; the number of persons who are fully qualified is 681; 2,066 railway employes and 553 members of the police force have been specially educated in the work; and 8,171 certificates and medallions have been issued. An ambulance waggon is stationed at 25 Lang-lane (Tel. 3264), at the back of the Grand Hotel, Spring-street, which may be summoned when required. Ashford litters are also provided for the use of the public in cases of accident in the city and suburbs, and first aid is generally rendered by trained firemen.

CHARITY ORGANIZATION SOCIETY.

By T. C. Mackley, Esq., Secretary.

Charity Organization Society.

The society has been established in Melbourne since 1887, its objects being:—(1) To encourage and organize charitable work and to promote co-operation therein; (2) To check imposture and professional mendicity, and to discourage indiscriminate alms-giving; (3)

To inquire into all applications for assistance, with the view of ascertaining if and in what way each case can be helped; (4) To afford (where necessary) immediate relief during inquiry or pending arrangements with charitable institutions or aid from other sources; (5) To maintain a woodyard, or other labour test, so that the means of earning food or shelter shall be open to any applicant able and willing to work; (6) To establish a loan fund; (7) To keep records of all cases for the purpose of reference, and to maintain a Central Register of help given by all relieving agencies. The society is managed by an executive committee elected by a council empowered to make rules and regulations for the conduct of its business. This council consists of a nominee of each of the charities represented, and of twenty members elected at an annual meeting of subscribers of the society. The income of the year ended 30th June, 1904, was—General account (for administration expenses)—Receipts, £779; expenditure, £772. Trust Account (being donations for special applicants and objects)—Receipts, £496; expenditure, £532. Emergency Relief Account—Receipts, £18; expenditure, £83. Woodyard—Receipts, £473; expenditure, £445. The number of cases dealt with during the year was 1,166, of which the new cases investigated were 627. The result of the inquiry shows that in 535 instances distress was due to misfortune, and in 64 to misconduct; 28 cases come under other headings. The society claims to have prevented a large amount of imposture, to have relieved subscribers of the annoying feeling that their benevolence was often wasted on unworthy objects, and to have stimulated and directed the flow of charity. Especially good work has been done in cases where employment has been found for those who, without the society's aid, might have degenerated into permanent burdens on public or private charity, and in the large number of cases in which relatives of indigent persons have been induced to recognise natural claims in a community where no legal obligation is entailed by relationship other than that of husband to wife and of parent to infant. The woodyard is a very practical part of the society's work. It affords a test of the sincerity of men who ask help on the ground that they cannot get work; and it gives temporary work to those who really need it.

This society has been well to the fore in regard to the establishment of labour colonies. That at Leongatha was founded by the advice and with the assistance of the society eleven years ago. Such institutions are regarded as a valuable resource for effectively assisting certain classes of the unemployed in adverse time and seasons. Although the Leongatha colony has not been altogether a success, it is hoped that future efforts will be benefited by the knowledge of the errors that attended its experimental establishment. The Charity Organization Society, however, has been instrumental in securing the continuation of the colony until another has been founded and equipped. The lack of suitable employment for the poor is partly met by the employment office of the society, through which a large number of persons have been given work, permanent in some cases and temporary in others, which otherwise would not have reached them.

LABOUR COLONY, LEONGATHA.

Labour
Colony,
Leongatha.

The Labour Colony at Leongatha was established by a proclamation of 26th September, 1893, setting apart and appropriating, under the *Settlement on Lands Act* 1893, about 800 acres in the township. By a further proclamation of 24th April, 1903; the colony was abolished, and the land resumed by the Lands Department, although the colonists were still maintained on the land.

The object sought by its establishment was to afford temporary relief at sustenance wages to able-bodied destitute men. During the first year of its existence 1,013 men were sent to the colony, and up to the present, 6,160 men have been afforded relief. The colonists are instructed in the general work of farming, dairying, fruit and vegetable growing. Pig breeding is carried on extensively, and bees and poultry are also raised. During the year ended 30th June, 1904, 593 men were admitted, a weekly average of 79 was maintained during the whole year—337 left looking for work, 137 left with engagements, 15 were discharged for various reasons, and 104 were at work on the 30th June, 1904. The cost of maintenance, including food, wages, and management, was 6s. 6d. per week per man.

After the trustees of the old colony had all retired the Minister of Lands instructed the Director of Agriculture, on 13th June, 1903, to take over the farm and manage it as a Labour Establishment, virtually as a Labour Colony for the relief of destitute men in Melbourne who desired to go there. No order was given that the number admitted to the Establishment was to be reduced, and the destitute were as freely admitted as formerly, but in many instances were not maintained there so long, orders being issued that when a man had earned £2 he should leave in search of work.

When the accounts were balanced for the financial year ending 30th June, 1903, it was found that there was a credit balance of £672 in trust accounts.

The total expense for the year was £2,619, which included £226 fares and freights; £67 plant and tools; £23 building material, and £51 live stock.

The receipts from sales amounted to £1,425, as follows:—

Dairy produce	...	...	£561	15	6
Farm produce and garden	...	...	239	18	11
Pigs	...	...	295	19	9
Cattle	...	...	119	19	6
Hides, bones, &c.	...	...	119	13	10
Sheep	...	...	36	0	8
Poultry	...	...	22	5	3
Bees	...	...	3	16	5
Miscellaneous	...	...	25	11	11

The following is the amount of Government grants spent annually since the establishment of the Colony:—

1893-4	...	... £4,213	15	2
1894-5	...	... 3,203	8	0
1895-6	...	... 2,473	13	1
1896-7	...	... 2,219	14	4
1897-8	...	... 2,729	13	2
1898-9	...	... 4,091	8	1
1899-1900	...	... 3,884	5	11
1900-1	...	... 3,000	0	0
1901-2	...	... 2,374	3	6
1902-3	...	... 3,627	7	10
1903-4	...	... 1,998	18	11
Total		...	... £33,816	8 0

It will be seen that the Government grant for 1903-4—£1,999 is the lowest that has ever been made, and is £1,628 less than that of the year 1902-3. The amount of cash in hand on the 30th June, 1904, was £1,485. Consequently, £1,000 will be sufficient provision for the year 1904-5.

On the 14th June, 1904, 460 acres or thereabouts of the old Labour Colony lands, including the homestead, were proclaimed a Labour Colony, and Trustees were appointed to act from 1st July, 1904. The Trustees appointed were—Messrs. S. Williamson Wallace, Elgar James Nevell, John Henry Mullaly, James Richard Pescott, and Patrick Joseph Carroll.

Although the profits from the farm will be reduced owing to the restricted area, there will still be work in clearing and cultivation to enable men to be sent to Leongatha for several years. By the continuation of this colony no man need starve in the city. Every week applications are made by destitute unemployed men to be sent to the Institution. A greater number apply in winter than in spring or summer, and without an asylum of this kind it is hard to conceive what would become of these destitute individuals. In every large community there is always a great number of human derelicts without criminal tendencies; and provision (other than gaols) where men can get work that is remunerative to the State, must of necessity be made; and this Institution, therefore, should come in time to acquire a national character. It is now almost self-supporting, and, in a few years' time, by the adoption of improved methods in management, should become entirely self-supporting. From the late director's experience of the relief that has been afforded to many people on the verge of starvation, he considers the Institution an excellent one in the interests of society as a whole.

AUSTRALIAN HEALTH SOCIETY.

By J. G. Burrows, Esq., Secretary.

The "Australian Health Society" was established in Melbourne in 1875. It consists of about 300 members, and is managed by a Health Society.

president, two vice-presidents, a treasurer, two secretaries (one being a lady), and fifteen members of council. Its objects are:—(1) To create an educated public opinion with regard to sanitary matters in general, by the aid of the platform, the press, and other suitable means; (2) to induce and assist people, by personal influence, example, and encouragement, to live in accordance with recognised laws whereby health is maintained and disease is prevented; (3) to seek the removal of all noxious influences deleterious to the public health, and to influence and facilitate legislation in that direction. To effect these objects, the society distributes pamphlets, tracts, and wall sheets, bearing upon the preservation of health; maintains a lending library of specially selected works for the use of members; and arranges for the delivery of public health lectures and the holding of meetings for women for instruction in the laws of health in Melbourne and suburbs. In pursuance of the plan of testing the work done in the inculcation of health and temperance lessons in the State schools, an examination was arranged to be held, with the concurrence of the Minister of Public Instruction, in September, 1904, of pupils (over 11 years of age) attending schools in country districts. Of those pupils who presented themselves for examination, 28 received the Health Society's certificate. These examinations are conducted annually by the council of the society, alternately in the metropolitan and country schools. The society receives no pecuniary aid from the Government, its work being carried on by voluntary subscriptions ranging from 5s. per annum upwards.

ROYAL HUMANE SOCIETY OF AUSTRALASIA.

By William Hamilton, Esq., Secretary.

The Royal Humane Society of Australasia was established in 1874 under the name of "The Victorian Humane Society." Its objects are as follow:—(1) To bestow rewards on all who promptly risk their lives to save those of their fellow-creatures. (2) To provide assistance, as far as it is in the power of the society, in all cases of apparent death occurring in any part of Australasia. (3) To restore the apparently drowned or dead, and to distinguish by rewards all who, through skill and perseverance, are, under Providence, successful. (4) To collect and circulate information regarding the most approved methods and the best apparatus to be used for such purposes. During the year ended 30th June, 1904, 60 applications for awards were investigated with the result that 18 certificates, 11 bronze medals, and 2 silver medals, were granted. The receipts during the year amounted to £559, and the expenditure to £420. The institution has placed and maintains 438 life-buoys at various places on the coast, rivers, lakes, and reservoirs, throughout all the Australian States and Fiji. Of the honorary awards distributed in 1903-4, 20 were for deeds of bravery performed in Victoria, 2 for similar acts in New South Wales, 5 in Queensland, 2 in New Zealand, and 2 in South Australia. The society has 141 honorary correspondents, residing as follow, viz. :—43 in Victoria, 36 in New South Wales, 25

in New Zealand, 22 in Queensland, 8 in Tasmania, 3 in South Australia; and 4 in Western Australia. Owing to the appointment of these gentlemen and to the awards made by the society appearing to give complete satisfaction throughout the States, there is no urgency for forming local branches of the society in the other States.

Swimming competitions have been inaugurated in the schools of the Commonwealth, and awards of medals and certificates are made to those pupils who attain proficiency in exercises which have special reference to saving life from drowning.

The Victorian Society for the Protection of Animals has been established for about 30 years. By the enforcement of the existing laws, and the procuring of such further legislation as may be deemed expedient, it seeks to prevent wanton and unnecessary cruelty. The creation of a wholesome and enlightened public opinion is also aimed at, since it is recognised that to excite and sustain such opinion regarding man's duty to the lower animals is even of greater force than the law, particularly in those classes of cases where pain and suffering may actually be caused in ignorance, and where consequently a little more knowledge of animals would result in the diminution of the unconscious practice of cruelty. To this end, papers and leaflets dealing with the proper, humane, and considerate treatment of animals are widely distributed. Honorary agents of the society are appointed in the principal centres, and these, by disinterested service in the cause of mercy, under the supervision and in co-operation with the secretary and inspector in Melbourne, forward the work of the institution in every portion of the State. During the year ended 30th June, 1904, 873 cases were dealt with by the society, of which 536 were connected with cruelty to horses. There were 84 prosecutions in cases of deliberate cruelty, in nearly all of which the law was vindicated by the punishment of the offenders. The receipts for the year amounted to £580 and the expenditure to £512.

Society for
the Pro-
tection of
Animals.

HOSPITAL SATURDAY AND SUNDAY.

In Melbourne and suburbs, the last Saturday and Sunday of October in each year are set apart for making collections in aid of the charitable institutions. The clergy of the various denominations take an active part in the movement, preaching sermons appropriate to the occasion, and otherwise helping it forward. The church collections on this Sunday are entirely devoted in aid of the fund. Sunday school superintendents, business firms, their employes, and others lend valuable assistance in making collections. The following are the amounts collected since the movement was inaugurated:—

COLLECTIONS, 1873 TO 1903.

		£			£
1873 to 1898	...	190,104	1902	...	6,669
1899	...	5,853	1903	...	7,058
1900	...	5,901			
1901	...	6,034	Total	...	£221,619

The returns for 1904 are not yet available.

Distribution
of moneys
collected
on Hospital
Saturday
and
Sunday.

The amounts distributed to the various charitable institutions, as well as the total sums collected, from the inception of the fund, and for the year 1903, were as under:—

DISTRIBUTION, 1873 TO 1903.

Institution.	Amount Distributed.		
	1873 to 1902.	1903.	Total.
	£	£	£
Melbourne Hospital	63,456	1,755	65,211
Alfred Hospital	27,501	771	28,272
Benevolent Asylum	19,025	526	19,551
Women's Hospital	19,127	477	19,604
Children's Hospital	24,004	821	24,825
Eye and Ear Hospital	10,390	307	10,697
Homœopathic Hospital	10,325	256	10,581
Victorian Home for Aged and Infirm	6,991	172	7,163
Richmond Dispensary	1,365	40	1,405
Collingwood Dispensary	1,900	...	1,900
Austin Hospital for Incurables	10,703	568	11,271
Convalescent Home for Women	1,915	140	2,055
" " Men	1,400	140	1,540
Melbourne District Nursing Society	653	67	720
St. Vincent's Hospital	2,750	212	2,962
Sanatorium for Consumptives, Echuca and Macedon	1,013	289	1,302
Queen Victoria Hospital for Women and Children	414	144	558
Melbourne Dental Hospital	40	20	60
Victorian Infant Asylum ... ..	...	40	40
Total distributed	202,972	6,745	209,717
Total collected	214,561	7,058	221,619

OLD-AGE PENSIONS.

An Act to provide for the payment of old-age pensions was passed in 1900. The minimum age of a pensioner is 65 years, but pensions may be granted to persons under that age if they have been permanently disabled through having been engaged in mining or any unhealthy or hazardous occupation. The period of residence in the State required to entitle a person to a pension is 20 years, five of which must be continuous and immediately preceding the application. A person who has deserted, without just cause, wife, husband, or children, for a period of 12 months in the preceding five years, is debarred from pension rights. The absence of serious criminal taint, to the extent of not having been imprisoned for periods amounting to five years during the whole qualifying period of residence, or to six months or upwards in the preceding five years, is insisted upon. Three convictions for drunkenness during the preceding two years is a disqualification. An applicant must be a British subject by birth, or a naturalized subject of not less than six months' standing, but Chinese and Asiatics, whether naturalized or not, and Aborigines are excluded. Relatives may be summoned to show cause why they do not support applicants for pensions, and may be ordered to do so. Originally the maximum pension was 10s. per week, but in the Amending Act of 1901 it was reduced to 8s. per week. Under the Amending Act of

1903 pensions are only granted and the amount fixed by the Treasurer of the State, after recommendation of the Commissioners. The maximum rate of pension (8s. per week) is retained. 12,040 persons were entitled to receive pensions on 31st December, 1903. Between 1st January, 1904, and 31st December, 1904, 846 pensions were granted to new applicants and 81 pensions were restored; 527 pensions were cancelled, and 1,015 pensioners died, leaving 11,425 persons entitled to pensions on 31st December, 1904, of whom 11,263 are receiving payment from last schedules prepared. (The remaining 162 pensioners are inmates of hospitals or have had their pensions temporarily suspended.) Of the persons entitled to pensions on 31st December, 1904, 4,863 were resident in Melbourne and suburbs; 791 in Ballarat and district; 543 in Bendigo and district; 352 in Geelong; 150 in Maryborough; 138 in Daylesford; 137 in Warrnambool, and the remainder were scattered throughout the other districts of the State.

The following are the amounts paid since the inception of the system on 1st January, 1901, viz. :—

In 1900-01	...	...	£129,338
1901-02	...	...	292,432
1902-03	...	...	215,973
1903-04	...	...	205,150
From 1st July, 1904, to 31st December, 1904	...	...	104,955
Total	...	...	<u>£947,848</u>

The following statement shows the estimated number of persons aged 65 years and over in the three States paying old-age pensions, the number of persons receiving pensions, the proportion of the latter to the former, and the annual amount payable:—

Old-age Pensions in Australia and New Zealand.

OLD-AGE PENSIONS IN AUSTRALIA AND NEW ZEALAND, 1904.

State or Colony.	Estimated Number of Persons Aged 65 Years and Upwards.	Number of Persons Receiving Old Age Pensions.	Proportion of those Eligible on an Age Basis Receiving Pensions.	Annual Amount Payable.
			Per cent.	£
Victoria	67,434	11,425	17	198,033
New South Wales	52,173	20,900	40	497,520
New Zealand	37,500	11,926	32	200,915
Total	157,137	44,251	28	896,468

It thus appears that New South Wales is paying pensions to two-fifths of those eligible to receive them under the age qualification. New Zealand to one-third, but in Victoria only about one-sixth of those so qualified are on the pension list.

Besides Victoria, only New South Wales and New Zealand have, in Australasia, provided pensions for their aged people. In New South Wales, the scheme sanctioned by Parliament specifies a pension of £26 a year, diminished by £1 for every £1 of income above £26 a year, and by £1 for every £15 of property the pensioner possesses. Persons under 65 years of age but over 60 years are entitled to pensions if they are incapacitated by sickness or injury from earning their livelihood.

In New Zealand, every person 65 years of age and over, is eligible for a pension, provided he has resided continuously in the colony for 25 years, and does not receive income in excess of £52 a year, nor possess property exceeding £270 in value. The maximum pension is £18 a year with a deduction of £1 per annum for each £1 of income above £34 a year, and for each £15 of property above £50.

The law of New South Wales and New Zealand, unlike that of Victoria, makes no provision for relatives of aged impecunious persons being compelled to support them.

The following return is an estimate of the number of people aged 65 and upwards whose age made them eligible on 1st October last to receive old-age pensions in Australia. In Victoria the estimated number is 67,464; in New South Wales, 52,173; in the other States, 43,263, or 162,900 in the Commonwealth of Australia. On the basis of the Victorian system of old-age pensions, 17 per cent. of these would be drawing pensions, and on that of New South Wales, 40 per cent. :—

AGES AT CENSUS, 1901, AND PROBABLE SURVIVORS AGED 65 AND UPWARDS ON 1ST OCTOBER, 1904.

Age at Census, 1901.	Victoria.		New South Wales.		Other States.		Australia.	
	Population at Census.	Survivors aged 65 and upwards on 1st October, 1904.	Population at Census.	Survivors aged 65 and upwards on 1st October, 1904.	Population at Census.	Survivors aged 65 and upwards on 1st October, 1904.	Population at Census.	Survivors aged 65 and upwards on 1st October, 1904.
61 years ...	4,454	2,108	4,764	2,254	3,920	1,855	13,138	6,217
62 " ...	5,342	5,127	5,054	4,850	4,433	4,255	14,829	14,232
63 " ...	5,321	5,177	5,090	4,943	4,435	4,315	14,846	14,435
64 " ...	5,726	5,561	5,340	5,186	4,648	4,513	15,714	15,260
65 to 70 years	29,923	25,106	22,300	18,711	16,763	14,063	68,986	57,880
70 " 75 "	20,141	14,847	13,010	9,591	11,189	8,248	44,340	32,686
75 " 80 "	9,964	6,496	6,437	4,199	5,909	3,858	22,310	14,553
80 " 85 "	4,518	2,502	3,475	1,924	3,098	1,716	11,091	6,142
85 " 90 "	1,190	463	1,077	419	952	374	3,225	1,256
90 " 100 "	312	75	391	94	270	66	973	235
100 and over ...	23	2	17	2	6	...	46	4
Total popula- tion, 65 and upwards	...	67,464	...	52,173	...	43,263	...	162,900

The 67,464 persons aged 65 years and upwards living in Victoria in 1904 are described as follow:—

CONDITION OF PERSONS RESIDING IN VICTORIA AGED 65 YEARS AND UPWARDS, 1904.

—	Number.
Independent or Provided for—	
Earning their own living	22,459
Members of Friendly Societies	2,500
Government Pensioners	3,149
Possessed of independent means	3,271
Total	31,379
Dependent—	
Residing in Benevolent Institutions	3,000
Old-age Pensioners	11,609
Dependent on Relatives	21,410
Total Dependent	36,019
Criminals	66
Total Aged 65 Years and Upwards	67,464

LUNATIC ASYLUMS.

The number of cases admitted to lunatic asylums during the year 1904 was 761, the number discharged recovered was 277, and relieved 65. The number of patients remaining in the asylums on the 31st December, 1904, was 4,642, or a proportion of 1 in every 261 of the population, as compared with 4,570, or 1 in every 264 of the population, in the preceding year. Of those discharged recovered in 1904, as many as 82 per cent. had been in the asylums for less than twelve months, 9 per cent. from 1 to 2 years, and 4 per cent. from 2 to 5 years. After this length of time in the asylums recoveries are not at all likely to take place. Of those who died, 35 per cent. had been resident under twelve months, 34 per cent. from 1 to 5 years, 16 per cent. from 5 to 10 years, 7 per cent. from 10 to 15 years, 4 per cent. from 15 to 20 years, 5 per cent. from 20 to 25 years, and about 6 per cent. were in longer than 25 years. These facts tend to show that mortality is heavy during the early stages of treatment, and that the death rate amongst those inmates who have a lengthened asylum residence is very light, and no doubt this result generally aids in making the large asylum population to which attention has been repeatedly directed.

Since the opening of the first asylum in 1848 up to the end of 1904, 33,616 persons have been admitted, viz., 19,229 males, and 14,387 females. The proportion who recovered was 29 per cent. of males, and 33 per cent. of females, whilst 4 and 7 per cent. respectively were relieved, 21 and 22 per cent. (including transfers) were not improved, 33 and 23 per cent. died, and 13 and 15 per cent. respectively still remain under care in the institutions.

Admissions, discharges, &c., lunatic asylums, 1848 to 1904.

Lunatics in Australia and New Zealand.

The number of lunatics in the different Australian States and New Zealand, and their proportion to the total population of each State on 31st December, 1903, were:—

NUMBER OF LUNATICS IN STATES.

State or Colony.	Number of Lunatics on 31st December, 1903.	
	Total.	Per 1,000 of Population.
Victoria	4 570	378
Queensland	1,852	359
New Zealand	2,959	3 15
New South Wales	4,935	345
South Australia	962	264
Tasmania	451	251
Western Australia (1902)	365	170

Recoveries of lunatics in Australia, 1903.

The recoveries of patients in the Victorian lunatic asylums in 1903 were above the average of the twenty-two years ended with 1903, the proportion in that year being 4,229 per 10,000 admitted, as compared with 4,059 in the period stated.

RECOVERIES.

	Recoveries per 10,000 Admissions.		Recoveries per 10,000 Admissions.
Western Australia (1902)	5,172	Victoria	4,229
South Australia	4,561	Queensland	4,006
Tasmania	4,557	New South Wales	3,559

Deaths of lunatics in Australia and New Zealand.

The mortality of lunatic asylum patients was higher in Victoria in 1903 than in any of the other States with the exception of South Australia. This will be seen by the following figures:—

DEATHS.

	Deaths per 10,000 Resident Patients.		Deaths per 10,000 Resident Patients.
South Australia	1,283	Tasmania	740
Victoria	832	Western Australia (1902)	621
New South Wales	758	New Zealand	596
Queensland	742		

INDUSTRIAL AND REFORMATORY SCHOOLS.

Industrial and reformatory schools.

There were at the end of 1904 three industrial and eleven reformatory schools in the State. Two of them (one industrial and one reformatory school) are wholly maintained and managed by the Government, and are used merely as receiving and distributing depôts, the children being sent as soon as possible after admission thereto to foster homes, situations, or to other institutions for dealing with State wards. The other schools are under private management and receive a capitation allowance from the Government for those inmates who are wards of the Department. Many of the inmates of the reformatories are either placed with friends or licensed out. The wards of

the State on 31st December, 1904, numbered 5,176, and in addition there were 44 others free from legal control, who, being incapacitated, were maintained by the State. Of the total number under control, only 287 are described as reformatory children; 189 of these were in reformatory schools, 62 were maintaining themselves at service, 33 were placed with relatives without cost to the State, 2 were in hospitals, and 1 was on a visit to friends. The balance, 4,889, are described as neglected children, of whom 3,154 were boarded out in foster homes, 826 were maintaining themselves at service, 769 were living with relatives without cost to the State, 132 were inmates of institutions for neglected children, 4 were in hospitals, and 4 on visits to relatives.

The welfare of the children boarded out is cared for by honorary committees, who send reports to the department as to their general condition. The rate paid by the Government to persons accepting charge of these children is five shillings per week for each child. Children from either industrial or reformatory schools may be placed with friends on probation, without wages, or at service. The number of children boarded out at the end of 1904 was 3,154, as against 3,363 in 1903, 3,753 in 1902, 3,701 in 1901, and 3,331 in 1900; the number placed with friends on probation was 769 in 1904, as against 825 in 1903 and 1902, 780 in 1901, and 719 in 1900; and the number at service or apprenticed 826 in 1904, as against 831 in 1903, 815 in 1902, 851 in 1901, and 842 in 1900.

Children
boarded
out, &c.

The circumstances leading to the commitment of these children are as follow, the particulars having been obtained from the orders:—The total number of children placed under control in the schools in 1904 was 445, and in only 219, or 49 per cent. of the whole, were the parents held to be blameable—the father in 140, the mother in 47, and both parents in 32 cases. There were 226 cases in which the parents were held to be blameless; in 77 the father was dead and the mother poor, but of good character; in 16 both parents were dead; in 61 the parents were alive, but, though held to be of good character, were too poor to support their children; in 18 the father was poor and the mother dead; in 27 both parents were the victims of misfortune; in 9 the parents were unknown; in 7 the father was unknown and the mother dead; and in 11 the father was unknown and the mother unable, through sickness or poverty, to maintain her offspring.

The Government expenditure for the maintenance of neglected children amounted in 1904 to £52,777, and for reformatory school children to £5,785; the expenses of administration amounted to £4,568, making a total gross expenditure of £63,130. A sum of £1,389 was received from parents for maintenance, and £54 from other sources, making the net expenditure £61,687. The average number of neglected children under supervision during the year was 4,999, of this total, 3,229 were maintained in foster homes at an average annual cost per head to the State of £14 12s. 6d., 86 were in Government receiving depôts at £30 17s. 8d. per head, and 90 were in private industrial schools costing £14 3s. 7d. per head; 826 were at service earning their own living, and 769 were with relatives

Cost of
mainten-
ance of
neglected
and re-
formatory
children.

and others at no cost to the State. The average number of reformatory wards under supervision during the year was 295. Of this number, 200 were maintained in private schools at an average annual cost per head of £29 os. 6d., 62 were at service earning their own living, and 33 were with relatives at no cost to the State. The average net cost per head of neglected and reformatory school children who were maintained by the State during the year was £17 2s. 4d.

VICTORIAN MINING ACCIDENT RELIEF FUND.

In December, 1882, an inrush of water in the New Australasian Company's mine at Creswick caused the deaths of 22 miners. Consequent on the disaster 79 persons—comprising 18 widows and 61 children—were left in destitute circumstances. Public subscriptions to the amount of £21,602 were raised throughout Victoria for the relief of the widows and orphan children of those who lost their lives, and upon the Government promising to subsidize the fund to the extent of £5,000, it was decided to make it a permanent and national one. An executive committee of representative gentlemen was appointed to administer the fund, which was deposited in banks, averaging about 5 per cent. interest per annum. In July, 1884, the late Mr. E. L. Zox, M.P.; one of the committee, introduced a Bill into the Legislative Assembly to enable the committee appointed to manage the fund to hand over their functions to a body of trustees proposed to be incorporated under the name of the "Victorian Mining Accident Relief Trustees." This was done in order to place the fund on a proper footing and so as to obtain a larger income from the investment of the capital, which was then hardly adequate to meet the demands on it. This Bill, which became law in December, 1884, provided for subsidizing the fund from time to time by Parliament, but this has never been carried out. The trustees appointed comprised the Minister of Mines, the Speaker of the Legislative Assembly, the Mayors of the cities of Melbourne, Ballarat, Bendigo, the Town of Ballarat East, the Borough of Creswick, and the President of the Miners' Association for the time being respectively. Permission was given to invest the moneys in Government debentures, stock, in incorporated banks—£5,000 being the limit in any one institution, or on first mortgages of freehold land and tenements in the city of Melbourne and suburbs.

In 1885 the sum of £20,000 was lent on the property known as "Our Lodgings," situated in Lonsdale Street, Melbourne, for three years at 6 per cent. per annum, precaution being taken to obtain the joint and several bond of the directors of the company for the due payment of the interest and principal. At the expiration of the period stated the company having fulfilled the conditions attached to the mortgage, obtained a release.

In 1888 the sum of £20,000 was again invested for seven years at 5½ per cent. per annum on mortgage over the land and buildings in Queen Street occupied by Messrs. Jacobs, Hart, and Co. This investment did not, however, turn out to be a satisfactory one and the mortgagor finally asked the trustees to release him from his obligations on handing over the property, together with a sum of £1,000. This latter proposal was agreed to by the trustees.

In view of the importance of this action in relation to the investment of public trust moneys, a board was appointed by Parliament to investigate the affairs of the trust, and to ascertain whether such release should be granted on the conditions set out, or whether the Relief Fund would be benefited by the adoption of another course than that proposed by the trustees. After careful review of the evidence, the board made a full report as to the condition of the fund. The constitution of the trust was considered to be defective and the formation of a new body was recommended, such body to consist of five members to be appointed by the Governor in Council, and to hold office for five years. It was further advised that the future investment of the Relief Fund be strictly confined to Government stock or debentures, and that the Act should be amended accordingly; that the mortgagor be released from his mortgage on the conditions stipulated by him; and that effect should be given to the expressed intention of Parliament to subsidize the fund, and to establish its permanency.

These recommendations were acted upon except as regards subsidizing the fund, which has not yet been done; and on the 31st December, 1903, the amount to the credit of the fund was £13,949, of which £12,000 was the estimated value of freehold premises in Queen street, £1,300 was in Government debentures, £513 bank deposit receipts, and £136 cash in hand. At the end of 1903 there were seven widows as a charge on the fund, receiving 15s. per week each.

BENDIGO MINERS' ASSOCIATION—THE WATSON FUND.

About the middle of the year 1889 the idea suggested itself to Mr. J. B. Watson of doing something for the permanently injured miners of the Bendigo District. It was immediately after the occurrence of a severe mining accident that Mr. Watson sent a letter to the Miners' Association with an offer to contribute £1,500, at the rate of £100 per year unconditionally, or to give £150 per year for 10 years, if the Society would contribute a like amount. His proposal was brought under the notice of the Committee of Management with the result that a Select Committee was appointed to bring up a report, and at the same time to formulate a scheme. It was thought that the sum of money was not sufficient to meet the liability that would be likely to occur. It was ultimately decided to recommend the members to accept Mr. Watson's offer of £150 for 10 years, and at the same time to cover it with the sum of £200 per year, to be made by levy on all members. This scheme was laid before Mr. Watson and the members, and accepted by both parties, and it was arranged that all gifts and donations that could be procured should be credited to a fund to be known as the Watson Sustentation Fund. It was decided that the collections of 1890 should be reserved strictly for revenue purposes, and that the benefits should not come into full operation until 1891, so as to give the fund a good start, and place it on a sure foundation. Payments were accordingly first made in 1891, at the rate of 5s. per week, and this rate was maintained for about two years, when the sick pay was increased to 7s. 6d. per week. Further changes were afterwards made, as necessity arose.

The following return shows the receipts and expenditure, from the inception of the fund. In the column "Administration" the item £152 for 1903 includes £132 expenses in connexion with the sale of property:—

PERSONS RELIEVED, RECEIPTS AND EXPENDITURE: WATSON
SUSTENTATION FUND.

Date.	Relieved during the Year.	On Funds at end of Year.	Deaths during the Year.	Receipts.		
				From the Founder, J. B. Watson.	Other Receipts.	Total Receipts.
				£	£	£
1890 ...	...	...	...	150	1,467	1,617
1891 ...	11	11	...	150	56	206
1892 ...	26	26	...	150	503	653
1893 ...	44	44	...	150	452	602
1894 ...	43	43	...	150	790	940
1895 ...	43	38	5	150	734	884
1896 ...	57	48	9	150	543	693
1897 ...	56	52	4	150	1,680	1,830
1898 ...	57	48	9	150	944	1,094
1899 ...	56	41	15	150	524	674
1900 ...	54	47	7	...	641	641
1901 ...	66	48	18	...	591	591
1902 ...	52	41	11	...	549	549
1903 ...	50	43	7	...	872	872
Total ...	...	...	85	1,500	10,346	11,846

Expenditure.

Date.	Sick Pay.	Donations to Members and Wives and Families of Deceased Members.	Administration.	Total Expenditure.	Balance at End of Year.
	£	£	£	£	£
1890 ...	...	...	...	...	1,617
1891 ...	104	87	6	197	1,626
1892 ...	330	150	8	488	1,791
1893 ...	570	116	9	695	1,697
1894 ...	578	64	6	648	1,989
1895 ...	777	98	7	882	1,991
1896 ...	845	107	34	986	1,698
1897 ...	946	121	17	1,084	2,444
1898 ...	917	99	10	1,026	2,512
1899 ...	872	61	7	940	2,245
1900 ...	973	65	11	1,049	1,837
1901 ...	765	140	9	914	1,514
1902 ...	842	28	11	881	1,182
1903 ...	827	39	152	1,018	1,038
Total ...	9,346	1,175	287	10,808	—

FINANCE.

STATE REVENUE AND EXPENDITURE.

The following table shows the receipts and expenditure from general revenue during the year ended 30th June, 1904. On 1st July, 1903, the total revenue deficiency was £2,161,460 3s. 5d.; and in the course of the year this amount was increased by £19,659 9s., leaving the accumulated revenue deficiency at the end of the financial year 1903-4 £2,181,119 12s. 5d., the whole of this amount, as in previous years, being covered by advances from the trust funds, with the exception of £75,000, which has been raised by the issue of Treasury bonds.

Revenue
and expen-
diture,
1903-4.

REVENUE AND EXPENDITURE, 1903-4.

Revenue.	Amount.	Expenditure.	Amount.
From—	£ s. d.	On—	£ s. d.
Excise and Inland Territorial ...	760,928 15 5	Revenue deficiency, 30/6/03: Consolidated deficit	2,161,460 3 5
Public Works ...	3,445,905 18 2	Special Appropriations	2,847,588 1 4
Ports and Harbors	70,302 15 7	Chief Secretary ...	667,758 14 1
Fees ...	265,899 8 5	Minister of Public Instruction	631,991 18 7
Fines ...	9,793 8 8	Attorney-General	74,498 0 3
Mallee Land Account	23,776 15 0	Solicitor-General ...	59,118 15 9
Miscellaneous ...	355,830 6 3	Treasurer ...	266,608 16 11
Commonwealth balances returned	2,002,803 9 10	Commissioner of Crown Lands and Survey	91,682 8 6
Revenue deficiency 30/6/04: Consolidated deficit	2,181,119 12 5	Commissioner of Public Works	154,957 10 9
		Minister of Mines and Water Supply	70,268 10 7
		Minister of Agriculture	86,529 8 8
		Minister of Health	19,683 9 2
		Minister of Railways	1,501,814 3 2
		Mallee Land Account	23,776 15 0
		Surplus Revenue transferred to Trust Fund for Works	443,331 5 5
Total ...	9,501,068 1 7	Total ..	9,501,068 1 7

Trust funds,
1900 to 1904.

The following are the amounts to the credit of the trust funds, and the manner of their investment, at the end of each of the last five financial years:—

TRUST FUNDS: RETURN FOR FIVE YEARS.

Accounts.	Credit Balance on 30th June.				
	1900	1901.	1902.	1903.	1904.
	£	£	£	£	£
Deposits in Savings Banks	3,675,418	3,675,418	3,603,187	3,595,418	3,495,418
Deposits in Savings Banks Security Account	2,116,141	2,453,452	2,500,327	1,543,952	1,625,812
Municipal Investments Account	614,480	1,116,380	1,115,380	1,113,799	1,112,799
Municipal Sinking Funds	610,895	626,368	652,951	634,141	633,464
Assurance Fund ...	161,025	169,076	176,683	184,685	194,773
Intestate Estates ...	93,575	89,482	89,288	88,698	100,511
Country Tramways ...	137,872	137,872	137,872	137,872	137,872
Trustee and Assurance Companies ...	99,795	104,795	104,795	104,795	104,795
Police Superannuation Fund	37,422	15,327	1,665	3,253	5,579
Other Funds ...	858,751	945,731	1,437,001	1,018,959	1,341,376
Total ...	8,405,374	9,333,901	9,819,149	8,422,572	8,752,399
How Invested:—					
Invested in Debentures, &c.	2,136,814	2,673,002	2,689,430	2,709,343	2,647,263
Deposited in Banks	306,138	132,096	504,228	42,624	454,510
Held otherwise ...	5,962,422	6,528,803	6,625,491	5,670,605	5,650,626

The revenue deficiency on 30th June, 1904, £2,181,119 12s 5d., is exclusive of a debit balance of £297,182 17s. 4d. in the Land Sales by Auction Fund, and is, with the exception of £75,000 met out of Treasury bonds, made a charge against the item "Held Otherwise," £5,650,626.

In 1898 an Act was passed to relieve any municipality, which desired relief, from further contributions to its loan sinking fund. The amount already to the credit of the sinking fund of any municipality which took advantage of the Act is allowed to accumulate with interest, and at the maturity of the loan the Government will, by the sale of inscribed stock, pay the difference between the amount at credit of the fund and the amount of the loan to be redeemed, the municipality repaying to the Government the amount so paid.

The amount of money to the credit of the municipal sinking funds has not materially altered during recent years. On 30th June, 1904, it was £633,464.

The reduction of £100,000 in the item "Deposits in Savings Banks" in 1904 represents a payment made to the Commissioners of Savings Banks in reduction of certificate, under the 19th section of Act, No. 1481.

The following is a return of the revenue and expenditure of Victoria for the five years 1900-1904. The Mallee land receipts, (£23,777 in 1903-4), which are set apart for the redemption of loans, are included as revenue, an equivalent amount being entered as expenditure, and afterwards transferred to the Mallee Land Account. The expenditure in 1904 also includes £443,331 transferred for works under Surplus Revenue Act.

Revenue and expenditure, 1899-00 to 1903-4.

REVENUE AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year ended 30th June.	Revenue.	Expenditure.	Surplus.	Deficit.
	£	£	£	£
1900	7,453,355	7,285,636	167,719	...
1901	7,712,099	7,672,780	39,319	...
1902	6,997,792	7,398,832	...	401,040
1903	6,954,619	6,759,960	194,659	...
1904	7,319,949	7,339,608	...	19,659

Early in 1901 the Customs, Post and Telegraph, and Defence Departments were transferred to the Commonwealth Government. If the full Federal returns were included, the revenue for 1904 would be increased to £8,419,597, the expenditure to £8,439,455, and the figures for the five years would show that an annual increase in both revenue and expenditure had been maintained; but that, while the increase in revenue between 1900 and 1904 would have been £966,242, the increase in expenditure would have been £1,153,819. The latter is mainly due to the introduction of old-age pensions, and to increased expenditure on education and on the railway working expenses. In the period shown, the excess of expenditure over revenue is £19,002.

There was, on the transactions of the year, a surplus of £423,672, viz., cash balance, £398,672, and Treasury bonds in aid of revenue redeemed, £25,000. Against this sum £443,331 was transferred to the trust fund, for the purposes of the public works specified in the Surplus Revenue Acts Nos. 1904 and 1945, leaving a deficiency for the year ended 30th June, 1904, as specified in the above table, of £19,659.

The sources of revenue may be grouped under three headings—(1) taxation, (2) public works, and (3) other services. Customs and Excise (under taxation), and Posts and Telegraphs (under public works) were transferred to the Federal Government in 1900-1, and an additional heading, "Federal Government," which comprises these sources, is therefore added. Land revenue, which averaged

Heads of revenue, 1899-00 to 1903-4.

£373,000 yearly, is included under "other sources." The amounts received during the last five financial years were as follow:—

HEADS OF REVENUE: RETURN FOR FIVE YEARS.

Heads of Revenue.	1899-1900.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Federal Government...	...	1,177,740	1,920,974	2,105,450	2,002,804
State Taxation—					
Customs and Excise	2,267,131	1,202,191	...	...	...
Other ...	717,461	762,438	818,274	950,183	1,012,119
Public Works and Services—					
Railways ...	3,008,521	3,302,202	3,362,030	3,033,596	3,400,243
Posts and Telegraphs	586,061	410,435	...	...	...
Others ...	175,445	195,743	202,502	180,379	198,026
Other Sources ...	698,736	661,350	694,012	685,011	706,757
Total ...	7,453,355	7,712,099	6,997,792	6,954,619	7,319,949
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Per Head of Population	6 5 4	6 8 10	5 15 9	5 15 5	6 1 1

In this table the figures for 1900-1 for Customs and Excise include only the amounts collected for the half-year ended 31st December, 1900, and for Posts and Telegraphs for the eight months ended 28th February, 1901. There is no State revenue under these headings for 1901-2, 1902-3, and 1903-4. The amount returned to the State by the Federal Government—£1,177,740 for 1900-1, £1,920,974 for 1901-2, £2,105,450 for 1902-3, and £2,002,804 for 1903-4—is that collected from the transferred departments, less the amount deducted by the Federal Government under Section 89 of the "Commonwealth of Australia Constitution Act." For 1903-4 the Federal Government received £2,443,505 from Customs and Excise; £650,583 from Posts and Telegraphs; and £8,364 from other sources; and returned to the State Government £2,002,804. Had the old arrangement remained in existence, the amount of revenue per head of the population would have been £6 19s. 4d. instead of £6 1s. 1d. under the new arrangement.

The railway revenue during 1902-3 was lower than in 1900-1 or 1901-2, the falling off in that year amounting to £328,434, which is entirely due to severe drought, the almost total harvest failure, and the consequent small carriage of grain resulting therefrom. As compared with the previous year, there was an advance in railway revenue of £366,647 in 1903-4, largely due to the excellent wheat harvest of that year, when there was a yield of 28½ million bushels, a large quantity of which had to be carried to the sea-board; whereas in 1902-3 the crop was only 2½ million bushels.

Income tax.

An income tax was first imposed in Victoria in 1895, and was to have expired by effluxion of time in 1898, but it has been from time

to time extended ever since. The Act is administered by a Commissioner, who, together with his officers, are bound by oath to secrecy. Incomes assessed for tax in any year are those earned, derived, or received in Victoria in the preceding calendar year, and are divided into two classes, viz. :—Incomes (1) from personal exertion, and (2) from property. The former consists of earnings, salaries, wages, allowances, pensions, &c., or stipends earned in or derived from Victoria, and all income arising or accruing from any profession, business, or occupation carried on in Victoria, and the latter, of all other income. This is the gross income, and the net income is ascertained by making certain deductions, the principal of which are losses and outgoings incurred in the production of the income, all other taxes under the Victorian Act, life assurance premiums not exceeding £50, and calls or contributions actually paid into any reconstructed company whose shares are of no value. Incomes of certain public, local, religious, provident, &c., bodies or societies are exempt from taxation, also the official salaries of the Governor and of Ministers of the Crown, and the incomes of mutual life offices with head offices in Australia, fire, fidelity, &c., insurance companies taking out licences under the "Stamps Act," limited to income from that class of business; and income from stock debentures or bonds of the Victorian Government or of any public or municipal trust or body. Prior to 1903 an exemption to the extent of £200 was allowed, except in the case of absentees.* The rate of tax was 4d. in the £1 on the first £1,200 of the taxable amount (allowing for £200 exemption), 6d. on the next £1,000, and 8d. on all over £2,200 on income from personal exertion, and double these rates on income from property. The rate of tax for 1903, based on the incomes of the previous year, was fixed by Act. No. 1819, as follows:—(a) Personal exertion—Net incomes up to £125 exempt; from £125 to £500, 4d. (with £100 exemption); over £500, 4d. on first £500 (no exemption), 1d. extra on every £500 or portion thereof up to £2,000; and 8d. on all over £2,000. (b) Property—Double these rates. This Amending Act also makes companies taxable as persons, except mining companies, the shareholders of which still pay on the dividends received. Special provision is also made for the assessment and taxation of life, fire, fidelity, and guarantee assurance and insurance companies. The rates for the year 1904, based on the incomes of 1903, were altered by Act No. 1863, which did not alter the exemption, but raised the minimum taxable from £125 to £150. The following are the rates under this Act:—Incomes from personal exertion—3d. for every £1 of the taxable amount up to £300; thence up to £800, 4d.; thence to £1,300, 5d.; thence to £1,800, 6d.; and over £1,800, 7d. Incomes from property—Double these rates. The rates for the year 1905, based on the incomes of 1904, were again altered by Act No. 1938, as follow:—Incomes from personal exertion are taxed 3d. for every £1 of the taxable amount up to £500; thence up to £1,000, 4d.; thence to £1,500, 5d.; over £1,500, 6d. Taxes from income on property are double these rates. The minimum amount taxable is £156, the exemption being £100 on incomes from £156 to £500, no exemption being made for companies. The tax on the income of life assurance companies is 8d.; that for other companies liable to tax, 7d. for every

£1 of the taxable amount. The taxable amount of the income of a mining company is the total amount of the dividends declared during the year. The following is a statement of the assessments, taxpayers, taxable income, and tax payable from personal exertion and property during the last five years:—

INCOME TAX: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
Number of Assessments:					
Personal exertion ..	20,322	21,511	22,901	61,635	43,122
Property	15,322	17,589	17,577	12,757	8,872
Total	35,644	39,100	40,478	74,392	51,994
Distinct taxpayers ...	34,377	37,803	39,215	67,812	48,034
Taxable Income—	£	£	£	£	£
Personal exertion ...	6,027,200	6,150,300	6,261,800	10,006,700	11,720,299
Property	2,316,500	2,348,000	2,325,000	3,930,400	3,102,203
Total	8,343,700	8,498,300	8,586,800	13,937,100	14,822,502
Tax Payable—	£	£	£	£	£
Personal exertion ..	123,457	125,824	123,609	211,870	199,655
Property	93,787	95,091	91,494	194,850	112,335
Total	217,244	220,915	215,103	406,720	311,990
Per taxpayer ...	£ s. d. 6 6 5	£ s. d. 5 16 11	£ s. d. 5 9 8	£ s. d. 6 0 0	£ s. d. 6 9 11
Average Tax payable in the £ on Taxable Incomes derived from—	d.	d.	d.	d.	d.
Personal exertion ...	4·91	4·91	4·74	5·08	4·09
Property	9·72	9·72	9·45	11·90	8·69

The effect of the Act of 1904 was that during the five years under review the number of assessments was increased from 35,644 in 1900 to 51,994 in 1904, the latter figures including 659 assessments of companies. Of the total increase, 22,800 were from personal exertion; but there was a decrease of 6,450 from property. From 1898 to 1902, under the authority of the Income Tax Act in operation during that period, there were between 6,000 and 7,000 non-resident persons assessed in small amounts in respect of dividends paid to them. The reduction in the number of assessments from the latter date is due to the fact that such income was not taxable after that time. The taxpayers increased by 13,657; the number in 1904 being 48,034. The taxable income from personal exertion increased from £6,027,200 in 1900 to £11,720,299 in 1904; and that from property, in the years given, from £2,316,500 to £3,102,203. The total increase in the taxable income was £6,478,802. The income exempt from taxation in 1900 was £5,681,400, and in 1904 it was £4,152,400. The amount of tax payable increased from £123,457 in 1900 to £199,655 in 1904 from personal exertion; and from £93,787 to £112,335 from property—a total increase of £94,746.

Notwithstanding the fact that by adopting a lower taxable income a large number of smaller taxpayers were included in the figures for 1903 and 1904 by the alteration of rates and exemptions and by the taxation of companies as individuals, the average amount per taxpayer in 1904 shows a considerable increase over previous years.

The average tax payable in the pound was also raised in 1903, both on taxable incomes derived from personal exertion (to 5d.) and from property (to nearly 1s.). The highest previous rates were—under 5d. and 9½d., and in 1904 they were 4d. and 8⅓d. respectively. The following return shows particulars of rates of taxation, assessments, taxable incomes, and taxes payable in the respective groups for which different rates of taxation are charged:—

INCOME TAX ASSESSMENTS, 1904—BASED ON INCOMES OF 1903.

Taxable Income.	Rate of Tax in £ on Incomes derived from		Number of Assessments.		Taxable Income from		Tax Payable on	
	Personal Exertion.	Property.	Personal Exertion.	Property.	Personal Exertion.	Property.	Personal Exertion.	Property.
Up to £300 ...	d. 3	d. 6	35,677	6,695	£ 4,301,266	£ 746,827	£ 53,766	£ 18,671
£300 to £800 ...	4	8	5,314	1,448	2,567,262	729,973	36,146	20,716
£800 to £1,300 ...	5	10	1,123	369	1,127,061	372,063	18,333	12,121
£1,300 to £1,800 ...	6	12	366	124	561,000	191,300	10,370	7,065
Over £1,800 ...	7	14	642	236	3,163,710	1,062,040	81,040	53,762
Total ...	...	...	43,122	8,872	11,720,299	3,102,203	199,655	112,335

It is here shown that the taxable income from personal exertion amounts to £11,720,299, and that from property to £3,102,203, after allowing for exemptions of about £4,152,400. The total net incomes of those who paid income tax, during 1903-4, amounted to nearly nineteen millions sterling, or an average of £395 for each taxpayer.

A Land Tax was first imposed in Victoria in 1877, and has continued in force ever since without any amendment. All estates over 640 acres in extent, valued at upwards of £2,500, whether consisting of one block or several blocks of land not more than five miles apart, are taxed at the rate of one and a quarter per cent. upon their capital value after deducting an exemption of £2,500. If a proprietor holds more than one estate, only one exemption is allowed. The lands are valued on a purely pastoral basis, according to their sheep-carrying capacity, irrespective of whatever value may attach to such lands for dairying or agricultural purposes. The estates in question are divided into four classes, the value being estimated according to the number of sheep they are able to carry, as follows:—

	Value per Acre.
	£
Class I.—carrying 2 sheep or more per acre ...	4
Class II. „ 1½ sheep per acre ...	3
Class III. „ 1 sheep per acre ...	2
Class IV. „ under 1 sheep per acre ...	1

The following are particulars regarding the land tax for the half-year ended February, 1905:—

LAND TAX: RETURN FOR THE HALF-YEAR ENDED
27TH FEBRUARY, 1905.

Class.	Estates Assessed.			Exemptions.		Net Taxable Value.	Half-year's Tax Payable.
	Number.	Area.	Capital Value.	Number.	Value.		
		Acres.	£		£	£	£
I. ...	95	194,627	778,508	85	212,510	566,008	3,538
II. ...	170	508,613	1,525,839	160	400,000	1,125,839	7,036
III. ...	369	1,510,152	3,020,304	324	810,000	2,210,304	13,814
IV. ...	492	4,637,175	4,637,175	384	960,000	3,677,175	22,982
Total...	1,126	6,850,567	9,961,826	953	2,382,510	7,579,326	47,370

There are thus 953 properties in the State, containing land to the extent of 6,850,567 acres, valued at £9,961,826, or an average of 7,200 acres to each property; from which a tax of £47,370 has been levied for the half-year ended 27th February, 1905. The collections in 1898-9 amounted to £108,745; in 1899-1900, to £108,222; in 1900-1, £97,948; in 1901-2, £97,862; in 1902-3, £92,867; and in 1903-4, to £106,445. In the following return a comparison is made of the number and size of the estates assessed for land tax in 1900 and in 1904:—

LAND TAX: RETURN FOR 1900 AND 1904.

Year.	Number of Assessments.	Estates.			Net Taxable Value.	Average Area to each Assessment.
		Assessed.	Area.	Capital Value.		
			Acres.	£	£	Acres.
1900	907	1,146	7,424,542	11,775,026	9,507,526	8,106
1904	953	1,126	6,850,567	9,961,826	7,579,326	7,188

The total area of the State being 56,245,760 acres, there is thus slightly less than an eighth of the whole subjected to taxation. The area of land alienated and in process of alienation is 24,526,255 acres, of which the taxable land is only two-sevenths.

COMMONWEALTH REVENUE AND EXPENDITURE.

The amount of revenue collected in this State by the Federal Government since its inauguration is £10,742,883. Of this amount £3,507,473 was used to meet the Victorian portion of Commonwealth expenditure, and £7,206,968 was returned to the State Government. A balance of £28,442 is still due to the State, but of this amount £28,000 is retained as "till-money," principally in the offices of the Post and Telegraph Department in the State.

A statement of the Commonwealth revenue and expenditure for Victoria, given separately, is as follows:—

COMMONWEALTH REVENUE AND EXPENDITURE CREDITED OR DEBITED
TO THE STATE OF VICTORIA: RETURN FOR 3½ YEARS.

	1901, to 30th June.	1901-2.	1902-3.	1903-4.
REVENUE.				
Customs Duties	£ 1,123,106	£ 1,976,245	£ 2,096,318	£ 2,040,128
Excise Duties	232,993	400,250	402,696	403,377
Posts and Telegraphs	177,931	591,470	622,700	650,583
Miscellaneous	2,780	8,505	5,407	8,364
Total	1,536,810	2,976,500	3,127,121	3,102,452
EXPENDITURE.				
Customs and Excise	£ 32,645	£ 63,812	£ 64,770	£ 66,731
Posts and Telegraphs	181,177	588,888	597,008	631,313
Defences	77,148	316,876	258,852	258,471
New Expenditure	41,056	87,194	98,200	143,332
Paid over to the State	1,177,740	1,920,974	2,105,450	2,002,804
Total	1,509,766	2,977,744	3,124,280	3,102,651

COMMONWEALTH AND STATE REVENUE AND EXPENDITURE.

The total revenue and expenditure of the State of Victoria is shown by combining State and Commonwealth receipts and expenditure. The following are the main heads:—

REVENUE AND EXPENDITURE OF COMMONWEALTH AND STATE
COMBINED: RETURN FOR FOUR YEARS.

Heads of Revenue and Expenditure.	1900-1.	1901-2.	1902-3.	1903-4.
REVENUE				
	£	£	£	£
Customs and Excise	2,558,290	2,376,525	2,499,014	2,443,505
Posts and Telegraphs	588,366	591,470	622,700	650,583
Railways	3,302,202	3,362,030	3,033,596	3,400,243
State Taxation... ..	762,438	818,274	950,183	1,012,119
Other sources	859,873	905,019	870,797	913,147
Total Revenue	8,071,169	8,053,318	7,976,290	8,419,597
EXPENDITURE.				
Customs and Excise	67,255	63,812	64,770	66,731
Posts and Telegraphs	510,449	588,888	597,008	631,313
Railways	1,982,421	2,052,264	1,849,989	1,896,359
Public Instruction	655,456	690,737	661,024	651,342
Public Debt—				
Interest and Expenses	1,900,139	1,941,449	1,907,656	1,948,376
Redemption	47,702	94,414	68,155	95,060
Other Expenditure	2,841,384	3,024,038	2,630,188	3,150,274
Total Expenditure	8,004,806	8,455,602	7,778,790	8,439,455

In 1901-2 the Customs and Excise revenue was less by £181,765 than during the preceding year, when the State Tariff was in force, but exceeded that for the year 1899-00 by £109,394. In 1902-3 and in 1903-4 this source of revenue showed an increase of £122,489 and £66,980 respectively over that of 1901-2. It is satisfactory to note that since the transfer of that department to the Commonwealth the expenditure on Customs and Excise was reduced to £64,770 and £66,731 in the last two years, as against £68,107 in 1899-00 under State control. On the other hand, under the Commonwealth in 1902-3 and 1903-4 Posts and Telegraphs showed surpluses of only £25,692 and £19,270 respectively, whereas under State control in 1899-1900 there was a much larger surplus—£64,143—the reduction of which has not been caused by a diminution of revenue, but by an increase in expenditure under Commonwealth control.

COMMONWEALTH, STATE, AND MUNICIPAL TAXATION.

In the following table will be found a statement showing for the years 1899-00 to 1903-4 the amount of revenue collected under the various heads of taxation by the Commonwealth, the State, and the Municipal bodies:—

COMMONWEALTH, STATE, AND MUNICIPAL TAXATION: RETURN FOR FIVE YEARS.

Heads of Taxation.	Amount Received.				
	1899-00.	1900-1.	1901-2.	1902-3.	1903-4.
Federal—					
Customs Duties... ..	£ ...	£ 1,123,106	£ 1,976,245	£ 2,096,318	£ 2,040,128
Excise Duties ... ..	... ..	232,993	400,280	402,696	403,377
Total Federal Taxation	... ..	1,356,099	2,376,525	2,499,014	2,443,505
State—					
Customs Duties... ..	1,937,754	1,027,805	...	...	...
Excise Duties	329,377	174,386	...	...	...
Wharfage Rates	34,462	37,592	41,760	43,976	45,216
Ports and Harbors	24,763	29,248	28,298	27,616	28,756
Business Licences	19,205	18,377	16,914	16,969	17,852
Probate & Succession Duties	126,478	155,902	217,796	161,636	308,531
Duties on Bank Notes	18,660	19,057	19,041	18,434	18,440
Land Tax	108,222	97,948	97,862	92,867	106,445
Income Tax	215,071	220,314	220,629	415,048	311,147
Stamp Duty	170,600	184,000	175,974	173,637	175,732
Total State Taxation ...	2,984,592	1,964,629	818,274	950,183	1,012,119
Municipal Taxation ...	857,322	897,062	964,246	940,351	981,312
Melbourne Harbor Trust Taxation	127,785	136,178	140,258	164,611	162,105
Total Taxation ...	3,969,699	4,353,968	4,299,297	4,554,159	4,599,041

STATE EXPENDITURE.

The following table shows for the years 1899-1900 to 1903-4 the principal heads of State expenditure:—

Heads of State expenditure.

PRINCIPAL HEADS OF STATE EXPENDITURE: RETURN FOR FIVE YEARS.

Heads of Expenditure.	1899-1900.	1900-1.	1901-2.	1902-3.	1903-4.	
	£	£	£	£	£	
General Administration	231,189	246,238	248,543	226,374	232,014	
Retiring Allowances, Gratuities, &c.	320,118	310,301	319,280	337,226	341,297	
Defences ...	201,611	161,342	...	...	...
Law, Order, and Protection	484,597	501,767	502,645	484,344	483,778	
Education:—						
State ...	585,062	621,774	656,761	631,129	621,314	
Secondary and Technical	31,100	33,682	33,976	29,895	30,028	
Science, Medical, &c.	60,371	61,083	63,084	52,398	51,792	
Charitable Institutions	281,656	293,154	313,735	300,821	292,864	
Agriculture	133,961	150,222	169,351	110,867	150,380	
Mining ...	64,889	67,953	59,502	53,961	45,975	
Crown Lands ...	68,879	78,978	83,096	79,014	73,906	
Public Works and Services.—						
Railways ...	1,801,954	1,982,421	2,052,264	1,849,989	1,891,430	
Posts and Telegraphs	521,918	329,272	...	...	1,198*
Others ...	280,156	322,370	330,555	209,146	666,555	
Public Debt:—						
Interest and expenses	1,852,970	1,900,139	1,941,449	1,907,656	1,948,376	
Redemption ...	37,947	47,702	94,414	68,155	99,989	
Old Age Pensions ...	...	129,338	292,432	215,973	205,183
Other Expenditure ...	327,258	435,044	237,745	203,012	203,529	
Total	Special Appropriations	2,672,851	2,878,550	2,996,333	2,810,955	3,343,342
	Votes ...	4,612,785	4,794,230	4,402,499	3,949,005	3,996,266
	Grand Total	7,285,636	7,672,780	7,398,832	6,759,960	7,339,608
Per Head of Population	£ s. d. 6 2 7	£ s. d. 6 8 2	£ s. d. 6 2 5	£ s. d. 5 12 2	£ s. d. 6 1 5	

* Arrears of salary to letter carriers

As compared with the previous year, the figures for 1903-4 show an increase of expenditure to the amount of £532,387 under special appropriations, and of £47,261 under annual votes. The former increase consists principally of additional expenditure on public works, amounting to £457,409, which sum includes £443,331 surplus revenue transferred for works, &c. Important increases of £39,513, £41,441, and £40,720 under agriculture, railways, and interest on debt respectively, also took place. On the other hand, the expenditure on old-age pensions was reduced by £10,790, and that on State primary education by £9,815.

The causes of the reduction under old-age pension payments since 1901-2 were that under Act No. 1751 the maximum payments were reduced from 10s. to 8s. per week, and provision was made for enforcing contributions from relatives. The total expenditure has decreased from £7,398,832 in 1901-2 to £7,339,608 in 1903-4, and the amount per head of the population from £6 2s. 5d. to £6 1s. 5d. per annum.

PENSIONS AND GRATUITIES.

During the year 1903-4 2,796 pensions were paid under special appropriations, amounting to £271,842; from annual votes, 193, amounting to £9,660. The total number of pensions was 2,989, and the amount £281,502. 103 compensations and gratuities were also paid, the amount being £17,795; and £42,000 was paid as a subsidy to the Police Superannuation Fund. The following statement contains full particulars, showing various Acts under which these payments have been made:—

PENSIONS, SUPERANNUATION ALLOWANCES, AND GRATUITIES, &C.,
PAID, 1903-4.

Division of Service.	Special Appropriations.		Annual Votes.		Total.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		£		£		£
General Public Service—						
Under Civil Service Act	487	83,381	14	872	700	109,812
„ Public Service Act	187	20,567				
„ Other Acts ...	12	4,992				
„ Discipline Act ...	18	1,351				
„ Lunacy Act ...	57	3,701	...	...	18	1,351
Education Department	880	76,465	34	2,037	914	78,502
Railways	1,149	76,823	138	6,523	1,287	83,346
Miscellaneous—						
Under Constitution Act	1	1,500	...	...	1	1,500
„ County Courts Act	5	3,062	...	...	5	3,062
Police	...	...	7	228	7	228
Total Pensions and Superannuation Allowances	2,796	271,842	193	9,660	2,959	281,502
Compensations and Gratuities	56	9,162	47	8,633	103	17,795
Subsidy to Police Superannuation Fund	...	2,000	...	40,000	...	42,000
Total Amount Paid ...	2,852	283,004	240	58,293	3,092	341,297

The total amount of pensions paid in 1903-4—£281,502—was an advance of £7,407 on that of the previous year. In the Education Department the increase was £2,104, and in the Railway Department £5,827. In other departments the increases or reductions were small.

In 1903-4 the payments out of the Police Superannuation Fund were as follow:—357 pensions, amounting to £42,935, and 17 gratuities, amounting to £6,404. The Police Superannuation Fund is maintained by the annual income arising from the balance of an investment in Government stock; by an annual subsidy of £2,000 from the consolidated revenue; by a moiety of the fines inflicted by the Courts of Petty Sessions; and, if necessary, by a deduction, not exceeding 2½ per cent., from the pay of the members of the force, and a further grant in aid from the consolidated revenue.

In the year 1903-4 31 pensions, amounting to £1,086, and £38 sick allowances were paid out of the Port Phillip Pilot Sick and Superannuation Fund, towards which, however, the Government does not contribute.

RAILWAY REVENUE.

After deducting the net earnings of the Department of Railways from the amount of interest and expense of loans, a correct idea of its financial condition is obtained. This has been done in the table which follows, and from the figures supplied by the Railway Department representing the actual receipts and expenditure of the railways, and not those brought to account in the revenue statement, and referred to in a previous table; the actual annual loss to the State in the last five years is shown; the loss in 1903-4 being much less than in any of the years under review. No account is taken of the value of the work performed free of cost for other Government departments, which is estimated at £20,000 in each of the first two years, £31,000 in 1900-1, £34,000 in 1901-2, and £61,161 in 1902-3.

RAILWAY DEFICIT: RETURN FOR FIVE YEARS.

	1890-1900.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Gross Receipts ...	3,025,162	3,337,797	3,367,843	3,046,856	3,438,141
Working Expenses ...	1,807,301	1,984,796	2,072,374	1,938,580	1,921,867
Pensions, Gratuities, &c.	95,239	90,443	93,744	93,507	100,536
Net Receipts ..	1,122,622	1,262,558	1,201,725	1,014,771	1,415,738
Interest on Cost of Construction	1,430,448	1,464,809	1,492,695	1,473,532	1,515,755
Deficit ...	307,826	202,251	290,970	458,761	100,017

Loss on working, 1890-1900 to 1903-4.

As compared with the four preceding years, this table shows an increase in receipts, and a decrease (except in one year) in working expenses. There is only a slight variation—an increase of £42,223—in the last year, under the heading Interest on Construction. The amount paid in pensions is slightly more than in the preceding year. During the years under review an increase is shown in the revenue, amounting to £412,979, and in the expenditure to £119,863 for working expenses and pensions, and to £85,307 for interest, the deficit in 1903-4 being £207,809 less than that of 1899-1900.

EXPENDITURE ON EDUCATION.

The expenditure during 1903-4 on State education amounted to £721,674, portion of which, however (£20,778) was for the Melbourne University and technical schools. Pensions, gratuities, &c., are also included, but this expenditure may be considered as more appropriately belonging to the education of a past generation rather than as a portion of the cost of instruction of the children of the present day. The expenditure in detail for the five years 1899-1900 to 1903-4, extracted from the report of the Education Department, is as follows:—

EXPENDITURE ON EDUCATION: RETURN FOR FIVE YEARS.

Expenditure on—	1899 1900.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Instruction	517,714	546,009	565,931	552,838	556,595
Training	2,242	4,516	4,701	4,555	4,177
Administration	34,218	39,865	41,977	39,148	37,621
Technical Schools	24,740	26,225	22,958	16,430	16,278
Melbourne University	5,250	5,750	6,000	4,500	4,500
Pensions, Compensation, and Gratuities	75,785	75,166	76,352	77,535	78,732
Miscellaneous	144	22	338	4,622	4,269
Total (exclusive of Buildings)	660,093	697,553	718,257	699,628	702,172
Buildings— Expended by the Public Works Department:—					
From Loans	13,940	4,758	35,197	10,734	384
„ Annual Votes	25,756	24,144	39,231	20,886	12,167
By Boards of Advice	2,077	3,293	3,398	3,901	3,383
Rents	2,912	3,845	4,119	3,848	3,568
Total	704,778	733,593	800,202	738,997	721,674

A considerable annual increase in the expenditure will be noticed during each of the three years, 1899-1900 to 1901-2, but a decrease to the extent of £61,205 for 1902-3, and a further decline of £17,323 in 1903-4. The decreases in 1903-4, as compared with 1902-3, are under—Training, £378; Administration, £1,527; Technical Schools, £152; Buildings, £19,867; and Miscellaneous, £352.

Increases were in Instruction, £3,757; Pensions, &c., £1,197. Since the inception of the system of free, compulsory and secular education in 1872, up to the 30th June, 1904, the expenditure on public instruction has amounted to £21,153,251, of which £15,713,697 has been spent on instruction, £1,176,304 on administration, £154,414 on training teachers, £1,677,946 on miscellaneous items, principally pensions, technical schools, and the Melbourne University (excluding the annual endowment of £9,000 to that institution under Act 16. Vict., No. 34), £2,430,890 on buildings, of which £1,129,610 was paid out of loans, and £1,301,280 from revenue. For particulars of the progress of State instruction since its inception, see Part Social Condition, *ante*.

The foregoing statement deals with public instruction generally, and includes some items of expenditure on secondary and technical education; but in the following statement particulars are given of primary State school education only—that is, the cost to the State of the “free, compulsory, and secular” system, the subjects of which are set out in the schedule of Act. No. 1777, as follow:—Reading, writing, arithmetic, grammar, geography, history, drill, singing, drawing, elementary science, manual training, and, where practicable, gymnastics and swimming; also, for children over nine years of age, lessons in health and temperance from standard works; and, for girls, sewing, needlework, cookery, and domestic economy:—

Expenditure
on primary
education.

EXPENDITURE ON PRIMARY EDUCATION: RETURN FOR FIVE YEARS.

Items.	1899-00.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Instruction—					
Teachers' Salaries	472,704	496,336	511,846	499,559	502,562
Singing, Drawing, Drill, Gymnas- tics, Kindergarten, Cookery, and Manual Training	1,211	2,497	4,681	5,955	5,334
Teachers' Travelling Expenses	1,438	1,803	2,060	2,540	2,562
Conveyance of Children to Schools	2,372	2,063	2,386	2,536	2,129
Books, Stores, Cadets, Kinder- garten, Manual Training, and Cookery Expenses	7,350	9,479	9,140	10,034	10,559
Cleaning, Stationery, Fuel, &c.	30,863	31,039	31,459	31,532	32,781
Teaching Night Schools	306	615	804	682	668
Training	2,242	4,516	4,701	4,555	4,177
Total Instruction	518,486	548,348	567,077	557,393	560,772
Administration—					
Office and Inspectors	29,380	31,257	31,235	29,156	28,830
Truant Officers	3,655	6,793	7,569	6,046	5,046
Stores, Cleaning, &c.*	1,183	1,814	3,173	3,946	3,745
Buildings	44,685	36,040	81,946	39,369	19,502
Retiring Allowances, Compensa- tion, and Gratuities	75,785	75,166	76,352	77,535	78,732
Total Expenditure	673,174	699,418	767,352	713,445	696,627

* Including Postage and Telegrams, £2,186 in 1902-3, and £2,615 in 1903-4.

Out of the total decrease (£78,528) which has taken place in the expenditure on Education during the past two years, £70,725 has been effected on items comprising primary instruction. This has occurred principally in the items Teachers' Salaries and Buildings. Slight increases are shown in the expenditure on Singing, &c., Teachers' Travelling Allowances, Books, Stores, &c., Cleaning, Stationery, Fuel, and Pensions.

The following return shows the cost per head of primary instruction, including salaries and allowances paid to teachers, travelling expenses, stores, maintenance of schools, stationery, fuel, books and school requisites, office administration, inspection, buildings, and retiring allowances, computed on the number of children in daily average attendance throughout the year:—

COST OF PRIMARY INSTRUCTION IN VICTORIA: RETURN FOR FIVE YEARS.

Year.	Cost to the State.		Scholars in Average Attendance.	Per Head of Scholars in Average Attendance.	
	Including Buildings	Excluding Buildings.		Including Buildings.	Excluding Buildings.
	£	£	£	£ s. d.	£ s. d.
1899-00 ...	673,174	628,489	145,868	4 12 4	4 6 2
1900-01 ...	699,418	663,378	147,818	4 14 8	4 9 9
1901-2 ...	767,352	685,406	150,939	5 1 8	4 10 10
1902-3 ...	713,445	674,076	150,268	4 14 11	4 9 8
1903-4 ...	696,627	677,125	145,500	4 15 8	4 13 1

SUBSIDIES, GRANTS, AND ENDOWMENTS.

The following is a statement of all grants and endowments, and expenditure in aid of various services, institutions, and societies, from 1899-1900 to 1903-4:—

	1899-00.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Grants to Agriculture, &c. ...	106,478	123,358	142,418	82,978	124,255
" Mining ...	23,399	24,900	15,992	11,866	15,950
Subsidy to Municipalities ...	100,000	100,000	100,000	50,000	50,000
<i>Educational Grants, &c.—</i>					
Melbourne University — Endowment under Act	9,000	9,000	9,000	9,000	9,000
Melbourne University — Additional Endowment voted	3,250	6,250	6,000	4,500	4,500
College of Pharmacy ...	500	500	500	250	250
Technological Schools — Maintenance, &c.	16,350	17,932	18,476	16,145	16,278

SUBSIDIES, GRANTS, AND ENDOWMENTS—*continued.*

	1899-00.	1900-1.	1901-2.	1902-3	1903-4.
<i>Educational Grants, &c.—continued.</i>	£	£	£	£	£
Public Libraries, &c. (including Melbourne Public Library)	24,767	26,660	27,065	20,828	18,611
Royal Society	100	100	100	50	50
Royal Geographical Society ...	...	...	75	...	...
Victorian Artists' Society ...	100	150	100	...	...
Fine Arts Galleries, Ballarat, Bendigo, &c.	500	500	500	250	...
Zoological and Acclimatisation Society, &c.	3,600	3,500	3,500	3,000	3,000
Parks and Gardens (including Melbourne Botanical Gardens)	14,383	14,867	15,175	12,295	11,321
Charitable Institutions	116,026	115,979	114,459	98,384	99,358
Instructor of the Blind	170	170	170	164	170
Animals' Protection Society ...	50	50	50	50	50
<i>Miscellaneous Grants and Subsidies—</i>					
Exhibitions	4,302	500	1,000	...	...
Exhibition Trustees, Expenses of ...	2,749	1,250	1,250	300	300
Fire Brigades	14,766	15,941	16,215	16,262	16,283
Mint Subsidy	20,000	20,000	20,000	20,000	20,000
Village Settlements and Labour Colonies	4,000	3,987	2,993	3,519	2,085
Carriage of Water—to reimburse Railway Department for Relief on account of Bush Fires, Cyclones, Drought, &c.	...	5,036	11,026	2,919	...
Relief of the Unemployed	1,082	906	1,161	907	736
Savings Banks Commissioners—Extra Working Expenses	10,841	11,178	12,685	13,663	15,046
Assistance to Municipalities for Drainage Works, &c.	14,939	10,508	8,287	2,816	2,111
Assistance to Municipalities for Roads and Bridges	16,875	21,540	28,035	6,054	19,929
Aborigines—Maintenance	4,845	4,705	4,633	4,810	4,407
International Astrophotographic Catalogue	192	200	200	200	200
Total	513,264	540,917	564,360	381,705	433,890

The total amount of these grants and subsidies for 1903-4 is greater than the total for 1902-3 by £52,000, but is less than the other totals shown by from £79,000 to £130,000. Compared with 1902-3, the only important increases are £40,000 in grants to Agriculture, &c., caused by increased allowance for carriage of grain on railways at reduced rates, and £14,000 in grants to municipalities for roads and bridges. The grant for the Public Libraries, Museums, and National Gallery of Victoria is reduced by £2,000.

LOANS FLOATED IN LONDON.

The total amount of loans raised in London at varying rates of interest was £67,297,560, after conversion operations. The amount paid off by means of new loans was £21,931,285, and by means of

payment derived from revenue, £566,100, leaving a balance due on 30th June, 1904, £44,800,175, consisting of debentures amounting to £1,114,700, inscribed stock, £41,501,675, and Treasury Bonds, £2,183,800. The following statement gives particulars respecting the various loans now forming part of the public debt, which were raised in London since 1859, together with the average prices obtained after deducting flotation expenses as well as accrued interest, and the rates of interest to which such prices are equivalent:—

LOANS FLOATED IN LONDON, 1859 TO 1904.

When Raised.	Debentures or Stock.				Average Price Obtained per £100 Debenture or Bond.		Actual Rate of Interest per £100 Net.
	Currency.		Amount Sold.	Rate of Interest.	Ex Accrued Interest.	Ex Interest and Expenses. (Net proceeds.)	
	When Due.	No. of Years.					
			£	Per cent.	£ s. d.	£ s. d.	£ s. d.
1859	1883	24	1,000,000	6	105 1 11 ³ / ₄	103 18 11 ³ / ₄	5 14 0
"	"	"	760,000	6	107 17 7 ¹ / ₄	106 14 7 ¹ / ₄	5 9 10
1860	"	23	1,837,500	} 6	104 17 10 ³ / ₄	103 14 10 ³ / ₄	5 14 1
"	1884	"	812,500				
1861	1885	24	1,000,000	6	103 1 6 ¹ / ₄	101 18 6 ¹ / ₄	5 17 0
1862	"	23	1,600,000	6	102 19 7	101 16 7	5 17 2
1866	1891	25	850,000	6	100 8 11 ³ / ₄	99 5 11 ³ / ₄	6 1 1
1869	1894	"	588,600	5	98 4 2 ³ / ₄	97 1 2 ³ / ₄	5 4 3
1870	"	24	1,518,400	5	100 17 6 ³ / ₄	99 14 6 ³ / ₄	5 0 5
1874	1899	25	1,500,000	4	90 2 7	88 19 7	4 15 5
1876	1901	"	{ 500,000 2,500,000	} 4	94 16 10 ³ / ₄	93 18 11 ³ / ₄	4 8 1
1878	1904	26	457,000				
1879	"	15	3,000,000	4 ¹ / ₂	97 17 5 ¹ / ₂	96 19 2 ¹ / ₂	4 14 0
1880	"	24	2,000,000	4 ¹ / ₂	103 3 8 ¹ / ₂	102 5 11	4 6 11
			<i>Stock.</i>				
1883	1907	"	4,000,000	4	98 16 8 ¹ / ₂	97 13 7 ¹ / ₂	4 3 0
"	1908	"	2,000,000	4	97 14 1 ¹ / ₂	96 10 11 ¹ / ₂	4 4 6
1884	1913	29	{ 2,636,800 1,363,400	} 4	98 5 7	97 2 8 ¹ / ₂	4 3 3
1885	1919	34	{ 3,180,620 819,380				
1886	1920	"	1,500,000	4	105 12 3 ¹ / ₄	104 9 0	3 15 5
1887	"	33	3,000,000	4	102 5 6 ³ / ₄	101 2 9	3 18 9
1888	"	32	1,500,000	4	108 1 1 ¹ / ₄	106 18 0 ³ / ₄	3 12 9
1889	1923	34	3,000,000	3 ¹ / ₂	102 14 10	101 11 11 ³ / ₄	3 8 5
1890	"	33	4,000,000	3 ¹ / ₂	160 2 4	98 19 6	3 11 1
1891	1921-6	30-5	{ 850,000 2,150,000	} 3 ¹ / ₂	96 3 7	95 0 10	3 15 6
1892	"	29-34	2,000,000				
1893	1911-26	17-32	2,107,000	4	94 7 5	93 4 8	4 11 7
1899	1929-49	30-50	1,600,000	3	94 7 1	93 4 2	3 7 3
1901	"	28-48	3,000,000	3	92 2 1	89 14 5	3 11 10
1902	"	27-47	1,000,000	3	95 16 6 ¹ / ₄	93 8 3 ³ / ₄	3 7 6
1903	"	26-46	3,038,560	3 ¹ / ₂	91 14 9 ³ / ₄	89 8 0	4 3 8
			<i>Treasury-bonds.</i>				
1892	1893	1	1,000,000	4 ¹ / ₂	99 3 11	99 1 5	5 0 0
1898	1900	2	500,000	3 ¹ / ₂	100 0 0	100 0 0	3 15 0
1903	1906	3	2,183,800	4	99 10 8 ³ / ₄	96 18 10	5 2 7
Total	..	..	66,343,360				
Paid off	..	..	21,543,185				
Outstanding	..	..	44,800,175				

The figures in the last column represent the rate of interest payable by the State for the actual amount of money which was realized after the deduction of all expenses which had been incurred in connexion with the flotation with allowance for redemption at par on maturity. The column, Amount Sold, includes £957,000 for conversion loans.

The nominal rate of interest has varied from 6 per cent. for earlier loans to 3 per cent. for those of later date, and the actual rate obtained by investors varied from 6 per cent. in 1866 to $3\frac{3}{8}$ per cent. in 1899 and 1902. The first six loans raised were obtained at about $5\frac{3}{4}$ per cent., but the credit of the State would appear to have gradually improved after 1866, and money was obtained four years later at 5 per cent. In 1883 it was obtained at 4 $\frac{1}{5}$ th per cent., in 1885 at $4\frac{1}{8}$, in 1888 at $3\frac{5}{8}$, and in 1889 at less than $3\frac{1}{2}$ per cent., In 1891 there was a reaction, when the money obtained cost $3\frac{3}{4}$ per cent., and the rate was still increased to over $4\frac{1}{2}$ in 1893, while 5 per cent. was paid on short-dated Treasury bonds obtained in 1892. Some later loans show a marked improvement, as in 1899 the actual rate of interest was less than $3\frac{3}{8}$ per cent., this being the lowest rate of those loans which were raised in London, while for the two later loans, one of which was floated in 1901, the money was obtained at slightly over $3\frac{1}{2}$ per cent., and the other in 1902, at $3\frac{3}{8}$ per cent., but the interest on loans raised in 1903 was as high as $5\frac{1}{8}$ per cent. on short-dated Treasury bonds, and $4\frac{1}{8}$ on stock sold.

LOANS FLOATED IN MELBOURNE.

The total amount of loans floated in Melbourne after conversion operations was £10,053,125. Of this amount, £1,989,461 was redeemed by loans, and £1,343,877 by revenue, leaving due a balance of £6,719,787 on 30th June, 1904, consisting of debentures, £2,599,295; inscribed stock, £3,120,492; and Treasury bonds, £1,000,000; but included is a sum of £1,000 overdue for debentures of the late Melbourne and Hobson's Bay Railway Company not yet presented for payment. The outstanding balance of loans floated in Melbourne amounted to £3,451,088 on 30th June, 1898, but during the last six years the local debt has been increased by over $3\frac{1}{4}$ millions sterling. The following is a statement of these loans, exclusive of Melbourne and Hobson's Bay Railway debentures, show-

ing the amounts originally raised, the amounts converted or paid off, and the amounts outstanding on 30th June, 1904:—

LOANS RAISED IN MELBOURNE.

Authorization.		Loans as originally raised.			Amounts.		Loans Outstanding on 30th June, 1904.
Act No.	Year.	Rate of Interest.	When due.	Amount.	Converted into Stock or Debentures.	Paid off.	
		Percent.		£	£	£	£
<i>Debentures.</i>							
13 & 23	1854	...	1855-75	735,000	...	735,000	...
40	1855	6	1857-72	299,100	...	299,100	...
15	1856	6	1872-4	2,900	...	2,900	...
36	1857	6	1883-5-8	1,000,000	52,780	947,220	...
150	1862	6	1889	300,000	23,900	276,100	...
332	1868	5	1894	610,000	297,100	312,900	...
371	1870	5	...	100,000	100,000	...	...
1296	1893	4	1913-23	746,795	...	...	746,795
1440	1896	3	1912	63,000	...	...	63,000
1659	1900	3	1921-30	1,000,000	...	...	1,000,000
1753	1901	3	1923-32	331,500	...	...	331,500
1816	1903	3½	1904	45,000	...	45,000	...
1901	1903	3	1934-54	457,000	...	...	457,000
<i>Inscribed Stock.</i>							
428	1872	4	1897	1,113,000	} 2,659,613	...	...
439	1872	4	"	86,780			
741	1882	4	"	13,102			
963	1887	4	"	167,600			
1015	1889	4	"	130,000			
1341	1893	4	"	750,000			
1369	1895	4	"	150,000			
1468	1896	3	1917	249,131			
1564	1898	3	"	2,290,482			
1623	1899	3	"	500,000			
1623	1899	3	"	268,184	...	131,887	2,926,779
1552	1898	3	"	3,809	...	3,809	...
1602 } 1749 }	1898	3	"	211,135	...	17,422	193,713
<i>Treasury Bonds.</i>							
1574	1898	3½	1901	500,000	...	500,000	...
1800	1902	3½	1907	1,000,000	...	...	1,000,000
Total ...				13,123,518	3,133,393	3,271,338	6,718,787

NOTE.—Exclusive of £62,000, Melbourne and Hobson's Bay Railway debentures redeemed in Melbourne.

Of the total loans raised in Victoria, £2,337,000, *i.e.*, the total of those loans which were floated prior to 1863, was obtained at 6 per cent.; £710,000, or those floated from 1868 to 1870, at 5 per cent.; £3,406,408, or those floated from 1872 to 1895, at 4 per cent.; and £5,125,110, floated since 1895, and £45,000 in 1903, at 3 and 3½ per cent. respectively. During 1898 and 1902 short-dated Treasury

bonds, for £500,000 and £1,000,000 respectively were authorized at $3\frac{1}{2}$ per cent. Of the total Melbourne loans outstanding on 30th June, 1904, £746,795 is bearing interest at 4 per cent., £1,000,000 at $3\frac{1}{2}$ per cent., and the balance, £4,971,992, at 3 per cent.

REPAYMENT OF LOANS.

The total debt on 30th June, 1904, exclusive of debentures for £1,000 overdue since 1897, was £51,518,962, and of this sum £2,598,295 was in the form of debentures; £42,616,375 of inscribed stock (London Register); £3,120,492 of stock (Melbourne Register); and £3,183,800 in the form of Treasury bonds. The following are the dates on which these loans are repayable, those repayable in Melbourne and London being also indicated:—

TOTAL DEBT, INTEREST, AND DATE OF REPAYMENT.

Under Act No.	When Repayable.	Rate of Interest per cent.	Amount Repayable.		
			In Melbourne.	In London.	Total.
	<i>Debentures.</i>		£	£	£
1296	1st April, 1913-23 ...	4	746,795	...	746,795
1440	„ 1912-22 ...	3	63,000	...	63,000
1659	1st Jan., 1921-30 ...	3	1,000,000	...	1,000,000
1753	„ 1923-32 ...	3	331,500	...	331,500
1901	„ 1934-54 ...	3	457,000	...	457,000
	<i>Inscribed Stock (London).</i>				
717	1st July, 1907 ...	4	...	4,000,000	4,000,000*
739	1st April, 1908 ...	4	...	2,000,000	2,000,000*
760	1st Oct., 1913 ...	4	...	4,000,000	4,000,000*
805	„ 1919 ...	4	...	4,000,000	4,000,000
845	„ 1920 ...	4	...	6,000,000	6,000,000
989	„ 1923 ...	$3\frac{1}{2}$	...	7,000,000	7,000,000
1032	„ 1923 ...	$3\frac{1}{2}$	...	7,000,000	7,000,000
1196	1st Jan., 1921-26 ...	$3\frac{1}{2}$	...	5,000,000	5,000,000
1217	„ 1911-26 ...	4	...	2,107,000	2,107,000
1287	„ 1929-49 ...	3	...	4,496,081	4,496,081
1560	„ 1929-49 ...	$3\frac{1}{2}$	...	3,013,294	3,013,294
1532	„ 1929-49 ...	3	...	1,000,000	1,000,000
	<i>Stock (Melbourne).</i>				
1468	29th Sept., 1917 ...	3	2,926,779	...	2,926,779
1564	„ „ ...	3	193,713	...	193,713
1623	„ „ ...	3	193,713	...	193,713
1602	„ „ ...	3	193,713	...	193,713
	<i>Treasury Bonds.</i>				
1800	1st October, 1907 ...	$3\frac{1}{2}$	1,000,000	...	1,000,000
1847	1st July, 1906 ...	4	...	2,183,800	2,183,800
	Total ...	...	6,718,787	44,800,175	51,518,962

* Debentures convertible into inscribed stock at option of holder. The amount so converted to 30th June, 1904, was £8,885,300.

The last of the 6 per cent. loans was paid off on the 1st January, 1891, and the last of the 5 per cents. on the 1st January, 1897. The loans at the higher rates of interest which have already been redeemed, were replaced by others obtained at lower rates, and by this means a considerable saving in interest has been effected. The last four loans which fell due were one for 1½ millions in 1899, another for 3 millions in 1901, and two for £5,457,000 in 1904. These were redeemed by the proceeds of loans amounting to £10,279,360 raised in London, the transaction effecting an annual saving of £77,869 in the amount of interest payable.

PURPOSES FOR WHICH LOANS WERE RAISED.

The aggregate amount of the loans raised to 30th June, 1904, exclusive of temporary Treasury bonds in aid of revenue, was £77,350,685; but a total of £25,830,723 (exclusive of £2,089,613 conversion loans) having been repaid, viz., £1,909,977 out of the general revenue, and £23,920,746 out of the proceeds of redemption loans, the balance on 30th June, 1904, was reduced to £51,519,962. The purpose for which the amount outstanding was borrowed and the annual interest payable thereon are as follow:—

PURPOSES FOR WHICH LOANS WERE RAISED.

Public Borrowings Contracted for—	Amount of Loans Outstanding on 30th June, 1904.	Annual Interest Payable.
REVENUE-YIELDING WORKS.		
	£	£
Railways	39,429,556	1,454,344
Tramways, Country	200,000	7,750
Water Supply and Irrigation—Melbourne	1,848,663	67,439
" " Country	5,851,647	204,960
Harbours and Docks	280,928	10,744
Graving Dock	352,710	11,874
Agriculture—Advances to Beet Sugar Company	63,000	1,890
" Wineries, &c.	57,021	1,726
Purchase of Land for Closer Settlement	193,713	5,811
Development of Mining	129,865	4,040
Total Revenue Yielding Works... ..	48,407,103	1,770,578
OTHER WORKS OF A PERMANENT CHARACTER.		
Public Offices, Law Courts, and Parliament Houses	793,006	28,227
Defence Works	149,153	4,974
State School Buildings	1,237,811	41,767
Other	932,889	30,465
Total other Permanent Works	3,112,859	105,433
Net Borrowings	51,519,962	1,876,011

The loans outstanding on the 30th June, 1904, include sums not yet expended, amounting in the aggregate to £219,869, of which

£181,745 has been borrowed for railways, and £63,811 for country water supply. For different other services the expenditure was £25,687 in excess of the amounts raised. Of the total sum borrowed, 94 per cent. has been devoted to revenue-yielding works, namely, railways, water supply, and country trams, etc.

The following return shows the growth of the public debt and interest since the date of the establishment of responsible government in 1855. The average rate of interest payable on the indebtedness has steadily declined from 6 per cent. in 1855 to 3·64 in 1904. In relation to population, however, the amount per head has substantially increased from 1855 to 1900, but since the latter year there has been no very great alteration.

Growth of
Funded
Debt in
Victoria.

GROWTH OF PUBLIC DEBT AND INTEREST IN VICTORIA, 1855 TO 1904.

End of Financial Year in—	Loans Outstanding.			Amount per head of population.	
	Amount.	Annual Interest Payable.		Debt.	Annual Interest.
		Total.	Average rate per cent.		
	£	£		£ s. d.	£ s. d.
1855	480,000	28 800	6·00	1 6 4	0 1 7
1860	5,118,100	306,405	5·99	9 10 4	0 11 5
1870	11,924,800	688,740	5·78	16 8 3	0 19 0
1880	20,056,600	1,004,436	5·01	23 11 9	1 3 7
1890	41,377,693	1,649,465	3·99	36 19 11	1 9 6
1900	48,774,885	1,867,604	3·83	40 17 4	1 11 3
1901	49,546,275	1,861,547	3 76	41 3 0	1 11 0
1902	50,408,957	1,887,877	3·74	41 15 5	1 11 4
1903	51,097,900	1,904,514	3·73	42 5 11	1 11 6
1904	51,519,962	1,876,011	3·64	42 13 4	1 11 1

Including money borrowed for temporary purposes (£300,000) in aid of revenue, the total debt on the 30th June, 1904, is £51,819,962, upon which the amount of interest and expenses (paid in 1903-4) was £1,947,862, or an average of 3·76 per cent. on the total debt. The amount of interest and expenses paid was fully earned by £42,121,940, the amount of such interest and expenses being £1,583,323. This leaves £9,698,022, all the interest and expenses upon which, £364,539, has to be met by charge upon the general revenue. In addition, a sum of £2,403,302 has been advanced from the trust funds, upon which the interest is £61,765, or 2·57 per cent. The total interest which has to be met from general revenue is thus £426,304, equal 3·52 per cent., or 7s. per head of population on a debt of £12,101,324, and this amount represents the real burden on 30th June, 1904. It is, however, worthy of notice that £3,112,859 of the indebtedness has been expended in the erection of Parliament House, public offices, and school buildings throughout the State, defence, and other works of a necessary and permanent character, and

if these are not directly reproductive in character, yet they save the State in rent charges and otherwise. A sum of £2,703,302 has been expended on works in anticipation of revenue and to meet revenue, deficiencies, etc., and the balance of the real debt, £12,101,324, has been expended on railways, water conservation, country trams, development of the agricultural and mining resources of the State, the graving dock, and on other revenue-producing works, which do not at the present time earn sufficient to cover working expenses and interest on the money expended in their construction, and will not do so until the population of the State has materially increased.

EXPENDITURE FROM LOANS.

In addition to the ordinary expenditure from revenue, certain sums are annually disbursed for various purposes from amounts raised by means of loans. The following table shows the details of such expenditure in each of the last five years:—

LOAN EXPENDITURE : RETURN FOR FIVE YEARS.

Works.	1899-1900	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Railways	595,543	490,857	467,937	354,916	236,944
Water Supply	144,149	138,233	88,902	115,405	118,392
Defences	229	4,080	11,889	..	..
Schools—					
Primary	13,745	4,618	34,332	12,039	558
Technical	6,892	99	..	..	..
Wineries, &c.	12,063	15,480	17,895	6,352	376
Closer Settlement, Purchase of Estates	63,985	85,040	55,462	1,189	3,666
Bush Fires—Advances to Farmers .. .. .	..	2,366	332	..	..
Loans to Farmers—Purchase of Seed and Fodder .. .. .	..	..	..	82,059	11,067
Mining Development	41,294	25,932	32,443	23,895	7,466
Pilots—Advance for Steam Service	23,000	..	..	..	..
Assistance to Municipalities—					
For Roads, &c.	30,765	36,439	45,714	44,552	17,267
For Drainage Works .. .. .	..	5,827	23,504	8,951	249
Drainage of Swamps	22	6,046	31,392	18,354	4,504
Levees, &c., Goulburn and Murray Rivers	5,837	11,340	13,569	26,775	6,339
River Yarra Improvements	9,856	5,245	8,338	2,999	3,706
Accommodation for Federal Parliament .. .. .	..	22,542	17,132	226	..
Other Public Works	58,509	78,121	35,434	31,691	15,276
Total	1,005,889	932,265	884,275	729,403	425,810
Per Head of Population	s. d. 16 11	s. d. 15 7	s. d. 14 8	s. d. 12 1	s. d. 7 0

It will be seen that during the last five years the loan expenditure averaged £795,528 yearly, whereas during the preceding five years the average was £334,406, and during the ten years ended 30th June, 1894, it was £1,995,600 yearly. During the last five years the loan expenditure of Victoria and New South Wales was as follows:—

	Total Last Five Years.	Annual Average.
Victoria	£3,977,642	£795,528
New South Wales	17,130,063	3,426,012

LOANS AUTHORIZED BUT NOT RAISED.

The permanent loans authorized, but not raised, on the 30th June, 1904, amounted to £1,893,980, which sum now represents the un-floated balance of loans authorized in 1896, 1898, 1899, 1901, and 1903. The following is a return of the amounts authorized, showing the purposes for which the original loans were intended, and the amounts raised up to June, 1904:—

LOANS AUTHORIZED BUT NOT RAISED, 30TH JUNE, 1904.

Purposes.	Under Loan Act—					
	59 Vict. No. 1440	62 Vict. No. 1552.	62 Vict., No. 1602. & 1 Ed. VII., No. 1749.	63 Vict., No. 1623.	1 Ed. VII., No. 1753	1 Ed. VII., No. 1816.
	£	£	£	£	£	£
Railways ... ..	...	...	...	206,357	350,609	...
Irrigation Works, &c.	...	...	...	100,000	100,000	...
Beet Sugar Industry	100,000	...	...	...	...	...
Closer Settlement ...	...	...	500,000	...	...	...
Loans to Farmers for Purchase of Seed	...	...	...	...	...	100,000
Redemption of Muni- cipal Debentures	...	1,116,608	...	...	...	...
Miscellaneous ... ..	...	...	...	193,643	49,391	...
Total	100,000	1,116,608	500,000	500,000	500,000	100,000
Amount raised to 30th June, 1904	63,000	3,809	211,135	268,184	331,500	45,000
Balance not floated...	37,000	1,112,799	288,865	231,816	168,500	55,000

In addition to the £51,519,962, the total amount of the outstanding funded loans of the State on the 30th June, 1904, these figures show that authority had been obtained from Parliament for a further borrowing to the extent of £1,893,980, and of this sum £114,808 is not apportioned to any service; £142,933 is for railway purposes, £142,575 for water supply, £288,865 for closer land settlement, £1,112,799 for the redemption of municipal debentures, and £92,000 for other works. The rate of interest on the amount to be raised is 3 per cent. on £1,838,980, and 3½ per cent. on £55,000.

SINKING FUNDS.

On 30th June, 1904, the sinking funds in Australia were as follow:—

SINKING FUNDS IN AUSTRALIAN STATES, 30TH JUNE, 1904.

State.	Sinking Funds in Connexion with—	
	State Funded Debts.	Municipal and Other Debts.*
	£	£
Victoria	320,957	656,314
New South Wales	894,621	323,894
Queensland .. .. .	..	..
South Australia	114,476	..
Western Australia	864,752	59,953
Tasmania	180,257	102,133
Australia	2,375,063	1,142,294

* Figures for 1903, except in the case of Western Australia, which are for 1902.

The following table shows for Victoria the various funds having balances to their credit on 30th June, 1904:—

	Balance at Credit
Mallee Land Account	£52,444
Farms Settlement Fund	4,618
Victorian Loans Redemption Fund	82,474
Victorian Government Consolidated Inscribed Stock Redemption Fund	168,839
Municipalities Contribution—Prince's Bridge	12,582
Total	£320,957

By Act No. 1428 of 1896, the moneys accruing from licensing, leasing, or selling of land in the Mallee country, or Mallee border, are to be paid into the Treasury and placed to the credit of a separate account, to be called the Mallee Land Account. The sums standing at credit to this account are available solely for the repurchase, redemption, or paying off of any Victorian stock or debenture.

By Act No. 1749 of 1901, it was provided that all moneys received by the Board of Land and Works, from lessees or purchasers of farm allotments, or purchasers of any land acquired by the Board, pursuant to the general provisions of the Act, should be paid into the Treasury, and placed to the credit of a separate account, to be called "The Farm Settlements Fund," which fund should be applied to the redemption of stock and the payment of interest thereon. Under the *Closer Settlement Act* of 1904, this fund was transferred to the Board appointed to administer that Act.

By Act No. 1561 of 1898, it was enacted that a Victorian Government Consolidated Inscribed Stock Redemption Fund should be kept in the Treasury, and should be applied in purchasing or repurchasing and ultimately in redeeming consolidated stock, and in paying expenses

Mallee Land Account.

Farm Settlements Fund.

Consolidated Inscribed Stock Redemption Fund.

and costs of such purchase or redemption. The fund is made up of money derived from repayments by Water Trusts, from the Mallee Land Account, dividends on investments, &c.

By Act No. 1565 of 1898, it was enacted that a Victorian Loans Redemption Fund should be kept in the Treasury, and should be available for the purchase, repurchase, or redemption of any Victorian Government 3 per cent. Stock, and in paying the expenses, costs, &c., incurred. This fund is derived from special appropriations, repayments on account of resumption of land in the Mallee district, bush fires and floods relief, seed advances, pilot service, municipalities, &c.

Loans Redemption Fund.

By Act No. 854 of 1885, authorizing the construction of a bridge over the Yarra, at Melbourne, known as Prince's Bridge, the Treasurer was empowered to apply £47,000 out of "The Railway Loan Account 1878" towards the cost of construction of the bridge and its approaches, and the improvement of the river channel and banks, and to make advances up to a specified amount (set out in the schedule to the Act) to the Board of Land and Works, on behalf of the municipal bodies interested in the construction of the bridge, such corporations to repay the amounts of their advances, and until repayment is fully made, to annually repay a percentage, as agreed between the municipalities and the Board. These sums are to be applied by the Treasurer to payment of interest and liquidation of principal.

Municipalities Contribution—Prince's Bridge.

STATE DEBTS.

The following is a statement of the total indebtedness of the Australian States on 30th June, 1904:—

FUNDED AND UNFUNDED DEBT OF AUSTRALIAN STATES,
30TH JUNE, 1904.

State.	State Debts.		Municipal and Corporation Debts (exclusive of Loans from Government.)	Grand Total.	
	Funded.	Unfunded.		Amount.	Per Head of Population.
	£	£	£	£	£ s. d.
Victoria.. ..	51,519,962	2,703,302	12,156,077	66,379,341	54 19 6
New South Wales	78,055,955	4,484,335	2,931,511	85,471,801	59 5 3
Queensland(31.12.03)	40,151,287	1,165,705	690,022	42,007,014	81 9 8
South Australia ..	27,504,695	1,453,139	119,202	29,077,036	78 8 6
Western Australia	16,090,288	..	418,050	16,508,338	69 16 0
Tasmania (31.12.03)	9,211,070	341,875	531,226	10,084,171	56 3 8
Total ..	222,533,257	10,148,356	16,846,088	249,527,701	63 5 11

The figures, £249,527,701, include loans raised by the State Governments, municipal bodies, corporations, and trusts. The figures for Victoria also exclude the amount of the tramways trust loan, viz., £1,650,000, which is treated as a loan to a private company, for although the money has been borrowed by the trust, which is composed of representatives of municipalities, on the security of municipal property, yet the interest is paid and a sinking fund provided by the tramway company, which renders the liability of the trust merely nominal; further, the property must be purchased by the municipalities when the trust's lease has expired.

The figures in the table show the full public indebtedness of the Commonwealth, including States, municipalities, and corporation debts, to the date at which comparison can be made. Victoria has the smallest amount per head, Tasmania the next, and Queensland the largest. There are, of course, private debts to a considerable extent and private investments by British capitalists; but there is no reliable information as to the amount of this class of indebtedness.

The State debts are those at the end of 1904, the municipal and corporation debts are for the year ended 1903, figures for 1904 for other States than Victoria not being available. The complete figures for Victoria on the 30th June, 1904, appear in the following statement:—

STATE AND LOCAL DEBTS, 30TH JUNE, 1904.

	£	£
State Debts (Funded)— ..		
London Register	44,800,175	
Melbourne Register	6,718,787	
State Debts (Unfunded)	2,703,302	
Overdue Debenture, late Melbourne and Hobson's Bay Railway—unpresented	1,000	
Total State Debts	54,223,264	
Municipal Debts	3,925,377	
Harbor Trust Debts	2,000,000	
Fire Brigades Board	130,000	
Melbourne and Metropolitan Board of Works	7,127,000	
Total Debts of Municipalities and Corporations	13,182,377	
Total Debts	67,405,641	

This sum (£67,405,641) is equal to a debt of £55 17s. 9d. per head of the population on 30th June, 1904.

The following is a summary of the funded debts of the Australian States and New Zealand on the 30th June, 1904, their proportion to population, and the total and average interest payable.

The amounts are exclusive of Treasury bonds or bills issued for revenue purposes:—

FUNDED DEBT OF AUSTRALIAN STATES AND NEW ZEALAND,
30TH JUNE, 1904.

State.	Funded Debt.		Interest Payable.	
	Amount.	Per Head of Population.	Amount.	Average Rate Per Cent.
	£	£ s. d.	£	
Victoria	51,519,962	42 13 4	1,876,011	3.64
New South Wales	78,055,955	54 2 4	2,781,724	3.56
Queensland (31.12.03)	40,151,287	77 17 8	1,484,770	3.70
South Australia	27,504,695	74 3 9	1,031,212	3.75
Western Australia	16,090,288	68 0 7	547,159	3.40
Tasmania (31.12.03)	9,211,070	51 6 4	337,871	3.67
Total Australia	222,533,257	56 9 0	8,058,747	3.62
New Zealand (31.3.04)	57,522,215	69 2 0	2,150,622	3.74

South Australia and New Zealand pay the highest average rate of interest on their loans, the reason being, not that their securities are considered of less value, but that a larger proportion of their loans was raised when the rates of interest were high.

In the following statement will be found the indebtedness per head of the various States of Australia and New Zealand during the last three years. In all the States except Western Australia and Tasmania, there has been an appreciable increase since 1901-2:—

GOVERNMENT FUNDED DEBTS PER HEAD OF POPULATION IN
AUSTRALASIA.

—		1901-2.	1902-3.	1903-4.
		£ s. d.	£ s. d.	£ s. d.
Victoria	30th June ..	41 15 5	42 5 11	42 13 4
New South Wales .. .. .	.. .. .	49 10 5	53 6 1	54 2 4
Queensland	31st December ..	74 8 6	74 14 10	77 17 8
South Australia	30th June ..	72 14 3	73 5 11	74 3 9
Western Australia .. .. .	.. .. .	71 14 6	70 7 11	68 0 7
Tasmania	31st December ..	52 4 1	52 3 1	51 6 4
New Zealand	31st March ..	67 0 11	68 5 4	69 2 0

DEBTS IN VARIOUS COUNTRIES.

In order that a comparison may be instituted between the States of Australia and other countries of the world in regard to indebtedness, the following table is furnished. The highest debt per head of population here disclosed is that of France (£26 12s. 3d.), which is about one-half of that of Victoria. The next highest is Cape Colony (£24 4s. 2d.), the next Great Britain (£17 16s. 10d.). From this amount there is a gradual diminution of indebtedness to

about £1 per head in British India and Japan. It must be remembered, however, that the large indebtedness of the Australian States is the result of expenditure on railways, roads, irrigation and water supply works, harbors, public and other works, required for the speedy development of an entirely new country, whilst in the older countries of the world, much of this class of work is left to private enterprise.

GOVERNMENT DEBTS PER HEAD OF POPULATION IN VARIOUS COUNTRIES.

Country.	Date.	Amount per Head.
		£ s. d.
United Kingdom	31st March, 1904 ..	17 16 10
British India	31st March, 1902 ..	0 19 10
Canada	30th June, 1903 ..	13 8 8
Cape of Good Hope	1902	24 4 2
Natal	30th June, 1902 ..	13 10 8
France	1st January, 1903 ..	26 12 3
Italy	30th June, 1903 ..	15 16 9
Austria	1902	14 3 7
Hungary	1902	10 17 8
German States	1902	10 4 10
German Empire (Imperial only)	1st March, 1902 ..	2 7 4
Norway	31st March, 1903 ..	6 8 8
United States of America	30th June, 1903 ..	5 14 2
Russia	1902	5 0 10
Sweden	1902	3 14 1
Japan	31st March, 1903 ..	1 4 5

The figures in the next table show that within the Commonwealth nearly sixty millions of money has to be redeemed within the next ten years, and 106 millions in the succeeding ten years. There is no prospect of any of these amounts being redeemed from revenue. It is therefore evident that borrowing for redemption purposes will have to be resorted to to the full extent, and heavy expenses thereby incurred.

DUE DATES OF AUSTRALIAN LOANS ON 30TH JUNE, 1904.

When Repayable.	Amount.	When Repayable.	Amount.
	£		£
Overdue	8,550	1935 to 1939	15,552,700
1904	444,340	1940	4,906,500
1905 to 1909	30,768,075	1945 and 1947	8,330,753
1910 to 1914	27,254,999	1950 and 1951	1,946,600
1915 to 1919	52,294,102	Annual Drawings	198,400
1920 to 1924	53,949,415	Interminable	532,890
1925 to 1929	11,504,280		
1930 to 1934	14,841,653		
		Total Funded Debt	222,533,257

VALUATION OF STATES' DEBTS.

In view of the possible transference of the States' debts to the Federal Government, it will be of interest to ascertain the present value of each State's indebtedness so far as funded stock is concerned. A mere statement of the various loans is not necessarily an indication of their actual value. Although a loan may be raised at above the market rate of interest and realize a premium, which when considered in conjunction with the term of the loan reduces the nominal rate to something approaching the current rate at par, the value of the loan at any time of its currency has a greater value than the nominal amount. To illustrate this: Suppose a loan of a million has a term of twenty years to run, upon which interest at the rate of 4 per cent. per annum is paid, and assuming, as is probably the case, the market rate of interest is $3\frac{1}{2}$ per cent. What is the value of the loan? Clearly, the present value of the principal (£1,000,000) due twenty years hence, together with the present value of an annuity of the amount of the interest (£40,000) for twenty years. The value of the former is £502,566, and that of the latter £568,496, and the total value of the loan £1,071,062. If the loan carry only 3 per cent. interest with the same currency, the value is £928,938.

Valuation of States' debts on $3\frac{1}{2}$ per cent. basis.

Each debt of each State of the Commonwealth has thus been separately valued upon a $3\frac{1}{2}$ per cent. basis, as from the 1st January, 1905—the presumption being that all debts due up to and inclusive of that date will be paid by the States indebted—and not including loans raised after 30th June, 1903. To this extent the amounts shown in the next table are deficient as compared with those shown in preceding tables, but it affords an idea of the comparative values of the nominal debt and its present worth on a $3\frac{1}{2}$ per cent. basis. Full particulars are not available to effect the complete valuation. The results are set forth in the following table:—

VALUATION OF STATE FUNDED DEBTS.

State.	Funded Debt. Nominal Amount.	Value of—		Total.
		Principal.	Interest.	
	£	£	£	£
Victoria	51,036,378	29,283,964	21,587,140	50,871,104
New South Wales ..	68,992,960	38,834,208	30,003,602	68,837,810
Queensland	38,318,627	19,720,491	19,105,742	38,826,233
South Australia .. .	25,831,980	14,229,962	11,799,340	26,029,302
Western Australia ..	14,910,810	7,125,862	7,310,679	14,436,541
Tasmania	9,036,129	4,725,981	4,463,771	9,189,752
Commonwealth .. .	208,126,884	113,920,468	94,270,274	208,190,742

It will be seen that the actual value of the whole of the States' debts differs but slightly from the nominal amount. This is due to the fact that the mean rate of interest is nearly $3\frac{1}{2}$ per cent. It is also noticeable that the actual values of the Victorian, New South

Wales, and Western Australian loans are less than the nominal values, whilst the actual values of the Queensland, South Australian, and Tasmanian loans are greater. In each of the first series of States the mean rate of interest payable upon the loans—after attaching due weight to the currencies of the loans—is less than $3\frac{1}{2}$ per cent., whilst in the latter it must be more. It is necessary to mention, however, that the above valuations have been made upon the assumption that interest is payable annually—not as is the case every six months.

COST OF PERIODIC CONVERSIONS.

Cost of
periodic
conversions.

The whole of this debt is practically in terminable stock—the average currency of these loans being probably about 35 years. The average rate of expenses in floating or converting the Victorian loans is about $1\frac{1}{4}$ per cent., which it is presumed does not differ essentially from those of the other States. As these debts necessitate the renewal during this period of 35 years, it is obvious that at the end of the period the expenses involved in the conversions of the debts of the Commonwealth would be approximately £2,600,000. Assuming an equal distribution throughout the period, the annual expense is £74,000—a rather large amount for the comparatively small population of Australia. In any scheme for the transference and consolidation of the present State debts, it might be advisable to take into consideration the conversion of the present into interminable stock in order to avoid the expenses in connexion with the present system of periodic conversions.

FEDERAL, STATE, AND LOCAL REVENUE AND EXPENDITURE.

A statement of the ordinary revenue and expenditure and also of the loan expenditure of the Federal and the State Governments and of municipal and local bodies during the last five years will be found in the following table. From the totals of revenue and expenditure, the amounts granted by one body to another have been deducted:—

FEDERAL, STATE, AND LOCAL REVENUE AND EXPENDITURE : RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
	£	£	£	£	£
<i>Revenue.</i>					
Government—					
Federal ..	..	1,536,810	2,976,500	3,127,121	3,102,452
State ..	7,344,495	6,425,269	4,987,757	4,767,168	5,234,887
Municipalities ..	1,036,497	1,105,262	1,201,230	1,180,453	1,229,609
Melbourne Harbor Trust ..	143,362	151,383	155,513	177,233	175,998
Melbourne and Me- tropolitan Board of Works ..	269,213	292,793	315,054	362,450	355,650
Fire Brigades Boards	18,516	19,529	20,278	21,639	19,797
Total ..	8,812,083	9,531,046	9,656,332	9,636,084	10,118,393

FEDERAL, STATE, AND LOCAL REVENUE AND EXPENDITURE :
RETURN FOR FIVE YEARS—*continued.*

—	1900.	1901.	1902.	1903.	1904.
	£	£	£	£	£
<i>Ordinary Expenditure.</i>					
Government—					
Federal ..	..	1,509,766	2,977,744	3,124,280	3,102,651
State ..	7,176,776	6,385,950	5,388,797	4,572,509	5,254,546
Municipalities ..	1,067,038	1,151,282	1,196,422	1,099,620	1,209,967
Melbourne Harbor Trust ..	148,612	158,007	162,603	150,174	144,897
Melbourne and Me- tropolitan Board of Works ..	337,079	366,936	373,571	398,879	409,039
Fire Brigades Boards	20,124	19,429	17,887	20,455	19,607
Total ..	8,749,629	9,591,370	10,117,024	9,365,917	10,140,707
<i>Loan Expenditure.</i>					
Government ..	1,005,889	932,265	884,275	729,403	425,810
Municipal ..	61,600	254,098	135,251	132,044	84,339
Melbourne and Me- tropolitan Board of Works ..	308,785	616,676	346,884	358,387	1,053,526
Fire Brigades Boards	1,609	..	..	..	..
Total ..	1,377,883	1,803,039	1,366,410	1,219,834	1,563,675
<i>Expenditure—Grand Total</i> ..	10,127,512	11,394,409	11,483,434	10,585,751	11,704,382
Per Head of Popu- lation—					
Revenue ..	£ s. d. 7 8 2	£ s. d. 7 19 3	£ s. d. 7 19 9	£ s. d. 7 19 10	£ s. d. 8 7 5
Ordinary Ex- penditure ..	7 7 1	8 0 3	8 7 5	7 15 5	8 7 9
Loan Expendi- ture ..	1 3 2	1 10 1	1 2 7	1 0 3	1 5 10

The total revenue of the Federal and State Governments, the municipalities and other corporations, is 5 per cent. more than in the previous year, and amounts to over ten millions. The ordinary expenditure also shows that a substantial increase has been made in the twelve months, the amount being increased by £774,790, and this has occurred mainly in the State expenditure. The loan expenditure increased by £343,841. The revenue per head in 1903 was £7 19s. 10d., and in 1904, £8 7s. 5d. The ordinary expenditure was £7 15s. 5d. and £8 7s. 9d. in those years; and the loan expenditure was £1 0s. 3d. and £1 5s. 10d. respectively.

TAXATION.

In the return following will be found, for the purpose of comparison, particulars of taxation by Government and by local bodies throughout the States of Australia and in the United Kingdom:—

TAXATION BY GOVERNMENT AND LOCAL BODIES IN THE STATES OF AUSTRALIA AND THE UNITED KINGDOM, 1903-4.

—	Total Amount of Taxation.	Rate per Head of Population.
	£	£ s. d.
Victoria	4,558,080	3 15 5
New South Wales	5,070,524	3 11 0
Queensland	1,967,943	3 16 4
South Australia	1,203,133	3 5 3
Western Australia	1,616,673	7 2 5
Tasmania	582,861	3 4 11
Australia	14,999,214	3 16 4
United Kingdom	179,494,767	4 4 4

In these figures the Commonwealth and the State taxation have been taken for the year 1903-4, and the municipal taxation for the year 1902-3, and it appears that the total taxation for Australia is £14,999,214, or an average of £3 16s. 4d. per head per annum. The lowest rate, £3 4s. 11d. per head obtains in Tasmania; South Australia is next with £3 5s. 3d.; then follow New South Wales, Victoria, Queensland, and Western Australia, with £3 11s.; £3 15s. 5d.; £3 16s. 4d.; and £7 2s. 5d. respectively. In Great Britain, the taxation is 8s. per head above the average of all Australia, and is higher than any of the Australian States except Western Australia.

LICENCES.

Under the *Licensing Act 1890*, dealing with the licensing of public-houses and the sale of fermented and spirituous liquors, it is provided that each licensing district shall consist of one division of an electoral district, and that every such licensing district shall be proclaimed in the *Government Gazette*. Sections 20 and 23 provide that the number of victuallers' licences issued in any one district shall not exceed one licence for each 250 inhabitants up to 1,000, and one for each subsequent 500 inhabitants. The number of inhabitants for the purpose of determining the number for such licensing district shall be taken to be five times the number of ratepayers on the rolls. Section 22 provides that there shall be no increase of licences in a district until the number shall be below the statutory number, and unless the electors shall determine that an increase shall be made. By section 27 it is enacted that if the number of licences is either above or below the statutory number, one-fifth of the electors may petition for a poll to be taken to determine whether the number shall be reduced or increased, as the case may be, to the statutory number, but no further. If on a poll being taken the electors decide that the number of licences is to be reduced, all licencees and owners are summoned

to the next available sitting of the Licensing Court, which determines the licences that are not to be renewed. Section 44 provides that the amount of compensation to be allowed to owners and occupiers of licensed premises diminished in value by the taking away of the licence shall be determined by arbitration—the owner and occupier appointing a joint arbitrator—the Minister another, and both arbitrators appointing an umpire. Under section 200 the licence-fees, fines, penalties, and forfeitures incurred under the Act, are paid to the credit of a trust fund account called the Licensing Act Fund, which is applied to the carrying out of the provisions of the Act. Should this fund be found insufficient to meet the necessary payments for compensation the amount required is to be paid from the proceeds of any duty on liquor which may be imposed hereafter, and specially appropriated by Parliament for the purpose. The first charge on the Licensing Act Fund, however, is that enacted by the next section, which provides for payment to the municipalities of a sum of money equal to the gross amount paid on account of licence-fees, fees for registration of brewers and spirit merchants, and fines, forfeitures, and penalties incurred under the Act, by persons within the municipalities for the year 1884; the Under-Treasurer certifying in writing each year the amount to which each municipality is entitled. This payment is called “the equivalent of licence-fees.”

The Act further provides for the issue of licences to vigneron to sell at their own vineyards wine made from grapes of their own growing in quantities of not less than one pint, not to be drunk on the vineyard; and specifies the conditions under which licences may be issued to steam packets, companies, grocers, vendors of colonial wines, lessees of railway refreshment-rooms, and for temporary and billiard-table licences; for the payment of all licences and fees, the conditions of obtaining licences, the establishment of licensing courts for applications for licences, for renewals, for hearing objections, for transfers, and generally for the liabilities devolving upon all licensed persons.

The following is a statement showing, as far as practicable, the number of licences issued for various purposes in 1904, and the amount of annual and temporary fees under each head, collected during the year:—

LICENCES—NUMBER AND REVENUE, 1904.

Description of Licence.	Number of Licences Granted.			Amount of Fees Collected.		
	Annual.	Temporary.	Total.	Annual.	Temporary.	Total.
				£ s. d.	£ s. d.	£ s. d.
<i>Excise.</i>						
The Distilling of Spirits—						
General ..	4	..	4	160 13 2	..	160 13 2
Wine ..	5	..	5	125 0 0	..	125 0 0
Vignerons ..	45	..	45	225 0 0	..	225 0 0
Test Still ..	34	..	34	3 11 7	..	3 11 7

LICENCES—NUMBER AND REVENUE, 1904—continued.

Description of Licence.	Number of Licences Granted.			Amount of Fees Collected.								
	Annual.	Temporary.	Total.	Annual.		Temporary.		Total.				
				£	s.	d.	£	s.	d.	£	s.	d.
<i>Excise—continued.</i>												
The Manufacture of Tobacco, Cigars, Cigarettes, and Snuff	52	..	52	944	18	4	..	..	..	944	18	4
The making of Beer	45	..	45	1,118	8	2	..	..	..	1,118	8	2
Sugar Refining ..	1	..	1	5	0	0	..	..	..	5	0	0
<i>Under Licensing Acts.</i>												
Victuallers	3,569	626	4,195	78,730	0	0	1,252	0	0	79,982	0	0
Packet ..	12	..	12	240	0	0	..	..	..	240	0	0
Grocers ..	330	..	330	3,300	0	0	..	..	..	3,300	0	0
Colonial Wine ..	325	..	325	1,625	0	0	..	..	..	1,625	0	0
Railway Refreshment Rooms ..	31	..	31	775	0	0	..	..	..	775	0	0
Billiard Tables ..	97	..	97	485	0	0	..	..	..	485	0	0
Spirit Merchants, &c.	406	..	460	11,500	0	0	..	..	..	11,500	0	0
Auctioneers—General	505	..	505	12,072	8	2	..	..	..	12,072	8	2
Gold-buyers	367	..	367	176	13	2	..	..	..	176	13	2
<i>Explosives—</i>												
Importation ..	140	..	140	355	0	0	..	..	..	355	0	0
Manufacture of Rackerock ..	30	..	30	7	10	0	..	..	..	7	10	0
Manufacture of other Explosives	7	..	7	8	10	0	..	..	..	8	10	0
Magazine ..	235	..	235	160	10	0	..	..	..	160	10	0
Fireworks ..	750	..	750	37	10	0	..	..	..	37	10	0
Sale of ..	1,265	..	1,265	316	15	0	..	..	..	316	15	0
Chemical Examination ..	44	..	44	138	15	0	..	..	..	138	15	0

NOTE.—In addition to the above there are other licences, particulars of which cannot be obtained for the calendar year 1904, but the fees collected during the financial year 1903-4 are as follow:—

Description of Licence.	Amount of Fees Collected.		
	£	s.	d.
Insurance ..	11,883	0	0
Sale of Tobacco, &c. ..	1,485	14	7
Servants' Registry Office ..	109	7	6
Pawnbrokers ..	1,010	0	0
Hawkers ..	1,544	0	0
Carriers ..	49	4	0
Stage Carriage ..	163	0	0
Marine Store ..	145	9	0
Forwarding Agents ..	160	0	0
Auctioneers' Temporary ..	127	0	0
Permits to Fish ..	13	0	0

ACCUMULATION.

PRIVATE WEALTH.

The returns of the Probate Office provide a means whereby an approximate estimate may be made of the private wealth of the people. Of course the estimate must only be taken as a rough approximation, but it will be shown exactly how far the method can be relied on, and what are its defects. The property left by persons who died during the five years, 1898 to 1902, is the basis whereby the property owned by the people alive, as shown by the census of 1901, is estimated. A period of five years is taken, because the returns for a single year may be unduly inflated by the falling in of one or several very large estates; but the period of five years of course furnishes a much more reliable estimate. The average amount left by each adult who died during the period is assumed to be the average amount owned by each adult alive at the census of 1901. The accumulated wealth of an individual is believed to be greater at a more advanced than at a less advanced age, and is probably greatest at death. Whatever advantage there may be is probably counter-balanced by the small estates, for which no probate or administration is taken out. In Victoria, for instance, deposits in Savings Banks up to £100, and life insurance policies up to £200, may be divided amongst those entitled without taking out probate or administration, and on 30th June, 1902, such deposits amounted to 5½ millions, most of which is thus unaccounted for in the estimate made. Notwithstanding the stringent provisions of the Probate and Administration Act, making chargeable with probate duty settlements and deeds of gift intended to evade payment of the duty, it is probable that some of these escape detection, and would also be unaccounted for in the calculation. The following is a statement on the basis explained, of the private wealth in several Australian States and New Zealand:—

PRIVATE WEALTH: AVERAGE DURING 1898 TO 1902 IN VICTORIA,
NEW SOUTH WALES, SOUTH AUSTRALIA, AND NEW ZEALAND.

State of—	Estates of Deceased Persons. Net Amount Sworn to.	Deaths of Adults.	Average Amount left by each Adult.	Adults at Census, 1901.	Private Wealth.	
					Total.	Per Head.
	£		£		£	£
Victoria ...	25,633,200*	53,213	482	651,143	313,851,000	261
New South Wales	24,027,400	46,710	514	700,480	360,047,000	266
South Australia	6,383,000*	12,591	507	186,327	94,468,000	260
Colony of New Zealand	11,329,700	24,645†	459	437,208†	200,678,000	246†

* Estimated.

† Including Maoris.

It is somewhat difficult to make a reliable estimate of private wealth, and this is forcibly illustrated by the following figures. In 1902-3 the Government Statistician of New South Wales estimated the private wealth of Victoria as £278,887,000, and of New South Wales as £358,934,000. In the following year his estimates were for Victoria £310,074,000, and for New South Wales £368,778,000, *i.e.*, the wealth of Victoria is shown to have increased by £31,187,000, and that of New South Wales by £9,844,000 in one year.

The values of estates returned by the Victorian and South Australian probate offices are the gross values, without deducting mortgages and debts, whilst the New Zealand figures refer to the net value, and in New South Wales both the gross and the net values are returned. Any estimate of wealth, founded on the probate returns must be based on the net values of estates left by deceased persons, for the reason that the debts of some people are the assets of others. If such debts were not deducted, the total amount of mortgages and debts would thus be counted twice over in the computation of the total wealth. The net values have, therefore, been estimated in the case of Victoria and South Australia by assuming that the gross bears the same ratio to the net as in New South Wales, and reducing the gross amount accordingly. Although the property left in Victoria by people dying during the five years amounted to 25 $\frac{2}{3}$ millions as against 24 millions in New South Wales, the Victorian property was left by a larger number of adults who died, which brings out the wealth per head slightly greater in New South Wales. It must be remembered, however, that the wealth represented by this estimate is the private wealth "in" the State, and not that "of" the State. Probates, &c., of persons dying out of the State leaving property in the State are included in the figures quoted; but on the other hand, many Victorians have large interests, pastoral, mining, and other, in the other States. Taking the net incomes from property of absentees in 1900, and capitalizing the same on a 4 per cent. basis, the income-returning property owned by outside investors in Victoria would appear to be about £26,340,000.

It has been found impossible to give a similar estimate of wealth for Queensland, Western Australia, and Tasmania, owing to the probate returns for those States being faulty or incomplete or apparently not accounting for anything like the whole of the property left by persons dying. In regard to New Zealand also it is probable that the wealth of that colony has been somewhat under-estimated, as it is stated in the New Zealand Official Year-Book that certain estates upon which no duty is payable are not included in their returns. The Registrar-General of New Zealand estimates the average wealth during 1898-1902 on a somewhat similar basis to that above adopted, to be £227,326,000 or £279 per head, which is slightly higher than in the three Australian States for which estimates are given. For 1903 his estimate is £256,402,400 or £308 per head. That estimate, however, is based on the assumption that the average left by each person dying, including infants and children, is the

amount owned by each person alive; and Maoris are not taken into account, although many of them are property owners. In the estimate in the preceding table (£246 per head), adults only are taken into account, and Maoris are included.

Another method of estimating wealth is by dividing it into its principal component parts, and valuing each part separately. Thus, where there is a general land tax, with no exemption or a very small one, the value of the land is obtainable; or where, as in Victoria, municipal government is universal, the rateable values are taken. Live stock is valued at so much per head; coin and bullion is taken to be the amount in the banks, with an addition for the amount of coin in circulation; shipping is valued at so much per ton for steamers and so much for sailing vessels; whilst houses and furniture are approximately arrived at by formulating an estimate based on the census returns. As regards mining properties, merchandise and produce, personal effects, and plant and machinery, several arbitrary methods are adopted which may or may not be near the mark; whilst such an important item of wealth as the goodwills of businesses appears to be entirely ignored in the computation. As this method cannot be relied upon, even approximately, it has been decided to adhere to the method of basing the wealth of the living on that of the dead as proved in the probate office, it being assumed, as previously pointed out, that any overstatement, due to the fact that the average age of an adult at death is greater than the average age of adults alive, is fully counterbalanced by the omission of the other property mentioned. Mr. Mulhall, in his "Industries and Wealth of Nations," bases his estimate of the wealth of the United Kingdom on the probate returns. He recognises this as the better method of the two, for he states that the "probate returns enable us to determine the exact amount of wealth." While it can hardly be claimed that an estimate of wealth in the Australian States as at present based upon these returns can be exact, yet if it were possible to obtain for a number of recent years the ages of persons leaving property, with the amount left by persons of each age, it would be possible to arrive at the estimate with greater accuracy; and, if the number of probates or letters of administration granted elsewhere and sealed in Victoria in respect of Victorian assets could be separated from the probates or administrations granted in Victoria, it would be possible to distinguish between the wealth in Victoria owned by Victorians and that owned by non-residents. Owing to the time and cost which would be involved in obtaining this information nothing can be done at present, and notwithstanding the fact that an estimate thus obtained would be more reliable than that just furnished it is questionable whether it would be worth the additional cost and labour involved.

Mr. Mulhall, in his Dictionary of Statistics, 4th edition, of 1898, gives an estimate of the private wealth of the principal nations of the world. For the purpose of his calculations he divided wealth under ten headings. Land was capitalized at thirty times the annual assessed value; cattle were taken from official estimates; farm implements were computed as 10 per cent. of the aggregate value of land

Wealth of various countries.

and stock; houses were capitalized at $16\frac{1}{2}$ times the rental; furniture was estimated at 50 per cent. of the value of the house in which it was situated, and included books, jewellery, clothing, carriages, &c.; railways were put down at cost of construction; factories were valued at one-third of their annual output; bullion estimates were official; merchandise was reckoned at 50 per cent. of the annual amount locally produced and imported; whilst sundries embraced all other components of wealth, and were estimated at 20 per cent. of the total. The returns relating to the United Kingdom were, however, based on the probate returns.

The following are the estimates of Mr. Mulhall, except in the case of Victoria, New South Wales, South Australia, and New Zealand, in respect of which the estimates, previously given, have been substituted. The figures for these Australian States and New Zealand refer to the year 1901, and those for other countries to 1895:—

PRIVATE WEALTH OF PRINCIPAL COUNTRIES OF THE WORLD.			
Country.	Wealth per Head.	Country.	Wealth per Head.
	£		£
United Kingdom ...	302	Germany ...	156
New South Wales ...	266	Argentina ...	154
Victoria ...	261	Belgium ...	154
South Australia ...	260	Europe ...	139
France ...	252	Spain ...	135
New Zealand ...	246	Sweden and Norway ...	114
United States ...	234	Austria ...	104
Denmark ...	230	Greece ...	101
Canada ...	196	Danubian States ...	90
Holland ...	183	Portugal ...	87
Switzerland ...	164	Russia ...	61

It will be seen from these figures that the three Australian States stand above all other countries, except the United Kingdom, and that New Zealand is only exceeded by the United Kingdom and France, in regard to private wealth per head.

Diffusion of
wealth.

The diffusion of wealth appears to be far wider in Victoria and South Australia than in New South Wales or New Zealand, according to the proportion of adults who die leaving property in respect of which probate or administration is taken out. For the reason previously mentioned, the comparison must be restricted to these three States and New Zealand. The following are the number of persons who died leaving property, as shown by the probate returns, the number of adult deaths, and the proportion of the former to the latter during the five years, 1898-1902:—

DIFFUSION OF WEALTH IN SEVERAL AUSTRALIAN STATES AND NEW ZEALAND, 1898-1902.

	Deaths of Adults.	Estates Proved.	
		Number.	Number per 1,000 Deaths of Adults.
Victoria ...	53,213	19,014	357
New South Wales ...	46,710	12,627	269
South Australia ...	12,591	4,422	351
New Zealand ...	24,645	6,855	278

It is thus shown that more than one-third of the adults who died in Victoria and South Australia during the five years, 1898-1902, were possessed of accumulated property in respect of which it was found necessary to obtain probate or letters of administration. An allowance should be made for the number of probates sealed of persons dying out of the State; but it is estimated that 5 per cent. would cover this.

PRIVATE LANDS: TOTAL AND GROUND VALUES.

The whole of Victoria, with the exception of about 664 square miles—600 in the county of Wonnangatta and the whole of French Island—or $\frac{3}{4}$ per cent. of the area of the State, being divided into municipalities for the purposes of local government, the value of real property, based on the municipal valuations, can be given with some degree of accuracy. Returns are obtained annually from each city, town, borough, and shire; and the following figures show the net annual rateable value and the capital value estimated by the municipalities over a series of years:—

RATEABLE PROPERTY: ANNUAL AND CAPITAL VALUES, 1880 TO 1905.

Year ended 30th Sept.	Estimated Value of Rateable Property.		Year ended 30th Sept.	Estimated Value of Rateable Property*	
	Annual.	Capital.		Annual.	Capital.
	£	£		£	£
1880 ...	7,117,946	83,847,418	1893 ...	12,779,600	189,461,350
1881 ...	7,175,289	87,642,459	1894 ...	11,676,079	174,984,851
1882 ...	7,433,812	91,792,547	1895 ...	10,641,200	167,197,780
1883 ...	7,692,706	95,610,959	1896 ...	10,393,000	168,427,700
1884 ...	8,098,814	103,795,832	1897 ...	10,345,535	171,253,984
1885 ...	8,793,490	114,283,570	1898 ...	10,152,500	168,611,906
1886 ...	9,621,135	125,878,748	1899 ...	10,134,108	168,456,523
1887 ...	10,153,771	137,885,701	1900 ...	10,283,500	169,911,900
1888 ...	11,913,473	167,385,210	1901 ...	10,537,497	174,141,754
1889 ...	12,931,526	187,558,511	1902 ...	10,885,087	185,101,993
1890 ...	13,265,543	194,313,646	1903 ...	11,188,932	203,902,919
1891 ...	13,733,770	203,351,360	1904 ...	11,437,830	209,143,730
1892 ...	13,605,990	197,366,940	1905 ...	11,743,270	210,920,174

The capital values given in the preceding table are not to be relied upon for purposes of accurate comparison. Most municipalities capitalize the net annual value on a 5 per cent. basis; but many assume the capital value to be much less in proportion to the annual value, some estimating 17, 16, 15, down to as low as 7 years' purchase, whilst in one case five years' purchase is given as the capital

value. Twenty years' purchase is adopted by most of the metropolitan municipalities, one being about 17 and four about 12 years; whilst the majority of country towns adopt from 7 to 12 years' purchase as the basis, one returning figures showing about 5 years' purchase as the capital value. Most of the shires adopt 20 years' purchase; but others vary from 16 to 8 years.

The following is an estimate of the capital value of land with and without improvements, the latter of which is commonly called the unimproved value, but should more correctly be termed the ground value:—

VALUE OF LAND WITH AND WITHOUT IMPROVEMENTS, 1904-5.

District.	Annual Rateable Value.	Capital Value with Improvements.	Unimproved or Ground Value.
	£	£	£
Urban	5,498,471	94,583,732	47,291,866
Rural	6,244,799	116,336,442	77,557,628
Total	11,743,270	210,920,174	124,849,494

Improvements are estimated at one-half in the case of urban properties, and one-third in the case of rural, which are about the proportions which are found to prevail in New Zealand, according to the valuations of the Valuer-General, revised to 1904. If the Victorian estimate were based upon the New Zealand proportion, without distinguishing the urban and rural, the ground value would be about £130,000,000, which is approximate to the above estimate. These proportions have also been checked by an examination of the census returns, which give the number of rooms in each house, and the materials of which same were built. In Melbourne city an average of £100, and in suburbs and country towns £70, per room for brick, &c., houses were allowed; whilst in urban districts £45 per room, and in rural £40 per room, were allowed for wooden houses. On this system the above estimates were verified as being remarkably close, allowing for other improvements, besides houses, in rural districts.

The following table shows for each of the last 27 years the number, value, and average value of estates of deceased persons leaving property in Victoria; the proportion of the number and value of estates left in the State to the total number of adults dying in

Landed property capital and unimproved or ground values.

Property left by deceased persons, 1878 to 1904.

the State in the same year; and also the percentage of properties of persons dying intestate:—

ESTATES OF DECEASED PERSONS, 1878 TO 1904.

Year.	Estates of Deceased Persons dealt with in the Victorian Probate Office.			Per 100 Deaths of Persons over 21 Years.		Percent- age of Intes- tates.
	Number.	Value Sworn under. (Debts not deducted.)	Average Value of each Estate.	Number of Estates.	Amount of Property Left.	
1878	1341	£ 2,919,215	£ 2,177	24·4	£ 46,581	43·2
1879	1385	2,666,433	1,925	22·2	42,731	48·2
1880	1235	1,890,100	1,530	20·4	31,267	40·0
1881	1548	2,935,070	1,961	22·8	43,290	39·3
1882	1698	3,482,938	2,051	23·2	47,607	40·0
1883	1794	3,748,344	2,089	24·5	51,172	42·1
1884	1890	5,113,687	2,706	25·7	69,536	38·6
1885	1938	4,297,919	2,218	25·5	53,791	36·1
1886	2126	4,532,271	2,137	25·6	54,619	40·7
1887	2348	5,201,130	2,215	26·9	59,578	38·2
1888	2276	7,026,984	3,088	25·6	79,026	38·5
1889	2908	11,252,096	3,869	29·4	113,681	39·7
1890	3107	8,667,127	2,789	31·3	87,291	42·0
1891	2714	7,581,678	2,797	25·0	70,658	31·6
1892	3208	9,669,784	3,014	34·9	105,152	38·0
1893	2801	6,231,931	2,225	30·8	68,558	34·6
1894	2805	5,419,225	1,932	33·5	58,077	34·6
1895	3153	5,340,052	1,694	31·9	53,999	36·5
1896	3335	6,091,421	1,852	34·0	61,993	36·2
1897	3291	5,782,173	1,757	34·6	60,746	36·1
1898	3590	6,269,345	1,746	32·4	56,649	36·2
1899	3641	5,920,104	1,626	34·0	55,261	35·3
1900	3961	6,918,533	1,747	38·9	67,882	36·0
1901	3846	6,527,235	1,697	36·5	61,940	34·8
1902	3976	7,571,482	1,904	37·0	70,470	34·9
1903	3884	6,074,077	1,564	37·4	58,520	34·9
1904	3827	5,762,084	1,506	37·3	56,144	33·8

A glance at the above figures will show that the increase in the number of estates has been remarkable, as will also be evidenced by the following figures, which must be taken as proving that the economic conditions prevalent in Victoria during the period reviewed in the above table have led to a wide and growing diffusion of wealth amongst the people:—

Period of Five Years.	Percentage of Adults who died leaving Estates which went through the Probate Court. Yearly Average.
1879-83	22·6
1884-88	25·9
1889-93	30·3
1894-98	33·3
1899-1903	36·7
1904	37·4

The average value of each estate left has fallen off very considerably since 1893, as compared with the values during the previous decade, which is very natural, seeing that during that period

values were much inflated, and were, as things afterwards proved, merely fictitious. The last column in the preceding table shows that the tendency to die without leaving a will is growing less, the percentage who died intestate having decreased from an average of 40·5 per cent. during 1878-90 to an average of 35·2 during 1891 to 1904.

ROYAL MINT.

Royal Mint returns.

A branch of the Royal Mint was established in Melbourne in 1872, and from that year until the end of 1904, 27,934,574 ounces of gold were received. This gold averages nearly £4 per ounce in value, being above the standard, which is £3 17s. 10½d. In the following table particulars are given, for the period 1872 to 1900 and for each of the last four years, showing the quantity of gold received at the Mint, where the same was raised, and its coinage value; also gold coin and bullion issued during the same periods:—

ROYAL MINT RETURNS, 1872 TO 1904.

Gold Received.		1872 to 1900.	1901.	1902.	1903.	1904.
<i>Gross Weight.</i>						
Raised in Victoria ...	oz	17,039,245	805,812	825,335	812,823	817,262
„ New Zealand „	„	2,197,441	89,245	185,848	166,513	161,488
„ Western Australia „	„	2,553,636	67,022	55,387	51,306	28,801
„ elsewhere „	„	1,781,718	86,160	75,674	66,859	66,999
Total ...	„	23,572,040	1,048,239	1,142,244	1,097,501	1,074,550
Coinage Value ...	£	93,194,656	4,077,194	4,470,378	4,313,140	4,212,792
<i>Gold Issued.</i>						
Coin—						
Sovereigns ...	No.	86,002,482	3,987,701	4,267,157	3,521,780	3,743,897
Half-Sovereigns ...	„	1,094,725	...	...	...	...
Bullion—Quantity ...	oz.	1,594,844	20,977	46,407	187,665	113,529
„ Value ...	£	6,640,487	87,534	195,410	792,594	479,132
Total value Coin and Bullion	£	93,190,331	4,075,235	4,462,567	4,314,374	4,223,029

Perth Mint, 1899-1903.

Since the opening of the Perth branch of the Royal Mint in 1899 there has been a large decrease in the gold received from Western Australia. In 1899, 507,072 ounces, and in 1900, 222,319 ounces, were received from that State. From 1899 to the end of 1903, 4,335,710 ounces of gold, valued at £15,390,430, have been received at the Perth Mint, all of which, with the exception of 499 ounces, was raised in Western Australia. The production of gold in Western Australia during 1903 was 2,436,311 crude ounces, the quantity received at the Perth Mint that year being 1,458,447 ounces, valued at £5,162,179. The total value of coin and bullion issued from the Mint during 1903 was £5,164,335, consisting of 4,674,783 sovereigns and 125,727 ounces of bullion. Since commencing operations until the end of 1903, the Perth Mint has coined 14,430,319 sovereigns, 119,376 half-sovereigns, and issued bullion worth £896,797.

Since the establishment of the Melbourne Mint, the gold coin exported from Victoria, less that imported, has amounted to £87,119,527, or less by £14,950,852 than the total gold coin issued from the Mint. The following particulars are given of the value of gold and silver coin and bullion imported and exported during each of the last five years:—

INTERCHANGE OF COIN AND BULLION, 1900 TO 1904.

Imports of—	1900.	1901.	1902.	1903.	1904.
Gold Coin ...	£ 204,585	£ 275,000	£ 114,380	£ 10,000	£ 79,100
„ Bullion ...	1,264,256	918,707	1,245,806	1,037,803	896,528
Silver Coin ...	63,032	48,787	23,250	17,346	5,427
„ Bullion ...	2,372	1,934	1,418	1,656	1,356
Exports of—					
Gold Coin ...	4,045,461	4,202,231	4,109,661	4,704,740	2,949,450
„ Bullion ...	86,600	96,297	196,036	716,234	486,593
Silver Coin ...	22,975	6,100	13,963	7,660	58
„ Bullion ...	299	743	167	319	1,108

It will be seen from the above figures that the net exports of coin and bullion in 1903 exceeded the amount in 1902 (an average year in this respect) by £1,412,175, and it also exceeded the total production of gold from the soil during the same year by more than one million pounds.

BANKING.

During 1904 there were eleven banks of issue in Victoria, possessing 523 branches or agencies, being a decrease of three on the previous year. The financial position of these banks, on 31st December in each of the last five years, is shown by the following return:—

VICTORIAN BANK RETURNS; 1900 TO 1904.

In Victoria.	1900.	1901.	1902.	1903.	1904.
LIABILITIES.	£	£	£	£	£
Deposits bearing interest	18,373,309	18,397,496	18,981,740	19,148,880	20,896,017*
Deposits not bearing interest	12,264,985	12,220,566	11,978,484	11,280,423	10,778,780
Notes in circulation ...	963,447	947,597	940,082	913,590	858,345
Other ...	293,839	290,838	325,324	210,441	220,201
Total ...	31,895,571	31,856,497	32,225,630	31,553,334	32,753,343
ASSETS.					
Coin and Bullion ...	7,777,856	7,015,316	7,396,912	6,452,687	6,351,576
Debts due ...	30,612,533	31,263,826	29,861,071	30,401,807	29,293,210
Property ...	2,800,419	2,741,347	1,999,574	1,957,544	1,951,171
Other ...	565,120	440,145	538,236	479,087	531,636
Total ...	41,755,928	41,460,634	39,795,793	39,291,125	38,127,592

* Including perpetual inscribed stocks, £946,83c.

VICTORIAN BANK RETURNS, 1900 TO 1904—continued.

In Victoria.	1900.	1901	1902.	1903.	1904.
CAPITAL AND PROFITS.					
Capital stock paid up	15,746,458	15,827,886	14,760,316	14,392,320	14,412,175
Reserved Profits (ex Dividend)	3,304,336	3,521,620	3,828,311	4,045,092	4,263,499
Last Dividend—					
Amount ...	337,494	371,024	418,555	396,488	437,251
Average rate per annum per cent.	4.29	4.69	5.67	6.45	6.55

Recovery in banking business.

Perhaps the best indication of the recovery in banking business is revealed by the annual increase in dividends paid and reserved profits. Compared with 1898, the average rate of dividend per cent. per annum has increased by 137 per cent., and the amount of reserved profits by 38 per cent.

Government deposits in banks.

The amount of Government deposits with banks in Victoria during each of the last twelve years was as follows:—

	£		£
1893 ...	2,122,754	1899 ...	2,705,243
1894 ...	2,393,450	1900 ...	2,840,102
1895 ...	2,495,285	1901 ...	2,557,811
1896 ...	2,338,970	1902 ...	2,455,773
1897 ...	2,260,566	1903 ...	2,201,980
1898 ...	1,796,075	1904 ...	3,117,683

Banks in Australia and New Zealand.

There are twenty-two banks in Australasia, many of which do business in several States. Eleven do business in Victoria and Queensland, thirteen in New South Wales, seven in South Australia, six in Western Australia, four in Tasmania, and five in New Zealand. The amounts of deposits, advances, notes in circulation, and coin and bullion for the quarter ended 31st December, 1904, are as follow:—

AUSTRALASIAN BANKING BUSINESS, 31ST DECEMBER, 1904.

Name of State.	Deposits.*	Advances, &c.	Notes in Circulation.	Coin and Bullion.
	£	£	£	£
Victoria ...	30,727,967	29,293,210	858,345	6,351,576
New South Wales ...	32,595,266	32,798,708	1,345,934	6,452,358
Queensland ...	12,808,351	13,642,460	...	1,814,927
South Australia ...	6,297,626	4,627,644	378,549	1,569,638
Western Australia ...	4,701,414	4,104,416	361,871	2,052,915
Tasmania ...	3,458,165	2,648,626	141,977	733,161
Australia ...	90,588,789	87,115,064	3,086,676	18,974,575
New Zealand ...	1,548,739	16,851,383	1,451,813	3,953,075
Australasia ...	109,137,528	103,966,447	4,538,489	22,927,650

* Excluding perpetual inscribed stocks.

These figures have been taken from the *Australasian Insurance and Banking Record*. In Queensland Treasury notes have taken the place of bank notes. In New South Wales and Queensland the advances outstanding exceed the deposits, whilst in every other State this condition is reversed.

As compared with the previous year, deposits have increased by £14,555 in the whole of Australasia, and by £254,688 in the Commonwealth of Australia. Advances, compared with the previous year, show a decrease in Australia of over 2½ millions—Victoria, New South Wales, and Queensland showing a decrease of £3,310,147, but South Australia, Western Australia, and Tasmania an increase of £534,913. Notes in circulation have decreased by £138,130 in Australia, each State showing a decrease; whilst in New Zealand there has been also a decrease of £14,466. Coin and bullion decreased by £159,898 in Australia, and increased by £206,494 in New Zealand.

The two classes of Savings Banks which formerly existed in Victoria, viz., the Post Office and the Trustees, were, in 1897, merged into one institution controlled by the Savings Banks Commissioners. The interest allowed to depositors is at the rate of 3 per cent. on sums up to £100; 2½ per cent. on excess over £100 up to £250; but no interest is allowed on excess over £250. The following are the particulars of depositors and deposits for a number of years:—

SAVINGS BANKS: DEPOSITS AND DEPOSITORS, 1875 TO 1904.

On the 30th June.	Number of Depositors.		Amount remaining on Deposit.	
	Total.	Per 1,000 of Population.	Total.	Average to each Depositor.
1875	65,837	81	£ 1,439,849	£ s. d. 22 6 6
1880	92,115	108	1,661,409	18 0 9
1885	170,014	174	3,337,018	19 12 7
1890	281,509	252	5,262,105	18 13 10
1895	338,480	286	7,316,129	21 12 3
1899	356,074	300	8,517,006	23 18 5
1900	375,070	314	9,110,793	24 5 9
1901	393,026	327	9,662,006	24 11 8
1902	410,126	340	10,131,604	24 14 1
1903	418,511	347	10,341,857	24 14 3
1904	432,867	358	10,582,808	24 8 11

The best evidence of the growing habit of thrift, as well as the wide diffusion of wealth amongst the middle and poorer classes in Victoria, is contained in the Savings Banks returns, the number of depositors, in proportion to population, having increased by nearly one-fifth during the last five years. On the 30th June, 1904, more than one person out of every three in the State (including children and infants, who themselves number more than one-third of the

population) was a depositor with a credit balance, on the average, of over £24. Of the amount on deposit in 1904, 38 per cent. belonged to depositors with accounts under £100 each, 40 per cent. with accounts between £100 and £250, and 22 per cent. with accounts over £250. The aggregate of the excess over £250—the money on deposit, for which interest is not allowed—was, on 30th June, 1904, £494,921.

Investment
of deposits,
&c.

The next statement shows the manner in which the deposits in Savings Banks of Victoria are invested or held:—

With Treasurer of Victoria—Certificate representing Post Office Savings Bank Deposits, taken over 30th September, 1897	...	£3,117,310
Government Debentures	...	1,846,110
Deposit with Treasurer of Victoria	...	378,108
Bank Fixed Deposit Receipts (in name of Treasurer of Victoria)—		
Due within two years	...	1,369,000
Fixed for periods exceeding two years	...	256,812
Savings Bank Mortgage Bonds (Advance Dept.)	...	555,800
Savings Bank Debentures	...	380,470
City of Melbourne Debentures	...	31,800
Melbourne and Metropolitan Board of Works Debentures	...	660,800
Mortgage Securities	...	1,426,993
Mortgage Properties in possession, not yet foreclosed	...	27,926
Freehold Properties, acquired by foreclosure of Mortgages	...	252,189
Melbourne Trust Ltd. Debentures and Shares	...	6,639
		<hr/>
		£10,309,957

In addition to the above, there were the following other assets:—

Accrued Interest on Investments	...	£133,322
Bank Premises	...	140,000
Advances Department	...	1,763
Commercial Bank—		
Current Accounts at call	...	75,679
Deposit at short notice	...	50,000
Cash at various Savings Banks, Agencies, and Trustees' Bankers	...	110,378
		<hr/>
Total Assets	...	£10,821,099

An advance department was established in 1896 by the Act amalgamating the Post Office and Commissioners' Savings Banks. The funds for this purpose are raised by sale of mortgage bonds for £25 each, and by debentures in denominations of £100 and over, redeemable at fixed dates not more than ten years from date of issue. The total issues up to 30th June, 1904, amounted to £1,783,600, of which mortgage bonds for £379,575 have been redeemed or repurchased, leaving £1,404,025 outstanding, £458,025 of which have been taken up by the public and the balance by the Commissioners themselves with Savings Bank funds. The amount advanced during the year 1903-4 was £159,925, making, with the amounts previously advanced, a total of £1,749,409, of which £408,858 has been repaid, leaving the amount outstanding on 30th June, 1904, at £1,340,551, representing 3,074 loans, which thus averaged £436. As a measure of the safety with which the advance department has been conducted, it may be mentioned that the instalments of principal in arrear amounted on 30th June, 1904, to only £85, and of interest to £133.

Savings
Banks,
loans to
farmers.

TRANSACTIONS UNDER CRÉDIT FONCIER SYSTEM TO 30TH JUNE, 1904.

	At 30th June, 1903.	During 1903-4.	At 30th June, 1904.
Loans raised £	1,602,880	180,720	1,783,600
„ repaid „	275,625	103,950	379,575
„ outstanding „	1,327,255	...	1,404,025
Applications received No.	7,575	703	8,278
„ „ amount £	3,669,465	361,143	4,030,613
Applications granted No.	4,820	458	5,278*
„ „ amount £	2,159,625	203,680	2,363,305*
Amounts advanced—			
To pay liabilities £	1,413,089	145,062	1,558,151
„ Crown rents „	65,896	4,187	70,083
For improvement and development* „	110,499	10,676	121,175
of land			
Total advanced „	1,589,484	159,925	1,749,409
Amounts repaid „	319,913	88,945	408,858
„ outstanding „	1,269,571	...	1,340,551

There are both Government and Trustee Banks in New South Wales, Tasmania, and New Zealand; Government Savings Banks only in Queensland and Western Australia; and Trustee Banks only in South Australia and Victoria—those in the latter State being guaranteed by, and under the supervision of, the Government.

Savings
Banks in
Australasia.

The following were the number of depositors, the amount on deposit, including interest, in each of the Australian States and New Zealand; on 31st December, 1903, in the case of New South Wales and New Zealand; 30th June, 1904, in the case of Victoria; 31st December, 1903, in the Government Banks, and 28th February in

* Including £437,560 offered to, but not accepted by, 852 applicants; also £122,790 granted to 393 applicants, whose applications were subsequently withdrawn.

the Trustee Banks of Tasmania; and 30th June, 1903, in the case of the other States:—

SAVINGS BANK DEPOSITORS IN AUSTRALIA AND NEW ZEALAND,
1903-4.

State.	Number of Depositors.		Amount remaining on Deposit.	
	Total.	Per 1,000 of the Population.	Total.	Average to each Depositor.
			£	£ s. d.
Victoria	432,867	358	10,582,808	24 8 11
New South Wales	331,956	236	12,344,623	37 3 9
Queensland	80,041	156	3,747,048	46 16 3
South Australia	120,349	330	4,172,720	34 13 5
Western Australia	54,873	247	2,079,763	37 18 2
Tasmania	47,904	267	1,249,401	26 1 8
Australia	1,067,990	273	34,176,363	32 0 0
New Zealand	280,011	336	8,482 959	30 2 4
Australasia	1,348,001	284	42,609,322	31 12 2

The number of depositors in Victoria is greater than in the other States and New Zealand in proportion to population, although the average amount standing to the credit of each depositor is not so large. It has already been shown that the diffusion of wealth, as evidenced by the proportion of persons dying leaving property, is wider in Victoria, and this is corroborated by the above figures. More than one-third of the population of Victoria and New Zealand are depositors, nearly one-third in South Australia, a little more than one-fourth in Tasmania, nearly one-fourth in Western Australia and New South Wales, and nearly one-sixth in Queensland.

The following table shows the number of depositors, amounts of deposits, and average to each depositor in Savings Banks in Great Britain, other European countries, and the United States and Canada. The information is generally for the year 1902, but in two or three instances for 1901. In some of these countries there are private Savings Banks, complete information regarding which could not be ascertained. It has, therefore, not been considered advisable to calculate the ratio of depositors to the total population:—

SAVINGS BANKS DEPOSITORS IN GREAT BRITAIN AND FOREIGN COUNTRIES.

Country.	Number of Depositors.	Amount remaining on Deposit.	
		Total.	Average to each Depositor.
		£	£ s. d.
England and Wales	9,406,323	162,499,894	17 5 6
Scotland	921,034	23,120,853	25 2 1
Ireland	476,198	11,489,422	24 2 6
Great Britain	10,803,555	197,110,169	18 4 11
Austria	4,831,465	174,444,408	36 2 1
Hungary	446,695	3,066,875	6 17 4

SAVINGS BANKS DEPOSITORS IN GREAT BRITAIN AND FOREIGN COUNTRIES—continued.

Country.	Number of Depositors.	Amount remaining on Deposit	
		Total	Average to each Depositor.
		£	£ s. d.
Belgium	1,862,820	29,150,968	15 12 11
France	11,237,510	176,641,811	15 14 4
Italy	6,392,481	92,960,555	14 10 10
Holland	1,260,603	14,427,084	11 8 11
Russia	4,357,000	97,149,640	22 5 11
Sweden	2,088,713	35,459,572	16 19 6
Norway	695,524	17,888,148	25 14 5
Denmark	1,203,120	37,846 198	31 9 1
Canada	211,762	12,008,258	56 14 1
United States	6,666,672	565,124,276	84 15 4

PRICES, &C., OF GOVERNMENT STOCK.

Selecting one of the leading 4 per cent. and one of the leading 3½ per cent. Victorian stocks, and finding the highest prices quoted in 1885 and each subsequent year, an adequate idea may be formed of the general course of prices in London during the last twenty years. These are shown in the following table, together with the equivalent returns to the investor, which are also collated with the actual rate of interest payable by the Government on the loans floated in each year:—

Comparative prices of Victorian stocks, 1885 to 1904.

PRICES OF VICTORIAN REPRESENTATIVE STOCKS IN LONDON, 1885 TO 1904.

Year.	Highest Prices quoted on Stock Exchange		Minimum Return to Investor.		Actual Interest payable by Government on Loans floated each year.
	4 per cents. (due 1920).	3½ per cents. (due 1923).	4 per cents.	3½ per cents.	
1885	104½	...	£ s. d.	£ s. d.	£ s. d.
1886	107½	...	3 15 10	...	4 2 5
1887	108½	...	3 13 2	...	3 15 5
1888	114½	...	3 13 1	...	3 18 9
1889	114½	105	3 6 5	...	3 12 9
1890	111½	103½	3 5 8	3 5 5	3 8 5
1891	109½	100½	3 8 0	3 7 0	3 11 1
1892	106½	98	3 10 3	3 9 9	3 15 6
1893	103½	93½	3 13 9	3 13 5	4 1 5
1894	106½	99½	3 18 6	4 3 4	4 11 7
1895	111½	105½	3 15 2	3 10 2	...
1896	116½	109½	3 9 0	3 6 1	...
1897	115	108½	3 2 7	3 1 6	...
1898	113½	107½	3 4 0	3 2 7	...
1899	114	107½	3 5 1	3 3 6	...
1900	111½	105½	3 4 5	3 2 10	3 7 3
1901	112½	106½	3 6 8	3 5 0	...
1902	112	104½	3 5 3	3 4 1	3 11 10
1903	107½	101½	3 5 3	3 6 0	3 7 6
1904	107	98½	3 11 2	3 10 0	4 3 8
			3 11 10	3 14 5	...

Yield to investors in Victorian securities in various years.

The minimum return to the investor is calculated after allowing for accrued interest and redemption at par on maturity; and the actual interest payable is arrived at after allowing for redemption and expenses of floating loans.

On comparing the amounts in the last column in the table with those in the two preceding columns, it will be found that the State, when raising or converting a loan, has, as a rule, to pay from 3s. to 10s. per £100 more than is received by British investors on similar securities at maximum prices. It will be noticed that the effective rate of interest payable on the conversion of the £5,000,000 loan during the latter half of 1903 amounts to over 4 per cent., which is higher than any previous loan since 1893, the year of the bank crisis.

Prices of Australasian stocks, 1894 to 1904.

The following are the means between the highest and lowest prices of Australasian stocks in London during each of the last eleven years. The stocks selected are the representative issues of 4 and 3½ per cents. :—

MEAN PRICES OF AUSTRALASIAN STOCKS IN LONDON, 1894 TO 1904.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
FOUR PER CENTS. REDEEMABLE IN—							
	1920.	1933.	1915.	1917-36	1934.	1920-40.	1929.
1894 ..	103½	107¾	105¾	105¾	108½	..	167½
1895 ..	104½	113½	109¾	109¾	117½	..	109½
1896 ..	111½	118½	111½	111½	124½	..	112¾
1897 ..	113	120¾	113½	112¾	121¾	..	114¾
1898 ..	111½	117½	109¾	110	118¾	..	112½
1899 ..	110	115½	109	108½	116½	..	111
1900 ..	109½	114¾	108½	108¾	115½	110½	111½
1901 ..	110	114¾	107½	107¾	113¾	109½	113
1902 ..	108¾	112¾	105½	105¾	112¾	110	111½
1903 ..	104¾	107¾	102½	102¾	109¾	107½	107¾
1904 ..	104¾	107½	102¾	101½	107¾	105½	106½
THREE AND A HALF PER CENTS. REDEEMABLE IN—							
	1923.	1924.	1924.	1939.	1915-35.	1920-40.	1940.
1894 ..	95¾	99½	95½	97¾	..	96¾	99¾
1895 ..	98¾	104½	102½	104¾	..	102¾	103¾
1896 ..	101½	108	106½	108¾	..	107¾	108
1897 ..	106½	109¾	106¾	111¾	..	108½	107¾
1898 ..	104¾	108½	104¾	103	..	107¾	106¾
1899 ..	103¾	105½	103	106¾	..	103	105½
1900 ..	103¾	105	103½	105¾	102½	102¾	105
1901 ..	104	104¾	102	104¾	101¾	102	106¾
1902 ..	102½	103¾	101¾	103¾	100¾	103	105¾
1903 ..	98	99½	97½	101½	98½	100¾	102½
1904 ..	96¾	97½	96¾	98¾	95¾	98	99¾

It will be noticed from these figures that immediately after 1894 there was a remarkable and rapid rise of all the above stocks; but in 1898 there was a sudden drop, which continued gradually until 1902. The decline in the prices was accentuated in 1903 and 1904, when there was another large fall, which reduced the prices to something like the level ruling in 1894. These figures, however, as they stand, do not afford an indication of the real values of the stocks concerned. To effect a correct comparison, the rate of interest obtained by the investor must be determined when allowance has been made for redemption at par on maturity. The foregoing table shows the mean between the highest and lowest prices for the year. Other things being equal, the maximum price would be when six months' interest is about to become due, whilst the minimum would be when the interest has just been paid; so that it may be fairly assumed that the mean price includes three months' accrued interest. To make a proper comparison, therefore, of the rise and fall of Australasian stocks, recourse must be had to a method which will allow for differences in the currencies of the various stocks. For instance, to compare Victorian 4 per cents. in 1904 with those in 1894, allowance must be made for the fact that these stocks in the former year have ten years less to run, which somewhat reduces the price. For a similar reason a comparison between the stocks of the States and New Zealand bearing different dates of maturity is extremely faulty.

The best method of comparing the value of stocks over a series of years, or of comparing the different values placed upon the stocks of different States by investors, is to show the actual or effective rate of interest the investor is satisfied with, as evidenced by the mean between the highest and lowest quotations during the year. This is done in the following table, allowance being made for an average of three months' accrued interest, which is deducted from the market price before the computation is made. In computing the yield to the investor, the bonus received or loss incurred by redemption at par at maturity is taken into account:—

Investor's return from Australasian stocks.

INVESTORS' INTEREST RETURN FROM AUSTRALASIAN STOCKS,
1894, 1897, 1900, 1902, AND 1904.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
FOUR PER CENTS.							
	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.
1894	3 17 2	3 13 7	3 13 10	3 13 9	3 13 0	..	3 13 4
1897	3 5 1	3 2 2	3 2 2	3 4 1	3 1 3	..	3 6 2
1900	3 8 8	3 6 4	3 7 6	3 7 10	3 6 2	3 7 0	3 9 0
1902	3 8 4	3 8 2	3 11 10	3 11 8	3 8 0	3 6 9	3 8 5
1904	3 14 0	3 13 0	3 16 2	3 19 9	3 13 0	3 13 2	3 13 9

NOTE.—Where the date of redemption is optional, the earliest date has been adopted for the calculation.

INVESTORS' INTEREST RETURN FROM AUSTRALASIAN STOCKS,
1894, 1897, 1900, 1902, AND 1904—*continued.*

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
THREE AND A HALF PER CENTS.							
	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.
1894	3 15 11	3 11 11	3 16 4	3 12 10	..	3 15 2	3 11 0
1897	3 3 11	3 0 6	3 3 7	3 1 0	..	3 1 1	3 3 11
1900	3 6 10	3 5 0	3 6 10	3 5 9	3 7 7	3 7 3	3 6 4
1902	3 7 10	3 6 8	3 9 0	3 7 6	3 10 3	3 6 9	3 5 6
1904	3 16 0	3 14 10	3 16 10	3 12 7	4 2 2	3 14 11	3 11 9

NOTE.—Where the date of redemption is optional, the earliest date has been adopted for the calculation.

Taking the $3\frac{1}{2}$ per cents. as being the representative stocks, it appears that, judging from the quotations in 1904, those of New Zealand return the least to the investor, South Australia being second in this respect, and Western Australia the highest, the net return in that State being over 4 per cent. The Victorian $3\frac{1}{2}$ per cents. have doubtless been affected by the bearing of the market in connexion with the £5,000,000 loan, which fell due on 1st January, 1904, and was converted into $3\frac{1}{2}$ per cent. stock, portion being temporarily floated into short-dated 4 per cent. bonds, with a view to conversion afterwards into $3\frac{1}{2}$ per cent. stock.

Prices of representative British and Colonial stocks in London.

The following is a statement of the interest return to the investor in the principal issues of Colonial stocks and from British Consols, as indicated by the mean between the highest and lowest market prices quoted during the years 1900 and 1904:—

MEAN PRICES OF BRITISH CONSOLS AND COLONIAL STOCKS,
1900 AND 1904.

Country.	Date of Maturity.	Rate of Interest on Stock.	Return to Investor Per Cent.		
			1900.	1904.	Increase.
		per cent.	£ s. d.	£ s. d.	£ s. d.
United Kingdom Consols	Inter-minable.	$2\frac{1}{2}$ *	2 10 0	2 17 4	0 7 4
Canada ..	1947	$2\frac{1}{2}$	2 17 1	3 2 10	0 5 9
" ..	1938	3	3 0 0	3 4 2	0 4 2
Natal ..	1937	4	3 10 1	3 9 6	-0 0 7†
Ceylon ..	1934	4	3 6 11	3 10 1	0 3 2
Natal ..	1914-39	$3\frac{1}{2}$	3 7 11	3 15 6	0 7 7
Hong Kong ..	1918-43	$3\frac{1}{2}$	3 7 5	3 10 8	0 3 3
New Zealand ..	1900	$3\frac{1}{2}$	3 6 4	3 11 9	0 5 5

* Consols carried $2\frac{1}{2}$ per cent. interest until 1903; but the rate of interest to a permanent investor in 1900 is only reckoned at $2\frac{1}{2}$, which is now the permanent rate.

† The minus sign denotes a decrease.

MEAN PRICES OF BRITISH CONSOLS AND COLONIAL STOCKS,
1900 AND 1904—continued.

Country.	Date of Maturity.	Rate of Interest on Stock.	Return to Investor. Per Cent.		
			1900.	1904.	Increase.
		per cent.	£ s. d.	£ s. d.	£ s. d.
South Australia ..	1939	3½	3 5 9	3 12 7	0 6 10
Victoria ..	1920	4	3 8 8	3 14 0	0 5 4
New Zealand ..	1945	3	3 3 2	3 12 0	0 8 10
Cape Colony ..	1923	4	3 10 4	3 13 6	0 3 2
British Guiana ..	1935	4	3 12 3	3 13 5	0 1 2
Western Australia..	1934	4	3 6 2	3 13 0	0 6 10
Cape Colony ..	1929-49	3½	3 5 3	3 15 8	0 10 5
Newfoundland ..	1935	4	3 11 1	3 13 3	0 2 2
Tasmania ..	1920-40	4	3 7 0	3 13 3	0 6 3
Jamaica ..	1934	4	3 10 11	3 13 3	0 2 4
New South Wales	1933	4	3 6 4	3 13 0	0 6 8
" Zealand "	1924	3½	3 5 0	3 14 10	0 9 10
New Zealand ..	1929	4	3 9 0	3 13 9	0 4 9
Natal ..	1929-49	3	3 4 9	3 15 5	0 10 8
Trinidad ..	1922-44	3	3 6 11	3 16 2	0 9 3
Queensland ..	1915	4	3 7 6	3 16 2	0 8 8
Tasmania ..	1920-40	3½	3 7 3	3 14 11	0 7 8
Queensland ..	1924	3½	3 6 10	3 16 10	0 10 0
Victoria ..	1923	3½	3 6 10	3 16 0	0 9 2
" ..	1929-49	3	3 4 10	3 18 5	0 13 7
New South Wales	1935	3	3 0 11	3 17 0	0 16 1
British Guiana ..	1923-45	3	3 7 2	3 19 11	0 12 9
Trinidad ..	1917-42	4	3 7 8	3 17 0	0 9 4
Quebec ..	1937	3	3 10 7	3 18 6	0 7 11
South Australia ..	1917-36	4	3 7 10	3 19 9	0 11 11
Jamaica ..	1922-44	3	3 6 1	4 4 3	0 18 2
Western Australia	1915-35	3½	3 7 7	4 2 2	0 14 7
Queensland ..	1922-47	3	3 6 1	4 5 1	0 19 0
South Australia ..	1916	3	3 10 2	4 13 11	1 3 9
Western Australia	1916-36	3	3 12 0	4 14 11	1 2 11

It would appear from this table as if the Australian and other Colonial 3 per cent. stock were not viewed with approbation by the British investor; but as most of this stock is payable at the option of the Government between extremes of 20 or 25 years, and the computation of returns to investors has been made on the assumption of redemption of the loans at the earliest dates, such returns are higher than the probabilities warrant. Since the market rate of interest is about 3½ per cent., it is not at all likely that the Government will endeavour to redeem at the earliest date, unless under the unlikely condition of a fall in interest below 3 per cent. Therefore, in the case of this stock, it would be a fairer comparison to calculate the return to the investor on the assumption of redemption at the latest optional date. Under these circumstances, the interest realized by

the purchasers of the various 3 per cent. Australian and other Colonial stock in 1904 would be as follow:—

Stock.	Return to Investor Per cent.		
	£	s.	d.
Victoria, 1929-49 ...	3	13	0
Natal, 1929-49 ...	3	11	0
Trinidad, 1922-44 ...	3	9	7
British Guiana, 1923-45 ...	3	12	2
Jamaica, 1922-44 ...	3	14	4
Queensland, 1922-47 ...	3	14	5
Western Australia, 1916-36 ...	3	16	11

It is thus seen, on comparison with the yields of the 3½ and 4 per cent. shown in the previous tables, that there is no preference exhibited in favour of any particular stock.

Price of
debentures
and stock
in Mel-
bourne.

The amount of Victorian Government stock and debentures, payable in Melbourne, outstanding on 30th June; the closing price in January, and the return to the investor per cent. for the last five years, are as follow. The market prices are taken from the *Australasian Insurance and Banking Record*:—

Year.	Amount Out- standing on 30th June.	Closing Price in January.	Return to Investor per cent.		
			£	s.	d.
3 % Stock, due 1917 or at any time thereafter.					
1899 ...	2,790,482	100½	3	0	2
1900 ...	3,059,511	100-100½	3	0	5
1901 ...	3,146,000	98½-99½	3	1	1
1902 ...	3,195,619	99¾	3	0	10
1903 ...	3,196,933	97	3	2	4
1904 ...	3,120,492	92½	3	5	5
1905 ...	...	88¾	3	8	2
3 % Debentures, due 1921-30.					
1901 ...	532,000	97¼-97½	3	2	10
1902 ...	1,000,000	95-95¾	3	5	0
1903 ...	1,000,000	93½-93¾	3	7	2
1904 ...	1,000,000	88-90	3	13	4
1905 ...	...	87½-88	3	15	6
4 % Debentures, due 1913-23.					
1899 ...	746,795	111-112	3	2	0
1900 ...	746,795	112	2	19	11
1901 ...	746,795	105-107½	3	9	5
1902 ...	746,795	106	3	9	2
1903 ...	746,795	104½	3	12	3
1904 ...	746,795	103	3	14	9
1905 ...	...	103¾	3	12	0

In computing the returns to investors in the preceding table, the first 3 per cent. stock has been regarded as interminable, since it is at the option of the Government whether it be redeemed in 1917, or

at any time thereafter; and, as before explained, with reference to other Colonial stock, it is extremely unlikely that redemption will take place at the earliest date. In the second 3 per cent. stock it has been assumed that redemption will be made at the latest optional date, viz., 1930. In the 4 per cent. stock the earliest date is assumed, since the nominal interest is in excess of the market rate. In all the stock, allowance has been for accrued interest wherever necessary. It thus appears that the yield on the 4 per cents. occupies an intermediate position between the two 3 per cents. It will also be noticed that the yields realized by the Colonial investor are practically the same as those realized by the investor in the British market.

LIFE ASSURANCE POLICIES.

Under the provisions of the *Companies Act* 1890, life assurance companies, whose head offices are outside Victoria, and who have branches in Victoria, are required to file returns with the Registrar-General showing the number of policies in force in Victoria during the preceding year. These returns are not required to be lodged before the end of September, and consequently this information has not been available as early as was desirable; but returns for 1904 have been obtained direct from all the companies except two of the least important, for which the figures of the preceding year have been repeated. This will not affect the comparison of 1904 with previous years, as the number of policies of those two offices was inconsiderable in comparison with the total. The following are the number and amount of policies in force in Victoria in companies whose head offices are inside, and those whose head offices are outside, Victoria during the years 1900 to 1904:—

Life assurance policies in force in Victoria.

LIFE POLICIES IN FORCE IN VICTORIA, 1900 TO 1904.

Year.	Companies with Head Offices in—				Total.
	Victoria.	New South Wales.	United Kingdom.	America.	
NUMBER.					
1900 ..	59,997	105,851	1,203	5,662	172,713
1901 ..	70,115	117,958	1,130	6,833	196,036
1902 ..	76,958	125,075	1,052	7,837	210,922
1903 ..	77,938	127,364	1,004	8,555	214,861
1904 ..	84,006	130,366	950	8,890	224,212
AMOUNT.					
	£	£	£	£	£
1900 ..	8,268,635	14,917,162	554,124	2,575,941	26,315,862
1901 ..	9,267,205	15,952,982	523,560	2,821,142	28,564,889
1902 ..	9,610,224	16,798,243	477,934	2,991,761	29,878,162
1903 ..	9,458,538	17,175,972	458,820	3,137,237	30,230,567
1904 ..	9,692,186	17,646,043	434,030	3,208,084	30,980,343

The policies dealt with in the preceding table include ordinary life assurance, endowment assurance, and pure endowment. The companies are required to distinguish between assurance and endowment in their returns to the Registrar-General; but it would appear that some have included only pure endowment under the latter head, and others have included endowment assurance as well, thus rendering the distinction between the two impossible for comparative purposes.

Satisfactory position of the Australian offices.

The increase in the number and amount of policies during the last four years has been most satisfactory; and a further evidence of the thrift of the Victorian people is afforded by the fact that at the end of 1904 over 18 per cent. of the total population, including women and children, were insured for an average sum of £138. Another noteworthy fact, established by the above table, is that, notwithstanding the keen competition of the four American and the three English companies, 95·6 per cent. of the policies, and 88·2 per cent. of the amount of assurance, are in Australian offices, of which there are eleven doing business in Victoria; 24·3 per cent. of the policies and 45 per cent. of the amount assured being in the Australian Mutual Provident Society, the head office of which is in Sydney.

Life policies. Growth of business, Australian and foreign companies.

The percentage of policies held in Australian and foreign offices in Victoria, and the percentage increase or decrease during the last four years, are as follow:—

LIFE ASSURANCE POLICIES: PERCENTAGE AND GROWTH OF VICTORIAN BUSINESS IN AUSTRALIAN AND FOREIGN OFFICES, 1900 TO 1904.

Companies with Head Offices in—	Percentage of—		Increase in 1904 as compared with 1900.	
	Total Policies.	Total Amount Assured.	Number.	Amount.
			Per cent.	Per cent.
Victoria	36·22	31·72	40·02	17·22
New South Wales ..	59·55	56·51	23·16	18·29
United Kingdom ..	0·52	1·68	-21·03*	-21·67*
America	3·71	10·09	57·01	24·54
Total	100·00	100·00	29·82	17·72

Thus, while there has been a decided increase in the business of the Australian and American offices, there has been a large falling off in the business of the British companies. The percentage increase has been greatest in the American offices; but all comparisons by way of percentage increases are faulty, unless taken in conjunction with the respective amounts. For instance, the number of policies in American offices has increased by four-sevenths during the last four years, and the amount assured by nearly one-quarter, whilst

* The minus sign denotes a decrease.

the percentage increases in Australian offices are much smaller; yet, as will be seen from the table preceding the above, the increase in the number of policies and the amounts assured in Australian is 48,524 and £4,152,432 respectively, as against 3,228 and £632,143 respectively in American offices.

The following are the number and amount of annuity policies in force in Victoria at the end of each of the last five years, distinguishing between those in force in companies whose head offices are inside, and those whose head offices are outside, Victoria:—

ANNUITY POLICIES IN FORCE IN VICTORIA, 1900 TO 1904.

Year.	Head Offices in Victoria.		Head Offices outside Victoria.		Total.	
	Number.	Amount per Annum.	Number.	Amount per Annum.	Number.	Amount per Annum.
		£		£		£
1900 ..	65	3,877	189	12,307	254	16,184
1901 ..	81	4,221	229	15,150	310	19,371
1902 ..	85	4,958	269	15,990	354	20,948
1903 ..	91	4,850	294	13,971	385	18,821
1904 ..	101	7,275	303	14,108	409	21,383

Annuity policies in Victoria.

There was an increase in both the number and amount of annuities at the end of each year except 1903. The annuities at the close of 1904 exceed those at the close of 1900 by 61 per cent. in number and 32 per cent. in the amount.

Returns have been obtained from four of the six companies whose head offices are in Victoria, showing the number and amount of policies in force outside Victoria at the end of each of the five years 1899-1903. The companies which furnished returns are—the Australasian Temperance and General Mutual, the Australian Widows' Fund, the Colonial Mutual, and the National Mutual; whilst returns have not been received from the Australian Alliance and the Victoria Life and General. The following are the particulars in respect of the four companies who furnished the information:—

Life policies in Victorian companies outside Victoria.

LIFE POLICIES IN FOUR VICTORIAN COMPANIES IN FORCE OUTSIDE VICTORIA, 1899 TO 1903.

Year.	Assurance and Endowment Policies.		Annuity Policies.	
	Number.	Amount.	Number.	Amount per Annum.
		£		£
1899	80,801	19,279,944	48	3,151
1900	86,305	19,716,014	55	3,509
1901	94,313	20,360,324	88	5,804
1902	102,049	21,315,990	123	7,684
1903	113,867	22,763,193	144	8,648

Incomplete as this information has been for the five years shown in this table, it has been found impossible to procure any information of value for 1904, and the particulars given in the previous issue are, therefore, repeated.

Comparing the figures with those in the table, showing the business in Victoria of the six Victorian companies, it will be seen that the business of the four above mentioned outside the State is increasing year by year, hand in hand with the increase of the business in the State, and that a much greater proportion of the business of these companies is done in the other States than in Victoria.

BUILDING SOCIETIES.

Building societies.

Building societies in Victoria date from an early period in the history of the State, and prior to the crisis of 1893 much success had attended their operations. The collapse of the land boom, in 1891, was responsible for an almost entire cessation of new building society business, the amount of advances falling from $4\frac{1}{2}$ millions in 1888, when land transactions were heaviest, to 2 millions in 1891, to half a million in 1892, and to £65,395 in 1897, since which year, however, as will be seen from the following figures, a slight recovery has set in. Thirty-two institutions sent in returns during 1904. The following are the principal items furnished for the last five years:—

BUILDING SOCIETIES: RETURN FOR FIVE YEARS.

—	1900.	1901.	1902.	1903.	1904.
Number of societies ...	38	32	31	32	32
" shareholders	12,120	6,010	6,160	6,365	6,970
" borrowers	6,910	4,933	6,167	6,105	6,275
Value of landed property	£ 224,199	£ 317,369	£ 342,047	£ 321,259	£ 281,440
During the year—					
Advances ...	115,343	150,043	164,786	145,186	131,307
Repayments ...	286,536	254,419	275,720	267,193	243,492
Working expenses ...	23,546	34,347	28,832	22,025	20,959
At end of year—					
Bank overdraft ...	107,047	31,978	90,623	75,476	70,312
Deposits ...	1,353,912*	471,861	737,405	735,017	721,548

Advances by building societies, 1876 to 1904.

The following figures, showing the advances made by building societies during each of the last 29 years, indicate the havoc wrought in building society business by the financial crisis of 1893. It will be seen that the advances have not of late years attained to anything like their normal proportions. In fact, after an annual increase

* Including amount due to debenture-holders.

from 1897 to 1902, there was a decline in 1903, and a further decline in 1904, as compared with 1901 and 1902:—

ADVANCES BY BUILDING SOCIETIES, 1876 TO 1904.

£			£		
1876	...	870,203	1891	...	2,059,627
1877	...	815,860	1892	...	504,089
1878	...	703,932	1893	...	96,364
1879	...	489,312	1894	...	82,897
1880	...	564,411	1895	...	124,127
1881	...	805,551	1896	...	124,113
1882	...	1,040,965	1897	...	65,395
1883	...	1,089,480	1898	...	90,604
1884	...	1,469,542	1899	...	94,117
1885	...	2,073,189	1900	...	115,343
1886	...	2,358,729	1901	...	150,043
1887	...	2,544,688	1902	...	164,786
1888	...	4,381,330	1903	...	145,186
1889	...	3,264,984	1904	...	131,307
1890	...	2,426,127			

MORTGAGES, LIENS, &C.

A statement of the number and amount of registered mortgages and releases of land in each of the last five years is hereunder. Generally, in about 13 per cent. of the mortgages the amount of the loan is not stated, so that the amounts stated in the following table may be taken as understating the total by about that proportion. No account is taken of unregistered or equitable mortgages to banks and individuals, as there is no public record of these dealings; nor are building society mortgages over land held under the *Transfer of Land Act* included, they being registered as absolute transfers. Besides releases registered as such, some mortgages are released or lapse in other ways, e.g., by a transfer from mortgagor to mortgagee, by sale by mortgagee, or by foreclosure—

Land mortgages and releases.

LAND MORTGAGES AND RELEASES: RETURN FOR FIVE YEARS.

Registered During Year.	1900.	1901.	1902.	1903.	1904.
Mortgages—					
Number ..	6,927	7,688	8,951	9,199	8,562
Amount £	5,300,951	5,768,957	7,626,922	6,452,908	7,982,671
Releases—					
Number ..	5,783	5,940	5,985	4,241	7,081
Amount £	4,867,113	4,777,258	5,472,950	5,324,527	4,884,665

There is nothing to show the number of new mortgages given during the year, for the majority of the mortgages registered simply replace old mortgages. It appears, however, that in the last three years there must have been a considerable number of new mortgages, which is probably accounted for by the calling in of overdrafts by

the banks in 1902, which forced a number of people to pay off the banks by mortgaging their properties; and by the disastrous failure of the harvest of 1902-3, which must have necessitated a large number of new and increased mortgages. Owing to the imperfection and incompleteness of the returns mentioned above, it would be unsafe to make any further deduction from the figures.

Stock mortgages, liens on wool and crops

The number and amount of stock mortgages, liens on wool, and liens on crops registered during each of the last five years were as follow. Releases are not shown, as releases of liens are not required to be registered, being removed from the register after the expiration of twelve months; and very few of the mortgagors of stock trouble to secure themselves by a registered release:—

STOCK MORTGAGES, LIENS ON WOOL AND CROPS: RETURN FOR FIVE YEARS.

Security.	1900.	1901.	1902.	1903.	1904.
Stock Mortgages—					
Number ..	641	706	717	742	821
Amount £	90,327	165,806	118,648	99,517	135,295
Liens on Wool—					
Number ..	283	287	278	229	156
Amount £	116,057	86,691	66,570	48,029	63,463
Liens on Crops—					
Number ..	971	737	565	3,835	1,867
Amount £	145,485	116,159	82,999	206,737	111,730
Total—					
Number ..	1,895	1,730	1,560	4,806	2,844
Amount £	351,869	368,656	268,217	354,283	310,488

Notwithstanding the number of bad seasons lately experienced, the number of these dealings has fallen off since 1899, and since 1894 the fall had been from 4,000 to 2,408 in 1898. It is not, however, to be inferred that this is evidence of absence of necessity on the part of farmers, graziers, and pastoralists, but it rather points to the conclusion that the banks and storekeepers are restricting advances on the securities of this description that are being offered. The large increase of liens on crops in 1903, as compared with the four preceding years, is due to the fact that 2,955 were liens to the Board of Land and Works, under the *Seed Advances Act* 1903. In 1904 the number of such liens was 1,286.

Bills and contracts of sale.

Two forms of security are taken by lenders over personal chattels, viz., a bill of sale, or a contract of sale, and for letting and hiring. The former is a simple mortgage of the chattels, whilst the latter purports to be an absolute sale of the chattels to the lender, with an agreement by the lender to hire the goods back to the borrower at a certain rental, which takes the place of interest. The number

and amounts of those filed in each of the last five years are as follows:—

BILLS AND CONTRACTS OF SALE: RETURN FOR FIVE YEARS.

Security.	1900.	1901.	1902.	1903.	1904.
Bills of Sale—					
Number ..	2,007	2,124	1,958	1,967	2,725
Amount £	180,061	186,932	225,544	221,114	189,433
Contracts of Sale—					
Number ..	393	370	327	425	364
Amount £	15,985	11,723	9,277	12,505	11,715

Before filing a bill of sale, 14 days' notice of intention to file must be lodged with the Registrar-General, within which period any creditor may lodge a "caveat" to prevent the filing of the bill without the payment by the borrower of his claim. To circumvent this, the practice arose, in 1877, whereby the borrower purported to sell the chattels to the lender, who hired them back to the borrower, and this became the form of security more generally adopted until 1887, when a decision was given that if there were any tacit understanding that the transaction should be considered as a loan, the security would be void unless registered as a bill of sale. In consequence of this, the number of contracts of sale has gradually decreased, until in 1904 the bills of sale were nearly eight times their number, and the amount secured about sixteen times as great.

A statement of the number and nature of trading companies floated and registered in Victoria during the six years' period, 1894-9, and during each of the last five years, is appended:—

Trading companies registered, 1894 to 1904.

TRADING COMPANIES REGISTERED IN VICTORIA, 1894 TO 1904.

Nature of Company.	1894 to 1899.	1900.	1901.	1902.	1903.	1904.
FINANCE—						
Land, property, investment ..	11	...	2	4	5	...
Building society ..	1	...	...	1	...	...
Finance, agency, &c.	8	...	1	1	2	...
Insurance ..	2	...	...	1	...	2
TRADE—						
Cycling ..	11	1	1	...	...	2
Export ..	1	...	1	3	...	1
Produce ..	12	1	1	1	1	4
Supply and trading ..	9	1	...	2	5	5
Merchants' imports ..	13	4	3	6	2	1
TRANSPORT—						
Carrying ..	6	1	1	1	1	...
Railways and rolling-stock ..	4	1	...	...	...	...
Tramways ..	3	...	1	...	...	...
Steamship ..	1	1	1	2	2	1
Others ..	7	2	...	...	...	2

TRADING COMPANIES REGISTERED IN VICTORIA, 1894 TO 1904—
continued.

Nature of Company.	1894 to 1899.	1900.	1901.	1902.	1903.	1904.
INDUSTRIAL—						
Bacon curing	4	1	1	...	..	1
Brewing	4	...	...	1	..	2
Bricks, tiles	5	...	...	1	...	...
Electric	3	1	1	...	...	2
Engineering, machinery	5	...	4	...	...	1
Explosives, &c.... ..	5	...	...	...	...	...
Freezing	5	...	...	...	...	...
Manufacturing (undefined)	9	...	...	2	2	...
Tobacco	3	1	...	1	1	1
Preserving	10	...	...	...	...	2
Printing	4	...	1	1	1	...
Wine-making	3	1	...	...	2	...
Others	86	18	14	26	17	10
PRIMARY PRODUCTION—						
Cultivation	2	...	...	...	...	2
Dairying, &c.	67	6	3	2	5	16
Mining, prospecting, &c.	26	4	2	3	1	1
Gold saving, extracting, &c.	5	...	...	4	...	1
Pastoral	2	2	...	1	...	...
MISCELLANEOUS—						
Newspaper, magazine	14	4	1	3	1	5
Public halls	13	...	2	1	...	...
Other	51	4	8	1	8	14
Total	415	54	49	69	56	76

The figures in the above table refer only to companies registered under Part I. of the *Companies Act* 1890, and are, therefore, exclusive of ordinary mining, life, and trustees and executors' companies, as well as building societies. From the above figures, it may be ascertained that of the 719 new companies registered during the last eleven years, 263, or 37 per cent., were industrial; 155, or 21 per cent., were connected with primary production; 92, or 13 per cent., with trade; 41, or 6 per cent., with finance; 38, or 5 per cent., with transport; whilst 130, or 18 per cent., were of a miscellaneous character, including newspapers, magazines, public halls, and various societies and associations. Those industrial companies, included under the term "others," are principally companies registered for the manufacture of a particular patented article, but include a number of companies formed for the manufacture of various commodities and for the treatment of natural products.

According to records in the Registrar-General's office, there were 1,115 trading companies in 1904 still actively engaged in the operations for which they were formed, as against 1,143 in 1903, 1,073 in 1902, 1,074 in 1901, 989 in 1900, 953 in 1899, 924 in 1898, 781 in 1897, and 799 in 1896, prior to which year this information was not obtainable. It will be seen from these figures that there has been a very decided increase in the number of active companies since 1897.

Number of
existing
companies.

MUNICIPAL STATISTICS.

The total number of municipalities administering local government throughout the State at the end of the year 1904 was 208. Of these 11 are ranked as cities, 12 as towns, 37 as boroughs, and the remainder (148) as shires. The whole of Victoria is now brought under control of municipalities, with the exception of about 600 square miles in the mountainous part of Wonnangatta, and 64 square miles in French Island.

The following is a summary of the population, number of rate-payers, estimated number of dwellings (inhabited and uninhabited), total and annual value of rateable property, and annual revenue of cities, towns, boroughs, and shires in each of five years ended 1903-4:—

MUNICIPALITIES: RETURN FOR FIVE YEARS.

Year.	Estimated Population.	Number of Rate-payers.	Estimated Number of Dwellings.		Estimated Value of Rateable Property.		Total Revenue.
			In-habited.	Uninhabited.	Total.	Annual.	
Cities, Towns, and Boroughs—							
1899-00	605,944	153,285	133,825	4,543	£ 67,113,600	£ 4,670,200	£ 657,775
1900-01	647,397	{ 153,783 }	130,215	4,250	67,302,423	4,765,632	736,240
1901-2		{ 157,820 }			77,289,493	5,223,282	809,325
1902-3	652,607	155,262	136,907	3,341	92,099,451	5,308,546	779,950
1903-4	652,658	158,691	137,394	4,958	93,376,880	5,366,477	789,596
Shires—							
1899-00	577,600	154,662	118,588	4,840	102,798,300	5,613,300	531,102
1900-01	551,523	{ 159,128 }	111,162	7,376	106,839,331	5,771,865	544,994
1901-2		{ 147,671 }			107,812,500	5,661,805	491,209
1902-3	557,285	150,724	115,429	3,567	111,803,408	5,880,386	499,112
1903-4	556,350	152,204	117,760	3,883	115,766,850	6,071,353	520,794
Total—							
1899-00	1,183,544	307,947	252,413	9,383	169,911,900	10,283,500	1,188,877
1900-01	1,198,920	{ 312,911 }	241,377	11,626	174,141,754	10,537,497	1,281,234
1901-2		{ 305,491 }			185,101,993	10,885,087	1,300,534
1902-3	1,209,892	305,986	252,336	6,908	203,902,919	11,188,932	1,279,962
1903-4	1,209,008	310,895	255,154	8,841	209,143,730	11,437,830	1,310,390

The number of ratepayers returned for 1903-4 is 310,895, and the total capital value of rateable property £209,143,730, which is equivalent to about 18 years' purchase on the annual value, £11,437,830.

Ratepayers and rateable property in municipalities.

The ordinary revenue and expenditure for the financial years ended 30th September, 1902, 1903, and 1904, were as follow:—

REVENUE AND EXPENDITURE OF MUNICIPALITIES, 1902 TO 1904.

Sources of Revenue.	1902.	1903.	1904.
Taxation —	£	£	£
Rates	784,810	765,910	807,982
Licences	121,317	106,948	105,123
Market and Weighbridge Dues	58,113	52,522	52,772
Government Endowment and Grants	99,304	98,609	80,781
Contributions for Streets, Footpaths, &c.	21,901	21,577	20,485
Sanitary Charges	48,332	44,718	50,097
Rents	56,494	58,081	59,956
Other Sources	110,263	130,697	133,194
Total	1,300,534	1,279,062	1,310,390
Heads of Expenditure.			
Salaries, &c.	139,174	135,730	138,884
Sanitary Work, Street Cleansing, &c.	131,847	125,535	126,219
Lighting	97,414	68,665	69,877
Fire Brigades' Contributions	15,884	16,530	16,668
Public Works—			
Construction	195,487	131,508	167,919
Maintenance	340,791	330,897	360,831
Formation of Private Streets, &c.	22,197	19,307	19,504
Redemption of Loans	32,015	50,146	43,959
Interest on Loans	195,186	193,638	191,310
Charities	13,277	12,431	13,117
Other Expenditure	112,454	113,842	142,460
Total	1,295,726	1,198,229	1,260,748

As compared with 1903, the revenue of 1904 has increased by £31,328. The items showing advances are:—Rates, about £42,000; sanitary charges, £5,400; rents, £1,900; market and weighbridge dues, and “other sources” of revenue, £2,700. Government endowment and grants have been reduced £17,800; licences, £1,800; and contributions for streets, £1,100. The expenditure shows an increase of £92,519. The items increased are—Salaries, about £3,100; sanitary work and street cleaning, £700; lighting, £1,200; public works, construction, £36,400; maintenance, £29,900; charities, £700; and “other expenditure,” £29,000. The reductions in expenditure are—Redemption of loans, £6,200; and interest on loans, £2,300.

Sixty-two per cent. of municipal revenue was derived from rates, 8 per cent. from licences of all kinds, 4 per cent. from market and weighbridge dues, 6 per cent. from Government endowments and grants, 2 per cent. from contributions for streets, footpaths, &c., 4 per cent. from sanitary charges, 4 per cent. from rents, and 10 per cent. from all other sources.

Proportion of municipal revenue raised from different sources.

In 1904 the salaries of the municipal officers amounted to £138,884, or 10 3-5ths per cent. of the entire revenue.

Salaries

A sum of £13,117, equivalent to about 1 per cent. of the revenue, was devoted to local charities—the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

Local charities

The assets of the municipalities are shown under three heads—(1) Municipal Fund, (2) Loan Fund, (3) Property; the liabilities under two heads—(1) Municipal Fund, (2) Loan Fund.

Assets and liabilities of municipalities.

MUNICIPAL ASSETS AND LIABILITIES, 1902 TO 1904.

Assets.	1902.	1903.	1904.
Municipal Fund—	£	£	£
Uncollected Rates	141,482	130,203	119,013
Other Assets	153,490	166,753	168,107
Loan Funds—			
Sinking Funds—			
Amount at Credit	697,019	654,281	680,989
Arrears Due	1,175	2,033	4,352
Unexpended Balances	282,229	223,624	160,321
Due by other Municipalities	18,835	18,366	16,414
Property—			
Halls, Buildings, Markets, &c.	2,470,460	2,449,762	2,495,101
Waterworks	210,367	226,220	226,084
Gasworks	61,592	60,820	68,744
Total Assets	4,036,649	3,932,062	3,939,125
Liabilities.			
Municipal Fund—			
Arrears due to Sinking Funds	1,175	2,033	4,352
Overdue Interest	13,044	17,616	17,875
Bank Overdrafts	148,236	107,090	86,890
Temporary Government Advances	17,604	13,310	11,033
Other Liabilities	147,888	126,671	132,098
Loan Funds—			
Loans Outstanding	4,254,061	4,212,051	4,205,886
Due on Loan Contracts	33,455	30,092	29,947
Due to other Municipalities	18,835	18,366	16,414
Total Liabilities	4,634,298	4,527,229	4,504,495

Municipal assets and liabilities compared.

The total assets of municipalities in 1904 amounted to £3,939,125, and the liabilities to £4,504,495, showing a deficiency of £565,370. The aggregate of the current liabilities (Municipal Fund) was £252,248, against which there were assets amounting to £287,120. The gross liability on account of loan expenditure for works completed and in progress was £4,252,247, which, after deducting sinking funds and unexpended balances, was reduced to £3,390,171. If credit were taken for the value of municipal properties (£2,789,929) in markets, halls, buildings, gasworks, waterworks, &c., the net burden on account of loan moneys would be £600,242. As compared with 1903, the assets increased by £7,063; and the liabilities were reduced by £22,734.

Endowment of municipalities

Under the *Local Government Act* 1891, £450,000 was provided as an annual endowment for the municipalities. This was the first statutory provision made since 1879, when an endowment of £310,000, authorized under the *Local Government Act* 1874, ceased to be payable. A subsidy, however, in lieu thereof, amounting to £310,000, was voted by Parliament annually, but this vote was gradually increased until £450,000 was reached in 1889-90 and 1890-91. This amount was reduced to £405,000 per annum from the 1st January, 1893; to £310,000 from 1st July, 1893; to £100,000 from 1st July, 1894; and to £50,000 from 1st July, 1902. The endowment is payable in equal moities in March and September in each year. The following table shows the method of distribution for the year 1903-4:—

ENDOWMENTS TO MUNICIPALITIES, 1903-4.				Municipality.			Endowment.		
				£			s. d.		
Boroughs (37)	...	...	...	916	3	7			
Shires—									
2nd Class (67)	...	...	...	18,111	18	9			
3rd „ (52)	...	...	...	17,533	2	7			
4th „ (6)	...	...	...	1,853	11	7			
5th „ (18)	...	...	...	7,346	9	5			
6th „ (8)	...	...	...	2,838	14	1			
Transferred to Trust Fund for Salaries, &c., of Inspectors of Municipal Accounts				1,400	0	0			
Total	...	...	...	50,000	0	0			

The amount of endowment paid is calculated on the amount of rates received during 1902, the following being the rates in the £1 received in 1903-4:—

				s. d.	
Boroughs	...	...	...	1	9'87
Shires—					
2nd Class	...	...	...	2	10'99
3rd „	...	...	...	3	4'82
4th „	...	...	...	4	10'32
5th „	...	...	...	5	9'25
6th „	...	...	...	6	8'19

In addition to the endowment of £50,000 the municipalities received from the Government a sum of £92,245 8s. 1d., under Act No. 1111, Section 201, the equivalent for (1) fees for licences; (2) fees for the registration of brewers and spirit merchants; (3) fines, penalties, and forfeitures incurred under *The Licensing Act 1876*. The particulars of this payment are in the following return:—

LICENCE PAYMENTS, 1903-4.						£	s.	d.
Paid to Cities (11) ...	...	...	...	...	...	36,894	5	5
„ Towns (12) ...	...	...	...	...	...	11,668	6	9
„ Boroughs (37) ...	...	...	...	...	...	14,738	8	0
„ Shires—								
1st Class (3) ...	...	...	...	...	...	555	0	0
2nd „ (67) ...	...	...	...	...	...	15,496	15	10
3rd „ (50) ...	...	...	...	...	...	9,478	18	9
4th „ (5) ...	...	...	...	...	...	831	15	0
5th „ (14) ...	...	...	...	...	...	1,839	18	10
6th „ (4) ...	...	...	...	...	...	741	19	6
Total ...	...	...	...	...	...	92,245	8	1
By adding the Accounts Paid on Account of 1903						£354	5	0
By deducting the Unpaid Accounts of 1904 ...						69	0	0
						285	5	0
Equivalent to Municipalities ...	...	...	...	...	...	92,530	13	1

The following is a statement of the payments and receipts of the Licensing Act Fund for the year ended 30th June, 1904:—

LICENSING ACT FUND.							
Payments.	£	s.	d.	Receipts.	£	s.	d.
Expenses of Officers under Licensing Act	7,045	8	5	Balance, 30th June, 1903	14,538	11	10
Cost of taking Poll of Electors ...	216	0	1	Licences, less Refunds	100,247	14	6
Equivalent to Municipalities (see previous table) ...	92,530	13	1	Fines, less Refunds	2,192	4	6
Balance, 30th June, 1904 ...	17,218	17	5	Sale of Confiscated Liquor	32	8	2
Total ...	117,010	19	0	Total ...	117,010	19	0

Classification of properties rated, 1901-2.

The number of properties rated and the annual assessments thereon in cities, towns and boroughs, and shires, in 1901-2, were as follow:—

NUMBER AND ASSESSMENT OF PROPERTIES RATED, 1901-2.

Rateable Values.	Number of Properties Rated.			Assessment of Properties.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.	In Cities, Towns, and Boroughs.	In Shires.	Total.
				£	£	£
Under £25 ..	138,191	119,146	257,337	2,713,023	2,426,477	5,139,500
£25 to £50 ..	34,848	44,225	79,073			
£50 to £75 ..	8,002	10,681	18,683	693,482	1,096,013	1,789,495
£75 to £100 ..	3,094	6,612	9,706			
£100 to £200 ..	3,823	5,813	9,636	517,663	762,504	1,280,167
£200 to £300 ..	1,013	1,112	2,125			
£300 to £400 ..	435	406	841	1,299,114	1,376,811	2,675,925
£400 to £500 ..	257	226	483			
£500 and upwards	627	707	1,334			
Total ..	190,290	188,928	379,218	5,223,282	5,661,805	10,885,807

Value of properties compared.

Of these properties, 89 per cent. were of an annual value of under £50, 68 per cent. being less than £25. The annual assessment on properties under £50 amounted to over five millions, or 47 per cent. of the total. Although there are a greater number of properties rated in cities, towns, and boroughs, than in shires, the latter are the more valuable, as evidenced by the fact that the assessment on the rural properties amounted to £5,660,000, as against £5,220,000 in urban municipalities.

Ratings in municipalities 1904.

Of the 60 cities, towns, and boroughs, 11 levied rates of 1s. in the £1, 5 of 1s. 3d., 2 of 1s. 4d., 12 of 1s. 6d., 14 from 1s. 7d. to 1s. 10d., 11 of 2s., 2 of 2s. 3d., 1 of 2s. 4d., and 2 of 2s. 6d. Of the 148 shires, 2 levied a rate of 9d. in the £1, 96 levied rates of 1s., 18 of 1s. 3d., 5 of 1s. 4d., 18 of 1s. 6d., 4 of 1s. 7d. to 1s. 10d., 4 of 2s., and 1 of 2s. 3d. in the £1. These figures give an average rating of 1s. 7d. in the £1 in cities, towns, and boroughs, and 1s. 2d. in shires. The rating in the urban districts is thus shown to be 5d. in the £1 more than in the rural districts.

MUNICIPAL LOANS.

Municipal indebtedness.

The total indebtedness of the municipalities at the end of their financial year was £4,205,886; £280,509 due to the Government, and £3,925,377 due to the public. The total indebtedness of the shires was £651,407; £132,103 due to the Government, and £519,304 other loans. The total indebtedness of the cities was £3,554,479, of which £148,406 was due to the Government, and £3,406,073 otherwise.

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1904.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year	13,156	8,962	22,118
Balance unexpended from previous year	204,891	17,651	222,542
Expenditure during the year	74,970	9,369	84,339
Balance unexpended at the end of 1904	143,077	17,244	160,321

The municipal expenditure of loan moneys during the year 1904 amounted to £84,339, of which £74,970 was spent by cities, towns, and boroughs, and £9,369 by shires. This is considerably less than the loan expenditure in any of the three preceding years, but exceeded that spent in 1900.

Municipal loan expenditure, 1900 to 1904.

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year.	Receipts. £	Expenditure. £
1900	93,098	61,600
1901	375,683	254,098
1902	29,628	135,251
1903	81,585	132,044
1904	22,118	84,339

Of the total loan receipts for the year (£22,118), £2,000 was received from the Government—all of which was lent to the Wangaratta Borough; the balance (£20,118) was raised from the public by the following districts. All the loans were floated in Melbourne, except as regards that of the Borough of Oakleigh, which was negotiated locally:—

Loans raised by municipalities, 1904.

LOANS RECEIPTS BY MUNICIPALITIES, 1904.		Amount.
Loans from the Public—		
Cities, Towns, and Boroughs—		£
Oakleigh ... ..	..	200
Wangaratta ... ..	...	2,506
Warnambool ... ..	...	8,450
Total ... ..	...	11,156
Shires—		
Belfast ... ..	...	700
Borong ... ..	...	1,500
Heidelberg ... ..	...	1,500
Howqua ... ..	...	750
Lillydale ... ..	...	154
Nunawading ... ..	...	704
Swan Hill ... ..	...	2,004
Yea ... ..	...	1,650
Total ... ..	...	8,962
Government Loans—		
Wangaratta Borough ... ..	...	2,000
Grand Total ... ..	...	22,118

The following is a statement of the revenue and expenditure of the City of Melbourne for the year 1904:—

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1904.

Heads of Revenue.						
Rates—						£
General	...	...	...	...	...	69,042
Lighting	...	...	...	...	...	22,987
Licences—						
Publicans'—Equivalent for—From Licensing Act	...	...	...	...	...	14,455
Abattoirs—Slaughtering Fees	...	...	...	...	...	1,483
Dairy	...	...	...	...	...	122
Noxious Trades	...	...	...	...	...	195
Drays and Hackney Carriages	...	...	...	...	...	2,346
Lodging-houses	...	...	...	...	...	25
Places for pastime	...	...	...	...	...	47
Fees under Dog Act	...	...	...	...	...	75 ²
„ City Baths	...	...	...	...	...	1,413
Market and Weighbridge Fees	...	...	...	...	...	32,440
Contributions for Forming Private Streets, &c.	...	...	...	...	...	506
Contributions for Flagging, Asphalting Footpaths	...	...	...	...	...	191
Lighting—Sale of Electric Current and Rent of Meters, &c.	...	...	...	...	...	45,855
Fines—Police Court	...	...	...	...	...	1,188
Costs allowed at Police Court	...	...	...	...	...	70
Rents—						
Abattoirs	...	...	...	...	...	5,732
Markets and Shops	...	...	...	...	...	32,884
Boat Sites and Shops	...	...	...	...	...	77
Town Hall Premises and Rooms	...	...	...	...	...	3,774
Interest on Fixed Deposits	...	...	...	...	...	4,280
Miscellaneous—						
Reimbursements in Aid—						
Abattoirs—Sale of Fertilizer	...	...	...	...	...	4,375
Lighting—Gas Repayments	...	...	...	...	...	531
„ Sale of Gas-lamps, and Sundry Receipts	...	...	...	...	...	34
Cleansing Streets—Sale of Manure and Extra	...	...	...	...	...	1,222
Cleansing	...	...	...	...	...	183
Cleansing Cesspools—Sale of Night-soil	...	...	...	...	...	200
Public Conveniences	...	...	...	...	...	200
Other Receipts—						
Fees under Building Act	...	...	...	...	...	496
„ Weights and Measures Act	...	...	...	...	...	250
Sundries	...	...	...	...	...	508
Total	...	...	...	...	...	247,663

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1904—
continued.

Heads of Expenditure.		£
Salaries, &c.—		
Administrative Staff	... ..	10,102
Allowance to Mayor	... ..	1,500
Commissions—Rate Collectors	... ..	1,670
Hall Porter and Housekeeper	... ..	200
Valuation	... ..	1,327
Citizens' Lists—Collection of	... ..	223
Closest Cleansing and Sanitary Works	... ..	713
Street Cleansing, &c.	... ..	18,842
Lighting—Gas supplied, &c.	... ..	963
„ Electric—Maintenance	... ..	34,968
Fire Brigades Board—Contribution	... ..	3,741
Public Works—Maintenance—		
Roads and Bridges	... ..	32,333
Markets	... ..	16,498
Weighbridges	... ..	1,101
Abattoirs—Slaughtering Account	... ..	4,614
„ Management, Labour, &c., producing Fertilizer	... ..	7,304
Town Hall and City Court Property	... ..	2,506
Baths	... ..	1,421
Parks and Planting Trees in Streets	... ..	5,103
Public Conveniences	... ..	1
Repayment of Loan	... ..	10,000
Interest on Loans from the Government	... ..	240
„ „ Public	... ..	58,375
Payments towards Redemption of Government Loans	... ..	210
Sinking Funds—Loans from the Public	... ..	9,088
Electric Supply—Sinking, Depreciation, and Renewals Fund	... ..	17,985
Expenses of paying Interest on Loans	... ..	514
Contributions to Charitable Institutions	... ..	1,035
Law Costs	... ..	562
Printing, Advertising, and Stationery	... ..	1,162
Miscellaneous—		
Rewards and Sundries	... ..	316
Inspection—Weights and Measures Act	... ..	564
„ Under Health Act	... ..	1,137
„ Under Dog Act	... ..	403
Insurance and Guarantee Premiums	... ..	705
Elections	... ..	206
Analyst and Sundries	... ..	227
Town Hall Organ—Organist's Fees, Tuning, &c.	... ..	134
Metropolitan Gas Act (Expenses)	... ..	737
Sundries	... ..	149
Total	... ..	248,879

City of
Ballarat
revenue
and expen-
diture,
1904.

Of each £100 of revenue received by the City of Ballarat in 1904, general rates amounted to £54; licences to £13; sanitary rates to £12; market and weighbridge dues to £9; rents to £3; and other receipts to £9. £41 per £100 of expenditure was on public works; £11 on interest on and redemption of loans; £12 on sanitary expenses; £8 on lighting; £9 on salaries and allowances; £7 on street cleansing; and £12 on all other items.

REVENUE AND EXPENDITURE OF THE CITY OF BALLARAT FOR THE YEAR ENDED 30TH SEPTEMBER, 1904.

Revenue.		Amount.	Expenditure.		Amount.
Special Grants — From Government	...	£190	Salaries	...	£2,244
General Rates	...	16,698	Allowance to Mayor	...	300
Licences — From Licensing Act Fund	...	3,626	Sanitary Expenses	...	3,440
" Other	...	326	Street Cleaning	...	2,000
Market and Weighbridge Dues	...	2,814	Lighting	...	2,400
Dog Fees	...	272	Fire Brigades' Board—Contribution	...	447
Pound Fees	...	55	Public Works { Construction	...	841
Closet Cleansing and Sanitary Rates and Fees	...	3,835	" Maintenance	...	10,777
Rents	...	996	Repayment of Loans—		
Other Sources	...	2,086	To the Public	...	500
			Government	...	377
			Payment to Sinking Funds on Loans from the Public	...	640
			Interest—Government Loans	...	314
			" Loans from the Public	...	1,176
			" Bank Overdraft	...	18
			Contributions to Charitable Institutions	...	336
			Other Expenditure...	...	2,495
Total	...	30,898	Total	...	28,305

As much as 65 per cent. of the income of the Town of Ballarat East, in 1904, was derived from rates, 17 per cent. from licences, 13 per cent. from sanitary rates and fees, and 5 per cent. from other sources. Fifty per cent. of the expenditure was for public works construction and maintenance, 8 per cent. for street cleansing, 10 per cent. for interest on and redemption of loans, 9 per cent. for salaries and allowances, 9 per cent. for sanitary expenses, 7 per cent. for lighting, and 7 per cent. for all other services.

Revenue and expenditure of the Town of Ballarat East, 1904.

REVENUE AND EXPENDITURE OF THE TOWN OF BALLARAT EAST FOR THE YEAR ENDED 30TH SEPTEMBER, 1904.

Revenue.		Amount.	Expenditure.		Amount.
Special Grants — From Government	...	£56	Salaries	...	£1,167
General Rates	...	8,934	Allowance to Mayor	...	200
Licences — From Licensing Act Fund	...	2,160	Sanitary Expenses	...	1,296
" Other	...	141	Street Cleansing	...	1,239
Market and Weighbridge Dues	...	67	Lighting	...	992
Dog Fees	...	130	Fire Brigades' Board—Contribution	...	224
Rents	...	159	Public Works { Construction	...	3,539
Closet Cleansing and Sanitary Rates and Fees	...	1,845	" Maintenance	...	3,837
Other Sources	...	296	Redemption of Government Loans	...	327
			Payment to Sinking Funds on Loans from the Public	...	150
			Interest—Government Loans	...	284
			" Loans from the Public	...	611
			" Bank Overdraft	...	132
			Contributions to Charitable Institutions	...	251
			Other Expenditure...	...	626
Total	...	13,788	Total	...	14,875

Revenue and expenditure of City of Bendigo, 1904.

In the City of Bendigo, in 1904, the following were the proportions of total revenue obtained under the different headings:—General rates, 46 per cent.; licences, 16 per cent.; sanitary rates and fees, 17 per cent.; market and weighbridge dues, 9 per cent.; rents, 7 per cent., and other sources 5 per cent. The proportions of the total expenditure on various services were:—Public works construction and maintenance, 38 per cent.; sanitary expenses, 14 per cent.; interest on loans and payments to sinking funds, 7 per cent.; salaries and allowances, 8 per cent.; lighting, 8 per cent.; street cleansing, 7 per cent.; and miscellaneous expenditure, 18 per cent.

REVENUE AND EXPENDITURE OF THE CITY OF BENDIGO FOR THE YEAR ENDED 30TH SEPTEMBER, 1904.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Special Grants — From Government	129	Salaries	2,267
General Rates	14,557	Allowance to Mayor	320
Licenses — From Licensing Act Fund	5,052	Sanitary Expenses... ..	4,337
„ Other	182	Street Cleansing	2,084
Market and Weighbridge Dues	2,739	Lighting	2,696
Dog Fees	330	Fire Brigades' Board—Contribution	718
Closest Cleansing and Sanitary Rates and Fees	5,427	Public Works { Construction 2,696 Maintenance 9,324	
Rents	2,362	Payments to Sinking Fund on Loans from the Public	1,000
Other Sources	1,028	Interest on Loans from the Public	1,213
		„ Bank Overdraft	153
		Contributions to Charitable Institutions	408
		Other Expenditure	4,640
Total	31,806	Total	31,856

Revenue and expenditure of the Town of Geelong, 1904.

About three-fifths of the revenue of the Town of Geelong, in 1904, was derived from rates, about one-sixth from licences, chiefly from Licensing Act Fund, one-eighth from rents, and the balance from miscellaneous sources. Nearly one-half of the expenditure was devoted to the maintenance of public works, more than one-fifth to the payment of interest on loans and payments to sinking funds, &c., about one-ninth to salaries and allowances, and the remainder to lighting, formation of private streets, street cleansing, and other purposes.

REVENUE AND EXPENDITURE OF THE TOWN OF GEELONG FOR
THE YEAR ENDED 31ST AUGUST, 1904.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
General Rates	8,442	Salaries	1,391
Lighting Rates	751	Allowance to Mayor ...	300
Government Subsidy for Parks and Gardens	279	Public Works—Maintenance	7,639
Licences — From Licensing Act Fund	2,282	Street Cleansing, Closet and Sanitary Work	617
„ Other	264	Lighting	1,017
Dog Fees	119	Interest on Loans	2,361
Market and Weighbridge Rents and Dues	206	Repayment of Loans ...	500
Rents	1,958	Payments to Sinking Funds	408
Contributions for Private Streets, &c.	75	Formation of Private Streets, &c.	605
All other	301	Fire Brigades' Board Contri- bution	182
		Contributions to Charitable Institutions	78
		Other expenditure	614
Total Revenue	14,677	Total Expenditure	15,712

MELBOURNE HARBOR TRUST.

The Melbourne Harbor Trust is a corporate body established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent, for which purpose certain lands and properties are vested in seventeen Commissioners, two of whom are elected by the Melbourne City Council, one each by the ratepayers of the municipalities of South Melbourne, Port Melbourne, Williamstown, and Footscray, three by the owners of ships registered at Melbourne, three by merchants and traders paying wharfage rates, and five are appointed by the Governor-in-Council. The following are particulars of the receipts and expenditure during each of the last five years:—

MELBOURNE HARBOR TRUST.—ORDINARY RECEIPTS AND
EXPENDITURE: RETURN FOR FIVE YEARS.

Net Receipts from—	1900.	1901.	1902.	1903.	1904.
	£	£	£	£	£
Wharfage Rates	127,785	136,178	140,258	164,611	162,105
Rents and Licence Fees ...	11,091	10,007	11,861	9,773	10,647
Other Receipts	4,486	4,298	3,394	2,849	3,246
Total	143,362	151,383	155,513	177,233	175,998
Net Expenditure on— Harbor Improvements and Maintenance	24,608	28,006	32,062	27,714	30,504
Wharves, &c.—Construc- tion and Maintenance ...	25,638	32,414	32,871	24,303	16,003
General Management, &c.	10,150	10,107	10,196	10,679	11,548
Interest on Loans and Ex- penses	88,216	87,480	87,474	87,478	86,842
Total	148,612	158,007	162,603	150,174	144,897

Melbourne
Harbor
Trust—
receipts
and expen-
diture.

During the 27½ years since the Trust has been in existence, the net receipts have amounted to £3,804,741, and the expenditure to £5,733,039, or £1,928,298 in excess of the receipts, to meet which loans amounting to £2,000,000 have been raised. Of this expenditure of nearly 5¼ millions, £1,881,052 has been expended on harbor improvements and maintenance, including dredging, landing, and depositing silt; £1,423,998 on wharfs and approaches, construction and maintenance; and £533,349 on plant.

MELBOURNE AND METROPOLITAN BOARD OF WORKS.

Area under control and value of property.

The district over which the Board exercises control consists of 20 cities, towns, and boroughs, and 4 shires, embracing a total area of 84,347 acres, and containing an estimated population on the 31st December, 1904, of 493,930. The annual value of rateable property in the district in 1904 was £4,568,784 (of which about £370,626 represents vacant land not taxed for water supply purposes), which at 1s. in the £1, the maximum the Board is empowered to levy in any one year for metropolitan general rate, would yield a revenue of £228,439, which is inclusive of water rates.

Liability on loans

To carry out its work, the Board is authorized to borrow £7,000,000, exclusive of loans amounting to £2,389,934, which were originally contracted by the Government, but taken over by the Board. The liability on Government loans on 30th June, 1904, was £1,848,663, and for loans raised by the Board £7,127,000. The Board is still empowered to borrow £414,271 before the limit of its borrowing powers is reached.

Sewerage works, receipts and expenditure.

The actual cost on sewerage works and house connexions up to 30th June, 1904, was £4,483,146, divided as follows:— For farm purchase and preparation, £409,536; for main outfall sewer and rising mains, £404,282; for pumping station building and engines, £177,528; for main and branch sewers, £1,383,113; for reticulation sewers, £1,660,247; and for house connexions, £448,440. Of this last-named sum, £265,879 has still to be repaid to the Board. In 1903-4, the ordinary receipts on account of sewerage works amounted to £189,889, of which £154,857 was collected in rates; the expenditure for interest was £226,823, and for maintenance of works, £26,557.

Revenue and expenditure of Melbourne Water-works.

The total expenditure to the 30th June, 1904, on the construction of the Melbourne Waterworks was £3,750,317. The gross revenue received since the opening of the works at the end of 1857 up to the 30th June, 1904, amounted to £5,340,704; whilst the expenses of maintenance and management amounted to only £904,954, and interest to £2,352,564. During 1903-4 the revenue received amounted to £165,761, as against £178,290 in the previous year; and the expenditure on maintenance and management (exclusive of repayments) to £37,374, as against £40,257 in the previous year. The net revenue in 1903-4 was thus £128,387, being equivalent to 3·42 per cent. of the mean capital cost, as compared with £138,033, or 3·69 per cent. in 1902-3. The loans outstanding (£2,635,663)

for the construction of the waterworks now bear an average nominal rate of only 3·83 per cent. The aggregate net profit up to the end of 1903-4, after paying all interest and expenses, has amounted to £2,083,186.

The following is a statement of receipts and expenditure during the five years 1899-1900 to 1903-4, exclusive of refunds, deposits, &c., included in the figures quoted in preceding paragraphs:—

MELBOURNE AND METROPOLITAN BOARD OF WORKS REVENUE AND EXPENDITURE: RETURN FOR FIVE YEARS.

	1899-1900.	1900-1.	1901-2.	1902-3.	1903-4.
<i>Ordinary Receipts.</i>					
	£	£	£	£	£
Water Supply	163,366	164,271	170,488	178,290	165,761
Sewerage	105,937	128,522	144,566	184,160	189,889
Total	269,303	292,793	315,054	362,450	355,650
<i>Ordinary Expenditure.</i>					
Management	36,959	46,171	50,253	59,542	55,796
Maintenance—					
Water Supply	17,486	19,410	20,808	21,480	20,767
Sewerage	22,587	24,582	24,336	26,555	26,557
Interest on Loans	260,047	268,196	278,174	291,302	305,919
Total	337,079	358,359	373,571	398,879	409,039
<i>Loan Receipts</i>	247,496	646,328	404,459	704,783	946,686
<i>Loan Expenditure.</i>					
Water Supply	14,814	14,294	16,042	10,771	8,653
Sewerage	292,523	322,030	325,111	324,190	309,480
Redemption of Loans ... ..	..	276,820	3,004	3,580	521,480
Loss on Sale of Deposit Receipts ... ..	..	..	..	..	193,948
Other	1,448	3,532	2,727	19,846	19,965
Total	308,785	616,676	346,884	358,387	1,053,526

FIRE BRIGADES' BOARDS.

There are two Fire Brigades' Boards, viz.:—A Metropolitan Board having jurisdiction within a radius of 10 miles from the General Post Office; and a Country Board for other parts of the State. Each Board consists of nine members, 3 of whom are appointed by the Governor-in-Council, and in the case of the Metropolitan Board, 3 are elected by the municipalities, and 3 by the fire offices; and in the case of the Country Board, 2 are elected by the

Fire
Brigades'
Boards—
receipts
and expen-
diture.

municipalities, 2 by the fire offices, and 2 by the brigades. Particulars of receipts and expenditure during the five years ended 30th June, 1904, are as follow:—

REVENUE AND EXPENDITURE OF FIRE BRIGADES' BOARDS:
RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
<i>Ordinary Receipts.</i>	£	£	£	£	£
Contributions — Government, Municipal, and Insurance ...	46,852	48,494	49,280	49,002	48,874
Receipts for Services ...	815	1,344	2,062	727	692
Interest and Sundries ...	1,774	2,324	1,954	4,626	2,814
Total ...	49,441	52,162	53,296	54,355	52,380
<i>Ordinary Expenditure.</i>					
Salaries ...	19,494	22,000	22,865	23,112	23,103
Fire Expenses ...	3,013	2,917	3,027	2,873	2,936
Horses, Quarters, &c. ...	12,649	13,654	13,009	12,002	9,207
Plant—Purchase and Repairs ...	6,962	4,403	2,866	4,862	4,305
Interest ...	6,071	6,087	6,080	6,073	6,057
Sinking Fund ...	2,000	2,000	1,971	2,028	2,250
Miscellaneous ...	860	1,001	1,087	2,221	4,332
Total ...	51,049	52,062	50,905	53,171	52,190
<i>Loan Expenditure.</i>					
Sewerage Connections ...	1,609	..	..	..	..

LAW, CRIME, ETC.

THE HIGH COURT OF AUSTRALIA.

The Commonwealth Constitution (section 71) provides that the judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and to consist of a Chief Justice, and at least two other Justices. Power is also given to the Federal Parliament to create other Federal courts, or to invest other courts with Federal jurisdiction. Section 72 provides that the Justices shall be appointed by the Governor-General in Council, shall not be removed, except on an address from both Houses of Parliament in the same session, on the ground of proved misbehaviour or incapacity; and that the Parliament shall fix the remuneration, which shall not be diminished during their continuance in office. The High Court is invested by the Constitution with both original and appellate jurisdiction. Section 73 provides that the High Court shall have jurisdiction to hear and determine appeals from all judgments, decrees, orders, and sentences of any Justice exercising the original jurisdiction of the court, of any other Federal court, or of the Supreme, or any other court of a State, from which there was on 1st January, 1901, an appeal to the Privy Council; or on questions of law of the Inter-State Commission (when appointed). The Parliament may regulate the mode in which the jurisdiction may be exercised, and may limit the jurisdiction by excluding specified cases, or classes of cases from it; but no such regulation or exception shall prevent the High Court from hearing and determining any appeal which could on 1st January, 1901, be heard by the Privy Council. Section 74 provides that there shall be no appeal to the Privy Council "from a decision of the High Court upon any question, howsoever arising, as to the limits *inter se* of the constitutional powers of the Commonwealth and those of any State or States, or as to the limits *inter se* of the constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council." It is, however, provided that the "Constitution shall not impair any right which the Queen may be pleased to exercise by virtue of Her Royal prerogative to grant special leave of appeal from the High Court to Her Majesty in Council"; but the Parliament may limit the matters in respect of which leave may be asked, and a Bill containing any such limitation

shall be reserved by the Governor-General for the Royal pleasure. Section 73 provides that the judgment of the High Court, in its appellate jurisdiction, shall be final and conclusive; but it would appear that this is qualified by the above provision, preserving the right of appeal from such a judgment in special cases. By section 75, the High Court is invested with original jurisdiction in all matters arising under any treaty; affecting consuls or other representatives of other countries; in which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party; between States, or between residents of different States, or between a State and a resident of another State; or in which a mandamus prohibition or injunction is sought against an officer of the Commonwealth. By sections 76, 77, and 78, the Parliament is empowered to confer additional original jurisdiction on the High Court in any matter arising under the Constitution, or involving its interpretation, or under any laws made by the Parliament; of admiralty and maritime jurisdiction; or relating to the same subject-matter claimed under the laws of different States; to define the jurisdiction of any Federal court other than the High Court, and the extent to which such jurisdiction shall be exclusive of that which belongs to or is invested in the courts of the States; to invest any court of a State with Federal jurisdiction; and to confer "rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power." By section 79 the Parliament may prescribe the number of Judges by whom the Federal jurisdiction of any court may be exercised; and section 80 provides for trial by jury of any offence against any law of the Commonwealth, and for the venue of the trial.

In pursuance of the powers conferred upon it by the Constitution, and within the limits thereof specified therein, the Commonwealth Parliament passed a Judiciary Act, which was assented to on 25th August, 1903. The High Court consists of a Chief Justice and two other Justices; and its principal seat is at the seat of Government, where there shall be the principal registry of the court. District registries in each other State are also provided for, and peripatetic sittings are to be held when required. Chamber business may be dealt with by a single Justice of the High Court, or (except in matters within the exclusive jurisdiction of the High Court) by a single Judge in Chambers of the Supreme Court of a State. A Full Court, consisting of any two or more Justices of the High Court, sitting together, may hear and determine any case or question referred by, and appeals from judgments of, any such single Justice or Judge; appeals from judgments of any other court exercising Federal jurisdiction, or of the Inter-State Commission; applications for a new trial; and applications for leave or special leave to appeal to the High Court from a judgment of the Supreme Court of a State, or of any other court of a State from which, at the establishment of the Commonwealth, an appeal lay to the Privy Council. The jurisdiction of the High Court to hear and determine these appeals and applications for a certificate that a question, decided

by the High Court, as to the constitutional powers of the Commonwealth and a State, is one which ought to be determined by the Privy Council, shall be exercised by a Full Court consisting of the three Justices.

Appeals on matters in respect of which an appeal lay to the Privy Council at the establishment of the Commonwealth, are to be heard before a Full Court, consisting of three Justices; and also applications for a certificate that a question, decided by the High Court, as to the constitutional powers of the Commonwealth and a State is one which ought to be determined by the Privy Council. The following matters are to be heard before a Full Court, consisting of two or more Justices:—Applications for leave, or special leave of appeal; cases or questions referred by a single Judge; appeals from a single Judge, or from other courts exercising Federal jurisdiction; appeals on questions of law from the Inter-State Commission; and applications for a new trial.

In addition to the original jurisdiction conferred by section 75 of the Constitution, previously mentioned, the High Court is, by section 30 of the Judiciary Act, invested with original jurisdiction in all matters arising under the Constitution, or involving its interpretation; and by section 33 is empowered to make orders or issue writs of mandamus and prohibition in certain cases. Part V. of the Act limits and defines the appellate jurisdiction; Part VI. defines the matters in which the jurisdiction of the High Court is exclusive; Part VII. deals with the removal of causes arising under the Constitution, and pending in any State court on appeal, to the High Court; Part VIII. treats of the members and officers of the High Court; Part IX. of suits by and against the Commonwealth and the States; Part X. of criminal jurisdiction, and Part XI. contains supplementary provisions, dealing with appearance of parties, application of laws, venue, and rules of court.

THE LEGAL SYSTEM IN VICTORIA.

The law of Victoria, in its basic principles and main provisions, is founded on the law of England. All laws in force in England in 1828 were, so far as they should be held to apply to the circumstances of Australia, by Imperial Statute made law in New South Wales (which then included Victoria); and in case of any doubt as to the applicability, the Colonial Legislature was empowered to declare whether or not they did apply, or to establish any modification or limitation of them within the colony. The same Statute established a Legislature within New South Wales with power to make laws for that colony; and Supreme and other courts were established. On the separation of Port Phillip from New South Wales in 1851, the new colony of Victoria was invested with similar powers, which were widened on the establishment of responsible government in 1855. In order, therefore, to ascertain the law of Victoria as to any particular matter or point, considerable research is often involved. The first step is a search of the Victorian Statutes; and if the matter is fully dealt with there, the labour is concluded; but, if it has

never been dealt with by any Victorian Act, recourse must be had to the Statutes of New South Wales, and the Imperial Statutes specially applicable to New South Wales passed between 1828 and 1851. If no law on the point is obtainable from these sources, the law of England in 1828 must be ascertained, which in most cases is found in the English text-books. Having found the apparent law from either of these sources, it is still necessary to search through series of law reports for decisions which may either modify or interpret same.

LITIGATION AND LEGAL BUSINESS.

Supreme Court civil business.

The Supreme Court of Victoria was first established in 1852, and its constitution and powers remain substantially unaltered by recent legislation, although the procedure has been entirely remoulded by the "Judicature Act of 1883." There were in 1904 five judges, viz., a Chief Justice and four Puisne Judges.

The following is a statement of Supreme Court business during 1891, 1895, and the last five years:—

SUPREME COURT CIVIL CASES, 1891 TO 1904.

Year.	Writs of Summons.		Causes Entered for Trial.	Causes Tried.	Verdicts for—		Amount Awarded.
	Number Issued.	Amount Claimed.			Plaintiff.	Defendant.	
		£					£
1891 ..	5,744	304,377	479	247	119	64	57,713
1895 ..	2,115	140,292	254	187	101	33	41,487
1900 ..	825	137,083	161	106	62	31	101,896
1901 ..	823	69,788	156	97	38	20	4,640
1902 ..	844	109,012	191	101	52	16	6,717
1903 ..	770	148,516	172	122	54	40	11,135
1904 ..	767	129,361	159	98	36	19	5,513

Decline in litigation.

The decline in litigation in the Supreme Court since 1891, to which attention was directed in the issues of this work for 1902 and 1903, still continues. In 1904 the writs issued were less than one-seventh; the amount sued for, and the causes which actually came to trial were only about two-fifths of the number in 1891. Notwithstanding the decrease in litigation, the census of 1901 showed the number of barristers and solicitors as 820, an increase of 90 over the number as shown at the previous census of 1891. The figures show that a very small proportion of writs result in actual trials whilst a large number of trials are either abandoned before a verdict is given, postponed to the following year, or compromised.

County Courts business.

County Courts have a jurisdiction both in equity and common law cases, limited to £500; and to try cases remitted by the Supreme Court. The cause of action must have arisen within 100 miles of the court in which proceedings are taken, which court must not be more than ten miles further away from defendant's residence than some other County Court in which the plaintiff might have sued. In 1904 there were 111 sessions lasting 301 days held in 48 places.

Particulars of litigation in 1891, 1895, and the last five years are as follow:—

COUNTY COURT CASES, 1891 TO 1904.

Year.	Number of Cases tried.	Amount sued for.	Amount awarded.	Costs awarded to—	
				Plaintiff.	Defendant.
		£	£	£	£
1891	9,947	293,073	115,199	14,006	7,263
1895	1,361	219,285	73,091	7,256	5,514
1900	789	160,676	49,595	5,188	2,782
1901	572	137,227	43,222	5,012	4,143
1902	622	169,968	52,202	5,662	2,331
1903	584	126,670	42,004	3,923	2,923
1904	553	144,405	52,059	4,612	2,644

The falling off in the number of cases tried still continues, the number in 1904 being less than in any preceding year, and only one-eighteenth of that in 1891; but the amount sued for and awarded, and costs awarded, have not fallen off to anything like the same extent. This would seem to indicate that litigants are much more cautious in instituting proceedings than formerly; and that the County Court is not resorted to for the recovery of petty and trade debts to the same extent as in former years.

Courts of Petty Sessions were held at 233 places in Victoria in 1904 by stipendiary magistrates and honorary justices. Clerks of courts of ten years' standing, who have passed the prescribed examination, and barristers of five years' standing are eligible for appointment as police magistrates; but there is no legal training or knowledge of the law required as a condition precedent to the appointment of a person as an honorary justice of the peace. The jurisdiction is limited to what may be called ordinary debts, damages for assault, or restitution of goods, where the amount in dispute does not exceed £50. Particulars of the debt cases heard during a series of years are as follow:—

Petty Sessions civil business.

COURTS OF PETTY SESSIONS: CIVIL CASES, 1891 TO 1904.

Year.	Cases heard.	Amount claimed.	Amount awarded.
		£	£
1891	33,030	210,255	144,158
1895	30,609	168,143	138,722
1900	17,577	95,890	80,960
1901	17,646	104,884	86,199
1902	20,421	116,936	96,166
1903	22,012	126,051	107,502
1904	22,046	133,560	116,757

In addition to the ordinary civil cases above mentioned, and to the criminal jurisdiction hereinafter mentioned, Courts of Petty Sessions deal with other business of a civil and quasi-criminal nature. During the year 1904, 511 appeals against municipal ratings, 636

maintenance cases, 517 fraud summonses against debtors, 10,274 electoral revision cases, 6,480 licences and certificates, and 1,683 miscellaneous cases were heard, and 494 lunatics were examined. There has been a large decrease in the debt cases heard before magistrates, and in the aggregate amount claimed and awarded, since 1891; but since 1900 there has been an increase under each of the three headings.

Probates
and letters
of adminis-
tration.

As compared with 1903, there has been a small decrease in the number of probates and letters of administration issued, and a slight falling off has also taken place in the value of property devised and bequeathed. In 1904, as compared with 1900, the number decreased by 3 per cent., and the value of property by 17 per cent. There must, however, naturally be large differences in the aggregate value of property left in different years on account of the falling in of one or several very large estates during certain years. This matter is dealt with more fully over a long series of years in part "Accumulation" of this work. The following information is furnished for the last five years:—

PROBATES AND LETTERS OF ADMINISTRATION: RETURN FOR FIVE YEARS.

Year.	Probates.		Letters of Administration.		Both.	
	Number.	Property sworn under—	Number.	Property sworn under—	Number.	Property sworn under—
		£		£		£
1900 ...	2,534	5,835,594	1,427	1,082,939	3,961	6,918,533
1901 ...	2,509	5,596,261	1,337	930,974	3,846	6,527,235
1902 ...	2,590	6,483,077	1,386	1,088,405	3,976	7,571,482
1903 ...	2,527	5,239,913	1,357	834,164	3,884	6,074,077
1904 ...	2,533	5,224,103	1,294	537,981	3,827	5,762,084

INSOLVENCIES.

Insolven-
cies, &c.

Prior to 1898, the returns of insolvencies were defective, inasmuch as private arrangements with creditors were not taken into account until that year. The number of failures and the declared assets and liabilities during the last five years were:—

INSOLVENCIES AND PRIVATE ARRANGEMENTS: RETURN FOR FIVE YEARS.

Year.	Insolvencies.			Private Arrangements.		
	Number.	Declared Liabilities.	Declared Assets.	Number.	Declared Liabilities.	Declared Assets.
		£	£		£	£
1900 ..	346	185,198	89,462	149	168,700	159,771
1901 ..	327	216,198	86,391	183	222,608	189,908
1902 ..	406	364,630	270,061	206	200,128	178,337
1903 ..	505	210,086	84,611	194	202,475	164,481
1904 ..	462	387,882	138,301	164	158,267	124,266

The number of insolvencies was greater in 1904 than in any of the four preceding years, with the exception of those in 1903, and the declared liabilities were the highest recorded for the five years. Insolvencies are still much below the average in normal times. Thus the average number during the last five years was 409, and the declared liabilities £272,799, whereas during the ten years, 1879 to 1888, the average yearly number was 612, with declared liabilities £661,720. During the eleven years, 1889 to 1899, when the failures resulting from the collapse of the land boom and the consequent banking crisis in 1893 swelled the returns, the yearly average number was 790, with declared liabilities £2,037,292.

In the following return will be found the occupations, in six classes, of those who became insolvent during the last five years, also the number of breadwinners in each class at the census of 1901, and the proportion of the former to the latter. The total number of insolvents does not include 132 whose occupations were not returned:—

OCCUPATIONS OF INSOLVENTS, 1900 TO 1904.

Occupation Groups.	Number of Breadwinners, Census, 1901.	Number of Insolvents, 1900 to 1904.	Proportion of Insolvents to every 1,000 Breadwinners.
Professional	35,224	193	5.48
Domestic	66,815	148	2.22
Commercial	79,048	864	10.93
Transport and Communication	31,516	257	8.15
Industrial	146,233	877	6.00
Primary Producers ..	165,147	471	2.85
Total	523,983*	2,810	5.36

* Exclusive of 10,066 persons of independent means.

As might be expected, fewer breadwinners of the domestic and primary producing classes become insolvent than those of other classes, in proportion to their numbers in the community, whilst a greater proportion of the commercial than any other class find it necessary to file their schedules or compound with their creditors.

The following figures show the results for five years, 1900. to 1904:—

Occupation Groups.	Number of Insolvents during—				
	1900.	1901.	1902.	1903.	1904.
Professional	44	42	43	35	29
Domestic	23	35	40	26	24
Commercial	172	155	176	186	175
Transport and Communication	32	41	69	71	44
Industrial	149	145	172	201	210
Primary Producers ..	64	72	87	134	114
Total	484	490	587	653	596

Insolvency
in Australia
and New
Zealand.

The number of insolvencies by way of sequestration of the estate of the debtor, distinguishing between voluntary and compulsory, also the declared liabilities and assets, are appended. Besides these insolvencies there are a number of liquidations in Queensland, and large numbers of private arrangements with creditors, which are virtually insolvencies, and are only recorded in Victoria and South Australia, but are not included in any case in the following table:—

INSOLVENCIES IN AUSTRALIAN STATES AND NEW ZEALAND, 1903.

State.	Number of Petitions.			Total	Total
	Compulsory.	Voluntary.	Total.	Liabilities.	Assets.
				£	£
Victoria	29	476	505	210,086	84,611
New South Wales ..	117	366	483	230,429	123,037
Queensland	22	352	374	70,916	14,817
South Australia ..	4	20	24	15,221	14,633
Western Australia ..	18	61	79	34,952	10,631
Tasmania	5	72	77	16,259	3,312
Australia	195	1,347	1,542	577,863	253,041
New Zealand	40	164	204	96,866	46,767

New South Wales heads the list in respect to the total amount of declared assets and liabilities; but no comparison of any value can be made on the above figures on account of the partial character of the returns.

DIVORCE.

Divorce, &c.

Under the Divorce and Matrimonial Causes Act, passed in 1861, a petition might be presented to the Supreme Court (*a*) by a husband praying that his marriage might be dissolved, on the ground that his wife had, since the celebration thereof, been guilty of adultery; (*b*), by a wife praying that her marriage might be dissolved on the ground that since the celebration thereof, her husband had been guilty of incestuous adultery, or of bigamy with adultery, or of rape, or of sodomy, or bestiality, or of adultery, coupled with cruelty, or of adultery, coupled with desertion without reasonable excuse for two years.

Judicial separation was obtainable either by husband or wife on the ground of adultery, or cruelty, or of desertion, without cause for a period of two years.

The *Divorce Act* 1889 extended the grounds upon which divorces are granted, those added being as follows:—

- (*a*) That the respondent has, without just cause or excuse, wilfully deserted the petitioner, and, without any such cause or excuse, left him or her continuously so deserted during three years and upwards.

- (b) That the respondent has, during three years and upwards, been an habitual drunkard, and either habitually left his wife without the means of support, or habitually been guilty of cruelty towards her, or, being the petitioner's wife, has for a like period been an habitual drunkard and habitually neglected her domestic duties or rendered herself unfit to discharge them.
- (c) That at the time of the presentation of the petition the respondent has been imprisoned for a period of not less than three years and is still in prison under a commuted sentence for a capital crime, or under sentence to penal servitude for seven years or upwards, or being a husband has within five years undergone frequent convictions, and been sentenced in the aggregate to imprisonment for three years or upwards and left his wife habitually without means of support.
- (d) That within one year previously the respondent has been convicted of having attempted to murder the petitioner, or of having assaulted him or her with intent to inflict grievous bodily harm, or on the ground that the respondent has repeatedly during that period assaulted and cruelly beaten the petitioner.
- (e) That the respondent being a husband has since the celebration of his marriage and the date of this Act been guilty of adultery in the conjugal residence, or coupled with circumstances or conduct of aggravation or of a repeated act of adultery.

The Act further provides for simplifying and cheapening the mode of procedure, for the hearing and trying of suits in private at the discretion of the court, for prohibiting the publication of evidence, for the intervention of the Attorney-General where collusion is suspected, and for the abolition of applications or decrees for the restoration of conjugal rights. The Act can only be taken advantage of by persons domiciled in the State for at least two years. The number of petitions and decrees for dissolution of marriage and judicial separation during the last five years were as follow:—

DIVORCES AND JUDICIAL SEPARATIONS: RETURN FOR FIVE YEARS.

Year.	Petitions for—		Decrees for—	
	Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.
1900	159	2	93	...
1901	148	2	83	...
1902	157	...	109	...
1903	199	1	101	...
1904	175	3	140	1

Since jurisdiction was first conferred upon the Supreme Court of Victoria in matters matrimonial in 1861, 1,730 decrees for dissolution of marriage, and 86 decrees for judicial separation have been granted. Of these, 1,382 and 15 respectively were granted since 1890; that is, during the 30 years ended 1890 only 348 decrees for dissolution of marriage were issued, and 71 for judicial separation, or an average per annum of about twelve of the former and two of the latter; whereas, since the Divorce Act of 1889 received the Royal Assent in 1890 no less than 99 decrees per annum for dissolution of marriage were granted, but the decrees for judicial separation have decreased to about one per annum.

The following were the petitions and decrees for divorce in the Australian States and New Zealand during 1903, also the divorces per 10,000 married couples living:—

DIVORCES IN AUSTRALIAN STATES AND NEW ZEALAND, 1903.

State.	Petitions for—		Decrees for—		Divorces per 10,000 Married Couples.
	Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.	
Victoria	199	1	101	...	5·60
New South Wales	280	30	204	14	10·64
Queensland	17	2	8	1	1·25
South Australia	18	3	10	...	1·82
Western Australia (1902)	11	3	8	...	2·70
Tasmania	3	...	3	...	1·17
New Zealand	146	3	136	3	11·73

The grounds of divorce are now substantially the same in Victoria and New South Wales, and were extended in New Zealand in 1898. The extension of the grounds upon which divorce may be obtained has had in New South Wales and New Zealand, as in Victoria, the effect of greatly increasing the number of petitions and decrees. It will be seen from the last column of the above table that, according to the decrees in 1903, divorce is twice as rife in New South Wales and New Zealand as in Victoria. Comparisons with the other States are valueless on account of the wide divergence in the grounds of divorce.

JUDICIAL AND LEGAL REVENUE AND EXPENDITURE.

The following return shows for the year 1904 the revenue derived from fees in connexion with the administration of the Transfer of Land Act, the Stamps Act, from the Registrar-General, for registration of patents, from equity, probate, and all other judicial and legal sources.

REVENUE FROM AND EXPENDITURE ON LEGAL SERVICES, 1904.

REVENUE.			
			£
Transfer of Land Act	...	...	35,393
Stamps Act	...	...	167,366
Registrar-General	...	...	6,096
Patents Office	...	...	2,736
Equity and Probate	...	...	6,925
Others	...	...	4,539
			<hr/>
Total	...	...	222,965
			<hr/>
EXPENDITURE.			
			£
Judges' Salaries (including Master-in-Equity)	...	...	17,000
Crown Law Officers and Crown Solicitor	...	...	18,763
Registrar-General and Registrar of Titles	...	...	29,876
Sheriffs	...	...	12,001
Police Magistrates and Wardens	...	...	16,392
Clerks of Courts	...	...	18,748
Controller of Stamps	...	...	938
Others	...	...	52,125
			<hr/>
Total	...	...	165,843
			<hr/>

In previous years it has not been practicable to obtain an exact statement of revenue from legal services, inasmuch as the ordinary postage stamp in use in the State was identical with that used for taxation purposes. Since federation, however, a separation has been effected, and on the 1st March, 1904, the State stamp department took over the sale of all duty stamps, and the correct revenue from these services is now obtainable.

CRIME.

ADMINISTRATION OF THE CRIMINAL LAW.

In nearly all cases where the criminal law has been broken, the alleged offender is brought at the very first opportunity before a Court of Petty Sessions, before two honorary justices or a police magistrate, or both, who, if the matter is one which comes within their summary jurisdiction, dispose of the case summarily. If the offence is an indictable one, the magistrates hold a preliminary investigation and, if satisfied that a *prima facie* case is made out by the prosecution, the accused is committed for trial to a superior court. There are two superior courts with criminal jurisdiction, viz., the Supreme Court, and a Court of General Sessions, which are held at various places throughout the State. The latter court may deal with all cases of a criminal nature except such as are expressly excluded from its jurisdiction, viz., nineteen of the most serious crimes. A person may be brought before magistrates by three modes of procedure, viz., by an arrest by a police officer on warrant issued on a sworn information,

or without an information if the offence is witnessed by the arresting constable; by private summons; and by a police summons. If at a coroner's inquest a verdict is returned for murder or manslaughter, the accused person is sent for trial to the Supreme Court without any investigation before magistrates. The Attorney-General or Solicitor-General has also the power of presenting any person for trial before a superior court without the necessity of any preliminary magisterial hearing; and upon the application of any person, properly supported by affidavit, a grand jury may be summoned, on the order of the Full Court, if the affidavit discloses that an indictable offence has been committed by a corporate body; or that such an offence has been committed by any person, and that some justice has refused to commit such person for trial. The grand jury consists of twenty-three men, who investigate the charge, and if they are of opinion that a *primâ facie* case has been made out, the case is sent for trial. The cases which are presented under these two latter forms of procedure, are, however, very rare.

POLICE PROTECTION.

Strength of
police force
in Australia
and New
Zealand.

The following figures denote the numerical strength of the police force in Australia and New Zealand, and the proportion of same to population on the 31st December, 1904:—

POLICE IN AUSTRALIAN STATES AND NEW ZEALAND, 1904.

State.	Number.			Proportion per 10,000 of Population.
	Metropolitan.	Country.	Total	
Victoria	824	671	1,495	12.35
New South Wales	1,006	1,304	2,310	15.85
Queensland	258	587	845	16.20
South Australia	224	156	380	10.20
Western Australia	134	359	493	20.35
Tasmania	70	164	234	12.99
Total Australia	2,516	3,241	5,757	14.45
New Zealand	71	579	650	7.35

It will be seen that Western Australia has the greatest police protection in proportion to population, Queensland and New South Wales next, New Zealand having by far the lowest. Of course, where the population is scattered, it is natural that more police in proportion to population will be required than in a densely populated centre where the area requiring protection is comparatively small.

CHARGES BEFORE MAGISTRATES.

Offences
reported
and unde-
tected
crimes.

Of the offenders who are reported as having committed offences, generally about 50 per cent. are arrested, 40 per cent. are summoned, whilst about 10 per cent. are still at large at the end of the year in

which the offence was reported, but in 1904 the rates were 47, 43, and 10 per cent. respectively. The following are particulars for the last five years:—

SUMMONSES, ARRESTS, AND UNDETECTED CRIMES: RETURN FOR FIVE YEARS.

Offences in respect to which persons were—	1900.	1901.	1902.	1903.	1904.
Brought before magistrates on summons ...	22,482	21,130	20,478	24,207	23,614
Arrested by the police	28,866	30,957	26,402	24,268	26,036
Still at large	6,449	6,472	6,153	6,593	5,533
Total	57,797	58,559	53,033	55,068	55,183

In this table each separate charge against a person is considered as a separate offence; for instance, a charge of drunk and disorderly, of resisting the police, of riotous conduct, and of tearing uniform would appear as four separate offences, although the occasion is the same. Of the offences in respect of which persons were still at large, 94 per cent. were offences against property, 3 per cent. were offences against the person, and the balance, 3 per cent., were of a miscellaneous character.

The following are particulars of cases brought before magistrates, from which it will be seen that about three-fourths are generally summarily convicted, one-fourth discharged, whilst an average of between 600 and 700 are sent for trial by superior courts:—

Offences dealt with by magistrates.

ARRESTS AND SUMMONSES DEALT WITH BY MAGISTRATES: RETURN FOR FIVE YEARS.

Number of Persons.	1900.	1901.	1902.	1903.	1904.
Arrested or summoned	49,589	50,169	45,198	46,682	47,736
Discharged by magistrates	11,664	12,564	11,096	10,020	11,318
Summarily convicted or dealt with ...	37,224	36,905	33,461	36,031	35,854
Committed for trial	701	700	641	631	564

In regard to persons arrested included in these figures, minor charges are excluded, and only that charge which throughout the hearing of the case has been most prominent is taken account of; but in regard to summons cases, the unit is each separate charge or case.

Males and females arrested.

The sexes of persons brought up on summons are not recorded; but about 20 per cent. of the arrests are always found to be females. The males and females arrested, and the disposal of the cases, in 1904, were as follow:—

MALES AND FEMALES ARRESTED, 1904.

Disposal.	Arrests.		
	Males.	Females.	Total.
Summarily Convicted	12,884	3,669	16,553
Discharged by Magistrates	5,729	1,319	7,048
Committed for Trial	480	41	521
Total	19,093	5,029	24,122

The arrests during the previous five years numbered 23,215 in 1899, 27,107 in 1900, 29,039 in 1901, 24,720 in 1902, and 22,475 in 1903.

DRUNKENNESS.

Arrests for drunkenness, 1900 to 1904.

The following are the number, and proportion per 1,000 of the population, of persons arrested for drunkenness during the last five years. Summons cases for drunkenness are not included prior to 1902, but the number of such cases is inconsiderable, being only 92 in 1904:—

ARRESTS FOR DRUNKENNESS: RETURN FOR FIVE YEARS.

Year.	Number.	Proportion per 1,000 of Population.
1900	15,878	13·31
1901	17,360	14·43
1902	14,540	12·00
1903	12,630	10·45
1904	13,881	11·50

Drunkenness—Comparison with previous years.

The amount of drunkenness, as evidenced by arrests, being taken as 100 in 1874-8, the numbers for the subsequent periods will show the increase or decrease by comparison:—

Period.	Index Number.
1874-8	100
1879-85	88
1886-92	106
1893-97	65
1898-1902	83
1903	71
1904	79

A very considerable decrease in drunkenness is shown during the five years following the banking crisis, which was a period of general

depression ; but during the five years 1898-1902, the arrests for drunkenness assumed something nearer their normal proportions. In 1904, however, the arrests for drunkenness were fewer than in either of the four preceding years, except 1903.

Drunkenness in each of the Australian States and New Zealand, over a series of years, is dealt with in company with other offences on the next and the following pages.

Drunkenness in Australian States and New Zealand.

DECREASE IN CRIME.

It is difficult to make a proper comparison of crime in recent years with former periods on account of the differences in the sex and age constitution of the people at different periods. The bulk of arrests consists of males from 20 to 50 years of age. The proportion of women and children arrested is comparatively very small ; so that it is natural that, at a period like the present, when the percentage of males at those ages is much less than ten years ago, the proportion of arrests per 10,000 of the population is not a true index of crime, and makes the decrease appear greater than it really is. It is therefore necessary to divide the sexes of arrested persons, and each sex into age groups, and to show the number of charges laid against males and females at various ages between 10 and 60 per 10,000 alive at each age, as shown by the census. The following are the particulars on this basis at the last four census years:—

Decrease of crime in Victoria.

CHARGES PER 10,000 ALIVE AT EACH AGE AGAINST PERSONS ARRESTED, 1871, 1881, 1891, AND 1901.

Ages.	1871.	1881.	1891.	1901.
Males.				
10 to 15 years	104	111	96	51
15 to 20 years	338	335	305	209
20 to 25 years	773	720	688	570
25 to 30 years	834	823	777	712
30 to 40 years	771	865	869	700
40 to 50 years	726	721	1,053	873
50 to 60 years	830	623	760	804
60 years and over	756	661	586	443
Females.				
10 to 15 years	37	26	15	15
15 to 20 years	80	90	50	28
20 to 25 years	141	178	139	116
25 to 30 years	232	219	171	172
30 to 40 years	303	290	189	168
40 to 50 years	272	322	238	166
50 to 60 years	245	223	215	116
60 years and over	186	166	144	110

During the years 1871, 1881, and 1891, the tabulations were based on each separate charge against arrested persons, and in 1901 on each separate arrest, only the most prominent charge being counted

in the latter year. The percentage by which the total charges exceeded the arrests during 1901, has, however, been added on to the figures for each age group for the purpose of comparison. A study of the figures shows that the proportion of offences has on the whole fallen off in 1901 as compared with the three previous periods. In regard to males, there has been a falling off in 1901 as compared with the three previous periods at all ages except 50 to 60, in which group the proportion of arrests was in excess of that in 1891 and 1881. The falling off is more marked amongst the very old people (60 years and over) and the young people under 20, than at other ages. The ages at which the largest proportion of arrests was made were 40 to 50 years in 1901 and 1891, 30 to 40 years in 1881, and 25 to 30 and 50 to 60 years in 1871. In regard to females there has been a very decided falling off at all ages, the ages at which the largest proportion of arrests were made being 25 to 50 in 1901, 40 to 60 in 1891, and 30 to 50 in 1881 and 1871.

CRIME AND DRUNKENNESS IN AUSTRALASIA.

A scientific comparison of crime cannot be made between different States or countries unless several considerations are taken into account. The first point necessary is that the criminal law, in the places compared, should be substantially the same; the second, that it should be administered with equal strictness; and the third, that proper allowances are made for differences in the age and sex constitution of the population. As previously pointed out, the latter consideration is one that must also be taken into account in comparing crime in recent years with previous periods when the population was very differently constituted in regard to sex and age. The returns of the States and New Zealand do not afford sufficient data to allow for these differences; but in regard to the first two points above mentioned the basis and main provisions of the criminal law are the same in each State; and it must be presumed, in the absence of any evidence to the contrary, that the law is administered with equal strictness in each State. The following table shows, for a series of years, the number of charges against persons arrested or summoned for the only four classes of offences for which complete comparisons can be made:—

CRIME IN AUSTRALIAN STATES AND NEW ZEALAND, 1890, 1895, AND 1900 TO 1903.

State.	Year.	Number of Charges against Persons Arrested or Summoned for—				
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.	Total.
Victoria	1890	4,091	5,036	18,501	37,156	64,784
	1895	2,500	4,068	11,143	22,616	40,327
	1900	2,238	3,540	15,878	30,192	51,848
	1901	2,152	3,521	17,360	29,054	52,087
	1902	2,121	3,882	14,540	26,337	46,880
	1903	1,936	3,968	12,630	29,941	48,475

CRIME IN AUSTRALIAN STATES AND NEW ZEALAND, 1890, 1895,
AND 1900 TO 1903—continued.

State.	Year.	Number of Charges against Persons Arrested or Summoned for—				
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.	Total.
New South Wales	1890	8,729	7,616	18,654	31,088	66,087
	1895	4,459	6,153	18,379	35,987	64,978
	1900	4,435	6,675	21,003	30,747	62,860
	1901	4,336	6,437	21,123	32,729	64,625
	1902	4,223	7,292	21,577	33,608	66,700
	1903	3,869	7,368	21,837	35,032	68,106
Queensland	1890	2,713	2,487	6,332	7,462	18,996
	1895	2,073	2,085	4,993	8,522	17,673
	1900	1,937	2,552	9,254	10,621	24,364
	1901	1,846	2,547	9,791	9,736	23,920
	1902	1,908	2,375	8,123	8,709	21,115
	1903	1,504	2,206	7,190	8,112	19,012
South Australia	1890	520	501	2,382	3,596	6,999
	1895	411	677	1,763	2,128	4,979
	1900	304	575	2,249	3,072	6,200
	1901	260	528	2,047	3,392	6,227
	1902	252	509	2,431	3,416	6,608
	1903	338	664	2,340	3,088	6,430
Western Australia	1890	371	536	1,181	2,602	4,690
	1895	654	1,080	2,154	4,489	8,377
	1900	1,037	1,746	3,070	9,010	14,863
	1901	1,040	1,593	3,348	9,352	15,333
	1902	845	1,889	3,311	10,398	16,443
	1903	797	2,146	3,572	10,690	17,205
Tasmania	1890	483	619	1,151	4,158	6,411
	1895	353	710	463	3,240	4,766
	1900	368	676	832	3,505	5,381
	1901	341	647	743	3,768	5,499
	1902	248	618	636	4,669	6,171
	1903	284	553	526	4,612	5,975
Total Australian States	1890	16,907	16,795	48,201	86,064	167,967
	1895	10,450	14,773	38,895	76,982	141,100
	1900	10,319	15,764	52,286	87,147	165,516
	1901	9,975	15,273	54,412	88,031	167,691
	1902	9,597	16,565	50,618	87,137	163,917
	1903	8,728	16,905	48,095	91,475	165,203
New Zealand	1890	1,516	2,297	5,830	8,604	18,247
	1895	1,281	2,557	5,104	8,639	17,581
	1900	1,526	2,680	7,319	13,165	24,690
	1901	1,586	3,048	8,086	13,105	25,825
	1902	1,114	3,083	8,311	15,568	28,076
	1903	1,303	3,138	8,872	17,440	30,753

The following table shows the number of charges laid against persons arrested or summoned per 1,000 of the population in the Australian States and New Zealand during a series of years:—

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1890, 1895, AND 1900 TO 1903.

State.	Year.	Charges against Persons Arrested or Summoned per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.
Victoria ...	1890	3·66	4·50	16·54	33·22
	1895	2·12	3·45	9·44	19·17
	1900	1·88	2·97	13·31	25·30
	1901	1·79	2·93	14·43	24·15
	1902	1·75	3·21	12·00	21·75
	1903	1·60	3·28	10·45	24·77
New South Wales ...	1890	7·92	6·91	16·93	28·21
	1895	3·53	4·87	14·53	28·46
	1900	3·28	4·93	15·51	22·70
	1901	3·16	4·69	15·39	23·85
	1902	3·03	5·23	15·49	24·12
	1903	2·72	5·19	15·39	24·70
Queensland ...	1890	7·03	6·45	16·41	19·35
	1895	4·58	4·60	11·03	18·82
	1900	3·95	5·21	18·90	21·68
	1901	3·65	5·04	19·36	19·25
	1902	3·71	4·62	15·82	16·96
	1903	2·93	4·30	14·02	15·82
South Australia ...	1890	1·64	1·60	7·53	11·35
	1895	1·18	1·94	5·06	6·11
	1900	·85	1·60	6·26	8·55
	1901	·72	1·46	5·65	9·37
	1902	·69	1·40	6·68	9·39
	1903	·92	1·81	6·39	8·42
Western Australia ...	1890	8·28	11·97	26·37	58·09
	1895	7·06	11·66	23·25	48·45
	1900	5·86	9·86	17·34	50·88
	1901	5·51	8·45	17·75	49·59
	1902	4·08	9·12	15·98	50·20
	1903	3·60	9·70	16·14	48·31
Tasmania ...	1890	3·36	4·31	8·01	28·93
	1895	2·22	4·46	2·91	20·36
	1900	2·13	3·91	4·82	20·29
	1901	1·96	3·73	4·28	21·70
	1902	1·41	3·52	3·48	26·72
	1903	1·60	3·11	2·96	25·98

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1890, 1895, AND 1900 TO 1903—*continued.*

State.	Year.	Charges against Persons Arrested or Summoned per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.
Australian States	1890	5·43	5·39	15·48	27·64
	1895	2·98	4·22	11·11	21·99
	1900	2·75	4·21	13·96	23·26
	1901	2·62	4·01	14·30	23·13
	1902	2·49	4·29	13·10	22·57
	1903	2·23	4·33	12·31	23·42
New Zealand	1890	2·44	3·70	9·39	13·86
	1895	1·85	3·71	7·37	12·48
	1900	2·00	3·51	9·58	17·24
	1901	2·04	3·92	10·39	16·85
	1902	1·40	3·86	10·42	19·51
	1903	1·59	3·83	10·82	21·26

Almost all serious crimes are either offences against the person or offences against property, the only serious crimes included under "Other Offences" being forgery, counterfeiting, and perjury, which are very few in number, being in Victoria in 1903, only 55 out of a total of 29,941 included under that category. A large proportion of these cases are merely breaches of various Acts of Parliament, by-laws, &c., which indicate no degree of criminal instinct or intent on the part of the person charged. They also include a large number of offences against good order, including insulting behaviour, &c., vagrancy, and soliciting prostitution. Comparison between the States of "Other Offences" is not of much value, on account of the differences in the laws of the States in these matters, and on account of the large proportion of these offences which are not crimes, but mere breaches of various Acts and by-laws.

Offences against the person set out in the first column of the preceding table, consists mainly of assault, but include murder, manslaughter, shooting, wounding, and all crimes of lust. A glance at the figures shows that since 1890 there has been a very large decline in these crimes in every State in proportion to population. South Australia easily holds the pride of place in 1903, then comes New Zealand, closely followed by Victoria and Tasmania. New South

Offences against the person.

Wales occupies a considerably worse position than Victoria, and the two last are Queensland and Western Australia, in that order, although the positions of these two would be reversed in 1903 if allowance were made for the exceptionally large proportion of adult males in the population of Western Australia.

Offences
against
property.

A decrease, as compared with 1890, will also be noticed in the proportion of offences against property in all the Australian States, except South Australia; but there has been a small increase in New Zealand. The decrease in respect of these offences is, however, not nearly so marked as that in respect of offences against the person. Offences against property are far less rife in South Australia than in any other State or New Zealand, Tasmania coming next, closely followed by Victoria, New Zealand, Queensland, and New South Wales, in that order. These crimes are far more rife in Western Australia than in any other State, although the proportion in excess would be considerably reduced if allowance were made for the large proportion of adult males in the population of that State. Offences against property consist principally of larceny and similar offences; but include burglary, robbery, &c., cattle stealing, and wilful damage to property.

Drunken-
ness.

In every Australian State there has been a decrease in drunkenness cases before magistrates in 1903, as compared with 1890; but an increase as compared with 1895 in every case except Western Australia. This offence is much less frequent in Tasmania than in any other State, South Australia coming next, and then following Victoria, New Zealand, Queensland, New South Wales, and Western Australia, in that order. If allowance were made for the large proportion of adult males in the latter State, Western Australia would now occupy a better position than Queensland or New South Wales, and would be about equal to Victoria. In the latter State summons cases for drunkenness were not included, previous to 1902, but the number of such cases was so small that the comparison is not appreciably affected by their omission.

Consump-
tion of
intoxicat-
ing liquors.

The following table shows during the five years 1899 to 1903 the average yearly consumption of intoxicating liquors in the principal countries of the world, the information having been compiled principally from a return prepared to the order of the British House of Commons, dated 3rd August, 1904.

AVERAGE CONSUMPTION OF SPIRITS, BEER, AND WINE IN AUSTRALIA AND NEW ZEALAND AND THE PRINCIPAL BRITISH POSSESSIONS AND FOREIGN COUNTRIES, 1899 TO 1903.

Countries.	Yearly Average Quantity Consumed, 1899 to 1903.			Proportion per Head.		
	Spirits.	Beer.	Wine.	Spirits.	Beer.	Wine.
	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
British—						
Victoria ..	1,000,800	16,460,400	1,591,200	.83	13.7	1.3
New South Wales ..	1,230,800	14,493,000	1,001,800	.89	10.5	.73
Queensland ..	546,000	5,752,400	170,600	1.08	11.4	.34
South Australia ..	163,800	3,210,600	1,195,115	.45	8.9	3.31
Western Australia ..	304,200	4,796,600	191,400	1.58	24.9	.98
Tasmania ..	91,000	1,587,200	26,800	.52	9.1	.15
Australia ..	3,336,600	46,300,200	4,176,915	.88	12.2	1.10
New Zealand ..	576,600	7,177,400	119,800	.73	9.2	.15
United Kingdom ..	44,295,600	1,288,206,400	15,351,000	1.07	31.0	.37
Dominion of Canada ..	4,086,600	24,972,400	489,400	.76	4.6	.09
Natal ..	323,000	308,600	..	.35	.34	..
Newfoundland ..	64,750	68,250	6,975	.29	.31	.03
Foreign—						
Russian Empire ..	147,206,500	127,590,500	..	1.08	.93	..
Norway ..	1,636,800	9,517,200	..	.74	4.3	..
Sweden ..	9,319,200	65,587,500	..	1.82	12.7	..
Denmark ..	7,854,000	52,141,400	..	3.21	21.3	..
German Empire ..	106,172,000	1,528,450,000	72,969,000	1.88	26.7	1.27
Holland ..	9,253,200	..	1,975,600	1.77	..	.37
Belgium ..	12,364,000	323,576,000	6,881,600	1.83	47.6	1.01
France ..	66,114,400	205,353,500	1,173,924,400	1.72	5.3	30.2
Switzerland ..	..	46,766,500	54,785,500	..	14.3	16.2
Portugal ..	..	..	95,704,400	..	..	18.3
Spain ..	..	..	353,918,000	..	..	19.0
Italy ..	8,764,800	4,844,400	796,136,000	.27	.15	24.2
Austria ..	67,980,000	414,969,500	116,424,000	2.58	15.7	4.4
Hungary ..	39,292,000	33,228,800	60,614,400	1.98	1.7	3.1
Bulgaria ..	770,000	985,600	49,900,000	.21	.27	13.2
Romania ..	5,192,000	1,331,000	41,130,000	.85	.22	6.9
United States ..	88,514,750	1,106,120,500	30,757,000	1.13	14.1	3.9

NOTE.—Where blanks occur the information is not available.

By comparing the figures for Australia in the foregoing table with those of several other countries, it will be seen that the consumption of intoxicants was proportionately less in Australia. As regards spirits, whilst the consumption in Australia was less than a gallon per head per year, in Denmark it amounted to over 3 gallons; in Austria to 2½ gallons; in Germany, France, Holland, Belgium, Hungary, and Sweden to nearly 2 gallons; and in the United Kingdom, Russia, and the United States to more than one gallon. The greatest beer-producing countries of the world are the German Empire, the United Kingdom, and the United States, in that order; but in consumption per head of the population, Belgium with more than 47 gallons; United Kingdom, 31 gallons; Germany, 27 gallons; and Denmark, 21 gallons, are the foremost. The particulars in this table would indicate that Belgium consumes more beer than any other country in the world, but the statistics of the States composing the German Empire show that Bavaria is entitled to that distinction with a consumption of more than 51 gallons per head. The consumption in Württemberg was also high, reaching 40 gallons,

Consumption of drink in various countries compared.

and in Baden about 35 gallons per head. The Australian consumption of 12 gallons does not appear to be large by comparison with these figures, Western Australia, with 25 gallons per head, being the only State in which the consumption approaches these countries. The chief wine-producing countries of the world—France and Italy—are also the greatest consumers, the former consuming 30 gallons, and the latter 24 gallons per head. Spain, 19 gallons; Portugal, 18 gallons; Switzerland, 16 gallons; and Bulgaria, 13 gallons, are also large consumers. The inhabitants of the British Empire are small wine-drinkers. At the Cape of Good Hope the consumption is highest, with between 2 and 3 gallons per head, though the figures are not available for recent years; Australia consumes a little over a gallon per head; the United Kingdom about one-third of a gallon, and Canada less than one-tenth of a gallon.

Expenditure
by the
people on
intoxica-
ting liquor.

With the assistance of the figures in the preceding table, it is not a very difficult matter to estimate for Australia, with some degree of accuracy, the approximate expenditure of the people on intoxicating liquors. Assuming that three-fourths of the spirits are consumed in hotels and clubs, and the balance privately, it would appear that each gallon of spirits costs the consumer 35s. It is estimated, allowing for imported ale and stout, that 3s. is paid for every gallon of beer consumed; and that 10s. per gallon is a fair average for wine, assuming that half is consumed in hotels, clubs, and saloons, and half privately, and allowing for imported champagnes and other wines.

The following table shows the approximate amount spent by the people on spirits, beer, and wine, during an average year, the figures being based on the average quantity consumed during the five years, 1899 to 1903. The amount per head of population and per adult individual 21 years of age and over is also shown:—

AUSTRALASIAN DRINK BILL:—YEARLY AVERAGE, 1899 TO 1903.

State of—	Expenditure by the People on—					
	Spirits.	Beer.	Wine.	Total.		
				Amount.	Per Head.	Per Adult Individual
	£	£	£	£	£ s. d.	£ s. d.
Victoria	1,751,400	2,469,060	795,600	5,016,060	4 3 7	7 14 4
New South Wales	2,153,900	2,173,950	500,900	4,828,750	3 10 4	6 15 9
Queensland	955,500	862,860	85,300	1,903,660	3 16 3	7 6 7
South Australia	286,650	481,590	597,558	1,365,798	3 15 7	7 7 1
Western Australia	532,350	719,490	95,700	1,347,540	7 0 0	11 6 1
Tasmania	159,250	238,080	13,400	410,730	2 7 3	4 14 1
Australia	5,839,050	6,945,030	2,088,458	14,872,538	3 18 3	7 7 9
Colony of New Zealand	1,009,050	1,076,610	59,900	2,145,560	2 14 10	5 2 6

These figures show that the average yearly expenditure on drink in Australia during the quinquennium, 1899 to 1903, amounted to nearly 15 millions sterling, and including New Zealand, to about

17 millions. In Victoria no less than 5 millions was spent, or nearly £188,000 more than in New South Wales, notwithstanding that the latter State had the larger population. Western Australia, according to population, stands at the head of the list with £7 per unit, and this is accounted for by the large adult population resident there. Victoria is second with over £4 per head. Tasmania is the most temperate of the Australian States, the consumption of alcoholic liquors only entailing a yearly expense of £2 7s. per head of the population, as against an average for the Commonwealth of £3 18s. In New Zealand also the expenditure is comparatively low, amounting to £2 15s. per head.

It has been claimed on behalf of New South Wales as a reason why cases of drunkenness are more frequent in that State than in Victoria, that in the latter State drunkenness itself is no crime, but must be allied with disorderly conduct before the person may be punished. This statement is incorrect, for Section 153 of the *Licensing Act 1890* (No. 1111) provides that: "Every person found drunk in any highway or other public place, whether a building or not, or on any licensed victualler's premises, may be taken into custody by the police, and shall be liable to a penalty not exceeding Ten shillings, &c." It is true that most of the cases of drunkenness are brought under the "Police Offences Act"; but the degree of disorderly conduct required is very slight, the mere fact of a person being so drunk as to be a nuisance or dangerous to himself or others being sufficient. If any doubt arises as to whether the accused is disorderly within the meaning of the section, the charge is laid under the section of the Licensing Act mentioned above, but such cases are comparatively few.

Drunkenness in Victoria and New South Wales.

The following is a statement of the number of charges of drunkenness made against persons in each State and in New Zealand during 1903, also the number of convictions, and the percentage of the latter to the former:—

Leniency of magistrates in drunkenness cases in Victoria.

PERCENTAGE OF CONVICTIONS FOR DRUNKENNESS IN AUSTRALIAN STATES AND NEW ZEALAND, 1903.

State.	Charges of Drunkenness.	Convictions.	
		Total.	Percentage of Charges.
Victoria	12,630	8,494	67.25
New South Wales	21,837	21,732	99.52
Queensland	7,190	7,130	99.17
South Australia	2,340	2,296	98.12
Western Australia	3,572	2,348	65.73
Tasmania	526	511	97.15
Australia	48,095	42,511	88.39
New Zealand	8,872	8,774	98.90
Australasia	56,967	51,285	90.03

It will be seen from the last column in the above table that the percentage of convictions in Victoria and Western Australia was much less than in the other States and New Zealand, nearly every case resulting in a conviction in the latter, and about two out of every three cases in the former. These figures seemed to denote such a comparative leniency on the part of magistrates in drunkenness cases in Victoria and Western Australia that the matter was brought under the notice of the Victorian Chief Commissioner of Police, who called for a report from the police officials best qualified to judge in Melbourne and the six principal country centres. It appears from the reports received, that it is the practice at the Melbourne City Police Court to discharge a person on his first appearance, and also upon the second offence if more than twelve months have elapsed since his first appearance; and also, generally throughout the State, to discharge first offenders and those who have been arrested on a Saturday, and were necessarily detained in custody till Monday, as it is considered the latter have already been sufficiently punished. In some cases, also, when an offender has been admitted to bail after arrest, he is discharged on promising to put a donation in the poor box. In all these cases no conviction is recorded in Victoria, and a similar practice is probably adopted in Western Australia; but in the other States a conviction is entered on the records in nearly every case, whether any punishment is inflicted or not. The Victorian Chief Commissioner of Police, in view of the peculiarity of result disclosed in the foregoing table, showing almost cent. per cent. convictions in all States except Victoria and Western Australia, decided that the matter was deserving of some further investigation, and accordingly placed himself in communication with the Police Department of New South Wales, with the result that it has been ascertained that in that State, in almost every instance, the accused person is found guilty, and a fine imposed. As regards the leniency in drunkenness cases in Victoria, the Chief Commissioner states that magistrates seem to take a common-sense view of the cases which come before them; and that he sees no reason to find fault with their action. Although the percentage of convictions entered on the records in Victoria and Western Australia is small in comparison to the other States, the extent to which persons are arrested for drunkenness is not affected thereby.

A large proportion of the offences dealt with by magistrates cannot be classed as crimes properly so called, but are mere breaches of Acts of Parliament, and show no degree of criminality in the person charged. A still larger proportion consists of drunkenness and offences against good order, including vagrancy, larrikinism, &c. The number of arrests for serious crimes preliminarily investigated

by magistrates in Victoria and New South Wales during 1903 was—

SERIOUS CRIMES IN VICTORIA AND NEW SOUTH WALES DURING 1903.

Class of Crime.	Victoria.	New South Wales.
Murder and attempts, manslaughter, shooting, wounding, &c.	52	164
Robbery, burglary, &c.	220	340
Crimes of lust	58	128
Horse, sheep, and cattle stealing	59	193
Total	389	825

The total per 10,000 of the population was 5.82 in New South Wales, and 3.22 in Victoria. Multiple charges are excluded from the above figures, each separate arrest only being counted. It is claimed on behalf of New South Wales that the comparatively large number of criminals in that State is due to the want of a proper law to prevent the influx of such persons from other places.

BIRTHPLACES OF ARRESTED PERSONS.

The following is a statement of the principal countries in which persons arrested during 1904 were born, and the proportion per 1,000 of the persons of such nationalities living in the State at the census of 1901:—

BIRTHPLACES OF PERSONS ARRESTED, 1904.

Birthplace.	Number.	Proportion per 1,000 living.
Victoria	12,154	13.87
Other Australian States	2,030	31.19
New Zealand	359	39.80
England and Wales	3,250	28.09
Scotland	1,296	36.25
Ireland	3,103	50.45
China	136	21.83
Other Countries	1,754	57.28
Total	24,122	20.08

As the ages of the people were not tabulated in conjunction with their birthplaces at the census, the proportion of Victorian arrests does not afford a proper comparison with the proportions indicated for other Australian States, Great Britain, and foreign countries.

The Victorian born population includes a large proportion of women and children, whereas there is so small a number of children in the State born in places outside Victoria, that the arrests of persons born outside the State may be regarded almost entirely as those of adults, and mostly of adult males. If the proportion of adult males arrested in Victoria be taken, it would in all probability approximate to those of the other Australian States.

EDUCATION OF ARRESTED PERSONS.

The ages of those arrested in 1904, and the degree of instruction possessed by them, are shown in the following table:—

AGE AND DEGREE OF INSTRUCTION OF PERSONS ARRESTED, 1904.

Ages.	Superior Education.	Read and Write Well.	Read Only, or Read and Write Imperfectly.	Unable to Read.	Total.
Under 10 years ..	..	..	43	310	353
10 to 15 ..	..	..	329	35	364
15 to 20 ..	..	13	996	30	1,039
20 to 25 ..	..	57	2,900	53	3,010
25 to 30 ..	5	93	3,171	79	3,348
30 to 40 ..	5	204	5,863	200	6,272
40 to 50 ..	10	182	4,920	241	5,353
50 to 60 ..	17	88	2,244	178	2,527
60 and upwards ..	8	44	1,553	251	1,856
Total ..	45	681	22,019	1,377	24,122

Education of children arrested.

The returns of those under fifteen years of age arrested by the police consist mainly of neglected and deserted children. Of the 717 children under fifteen arrested during 1904, not one was possessed of superior instruction, nor could read and write well; and 345, or 48 per cent., were unable to read.

OFFENCES HEARD BY MAGISTRATES.

Arrests and summonses for various offences.

Prior to 1902, information relating to various offences has been incomplete on account of there being no returns as to summons cases other than "against the person," "against property," and "other offences." As will be seen below, there is a large proportion of assaults and offences against good order initiated by summonses, and the following are particulars of the different classes of offences in 1904, distinguishing between arrest and summons cases, multiple

charges against the same individual being each counted as an offence:—

ARRESTS AND SUMMONSES FOR VARIOUS OFFENCES, 1904.

Nature of Offence.	Number of Offences for which—		Total Offences Heard.
	Arrests were made.	Summonses were issued.	
Against the Person—			
Murder and attempts, manslaughter, shooting at, &c.	107	..	107
Assaults	658	811	1,469
Others	149	121	270
Against Property —			
Robbery, burglary, &c.	256	..	256
Larceny and similar offences ..	2,005	232	2,237
Wilful damage to property ..	238	211	449
Others	140	175	315
Against Good Order—			
Drunkenness	13,789	92	13,881
Others	7,384	6,354	13,738
Breaches of Licensing Act .. .. .	..	685	685
Other Offences	1,310	14,933	16,243
Total	26,036	23,614	49,650

Of the 26,036 offences for which arrests were made, 1,914 were multiple charges, leaving the number of separate arrests 24,122, of which 16,553 were summarily convicted, 7,048 were discharged, and 521 were committed for trial. Of the 23,614 summons cases, 19,301 were summarily convicted, 4,270 were discharged, and 43 were committed for trial. Of the total persons dealt with (47,736), the number summarily convicted was 35,854, 11,318 were discharged, and 564 were committed for trial.

SENTENCES PASSED.

During 1904 there were 16,553 sentences by magistrates in exercise of their summary jurisdiction, 12,884 of which were of males and 3,669 of females. These figures do not represent the number of distinct individuals sentenced during the year, for many of them, particularly the habitual drunkard class, were brought up and sentenced several times. Of every 1,000 males sentenced, 438 were fined, 421 were imprisoned for a period less than one month, 98 for a period between one and twelve months, four for one year or over, and 39 were sent to reformatory schools, ordered to find bail, or otherwise dealt with. Of every 1,000 females sentenced, 363 were fined, 488 were imprisoned under one month, 91 over one and under twelve months, and 58 were sent to the industrial or reformatory schools, ordered to find bail, or otherwise dealt with. In addition to these sentences, there were 904 cases (799 males, 105 females) in which, although the magistrates found the accused persons guilty, it was deemed inexpedient to inflict any punishment, admonition and

Sentences
by magis-
trates.

caution being considered sufficient. In addition to the sentences of imprisonment, five prisoners were ordered one whipping.

Sentences
in superior
courts.

During 1904, 338 persons were sentenced by superior courts, of whom 18 were females. Of the 320 males, four were sentenced to death, five to periods between ten and fifteen years, two between seven and ten years, 30 between four and seven years; 97, or 30 per cent., between one and four years; and 153, or 47 per cent., to periods under one year; whilst one was fined, and 28 were required to find bail to appear when called upon. Of the eighteen females one was sentenced to two years, one to one year, fifteen to under twelve months, whilst one was sent to the Reformatory. In addition to the term of imprisonment, twelve persons were ordered to be kept in solitary confinement during various portions of their terms of imprisonment, and four were ordered to receive one whipping each.

GAOLS AND PRISONERS.

There are nine gaols in Victoria, including the Pentridge Penal Establishment, Ararat and Portland gaols having been closed several years ago, and Maryborough recently. The gaols at Sale and Castlemaine have been reduced to receiving stations for local committals with very short sentences. The following statement gives for the year 1904 the accommodation, daily average in confinement, number received during the year, and the number in confinement at the end of the year:—

GAOL ACCOMMODATION AND PRISONERS, 1904.

Name of Institution.	Number of Prisoners.							
	For whom there is Accommodation.		Daily Average.		Total Received.		In Confinement, 31.12.04.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Pentridge ..	800	..	476	..	477	..	508	..
Ballarat ..	62	18	32	1.86	387	36	36	2
Beechworth ..	66	15	39	.24	200	8	41	..
Bendigo ..	116	28	27	1.33	354	50	26	2
Castlemaine ..	99	..	5	.06	70	3	1	..
Coburg Female Prison ..	..	324	..	96.32	..	207	..	97
Geelong ..	187	29	100	.22	342	19	110	..
Melbourne ..	485	114	194	36.69	3,956	1,174	175	41
Sale ..	30	5	8	.29	116	5	6	..
Total ..	1,845	533	881	137.01	5,902	1,502	903	142

The above figures show that there is accommodation in the gaols for more than twice the average number in confinement. The question would now seem to arise whether one or more of these establishments should not be discontinued as a gaol and utilized for other

purposes. There are also seven police gaols which are used as receiving stations, but the daily average number of prisoners detained therein during 1904 was only nine.

The following is a statement of the average number of prisoners, male and female, in detention during 1891, 1895, and the last five years in all the gaols of the State, from which it will be seen that the decrease is very considerable, the number in 1904 being 873, or 46 per cent. less than in 1891:—

PRISONERS IN CONFINEMENT, 1891, 1895, AND 1900 TO 1904.

Year.	Average Number of Prisoners in Confinement.		
	Males.	Females.	Total.
1891	1,550	350	1,900
1895	1,208	216	1,424
1900	981	204	1,185
1901	951	200	1,151
1902	943	170	1,113
1903	907	141	1,048
1904	890	137	1,027

Prisoners in confinement—decrease.

EXPENDITURE ON POLICE AND GAOLS.

In the 39½ years ended 30th June, 1904, the total amount expended in connexion with the police, and penal establishments and gaols of Victoria was £11,228,051, viz., £8,943,903 on the former, and £2,284,148 on the latter. The following table shows the amounts and the amounts per head expended in connexion with the police, and penal establishments and gaols of Victoria during each of the five years ended with 1903-4:—

Expenditure on police, gaols, &c.

EXPENDITURE ON POLICE AND GAOLS, 1899-1900 TO 1903-4.

Year.	Amount Expended (exclusive of the Cost of Buildings) on—			Amount per Head of Population.
	Police.	Gaols and Penal Establishments.	Total.	
	£	£	£	s. d.
1899-1900	261,954	50,805	312,759	5 3
1900-1	272,444	52,138	324,582	5 5
1901-2	271,561	51,948	323,509	5 4
1902-3	264,422	51,919	316,341	5 3
1903-4	269,647	49,226	318,873	5 3

Expenditure
on police
and gaols
in Austral-
asia.

The following are the amounts expended on police and gaols in the Australian States and New Zealand during the year ended 31st December, 1904, in Tasmania; 31st March, 1904, in New Zealand; and 30th June, 1904, in the other States:—

EXPENDITURE ON POLICE AND GAOLS IN AUSTRALIAN STATES AND NEW ZEALAND, 1903-4.

State.	Amount Expended (exclusive of the Cost of Buildings) on—			Amount per Head of Population.
	Police.	Gaols.	Total.	
	£	£	£	s. d.
Victoria	269,647	49,226	318,873	5 3
New South Wales	430,996	103,836	534,832	7 6
Queensland	165,479	25,312	190,791	7 5
South Australia	85,090	16,219	101,309	5 6
Western Australia	126,997	29,228	156,225	13 9
Tasmania	34,701	5,330	40,031	4 6
Australia	1,112,910	229,151	1,342,061	6 10
New Zealand	125,152	34,976	160,128	3 10

Executions.

One execution took place in 1904, as against two in 1902, one in 1900, one in 1898, one in 1897, one in 1896, two in 1895, and five in 1894. Since the first settlement of Port Phillip, 168 criminals have been executed within the State, of whom only three were females.

Coroners' inquests.

In 1904 the number of coroners' inquiries into the causes of deaths of individuals was 1,224, which was below the average number of the four preceding years. In 723 cases death was found to be due to disease or natural causes, in 306 cases to accident, in 107 to suicide, in 77 to external causes which could not be ascertained, in three to homicide, in one to intemperance, whilst in three cases the cause of death was doubtful. Of those due to violence, 62 per cent. were due to accidental causes, 22 per cent. to suicide, whilst in 16 per cent. of the cases the cause or motive of the violence which caused death was doubtful. The number of inquests during the last five years was 7,470, of which 4,340 deaths were found to be due to disease or natural causes, 3,073 to violence, and 57 to other causes.

VITAL STATISTICS.

Marriages in Victoria can only be celebrated by a minister of religion whose name is registered in the office of the Government Statist, by the Government Statist, or by any duly appointed registrar of marriages. In order to guard against the celebration of marriages by undesirable persons, the present law provides that no person shall be registered as a minister of religion unless he ordinarily officiates as such in one of the officially recognised religious denominations, is supported by the recognised head of the denomination in Victoria, or, if there be no such head, then by at least two registered ministers; and satisfies the Government Statist that he is a fit and proper person to celebrate marriages. The Governor in Council may prohibit from celebrating marriages any minister who is proved guilty of any offence, misconduct, or impropriety unworthy of his calling; and the Government Statist may cancel the registration of any minister who ceases to officiate or otherwise loses his qualifications. Any clergyman or person officiating as such who celebrates a marriage without being duly registered, or any person who obtains registration by untruly representing himself as an officiating minister, or who personates a registrar, shall be guilty of a misdemeanour, punishable by a penalty not exceeding £500, or by imprisonment not exceeding five years, or by both; but if the omission were accidental, the penalty is reduced to a maximum of £20 on summary conviction. In the case of a minor (not being a widower or widow), wishing to marry, there must be obtained the written consent (*a*) of the father if he be within Victoria; if not (*b*) of a guardian appointed by him; if no such appointment (*c*) of the mother if within Victoria; if there be no such parent or guardian (*d*) of a police magistrate, or a justice appointed for the purpose by the Chief Justice or a Judge of the Supreme Court. If the mother has been deserted by the father, or obtained a protection order against him, or if, through divorce or judicial separation she has become the guardian *de facto*, her consent is sufficient authority for the marriage. If the minor is a ward of the Neglected Children's or Reformatory Schools' Department, the Departmental Secretary's consent is the authority. In all cases the consent must be indorsed on the marriage certificate. Marriages of Jews and Quakers are exempted from the above provisions, and are deemed legal and valid if celebrated according to their respective usages. To guard against the abuse of the system of matrimonial agencies, the Governor in Council is empowered, if deemed expedient, to prohibit ministers from celebrating marriages in any undesirable place or building. No marriage shall be invalid by reason of

Law as to
marriages
in Victoria

having been celebrated by an unqualified person if either of the parties shall have believed at the time that such person was qualified, nor by reason of any formal defect or irregularity. Marriage with a deceased wife's sister has been legalized in Victoria since 1873; but there is no provision to validate a marriage of a woman with a deceased husband's brother.

Registra-
tion.

The present official system of compulsory registration of births, deaths, and marriages in Victoria has been in force since 1853; and the registers—framed on the best models—are replete with all necessary information bearing on the family history of the people. The statutory duties under the Registration Acts are performed by the Government Statist, who has control over the local registrars of births and deaths, and (so far as regards their registration duties) of the officiating clergymen and lay registrars; and copies of all entries certified by him or by the Assistant Government Statist, are *primâ facie* evidence in the Courts of Australia of the facts to which they relate. At the head office in Melbourne there is kept for reference a complete collection of all registrations effected since 1st July, 1853, as well as certified copies or originals of all existing church records relating to earlier periods, as far back as 1837. For the registration of births and deaths, the State is divided into 634 registrars' districts, for each of which a registrar is appointed, who (if not a public servant) is paid by fees at the rate of 2s. 6d. per entry, but is not prevented from following his or her own private business; whilst the marriages are recorded by the clergyman or lay registrar who performs the ceremony. Registrations of marriages are made in triplicate, and of births and deaths in duplicate—each copy bearing the original signatures of the parties married and witnesses (in case of marriage), or of the informant (in case of a birth or death), and of the registrar. One copy is retained by the registrar or clergyman; one forwarded to the Government Statist—to be kept as a permanent record; and the third (in case of marriage only) is given to one of the parties married. The parents of a legitimate child born in Victoria, or the occupier of a house wherein a birth or death occurs, is required under a penalty of £10 to give notice (either personally or by authorized agent) to the registrar of the district within 60 days after the birth, and within 7 days after the death. (As an alternative, the notice may be given by the attending doctor or nurse.) If an illegitimate child is born in any house or place of which the mother of the child is not the occupier, or if an illegitimate child, under five years of age, dies in, or its dead body is brought to, any house or place, the occupier must give notice to the deputy-registrar within three days if within any city, town, or borough, or to either the deputy-registrar or police officer in charge, if elsewhere. In the case of an illegitimate birth, if the mother is the occupier the notice must be given within three weeks. The penalty for breach of this is imprisonment for six months or a penalty of £25. No fee is charged for registration, except in the case of a birth registered after sixty days, when 5s. is charged if within twelve months, and 12s. 6d., if over one year. By an Act (No. 1835), passed on the 6th April, 1903, an illegitimate

Church
records.

child, whose parents marry after the passing of the Act, may, provided there was no lawful impediment, at the time of the birth, to the marriage of the parents, be legitimized if the birth be registered for that purpose within six months after the date of the marriage. If the parents had married before the passing of the Act, the child might have been registered within six months after the passing of the Act. Applicants for searches or certificates of births, deaths, or marriages should, in applying to the Government Statist, furnish particulars of the date and place of the event; also the names of the parties in the case of a marriage, or the name, age (if a death), and parentage in the case of a birth or death.

MARRIAGES.

The number of marriages celebrated in Victoria during the year 1904 was 8,210, as against 7,605 in 1903, and 8,477 in 1902, and an average of 8,201 during the last five years. Marriages, 1900-4.

The ordinary marriage rate is the number of marriages per 1,000 of the total population. Like the ordinary birth and death rates similarly estimated, it is only adapted to effect comparisons in old and settled communities where the age constitution of the people remains almost unchanged. It is not suitable for comparative purposes in newly settled countries, such as Australasia, especially in the earlier days. As, however, it furnishes a ready and closely approximate comparison between different years which are not widely separated, the figures are given for the last five years in Victoria:— Marriage rates.

1900	...	...	...	6.96	per 1,000
1901	...	...	...	6.97	„ „
1902	...	...	...	7.00	„ „
1903	...	...	...	6.29	„ „
1904	...	...	...	6.80	„ „

The number of marriages celebrated during the year 1904 was equal to the average of the last five years, and exceeded that of the previous year by 605. It will be noticed that although there was a slight increase in the rate from 1900 to 1902, there was a sudden fall in 1903—the number of marriages in that year being lower than in any year since 1897. Though the migration of marriageable men from Victoria accounts to some small extent for the reduced rate as compared with earlier years, yet the probable explanation of the decline in the marriage rate is to be found in the prevailing economic conditions.

It has been shown upon more than one occasion that, in a normal population, the frequency of marriage is not dependent upon the number of the total population, still less upon the number of marriageable women, but almost entirely upon the number of marriageable men the community contains, the tendency of whom to marry is modified by their occupations, and upon the view they take of their future prospects. To demonstrate this, the following table has been constructed showing the proportion of marriages to the population, to the number Factors in marriage rates.

of single men, and to the number of single women, in each census year from 1854 to 1901:—

PROPORTION OF MARRIAGES PER 1,000 OF POPULATION AND OF SINGLE MEN AND WOMEN, 1854-1901.

Year of Census.	Exclusive of Chinese and Aborigines.						
	Enumerated Population.	Number Marriageable—		Marriages.	Proportion of Marriages per 1,000 of the—		
		Men.	Women.		Popu-lation.	Marriage-able Men.	Marriage-able Women.
1854 ..	234,361	70,865	15,083	3,696	15.77	52.16	245.04
1857 ..	383,668	95,427	26,317	4,465	11.64	46.79	169.66
1861 ..	513,896	106,940	37,006	4,528	8.81	42.34	122.36
1871 ..	712,263	89,921	65,386	4,715	6.62	52.43	72.11
1881 ..	849,438	99,824	119,360	5,732	6.75	57.42	48.02
1891 ..	1,139,463	163,048	173,138	9,007	7.97	55.24	52.02
1901 ..	1,193,340	154,334	211,087	8,468	7.08	54.87	40.12

Fluctua-
tions in
marriage
rate.

It will thus be observed that, whilst the proportion of marriages to the population (marriage rate) and to the marriageable women has fluctuated considerably, the proportion to the marriageable men has been tolerably constant, the extremes being $57\frac{1}{2}$ in 1881, and $42\frac{1}{2}$ in 1861, and the usual range was between the narrow limits of 52 and 55. This proportion steadily diminished from $57\frac{1}{2}$ in 1881 to 55 in 1901, although the latter was higher than at any period prior to 1881. The proportion of marriages per 1,000 married women, on the other hand, has fallen off considerably. Even in the more settled times, after the gold rush, it fell from 72 in 1871 to a level of about 50 in 1881 and 1891, and still further to as low as 40 in 1901, owing to the generally increased proportion of marriageable women to men, which at the last period reached to as high as 137 per 100 men. In other words, the chances of a woman marrying in Victoria are now very much smaller than at any earlier period, the proportions having fallen from about 1 in every 4 of the marriageable women in 1854, 1 in 8 in 1861, to 1 in 20 in 1891, and 1 in every 25 in 1901.

Marriage
rates in
certain age-
groups,
1881-1901.

To further investigate this subject, it will be interesting to ascertain the marriage rates amongst marriageable men and women at different periods of life, and, with this view, the rates have been com-

puted for various age groups between 15 and 50 at each of the last three census periods, and are shown in the following table:—

PROPORTION OF MARRIAGES PER 1,000 MARRIAGEABLE MEN AND WOMEN AT EACH AGE.

Age Group.	Men.			Women.		
	1881.	1891.	1901.	1881.	1891.	1901.
15—21 .. ..	..	..	..	24.6	23.6	18.8
21—25*	57.8	44.3	44.6	118.8	106.0	87.2
25—30	114.2	85.9	90.5	105.7	100.5	84.7
30—35	82.9	75.2	82.1	73.1	66.4	57.9
35—40	56.4	51.1	62.6	53.8	46.4	37.2
40—45	30.5	33.4	39.9	32.5	27.7	22.3
45—50	21.8	25.9	29.8	22.1	17.8	14.3
50 upwards ..	10.5	9.1	9.1	4.9	4.2	2.4
15—45 .. ..	..	..	..	55.9	58.7†	49.0

In the last two periods, as compared with the first, there is every evidence of a tendency amongst men to defer marriage to a later period in life—the turning point being age group 30-35, for there has been a marked decrease in the rates below, but an increase in the rates above that age. In 1901, as compared with 1891, however, there was a considerable increase in the rate at every age period except 20-25 and over 50.

Tendency amongst men to defer marriage.

In the case of marriageable women, there was, it will be observed, a slight fall between 1881 and 1891, but a considerable fall between 1891 and 1901 in the proportion marrying at each age group under 35; but a rapid fall from each census to the subsequent one in the proportions at ages over 35. The fall between 1891 and 1901 was almost uniformly distributed over the various age groups, and averaged about 18 per cent. In this connexion it may be noted that whilst the marriageable women between 15 and 45 increased by 25,300 during the intercensal period 1891-1901, the number of marriageable men between 20 and 50 decreased by 9,156—a decrease chiefly due to the efflux of single men to Western Australia and South Africa. Thus, there were resident in Western Australia, according to the recent census returns of that State, 17,433 adult males of Victorian birth (besides 6,909 minors), of whom 6,701 were married, and 10,732 were single.

Fall in marriage rates of women at all ages.

There was a sensible increase in the mean ages at marriage of both brides and bridegrooms during the 23 years ended in 1902. A slight improvement is shown, however, in the mean marrying ages

Mean ages at marriage.

* In the case of men 20-25.

† The apparent anomaly of the rate for women between 15 and 45 being higher in 1891 than in 1881, whilst the rate in each age group in 1881 is higher than that in the corresponding period in 1891, is due to the changes in the age constitution of women under 45 years of age.

of both sexes during the last two years as compared with the preceding quinquennial period, as will be seen from the following statement, which gives for certain five-year periods, and for the last two years, the mean ages of brides under 45 years of age, and of the bridegrooms marrying such brides:—

AGE AT MARRIAGE.

Period.	Brides under 45.	Bridegrooms of Brides under 45.
1870-4	24.13 years	29.93 years
1880-4	23.83 "	28.61 "
1890-4	24.66 "	28.66 "
1898-1902	25.49 "	29.75 "
1903	25.38 "	29.43 "
1904	25.34 "	29.33 "

The mean age of bridegrooms marrying brides under 45 years of age in Victoria during the year 1904 was 29.33, an age which would have been slightly higher if all the bridegrooms were included. In England and Wales, during the years 1900-1, the mean age of all bridegrooms was 28.48—or about one year lower than in Victoria—and this later marriage age to a large extent accounts for the lower marriage rate in Victoria when compared with England and Wales. In Victoria the marriage rate in 1904 was 6.8 per 1,000 of the population, in England and Wales it was 7.8 in 1903.

Marriage rates in Australian States and New Zealand.

In the following table are shown the marriage rates per 1,000 of the population in the Australian States and New Zealand for each of the last five years, and also the mean rates for the whole period:—

MARRIAGE RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND: RETURN FOR FIVE YEARS.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.
1900 ..	6.96	7.38	6.88	6.37	10.06	7.71	7.24	7.67
1901 ..	6.97	7.68	6.61	6.43	9.66	7.71	7.29	7.81
1902 ..	7.00	7.53	6.31	6.61	9.77	7.46	7.23	8.01
1903 ..	6.29	6.88	5.72	6.21	9.33	7.53	6.67	8.27
1904 ..	6.80	7.21	5.93	6.85	8.83	7.55	7.00	8.26
Mean	6.80	7.34	6.29	6.49	9.53	7.59	7.09	8.00

Marriage rates in different States compared.

It will be observed that, according to the average of the five years, the lowest marriage rates prevailed in Queensland and South Australia, and by far the highest in Western Australia. In Victoria the rate was somewhat below, and in New South Wales slightly above, the

average for Australia. For the year 1904, all the States, except Western Australia, showed an increase in the marriage rate, varying from 10 per cent. in South Australia and 8 per cent. in Victoria to less than 4 per cent. in Queensland, Tasmania having remained nearly stationary. The rate of the Commonwealth increased by 5 per cent. in the same period.

For reasons already explained, a better and more reliable index of the frequency of marriage in the different States is a comparison of the marriages with the number of marriageable male adults per 1,000, aged 21 and upwards, such as is contained in the following statement for the average of the three years, 1900 to 1902:—

Marriages in proportion to marriageable males in Australian States and New Zealand.

MARRIAGES PER 1,000 MARRIAGEABLE MALES IN AUSTRALASIA.

Victoria	...	...	...	...	56.0
New South Wales	...	...	...	...	58.3
Queensland	...	...	...	...	41.6
South Australia	...	...	...	...	56.8
Western Australia	...	...	...	...	41.9
Tasmania	...	...	...	...	65.7
<hr/>					
Total Australia	...	...	...	...	55.7
New Zealand	...	...	...	...	55.1

Although the marriage rates are generally regarded as evidence of prosperity in a community, it can hardly be regarded as such in some of the Australian States, where the age and sex constitutions are not normal. Thus, in Queensland and Western Australia, the low rates amongst marriageable men cannot be said to be due to the absence of prosperity, as compared with the other States, or to greater disinclination on the part of the men to marry, but rather to the fact that the number of marriageable women to that of men is small in both those States.

The average marriage rate of Australia is the same as in Italy, but is lower than in 11 out of the 15 European countries shown in the following table for the period, 1896-1900:—

Marriage rates in various countries.

MARRIAGE RATES IN VARIOUS COUNTRIES.

Hungary	..	..	8.4	Holland	..	..	7.4
German Empire	..	..	8.4	Denmark	..	..	7.4
Belgium	..	..	8.3	Scotland	..	..	7.3
England and Wales	..	..	8.1	Australia (1900-4)	..	..	7.1
Austria	..	..	8.0	Italy	..	..	7.1
Spain	..	..	7.7	Norway	..	..	6.9
Switzerland	..	..	7.7	Sweden	..	..	6.1
France	..	..	7.5	Ireland	..	..	4.9

Formerly the marriages which were celebrated in urban and rural districts were compared with the populations of those districts respectively, but as the place where a marriage was solemnized is no guide as to domicile, the method has been abandoned, and the classification according to the usual residence of the parties adopted instead. The following table gives the average annual numbers and rates per 1,000 of the population of brides and of bridegrooms, whose usual place of residence (if in Victoria) was in Melbourne and suburbs, other urban

Marriage rates in urban and rural districts.

districts, or rural districts respectively, or was outside the State—during the two years 1903 and 1904:—

USUAL RESIDENCE OF BRIDES AND BRIDEGROOMS, AVERAGE OF 1903 AND 1904.

Usual Residence of Bridegroom.	Usual Residence of Bride.				Total Bridegrooms.	Proportion of Bridegrooms per 1,000 of Population.
	Metropolitan.	Other Urban.	Rural.	Outside Victoria.		
In Victoria—						
Metropolitan Districts	3,029	100	154	32	3,315	6.6
Other Urban Districts	91	1,015	191	10	1,307	6.3
Rural Districts	367	259	2,238	31	2,895	5.8
Outside Victoria ..	157	61	84	89	390	..
Total Brides	3,643	1,435	2,667	162	7,907	6.5
Proportion of Brides per 1,000 of Population ..	} 7.2	6.9	5.4	..	6.5	..

Lower marriage rate in rural than urban districts.

It will first be noticed that nearly 5 per cent. of the bridegrooms, and 2 per cent. of the brides, resided outside the State. Excluding non-residents, these figures show that the marriage rate—for both males and females—was higher in the metropolitan and other urban districts, than in rural districts.

Rates in districts in 1903-4 and previous years.

An examination of the marriage rates obtaining in metropolitan, urban, and rural districts, during the years 1903-4, shows a sensible decline in the metropolitan and urban centres, as compared with the three preceding years, whilst in the rural districts it remained fairly constant, as will be seen from the following figures, which show the marriage rates for both sexes in each division of the State during the periods 1900-2 and 1903-4:—

Period.	Metropolitan District.	Urban District.	Rural District.
Males—1900-1902 ..	.. 7.2	.. 7.2	.. 5.8
" 1903-1904 ..	.. 6.6	.. 6.3	.. 5.8
Females—1900-1902 ..	.. 7.7	.. 7.7	.. 5.6
" 1903-1904 ..	.. 7.2	.. 6.9	.. 5.4

Causes of lower marriage rate in rural districts.

To what extent the lower rates in the rural districts are due to variations in sex, age, and conjugal condition, is a problem which may be solved by an examination of the recent census returns. The first striking fact disclosed is the great preponderance of females over males in both urban districts, whilst the reverse was the case in the rural districts—there being over 111½ females to every 100 males in the former, as compared with only 86½ females to every 100 males in the latter. Secondly, there was, when compared with the total population, a larger proportion of adult males, but a much smaller proportion of adult females, in the rural than in the urban districts at each of the three age groups, 15 to 21, 21 to 45, and 45 and over.

The tendency which undoubtedly existed in former years for young men starting life to leave their homes in the country and gravitate to the towns, where life is considered more attractive, and higher wages and easier employment usually prevailed, has, owing to economic causes, been, at least for a time, reversed; although it still continues in the case of women, who can always readily find remunerative employment in the towns. Then again, the census returns show that there is a much larger proportion of marriageable men, but a much smaller proportion of marriageable women, in the country than in either of the two urban districts—the percentage of marriageable men (aged 21 and upwards) in the total population being 14.4 in the rural, as against 11.1 in the metropolitan and 10.3 in the other urban districts; and that of marriageable women (aged 15 to 45) 11.9, as against 15.2 and 16.0 respectively. To arrive at definite results in regard to the marriage rate, it will, therefore, be necessary to compare, according to the plan already adopted, the marriages with the marriageable population of each sex in the three districts. Such a comparison shows that the marriage rate of men is far less in the country than in the towns, but that an eligible woman in the country has—under general conditions—a better chance of marriage than one residing in the metropolis, or in the other urban districts; as, out of every 100 eligible men in the rural districts, four marry annually, as against nearly seven in every 100 in the urban districts; whereas of eligible women more than one-twentieth in the rural, but less than one-twentieth in the urban districts, marry within twelve months. The following are the proportions of marriages per 1,000 marriageable persons, viz., men aged 21 or upwards, or women aged 15 to 45, in each district according to the average of the three years, 1900 to 1902:—

PROPORTIONS OF MARRIAGES PER 1,000 MARRIAGEABLE PERSONS IN METROPOLITAN, URBAN, AND RURAL DISTRICTS.

District.	Men.	Women.
Metropolitan ..	66.9	48.5
Other Urban ..	69.1	46.7
Rural ..	38.9	51.5

These results confirm those obtained when comparing the marriages per 1,000 marriageable men in the different States, when it was shown that where there was an excess of marriageable women, such rate was high, but where the proportion of marriageable women to marriageable men was abnormally low, such rate is low, but the rate for women is high.

During the twenty years, 1881 to 1900, of the 153,399 marriages celebrated in Victoria, 26.73 per cent. were celebrated in the Autumn quarter, 25.97 per cent. in the Spring, 24.00 in the Summer, and 23.30 in the Winter. In the years 1901-4, the percentages were

Marrriages
in quarters.

27.37 in the Autumn, 24.51 in the Summer, 24.51 in the Spring, and 23.61 in the Winter quarter. It would thus appear that marriages are most numerous in the Autumn, and least in the Winter quarters.

Former condition of persons married at certain periods.

The following statement shows the percentages of persons in each conjugal condition, who married at the periods specified:—

CONJUGAL CONDITIONS OF PERSONS MARRYING, 1871-1904.

Conjugal Conditions.	1871-80.	1881-90.	1891-1900.	1901-4.
Bachelors and Spinsters ..	80.59	85.84	87.22	87.88
Bachelors and Widows ..	7.10	4.72	4.23	3.79
Widowers and Spinsters ..	7.75	6.17	6.07	6.01
Widowers and Widows ..	4.56	3.27	2.48	2.32

That these percentages are now approaching somewhat those of a settled community, might be inferred from the slight alteration which has taken place between the rates in 1901-4 and those of the preceding ten years. This is corroborated by the similar percentages for England and Wales during the year 1900, which were 87.30 for marriages contracted between bachelors and spinsters, 3.27 between bachelors and widows, 5.89 between widowers and spinsters, and 3.54 between widowers and widows.

Divorced persons re-marrying, 1900-4.

The number of divorced persons re-marrying has shown a steady increase in each year since 1900, except during 1903. The number for 1904 was considerably higher than for any other year during the last five. A larger number of divorced women remarry than divorced men; the ratio for the last five years being about 4 of the former to every 3 of the latter. The following are the numbers of divorced persons re-marrying for the last five years:—

DIVORCED PERSONS RE-MARRYING: RETURN FOR FIVE YEARS.

Year.	Males.	Females.	Total.
1900	40	45	85
1901	41	45	86
1902	34	59	93
1903	33	37	70
1904	45	68	113

Marriages of minors.

In all civilized countries minors are not permitted to marry without the consent of their parents or guardians. The following table shows the numbers of males and females who marry under 21 to every 100 marriages, for the periods, 1881-90, 1891-5, 1898-1902,

and 1903-4, in Victoria, and for the period 1897-1901 in England and Wales:—

MARRIAGES OF PERSONS UNDER 21 YEARS IN VICTORIA AND ENGLAND AND WALES.

	Number under 21 in every 100 Marriages in Victoria.				Number under 21 in every 100 Marriages in England and Wales.
	1903-4.	1898-1902.	1891-5.	1881-90.	1897-1901.
Bridegroom ..	2·33	1·95	1·80	2·26	5·06
Bride ..	15·47	15·44	17·13	21·00	16·52
Mean ..	8·90	8·74	9·51	11·63	10·79

During the five years, 1900 to 1904, an annual average of 8,201 marriages was registered, of which only 143, or a little under 2 per cent., were celebrated by lay registrars. This proportion was as high as 7 in the ten years, 1881-90, but suddenly dropped from 6.6 to 3.7 in 1894, and has since declined to 1.4 in 1904, probably owing to the competition of matrimonial agencies, which sprang up about 1894. Of the other marriages, 1,665 were solemnized according to the rites of the Church of England, 1,317 of the Presbyterians, 1,627 of the Methodists, 409 of the Baptists, 393 of the Independents, 1,350 of "other sects"—chiefly Protestants—1,273 of the Roman Catholic Church, and 24 according to those of the Jews.

The number of marriages solemnized at matrimonial or advertising agencies gradually rose from 1,409 in 1898 to 1,701 in 1900, and fell to 1,188 in 1902, but increased again to 1,353 in 1903, and to 1,502 in 1904. About 20 per cent. of the total marriages were performed in such agencies in 1900, and 18 per cent. in 1903 and 1904. This accounts for the unduly large proportion of marriages celebrated by "other sects," whose clergymen acted for such agencies.

BIRTHS.

The number of births registered in Victoria during the year 1904 was 29,763—15,313 males and 14,450 females. This was 194 above the number recorded for the preceding year, but 3,866 fewer than the average of the ten years ended 1900. The figures for each year since 1890 were:—

NUMBER OF BIRTHS IN VICTORIA, 1891-1904.

1891 ..	38,505	1896 ..	32,178	1901 ..	31,008
1892 ..	37,831	1897 ..	31,310	1902 ..	30,461
1893 ..	36,552	1898 ..	30,172	1903 ..	29,569
1894 ..	34,258	1899 ..	31,008	1904 ..	29,763
1895 ..	33,706	1900 ..	30,779		

During the twenty years ended with 1883, the number of births remained almost stationary; but in 1884 a marked increase took

place, which continued during the subsequent seven years; the number in 1891 being the highest. Since 1891, however, a rapid falling off has taken place down to the period embraced in the last five years, when the number has fluctuated at a lower level than that which had prevailed at any other period since 1886. The number of births in 1903 was the lowest since 1884. During 1904, however, a slight improvement is shown, as compared with the previous year.

In connexion with this decline in the number of births since 1891, it must be borne in mind that during the whole of the intervening period there has been an extensive emigration from Victoria—the excess of departures over arrivals amounting to 157,462 persons—and as these emigrants were for the most part adults of the reproductive period of life, the diminution in the number of births shown in the last table can be readily understood, and has already been largely felt in a reduced attendance in the public and private schools of the State.

The following table shows the birth rates in Victoria from 1860 to 1904:—

BIRTH RATES IN VICTORIA, 1860-1904.

Year.	Birth Rate.	Year.	Birth Rate.	Year.	Birth Rate.
1860 ..	42·81	1891 ..	33·57	1898 ..	25·51
1865 ..	42·40	1892 ..	32·51	1899 ..	26·14
1870 ..	38·07	1893 ..	31·18	1900 ..	25·79
1875 ..	33·94	1894 ..	29·05	1901 ..	25·78
1880 ..	30·75	1895 ..	28·46	1902 ..	25·15
1885 ..	31·33	1896 ..	27·19	1903 ..	24·46
1890 ..	33·60	1897 ..	26·49	1904 ..	24·65

The above rates, based upon the number of births to every 1,000 of the population, are, like marriage rates calculated on a similar basis, apt to mislead, unless the different constituents, or elements of the population, bear a normal proportion to one another.

The method is, at all events in young communities, absolutely unreliable and misleading. In the earlier years when, owing to immigration, the population consisted for the most part of men and women at the reproductive period of life, the birth rate is obviously high. As time proceeds, however, notwithstanding that immigration of reproductive adults may be maintained, the proportion of such to the total population must continuously diminish, and with it, of necessity, the birth rate. The decline in Victoria in the latter years is accentuated on account, not only of the cessation of immigration, but on the absolute emigration of adults. Under these circumstances, the figures in the table do not show the true measure of the fall in the birth rate.

Birth rates,
1860 to
1904.

Ordinary
birth rate
misleading
in new
countries.

A more correct rate is the ratio of the number of legitimate births to that of married women under 45, and the following table shows the rate computed in the ordinary manner, also the proportion of legitimate births per 1,000 of such women during the last four census years:—

LEGITIMATE BIRTHS PER 1,000 OF THE POPULATION AND OF MARRIED WOMEN UNDER 45 YEARS OF AGE.

Year.	Enumerated Population.	Married Women under 45 years of Age.	Legitimate Births.	Proportion of Legitimate Births.	
				Per 1,000 of the Population.	Per 1,000 Married Women under 45 years of Age.
1871 ..	731,528	88,561	26,805	36·64	302·67
1881 ..	862,346	84,831	25,675	29·77	302·66
1891 ..	1,140,405	120,700	35,853	31·44	297·04
1901 ..	1,201,341	127,858	29,279	24·37	229·00

It will be observed that, although the proportion of legitimate births per 1,000 of the population fluctuated considerably during the four census periods, the proportions per 1,000 of married women remained fairly uniform during the first three census years, but showed a decline in 1901 from 297 to 229, being equivalent to nearly 23 per cent. A noticeable instance of the unreliability of the ordinary birth rate in a new country such as this, appears in the above table on comparing 1881 with 1891, for whereas the birth rate per 1,000 of the population was considerably higher (by nearly $1\frac{3}{4}$ per 1,000) in the later than in the earlier year, yet the proportion of births per 1,000 married women was actually lower. The fluctuations in the ordinary birth rate from 1871 to 1891 are, therefore, found to have been mainly due to varying proportions of married women in the community at the fruitful period of life. The exceptional fall since 1901, however, cannot be so explained, as other factors must be involved which require further investigation, and which will be dealt with in the following paragraphs.

An analysis of the minor age groups, of which the whole age group, 15 to 45, is composed, will disclose the fact that there has been a considerable falling off in 1901, as compared with previous census periods, in the proportion of married women at the younger, and more fertile ages, but a counter-balancing increase in that at the higher ages—a result chiefly brought about by a decrease in the proportion of young men at marriageable ages, through emigration, and the consequent decline of the female marriage rates at the lower age groups. Thus, the number of married women under 30 years of age fell from 53,778 in 1891 to 39,230 in 1901, or by 27 per cent., whereas the number over 35, but under 45, increased during

Proportion of births to population and married women.

Percentage of married women in quinquennial groups under 45 years of age.

the same period from 37,460 to 57,161, or by 52½ per cent. Relatively to the whole number at child-bearing ages, the married women under 30 years of age fell from 44½ per cent. in 1891 to 30½ in 1901; whilst those at the higher ages, between 35 and 45, rose from 31 to 44½ per cent. This will be seen in the following statement:—

PERCENTAGE OF MARRIED WOMEN IN AGE GROUPS TO TOTAL UNDER 45 YEARS AT FOUR LAST CENSUS YEARS.

Census Year.	Married Women Under 45 Years of Age—Percentage in each Age Group.					
	15—20.	20—25.	25—30.	30—35.	35—40.	40—45.
1871 ..	2·03	13·04	21·14	23·07	23·32	17·40
1881 ..	1·73	15·95	20·46	20·60	20·97	20·29
1891 ..	1·35	15·69	27·52	24·41	17·21	13·82
1901 ..	·81	9·90	19·83	24·96	24·92	19·58

So far as the groups 15 to 25 are concerned, the results are in accordance with the figures published in the English Registrar-General's Report for 1903, which show that of the total number of married women between 15 and 45 years of age in England and Wales, the proportion of those between 15 and 25 was 15·2 per cent. in 1871, 14·8 per cent. in 1881, 13·7 per cent. in 1891, and as low as 12·4 in 1901.

To estimate the extent to which the changes in age distribution between the two last periods would influence the birth rate for this State, it is necessary to ascertain the rates of natality for married women at different ages. Up to the present, the available information relating to Victoria on which such rates might be computed, has not yet been tabulated in respect to all married women, although it was done for one year in respect to newly married women.* Such rates were, however, published in a previous issue of this work† for several European countries and towns, from which it is proposed to select the rates for Sweden—which it has been decided to adopt as a standard for measuring the extent of the decline in the productiveness of married women in Victoria during the last ten years, owing to changes in their age constitution. The following were the rates of natality in Sweden in 1891, at each quinquennial age group under 45:—

Age of Wives.	Births per 100 Wives.
15—20	51·8
20—25	45·1
25—30	37·5
30—35	31·2
35—40	25·0
40—45	14·2

* For particulars, see *Victorian Year-Book*, 1895—8, page 663, et seq.

† *Ibid.*, page 666.

Applying these proportions to the numbers of married women at similar age groups in Victoria in 1891 and 1901, it is found that the relative fertility of such women diminished by 9 per cent. in the interval, owing to their increased average age alone. This will, however, account for little more than a third of the fall since 1891 in the rate actually experienced. It is also found that in 1891 the rate in Victoria was only 5½ per cent. below that of Sweden under similar age conditions, whereas in 1901 the former was nearly 22 per cent. below the latter. The following are the results:—

BIRTH RATE.

Year.	Births per 1,000 Married Women 15 to 45.		Percentage of Victorian rate below Swedish.
	Actual.	Applying Swedish rates to Victoria.	
1891	302·1	319·8	5·5
1901	227·9	291·2	21·7
Decrease	74·2	28·6	..
„ per cent.	24·6	8·9	..

Prior to 1891, immigration, voluntary and assisted, had practically ceased, and as the bulk of the immigrants belonged to the latter class, they were physically a selected class under the immigration laws, and amongst whom a high birth rate was to be expected. This cessation was probably chiefly responsible for the decline in 1891, and for the larger decline in 1901, when the more prolific women (as a class) were approaching, or had actually passed, the reproductive limit, and the women as a whole were reaching the conditions of a more settled population, with its due proportion of frail and infirm. In brief, the average physique of women now is not equal to that of the earlier years—owing entirely to natural causes, the average in the earlier period being that of a specially selected class, whilst the average of the present is that of nearly a normal population. As further contributing towards the decline from 1891 to 1901, it is pointed out that the conditions obtaining in 1891 were entirely different from those of 1901, the former being a year in a prosperous period, and the latter representing the sixth year of an unprecedented drought, both as regards duration and intensity.

Cessation of immigration chief factor in decline of birth rate.

Birth rates
in Aus-
tralian
States and
New
Zealand.

The following table gives the birth rates, calculated in the ordinary way, per thousand of the population in the Australian States and New Zealand for 1891, and for each of the last five years:—

BIRTH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND:
RETURN FOR 1891 AND THE LAST FIVE YEARS.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1891 ..	33·57	34·50	36·35	33·92	34·85	33·37	34·23	29·01
1900 ..	25·79	27·43	30·19	25·55	30·80	28·16	27·31	25·60
1901 ..	25·78	27·60	28·28	25·09	30·32	28·40	27·05	26·34
1902 ..	25·15	27·17	27·68	24·60	30·09	28·92	26·63	25·89
1903 ..	24·46	25·35	24·62	23·24	30·27	28·47	25·21	26·61
1904 ..	24·65	26·73	27·12	24·70	30·34	29·59	26·30	26·94
Mean of 5 Years	25·17	26·86	27·58	24·64	30·36	28·71	26·50	26·28

During the year 1904, the Australian States and New Zealand, when compared with the previous year, showed an increase in the ordinary birth rate, varying from 10 per cent. in Queensland to less than 1 per cent. in Western Australia and Victoria. This improvement in the birth rate of the Commonwealth is equal to a gain of 4,327 births, as compared with the rate for the preceding year. If to this gain be added the saving in infantile life during 1904, the total gain in the Commonwealth would be about 7,200 children in excess of 1903.

Decline in
the number
of legiti-
mate
births.

According to the average of the last five years, the highest birth rate prevailed in Western Australia and the lowest in South Australia, the latter being but slightly lower than that of Victoria. The comparison of these rates is not a reliable one, but it is useful for certain purposes. As already explained in the case of Victoria, it cannot be relied on as an index of the productiveness of married women, which can be more closely gauged by a comparison of the legitimate births with the number of married women at reproductive ages. Such a comparison is effected in the subjoined return, which shows the results for each Australian State and for New Zealand at the two last census years:—

PROPORTION OF LEGITIMATE BIRTHS PER 1,000 MARRIED WOMEN
UNDER 45 YEARS OF AGE.

State.	Proportion of Legitimate Births per 1,000 Married Women, aged 15 to 45.		Decrease per cent.
	1891.	1901.	
Victoria	302·1	227·9	24·6
New South Wales	298·9	235·6	21·2
Queensland	315·0	251·0	20·3
South Australia	311·1	235·0	24·5
Western Australia	352·8	244·0	31·1
Tasmania	315·9	254·6	19·4
New Zealand	279·1	246·1	11·8

It will be seen from these figures that between 1891 and 1901 there was a pronounced decline in the percentage of legitimate births to married women under 45 years of age in the different States, varying from 31 per cent. in Western Australia, and 24 in Victoria and South Australia, to about 20 in Queensland and Tasmania, and to nearly 12 per cent. in New Zealand. The remarks already made regarding changes in age, constitution, and physique when dealing with the decline in Victoria are equally applicable to other States, except Western Australia, where, although immigrants are still received from the other States, yet they do not belong to the selected classes of former years.

The following is a statement of the birth rates in the principal European countries for the year 1901, also the average birth rates for the 25 years, 1876-1900, arranged in order according to the rates in 1901:—

Birth rates in European countries.

BIRTH RATES IN EUROPEAN COUNTRIES.

Country.	Births per 1,000 of Population.		Decline per cent.
	1901.	1876-1900.	
Hungary	37·8	42·9	12
Austria	36·9	37·8	2
Prussia	36·2	37·7	4
German Empire	35·7	37·4	4½
Spain	34·7	35·9	3
Italy	32·6	36·6	11
Holland	32·3	34·2	6
Denmark	29·9	31·3	4½
Norway	29·8	30·7	3
Scotland	29·5	32·2	8½
Belgium	29·4	30·1	2
Switzerland	29·1	28·9	1 (increase)
England and Wales	28·5	32·3	12
Sweden	26·8	28·7	7
Ireland	22·7	23·8	5
France	22·0	23·7	7

It will be seen that there was a decline in the birth rates for 1901 as compared with the averages of the 25-year period in all the countries named with the exception of Switzerland. The decline was relatively greatest (viz., 12 per cent.) in the case of England and Wales, and of Hungary (where the birth rate is still the highest in Europe, with the exception of Russia), and was also very marked in Italy, with a fall of 11 per cent., in Scotland (8½ per cent.), Sweden (7), France (7), Holland (6), and Ireland (5), whilst the fall was less than 5 per cent. in all the other countries shown. The average rate in the Commonwealth of Australia for the past five years was lower than the rate for 1901 in any of the European countries except Ireland and France; but, as already explained, there are exceptional reasons why the rate in Australia is so abnormally low. By a comparison of the birth and marriage rates in European countries, it is

found that a high birth rate is generally concurrent with a high marriage rate and *vice versa*. A notable exception to this is France, in which a high marriage rate is co-existent with a lower birth rate than in any other European country.

Birth rates
in town and
country.

The following table shows the number of births per 1,000 of the population in the metropolitan, the other urban, and the rural districts, for 1875 and each subsequent fifth year, and the averages of the years 1901-4:—

BIRTH RATES IN METROPOLITAN, OTHER URBAN, AND RURAL DISTRICTS.

Year.	Number per 1,000 of the Population.			
	Metropolitan District.	Other Urban Districts.	Rural Districts.	Victoria.
1875	33·63	38·63	31·54	33·94
1880	31·19	34·21	28·72	30·75
1885	34·94	31·87	28·12	31·33
1890	37·71	34·43	28·93	33·60
1895	29·46	34·03	25·49	28·46
1900	24·54	32·29	24·26	25·79
1901-4	24·29	30·97	23·31	25·01

It will be noticed that in the last four years, as compared with 1890, the birth rate in the metropolitan district fell off by nearly 36 per cent., in the rural districts by 19 per cent., and in the other urban districts by only 10 per cent.

Illegitimate
births and
rates.

The number of illegitimate births registered in Victoria during the year 1904 was 1,707, which gives a proportion of 5·73 to every 100 births registered, which was slightly above the average of the five years ended with 1903. This proportion has been fairly constant during the last twelve years, when it was decidedly higher than at any earlier period within the last 30 years. The proportion in Victoria was much lower than in Queensland and New South Wales, and slightly lower than in Tasmania, but higher than in any other of the Australian States or New Zealand; it was also lower than in Scotland, but much higher than in the other portions of the United Kingdom; it was also lower than in 14 countries on the continent of Europe respecting which particulars are available, in six of which the rates run as high as from 10 to 15 per cent.* The following are the proportions of illegitimate births to every 100 children born in the Australian States and New Zealand, for the five years ended with 1904, and in the United Kingdom for the ten years, 1891-00:—

ILLEGITIMATE BIRTH RATES.

<i>Australasia</i> —		<i>Australasia</i> —	
Victoria	5·7	South Australia	4·2
New South Wales	6·9	<i>United Kingdom</i> —	
Queensland	6·4	Scotland	7·2
Tasmania	5·8	England	4·2
New Zealand	4·5	Ireland	2·6
Western Australia	4·3		

* For particulars, see edition of this work for 1895-8, page 654.

It will readily be supposed that a larger proportion of illegitimacy prevails in Melbourne and suburbs than in any other district of Victoria, and that the proportion in country districts is the smallest of all. During the five years 1900-4, in the metropolitan districts, about 1 birth in 11; in the other urban districts, about 1 in 18; and in the rural districts, only 1 birth in 38 was registered as illegitimate. Of 32 foreign cities, respecting which the information was given in a previous issue of this work, each is burdened with a larger amount of illegitimacy than that prevailing in Melbourne.

Illegitimacy in town and country.

Although the proportion of illegitimate births to the total births, as already stated, has varied so little for several years past, yet the proportion of such births to the number of unmarried women and widows, between the ages of 15 and 45, shows the same decline between 1891 and 1901, as has already been observed in the proportion of legitimate births to married women at similar ages. With the exception of altered age distribution, which in this instance is estimated to account for less than 1¼ per cent. of the fall, the many causes, which have contributed so largely to the decline in the legitimate birth rate, have no doubt operated—but in a major degree—to bring about a reduction in the illegitimate birth rate per 1,000 single women, which will be seen on comparing the rate for 1901 with that of the previous census, 1891, as given in the subjoined statement:—

Fall in illegitimate birth rate.

ILLEGITIMATE BIRTHS PER 1,000 SINGLE WOMEN.

Period.	Single Women Aged 15 to 45.	Illegitimate Births.	Illegitimate Births per 1,000 Single Women.
1891	142,443	2,064	14·49
1901	167,760	1,729	10·31

The proportion of illegitimate births per 1,000 unmarried and widowed women between the ages of 15 and 45, was 14·49 in 1891, and 10·31 in 1901. In England and Wales it was 14·1 in 1880-2, 10·5 in 1890-2, and 8·5 in 1900-2, a reduction, during the two latest census periods, of about 29 per cent. in that of Victoria, and 19 per cent. in that of England and Wales.

Rates in England and Wales and Victoria.

Infantile mortality is perhaps one of the most prominent determinants of the birth rate. A cursory glance at the next table, which shows the ordinary birth rate and the infantile mortality (that is, the percentage of infants dying under one year), is *primâ facie* evidence of the intimate connexion existing between the two events:—

Birth and infantile death rates in various countries.

BIRTH AND INFANTILE DEATH RATES IN VARIOUS COUNTRIES.

Country.	Birth Rate per 1,000 of the Population.	Deaths under 1 year per 100 Births.
South Australia	25·5	10·9
Victoria	25·7	11·0
New Zealand	25·7	8·1
Sweden	26·9	10·0
Commonwealth of Australia	27·1	11·0

BIRTH AND INFANTILE DEATH RATES IN VARIOUS COUNTRIES—*contd.*

Country.	Birth Rate per 1,000 of the Population.	Deaths under 1 year per 100 deaths.
New South Wales	27·4	11·1
Tasmania	28·1	9·6
Switzerland	28·4	19·0
Queensland	28·5	10·4
Great Britain	28·7	15·0
Belgium	28·9	17·0
Japan	29·8	15·2
Denmark	30·0	14·0
Western Australia	30·6	14·0
Italy	33·9	19·0
Holland	32·1	20·0
Prussia	36·5	21·0
Austria	37·2	25·0
Hungary	38·9	25·6
Saxony	39·9	28·3

France and Ireland have been intentionally omitted from this table—the former because the low birth rate is due to the practice of well-known restrictive measures, the latter to the excessive withdrawal of reproductive adults by emigration. Russia is also omitted in consequence of want of reliable figures, but it is generally understood that both the birth rate and infantile mortality are the highest in the civilized world.

The following statement shows the birth rates per 1,000 of the population, and the number surviving their fifth year:—

BIRTH RATES AND SURVIVORS.

Country.	Birth Rate.	Surviving their Fifth Year.
Hungary	39·4	23·6
Austria	37·2	22·8
Prussia	36·5	25·0
Spain	34·8	19·9
Italy	33·9	21·4
Holland	32·1	25·6
Norway	30·3	25·4
Denmark	30·0	22·7
England	29·2	22·2
Belgium	28·9	21·9
Switzerland	28·4	21·2
New South Wales	27·4	23·3
Sweden	26·9	21·1
New Zealand	25·7	22·8
Victoria	25·7	21·7
France	22·0	16·5

During recent years the question of the birth rate and its decline in Australia has received much public attention, culminating in the

appointment of a Royal Commission in New South Wales, but it would not appear that the intimate connexion existing between birth rate and infantile mortality has yet received the consideration which its importance justifies. It has already been pointed out in a previous table that such relationship does exist, and that high birth rates are in normal communities associated with high infantile mortalities, and low birth rates with low mortalities. It will also be observed from the preceding table that the mortality generally in high birth rate countries is such that after five years the numerical superiority of the high birth rates vanishes. Although the infantile mortality in Australia is very low when compared with other communities, yet probably more could be done in the direction of saving infant life—particularly illegitimate children. The abnormally low rates which prevailed during 1904 must not be looked upon as the result of permanent efforts, with that object in view, but rather to the absence of fatal epidemics. As the Commonwealth must in the future depend for its increase of population upon its natural increase, unless steps are taken to promote immigration, it is absolutely necessary that its infantile life must be preserved to its utmost limit, and to this end the Commission made many valuable suggestions, amongst which are:—The distribution of printed instructions *re* infant feeding; that girls should be taught infant feeding at school; that advertisements *re* artificial foods should be subject to regulation and control; the prohibition of preservatives in artificial foods and milk; the Government control of infant and foundling homes.

Doubtless if these and the other suggestions of the Commission are given effect to, the infantile mortality would be brought down to the irreducible minimum; and as the present need of Australia is population, it would be of great economic advantage if measures were taken enforcing the Commission's recommendations.

DEATHS.

The following return shows the number of deaths—males and females—also the quarters in which they were registered and proportion per 1,000 of the population, during the years 1900-4:—

DEATHS IN EACH QUARTER: RETURN FOR FIVE YEARS.

Year.	Total Deaths.	Sex.		Quarter of Registration.				Death Rate per 1,000 of the Population.
		Males.	Females.	March.	June.	September	December.	
1900 ..	15,215	8,627	6,588	4,113	3,393	3,758	3,951	12·74
1901 ..	15,904	9,035	6,869	4,129	3,844	4,120	3,811	13·22
1902 ..	16,177	9,152	7,025	3,886	3,930	4,281	4,080	13·40
1903 ..	15,595	8,626	6,969	4,036	3,994	3,810	3,755	12·90
1904 ..	14,393	7,992	6,401	3,439	3,590	3,992	3,372	11·92
Average	15,457	8,686	6,771	3,921	3,750	3,992	3,794	12·84

Deaths.

The number of deaths during the year 1904 was 14,393—7,992 males and 6,401 females—a result considerably under the average of the last five years, when the total was 15,457—the males 8,686, and the females 6,771. According to the experience of the five years, 1900-4, the quarter of the year ending 30th September is the most fatal, the next in order being the quarter ending 31st March. These positions, however, were not maintained in the year under review, for, although the greatest number of deaths occurred in the September quarter, the next occurred in the June quarter. The death rate for 1904 is the lowest experienced in the history of the State.

Death rates in Australian States and New Zealand.

For purposes of comparison the death rates per 1,000 of the population for each of the Australian States and New Zealand are shown in the following statement, for a period of five years from 1900 to 1904:—

DEATH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND:
RETURN FOR FIVE YEARS.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australian States.	New Zealand.
1900 ..	12·74	11·16	11·72	10·68	12·65	11·02	11·77	9·43
1901 ..	13·22	11·68	11·88	11·22	13·36	10·45	12·17	9·81
1902 ..	13·40	11·95	12·08	11·86	13·63	10·90	12·45	10·50
1903 ..	12·90	11·63	12·38	10·79	12·60	11·86	12·09	10·40
1904 ..	11·92	10·62	10·11	10·22	11·91	11·01	11·01	9·57
Average	12·84	11·41	11·63	10·95	12·83	11·05	11·90	9·94

Although the death rate of Victoria, according to the average of the five years, 1900-4, was higher than in any other State, this result is due, as will be shown later on, to the larger proportion of persons aged 60 years and over, amongst whom the death rate is very high.

A lighter mortality was experienced in each State, excepting Tasmania, during 1904 than in any other year shown above. The death rate for the Commonwealth fell from 12·09 in 1903 to 11·01 during the year under review—a decline of 9 per cent. The saving of life due to the diminished death rate—4,275— and the increase resulting from the improved birth rate—4,327—represent a gain of 8,602 persons to the Commonwealth, as compared with the rates prevailing in the previous year.

Death rates in European countries.

The following were the maximum, minimum, and mean death rates per 1,000 of the population, in the principal European countries

during the five years ended with 1900, also the average of the 25 years ended with the same year. It is remarkable that, with the exception of Sweden, Austria and Hungary, Spain and Italy, the minimum rate during the five-year period almost invariably occurred in 1896, and the maximum in 1900. In all, except Ireland, there has been a noticeable decrease, and in Austria, Hungary, Switzerland, Germany (including Prussia), Holland, and Italy, a considerable decrease in the recent five-year period, as compared with the average of 25 years. The countries are arranged in order according to the average rate of mortality in the more recent period:—

DEATH RATES IN EUROPEAN COUNTRIES.

Country.	Five Years, 1896-1900.			Average of 25 Years.
	Max.	Min.	Mean.	
1. Norway	15·8	15·2	15·7	16·6
2. Sweden	17·7	15·1	16·1	17·1
3. Denmark	17·3	15·5	16·4	18·3
4. Holland	17·8	16·9	17·2	20·3
5. England and Wales	18·2	17·0	17·7	19·1
6. United Kingdom ..	18·4	17·0	17·8	19·0
7. Scotland	18·5	16·6	17·9	19·2
8. Ireland	19·6	16·6	18·1	18·2
9. Belgium	19·3	17·2	18·1	20·1
10. Switzerland	19·3	17·6	18·1	20·6
11. France	21·9	19·5	20·7	21·9
12. Prussia	21·8	20·0	21·0	23·7
13. Germany	22·1	20·5	21·2	24·2
14. Italy	24·0	21·8	22·9	26·4
15. Austria	26·4	24·9	25·6	28·8
16. Hungary	28·9	26·9	27·9	32·3
17. Spain	29·9	28·6	29·2	30·6

Comparing this statement with a previous one, it will be noticed that the death-rate of Victoria or of Western Australia—the highest in Australasia—is considerably lower than that in Norway—the lowest in Europe. And although, owing to the fact that emigration from the old to the newer countries tends to raise the death rate in the former, but to lower it in the latter, the death rates, calculated on the total population, would naturally be on a higher level in Europe than in Australasia, yet it may be safely affirmed that the true rate of mortality, allowing for differences in the age constitution of the people, is lighter in Australasia than in any State in Europe, except, perhaps, Norway, Sweden, and Denmark.

Death rates of European and Australasian States compared.

In every country the death rate is higher in towns than it is in the country districts. This circumstance, although no doubt partly attributable to the superior healthfulness and immunity from contagion

Death rates in town and country.

prevailing in the latter, is also to a great extent due to the fact that hospitals and charitable institutions, which are frequented by patients from the country as well as by town residents, are generally situated in the towns; and further, that outside of charitable institutions many persons die who have come from the country on the approach of a serious illness for the sake of the superior nursing and medical attendance to be obtained in town. In the ten years ended with 1890, the rate in the metropolitan district was higher than in the other urban districts, but in more recent years was much lower, in consequence of a marked decrease in the rate in the former district; whilst in the rural districts the rate has remained fairly constant, at between 8 and 9 per 1,000, or much less than half the rate in the extra-metropolitan towns. The following are the figures for the means for the periods, 1881-90 and 1891-1900, and the years 1901 to 1904:—

DEATH RATES IN METROPOLITAN, OTHER URBAN, AND
RURAL DISTRICTS.

Period.	Metropolitan District.	Other Urban Districts.	Rural Districts.
1881-90	20·65	19·90	8·90
1891-1900	16·25	21·17	8·98
1901	15·09	19·54	8·73
1902	14·93	20·86	8·77
1903	14·37	20·17	8·41
1904	12·99	18·71	8·02

Proportion of deaths in general hospitals, 1900-4.

In Victoria during the past five years one in every seven deaths occurred in general hospitals, and in Melbourne and suburbs during the same period one in every four took place in some public institution.

Unreliability of ordinary death rate.

The misleading results arrived at by a comparison of the ordinary death rates of different countries, or of the same country at different periods, unless the age distribution is identical, have been pointed out in former editions of this work. This applies more especially to such a comparison of newly-settled communities—such as the Australian States—with one another, and with the old-established countries of (say) Europe. In the former the population is, on the average, younger than in the older countries, and is, moreover, constantly being strengthened by immigrants at the younger adult ages, at which the mortality is low; whereas, in the latter, not only is the age distribution more constant from year to year, but there is relatively a much larger proportion of elderly people, amongst whom the death rate is very high, concurrent with a smaller proportion of the younger and middle-aged adults, at the most vigorous period of life. Some idea of the differences of age distribution at present existing between European countries and the Australian States (as a whole) will be obtained by the following comparison of the proportions of

the population living at various age groups in Sweden—as representative of the former—and in Australia:—

PERCENTAGE OF POPULATION IN AGE GROUPS, SWEDEN AND AUSTRALIA.

Age Group. (Years.)	Percentage of Population Living at each Age Group in—	
	Sweden in 1890.	Australia in 1901.
Under 1 year	2·55	2·47
1 to 5	9·25	9·05
5 to 15	21·10	23·60
15 to 20	9·50	10·04
20 to 25	8·20	9·36
25 to 30	6·70	8·50
30 to 35	6·00	7·79
35 to 40	6·00	7·25
40 to 45	5·60	5·88
45 to 55	9·40	7·29
55 to 65*	7·70	4·76
65 to 75	5·40	3·01
75 to 85	2·34	·89
85 and over	·26	·11
Total	100·00	100·00

It will be observed that the most striking differences occur between the ages of 20 and 40—the migratory period—under which ranged 33 per cent. of the population in Australia, as against only 27 per cent. in Sweden; and at ages over 45, at which the preponderance was in favour of Sweden, where there were 25 per cent. over that age as against only 16 in Australia.

In accordance with the decision of the Conference of Statisticians, held at Hobart in 1902, that “for computing the ‘Index of Mortality’ the table of age groups adopted by the Congress of International Statistics be followed, viz.:—Under 1 year, 1 to 20 years, 20 to 40 years, 40 to 60 years, and 60 years and over, and that the population of Sweden, as enumerated at the last census at those ages, be taken as a standard,” the method referred to has been adopted in Victoria. It consists of applying the ascertained death rates in the age group specified to a population whose age distribution corresponds with that of Sweden in 1890.

Index of
mortality.

* At age 55 to 60 the proportion in Sweden was 4·20, and in Australia 2·54 per cent.

The following was the result for Victoria in 1901, when the populations within the several age groups were accurately known, and the incidental death rates could be established:—

“INDEX OF MORTALITY,” VICTORIA, 1901.

Age.	Standard Population, per 1,000. (Sweden, 1890.)	Death Rate per 1,000 at each Age in Victoria 1901.	Index of Mortality for Victoria, 1901.
0—1	25·5	112·55	2·88
1—20	398·0	4·19	1·67
20—40	269·6	6·21	1·68
40—60	192·3	13·19	2·54
60 and over	114·6	59·81	6·86
Total	1,000·0	13·22	15·63

Proportions of population at five age groups in Australian States and New Zealand.

In order to compare with the proportion in Sweden, as shown in the second column of the previous table, as well as to afford a basis for the computation of the “Index of Mortality,” the proportions per 10,000 living at the same five age groups in each Australian State and New Zealand, for the year 1901, are given in the following table for both sexes, and also for males. The great preponderance of population at the age groups between 1 and 40, and the large and increasing deficiency at age groups over 40, are the characteristic features of the Australian populations when compared with the Swedish. Amongst the Australian States, Victoria is conspicuous in having by far the largest proportion of persons aged 60 and over—an age group which has an important influence in determining the death rate. On the other hand, Victoria has, with one exception, the lowest proportion of both sexes between 1 and 20, and also, with one exception, the lowest proportion of males between 20 and 40—at which age groups the death rate is lightest:—

PROPORTIONS LIVING AT FIVE AGE GROUPS IN AUSTRALIAN STATES AND NEW ZEALAND, 1901.

State.	Proportion per 10,000 of Total Population Living at the Age Period—					Total.
	Under 1 Year.	1 to 20.	20 to 40.	40 to 60.	60 and over.	
Both Sexes.						
Victoria	236	4,163	3,272	1,531	798	10,000
New South Wales	253	4,382	3,210	1,597	558	10,000
Queensland	260	4,348	3,309	1,601	482	10,000
South Australia	227	4,445	3,054	1,641	633	10,000
Western Australia	273	3,324	4,548	1,529	326	10,000
Tasmania	267	4,519	3,118	1,488	608	10,000
Australia	247	4,269	3,290	1,571	623	10,000
New Zealand	238	4,195	3,295	1,596	676	10,000

PROPORTIONS LIVING AT FIVE AGE GROUPS IN-AUSTRALIAN STATES AND NEW ZEALAND, 1901—*continued.*

State.	Proportion per 10,000 of Total Population Living at the Age Period—					Total.
	Under 1 year.	1 to 20.	20 to 40.	40 to 60.	60 and over.	
Males only.						
Victoria	120	2,093	1,585	795	434	5,027
New South Wales	127	2,210	1,664	915	324	5,240
Queensland	132	2,201	1,910	1,016	302	5,561
South Australia	116	2,234	1,527	897	312	5,086
Western Australia	140	1,704	2,994	1,073	219	6,130
Tasmania	135	2,297	1,639	802	323	5,196
Australia	125	2,154	1,723	890	350	5,242
New Zealand	124	2,117	1,692	906	415	5,254

The "Index of Mortality" has been computed for each Australian State and New Zealand for the year 1901, with the following results, which is contrasted with the death rate per 1,000 of the total population for the same year. The death rates for 1901 differ but slightly from the average of the 3 years, 1900-2:—

Index of mortality in Australian States, 1901.

"INDEX OF MORTALITY" IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1901.

State.	Ordinary Death Rate.	"Index of Mortality."
Victoria	13·22	15·63
New South Wales	11·68	15·33
Queensland	11·88	15·24
South Australia	11·22	14·30
Western Australia	13·36	17·89
Tasmania	10·45	13·82
Australia	12·17	15·41
New Zealand	9·81	12·42

Although the order of the States is but slightly affected by the new method, Western Australia is shown to have really a far higher rate of mortality than that indicated by the ordinary method; but Victoria only a slightly higher rate than in the two other principal Australian States—New South Wales and Queensland—and probably even this small difference in favour of the latter States would dis-

appear if the old-age group 60 and upwards were subdivided. New Zealand enjoys the enviable position of supremacy—its death rate not only being the lowest Australasian, but probably the lowest of any country in the world for which statistics are available.

“Adjusted”
death rates,
1871 to
1902.

The “Index of Mortality” has not yet been computed for earlier years, or for other countries, except Sweden (where it was, in 1900, 1672); but an equally fair comparison is available for Victoria, for three successive decades, and for the triennial period 1900-2, by means of the “Adjusted”* death rates, already alluded to, and these are embodied in the following table for each sex, together with the ordinary death rates, based on the total population of either sex, irrespective of age variations:—

ADJUSTED DEATH RATES IN VICTORIA, 1871-1902.

Period.	Ordinary Death Rate.†		Adjusted Death Rate.‡	
	Males.	Females.	Males.	Females.
1871 to 1880 ..	16·45	14·15	16·48	14·64
1881 to 1890 ..	16·65	13·56	15·97	13·85
1891 to 1900 ..	15·47	12·36	14·14	12·04
1900 to 1902 ..	14·80	11·43	13·05	10·75

Diminishing
rate of
mortality
in Victoria.

The “adjusted” rates indicate that there has been a considerable falling off in the true rates of mortality at each successive decade, more especially the last, at which the rate was about $2\frac{1}{2}$ per 1,000 lower than in the first decade, and over $1\frac{3}{4}$ lower than in the second one. A further fall occurred during the three years, 1900-1902, when the mortality was exceptionally low, being more than 1 per 1,000 below that of the ten years, 1891-00.

Proportion
of deaths at
each age to
population.

The following are the death rates at various age groups in Victoria, according to the average of the ten years, 1891-00, and of the three years, 1900-2. The population on which the rates in the last column but one are based is the mean of the populations enumerated at the censuses of 1891 and 1901; and the population, according

* For the method of calculating the “Adjusted death rate” see *Victorian Year-Book*, 1892, Vol. I., paragraph 656 *et seq.*

† Per 1,000 of the actual population.

‡ Per 1,000 of the standard population. See *Year-Book*, 1892, paragraph 656.

to the census of 1901, taken at the end of March, was used for computing the rates in the last column:—

DEATH RATES AT VARIOUS AGE GROUPS IN VICTORIA, 1891-1900 AND 1900-2.

Ages.	Deaths.		Deaths per 1,000 Living at each Age.	
	Average of Ten Years, 1891-1900.	Average of Three Years, 1900-2.	Average of Ten Years, 1891-1900.	Average of Three Years, 1900-2.
<i>Males—</i>				
Under 5 years ..	2,794	2,282	39·29	34·07
5-10	231	195	3·36	2·70
10-15	139	142	2·20	2·10
15-20	191	184	3·28	3·11
20-25	274	249	4·79	4·90
25-35	672	579	6·60	6·25
35-45	633	742	9·03	8·81
45-55	671	655	15·32	15·34
55-65	1,200	910	32·90	29·86
65-75	1,460	1,724	62·99	61·57
75 and upwards ..	1,032	1,276	145·05	141·59
All ages ..	9,297	8,938	15·47	14·80
<i>Females—</i>				
Under 5 years ..	2,367	1,900	34·09	29·10
5-10	209	186	3·12	2·63
10-15	128	128	2·06	1·92
15-20	202	175	3·43	2·92
20-25	289	237	4·81	4·10
25-35	676	608	6·89	6·00
35-45	543	642	8·68	8·32
45-55	476	454	12·12	11·48
55-65	693	635	23·64	21·49
65-75	785	994	45·87	45·07
75 and upwards ..	673	868	124·33	122·77
All ages ..	7,041	6,827	12·36	11·43

It will be observed that the rate of mortality in the three years, 1900-1902, was lower at every age group in the case of females, and at all age groups except two—20 to 25, and 45 to 55—in the case of males. Low mortality in 1900-2.

A still greater improvement is noticeable on comparing the rates for the decade, 1891-00, with those for the previous one;* for in the case of males, there was a much diminished rate of mortality at every age group below 55, and only a slight increase in the groups Decreased mortality at various ages, 1881-90 to 1891-1900.

* See *Victorian Year-Book*, 1895-8, page 685.

over that age, and, in the case of females, a considerable decrease at every age group except 55-65.

Deaths of
sexagen-
arians,
1900-2.

The proportion of deaths per 1,000 persons 60 years and upwards in the Commonwealth, is of special interest now, owing to its bearing on the question of a Commonwealth old-age pension, at present under consideration, and the following table has been constructed, showing, in age groups, such proportions for the Australian States and New Zealand, on the average of the years 1900-2:—

DEATH RATES OF SEXAGENARIANS.

Ages at Death.	Deaths per 1,000 of the Population in Age Groups in—							
	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Common- wealth.	New Zealand.
60 to 65	30·1	29·8	29·8	25·3	32·1	25·2	29·3	24·3
65 to 70	43·9	45·4	47·7	41·1	51·4	41·0	44·5	39·9
70 to 75	69·5	71·7	72·1	58·9	67·8	66·2	68·9	64·4
75 to 80	104·5	105·8	124·4	88·8	127·4	106·0	101·8	97·8
80 & over	181·7	195·2		162·4	186·8	199·1	185·0	182·0
Total ..	62·2	58·9	52·1	54·5	56·6	65·1	58·4	49·2

The experience of the three years, 1900-2, shows that of every 1,000 persons aged 60 years and upwards in the Commonwealth, 58·4 died during the year, a lower rate than that of Tasmania, Victoria, or of New South Wales, but higher than that of the other States and New Zealand, the proportion of deaths for each State and New Zealand being:—Victoria, 62·2; New South Wales, 58·9; Queensland, 52·1; South Australia, 54·5; Western Australia, 56·6; Tasmania, 65·1; and New Zealand, 49·2. As the average age of persons over 60 years tends to increase in young countries, it may be expected that these rates will become higher, until the normal, or settled conditions of older countries are reached.

Infantile
mortality
in 1904 and
previous
years.

During 1904 a low infantile death rate was recorded for Victoria. The proportion—779 deaths to every 100 births—was the lowest experienced in the history of the State. The total number under 1 year who died was 2,319, and, as the births for the same period numbered 29,763, it follows that 1 infant died to every 12·83 births. In the ten years ended with 1900, the proportion of infants dying was 11·11, and in 1903, 10·64 to every 100 births. The improvement shown in 1904, as compared with 1903, was nearly 27 per cent., which was equivalent to saving the lives of 8·48 more infants than in the preceding year.

The following table shows the infantile mortality rates in Melbourne and suburbs, and the remainder of the State, and the difference in favour of the latter during the years 1873-1904:—

Infantile death rates in Melbourne and country.

INFANTILE DEATH RATES IN MELBOURNE AND SUBURBS, AND THE REMAINDER OF THE STATE, 1873-1904.

Period.	Melbourne and Suburbs—Deaths per 100 Births.	Remainder of State—Deaths per 100 Births.	Excess per cent. of Melbourne over Country Rate.
1873-80	16·85	10·16	66
1881-90	17·14	9·50	80
1891-1900	13·36	9·60	39
1901	12·41	8·89	39
1902	12·74	9·55	33
1903	12·43	9·42	32
1904	9·27	6·81	36

It will be observed from the above figures that the mortality amongst infants is much heavier in the metropolitan area than in the remainder of the State. This was more marked in earlier than later years. During the period, 1873-80, the rate prevailing in the metropolitan area was 66 per cent. greater than in the rest of Victoria. In 1881-90 it was 80, and in 1891-1900 it was 39 per cent., whilst in the years 1903 and 1904 it fell to 32 and 36 per cent. respectively, showing that the conditions surrounding infant life in Melbourne are steadily improving, and are approaching those of rural life.

The mortality of illegitimate infants under 1 year of age, during the years 1901, 1903, and 1904, was nearly three times as great as that prevailing amongst children legitimately born. On the average of the three years under review, of every 100 illegitimate children born, 24·3 died within a year, as compared with only 8·7 deaths to every 100 legitimate births. The mortality rates for 1904, for illegitimate and legitimate children fell to 20 and 7 per cent. respectively.

Infantile mortality of illegitimates.

In classifying the deaths of infants, those are distinguished which occur at under the age of one month, at from 1 to 3 months, at from 3 to 6 months, and at from 6 to 12 months. The annual numbers of these during the ten years ended with 1900, and the period, 1900 to 1904, are shown in the following table, together with the proportion of deaths at each of those periods of age and the number at each such period to every 100 births. It will be noticed that in the last five years the mortality of infants at each age period,

Deaths of infants at different ages.

excepting girls under 1 month, was below the average of the ten years ended with 1900:—

DEATHS OF INFANTS AT VARIOUS AGES, 1891-1900 AND 1900-4.

Ages.	Average Annual Deaths at under 1 year of Age.					
	Ten Years—1891-1900.			Five Years—1900-4.		
	Number.	Percentage at each Age.	Number per 100 Births.	Number.	Percentage at each Age.	Number per 100 Births.
<i>Boys.</i>						
Under 1 month	650	31·7	3·79	586	35·6	3·76
1 to 3 months	355	17·3	2·07	298	18·1	1·91
3 to 6 „	445	21·7	2·59	344	20·9	2·21
6 to 12 „	600	29·3	3·50	416	25·4	2·69
Total ..	2,050	100·0	11·95	1,644	100·0	10·57
<i>Girls.</i>						
Under 1 month	488	28·7	2·98	459	34·4	3·11
1 to 3 months	301	17·7	1·84	214	16·0	1·44
3 to 6 „	385	22·6	2·35	292	21·8	1·97
6 to 12 „	528	31·0	3·23	371	27·8	2·52
Total ..	1,702	100·0	10·40	1,336	100·0	9·04

More deaths of male than female infants at all ages.

During both periods referred to in the table, the mortality of male infants in proportion to the number born exceeded that of female infants at each of the age periods—more especially in the first month of life, when the excess was about one-fourth. During the period of ten years, the births of male infants were in the proportion of about 105 to every 100 female infants; but as the numbers shown above indicate a proportion of 120½ deaths of the former to 100 of the latter, the proportion alive at the end of the first year is reduced to 103 males to every 100 females. These proportions remained undisturbed during the five years period 1900-4.

Periods at which infants die.

In the same period of ten years, nearly a third of the male and nearly two-sevenths of the female infants who died before they were a year old died in the first month after birth; over a sixth of both males and females in the next two months; between a fourth and a fifth of both males and females in the next three months; and about three-tenths in the next six months.

Infantile mortality in Victoria, England, and New South Wales.

Of infants of both sexes who died under 12 months, 47·8 were under 3 months, 22·1 were from 3 to 6 months, and 30·1 per cent. from 6 to 12 months. In England and Wales, for the same period, the percentages were—under 3 months, 48·4; 3 to 6 months, 20·9; 6 to 12 months, 30·7. In New South Wales the percentages were 50·3, 22·6, and 27·1 respectively.

According to the experience of the ten years 1891-1900, it appears that of every 20,000 newly-born boys and girls in equal numbers, 379 of the former and 298 of the latter may be expected to die before they are a month old; 207 more boys and 184 more girls may be expected to die between one and three months of age; 259 more boys and 235 more girls between three and six months; 350 more boys and 323 more girls between six and twelve months. At the end of a year it is probable that 1,195 of the boys and 1,040 of the girls will have died, and 8,805 of the former and 8,960 of the latter, or 17,765 of mixed sexes, will be still living. In the previous ten years, the proportion surviving the first year was 8,652 males and 8,816 females. Hence there has been an improvement in the rate of infantile mortality in the last decade, as compared with the previous one, which has resulted in the saving of 148 more lives in every 10,000 infants of both sexes.

The following table shows the proportion of deaths of infants under one year to the total births in each Australian State and in New Zealand for each of the last five years, and the average for the ten years ended with 1900:—

INFANTILE MORTALITY IN AUSTRALASIA.

Year.	Deaths under 1 Year per 100 Births.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand
1891-1900 ..	11·11	11·22	10·34	10·54	14·48	9·58	8·38
1900 ..	9·53	10·32	9·84	9·93	12·61	7·99	7·51
1901 ..	10·29	10·37	10·19	10·01	12·89	8·90	7·14
1902 ..	10·86	10·97	10·02	9·40	14·20	7·91	8·29
1903 ..	10·64	11·63	11·99	9·71	14·12	11·08	8·11
1904 ..	7·79	8·24	..	7·05	11·30	9·07	7·10
Mean—5 years ..	9·82	10·31	..	9·22	13·02	8·99	7·63

It will be observed that the average rate for the ten years, 1891-1900, was far higher in Western Australia, and much lower in New Zealand and Tasmania, than in any other Australasian State. During 1904 the infantile mortality in the Commonwealth and New Zealand—with the exception of Tasmania—was lower than has hitherto been experienced. The rates in Western Australia and Tasmania were higher than in the other States, the lowest being in South Australia and New Zealand. Compared with the preceding year the decline was very marked in all the States.

Of all the countries respecting which information is available, infantile mortality is highest in Russia, Austria, and some of the German States—where at least one out of every four infants born die within twelve months—whilst it is lower in Tasmania and New

Zealand than in any of the European countries, and lower in all the Australian States than in any except Sweden and Ireland. The following table shows the various rates:—

INFANTILE MORTALITY IN VARIOUS COUNTRIES.

	Deaths under 1 Year of Age to 100 Births.		Deaths under 1 Year of Age to 100 Births.		Deaths under 1 Year of Age to 100 Births.
Russia ...	30·0	Italy ...	19·0	Victoria ...	11·1
Bavaria ...	27·0	Belgium ...	17·0	South Australia ...	10·5
Austria ...	25·0	France ...	17·0	Queensland ...	10·3
Wurtemberg ...	25·0	Great Britain ...	15·0	Sweden ...	10·0
Prussia ...	21·0	Greece ...	15·0	Ireland ...	10·0
Holland ...	20·0	Western Australia ...	14·5	Tasmania ...	9·6
Roumania ...	20·0	Denmark ...	14·0	New Zealand ...	8·4
Switzerland ...	19·0	New South Wales ...	11·2		

NOTE.—The information respecting all the countries except the Australasian States is for the year 1895 and was obtained from *Mulhall* (page 685). That respecting the Australasian States is based on the average of the ten years ended with 1900.

Deaths of
children
under 5.

In the year 1904 deaths of male children under 5 years of age numbered 1,681, and deaths of female children under that age numbered 1,373—the former being in the proportion of about 21 per cent., and the latter of about 21·5 per cent., to the total number of deaths at all ages. These proportions are much below the average of former years. Comparing the averages of the last three decades, a marked falling off took place, from period to period, in the mortality of children relatively to that of persons of all ages, and the following table shows the annual number of such deaths at each year of age, and their proportion to the deaths at all ages, in each of the last four years and during the three decennial periods ended with 1880, 1890, and 1900:—

MORTALITY OF CHILDREN UNDER FIVE YEARS.

Period.	Years of Age at Death.					Total under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion Per 100 Deaths at all Ages.
Males.							
1871-80	1,783	508	206	148	119	2,764	39·41
1881-90	2,158	464	161	114	92	2,989	34·28
1891-1900	2,050	432	143	93	76	2,794	30·05
1901	1,788	317	90	77	58	2,330	25·79
1902	1,793	345	106	67	37	2,348	25·65
1903	1,694	271	100	76	47	2,188	25·36
1904	1,299	192	85	55	50	1,681	21·03
Females.							
1871-1880	1,482	482	198	139	106	2,407	46·06
1881-1890	1,805	423	151	105	84	2,568	39·61
1891-1900	1,702	385	129	82	68	2,366	33·61
1901	1,404	308	100	61	48	1,921	28·11
1902	1,515	285	110	52	51	2,013	28·65
1903	1,452	267	103	67	51	1,940	27·84
1904	1,020	169	79	49	56	1,373	21·45

The average number of male and female children at each year of age under 5 living, during the period of ten years ended with 1900, is compared in the next table with the average number of deaths of children of the same sexes at those ages which occurred annually during that period:—

Number of children under 5 and their deaths.

DEATHS OF CHILDREN UNDER FIVE IN PROPORTION TO POPULATION.

Age last Birth-day.	Males.				Females.			
	Mean Number Living, 1891 and 1901.	Annual Deaths, 1891 to 1900.		Deaths per 1,000 Children Living.	Mean Number Living, 1891 and 1901.	Annual Deaths, 1891 to 1900.		Deaths per 1,000 Children Living.
		Number.	Per-centage.			Number.	Per-centage.	
0	15,516	2,050	73·38	132·12	15,089	1,702	71·94	112·80
1	14,124	432	15·46	30·59	13,783	385	16·27	27·94
2	13,981	143	5·11	10·23	13,428	129	5·45	9·61
3	13,780	93	3·33	6·75	13,667	82	3·47	6·00
4	13,698	76	2·72	5·55	13,437	68	2·87	5·06
Total	71,099	2,794	100·00	39·29	69,404	2,366	100·00	34·09

Of every 1,000 boys under 1 year of age, 132, and of every 1,000 girls under 1 year of age, 113, died in the decade under notice; the corresponding proportions for the previous ten years being 152 and 130 respectively. These proportions are naturally higher than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 120 deaths of male infants and 104 deaths of female infants to every 1,000 births of infants of those sexes respectively during the recent decade, and 135 and 118 respectively during the previous one.

Proportion of infants dying annually.

In proportion to their respective numbers in the population, more boys than girls died at every year of age, the difference per 1,000 living being as much as 19 at under 1 year, but only about 2·3 at from 1 to 2, and less than 1 at subsequent ages.

More boys died than girls.

According to the figures, deaths of boys under 1 year of age furnish a larger proportion to the total deaths of boys under 5 than deaths of girls under 1 do to the total deaths of girls under 5, but the reverse is the case at each of the years of age after the first.

Boys and girls dying under 1 year.

Of the whole number of children who died before they attained the age of 5, nearly three-fourths, viz., 73 per cent. of the boys, and 72 per cent. of the girls, were under 1 year of age; less than a sixth of the boys and about a sixth of the girls were between 1 and 2; about 1 in 19 of the boys and about 1 in 18 of the girls were between 2 and 3; 1 in 33 of the boys and 1 in 28 of the girls were between 3 and 4; 1 in 37 of the boys and 1 in 35 of the girls were between 4 and 5.

Proportion of deaths of children at each age.

It results from actuarial calculations, based upon the figures for the decade 1891-00 in the last table, that of every 20,000 boys and girls in equal numbers born in Victoria, 1,195 boys and 1,040 girls

Probable mortality of children under 5 years.

may be expected to die before they complete a year of life, 265 more boys and 247 more girls before they complete 2 years, 81 more boys and 84 more girls before they complete 3 years, 63 more boys and 52 more girls before they complete 4 years, and 47 more boys and 43 more girls before they complete 5 years. At the end of that period it is probable that 1,651 of the boys and 1,466 of the girls will have died; and 8,349 of the boys and 8,534 of the girls will be still living. The average result for both sexes is 8,441 per 10,000, which is more favorable than that deduced from the mortality of either of the two previous decades 1881-90, and 1871-80, which showed the number of survivors at the end of the first five years of life to be 8,211 and 8,103 respectively.

Tendency of the sexes towards equality in the first 5 years after birth.

Out of every 10,000 infants born in Victoria, there will on the average be 5,120 boys and 4,880 girls—being in the ratio of 105 of the former to every 100 of the latter. These, according to the results just arrived at, will be reduced at the end of 5 years to 4,275 boys and 4,165 girls—or in the ratio of 103 of the former to every 100 of the latter. Thus, one-half of the excess of males over females at birth is neutralized in the first two years.

Survivors at age 5 out of every 1,000 born.

The number of survivors at the age of 5 out of every 1,000 children born has also been computed for New South Wales and New Zealand, and the results are compared with those given in *Mulhall's Dictionary of Statistics* for several European countries, as follow. It will be noticed that a larger number of infants survive the first five years in New Zealand, New South Wales, and Victoria than in any European country:—

CHILDREN SURVIVING THEIR FIFTH YEAR IN VARIOUS COUNTRIES.

	No. of Survivors.		No. of Survivors
New Zealand	889	Denmark	755
New South Wales ..	850	France	751
Victoria	844	Switzerland ..	748
Norway	838	Prussia	684
Ireland	837	Italy	632
Sweden	783	Austria	614
Scotland	780	Hungary	598
England and Wales ..	762	Spain	571
Belgium	756		

Connexion between infantile mortality and birth rate.

It is remarkable that those countries (with the exception of France) in which the greatest infantile mortality occurs are those which possess a high birth rate, and on the contrary those countries which have a low birth rate have also the lightest mortality. It is evident, therefore, that there is an intimate association between the birth rate and the infantile mortality, and in view of the importance at present attaching to the subject of the declining birth rate, both by medical men and economists, the figures shown above should prove of some interest. So great indeed is the mortality per 1,000 births in the high birth rate countries that the ultimate gain to the population of those countries at the expiration of five years is in some cases below that of the low birth rate countries, and it is highly probable that could the mortality have been traced for a year or two beyond that period, it would be found that the supremacy rests with the low

birth rate countries. The following statement shows the birth rate per 1,000 of the population, and the number surviving their fifth year similarly estimated:—

BIRTH RATES AND SURVIVORS IN VARIOUS COUNTRIES.

Country.	Birth rate.	Surviving age 5.
Hungary	39·4	23·6
Austria	37·2	22·8
Prussia	36·5	25·0
Spain	34·8	19·9
Italy	33·9	21·4
Holland	32·1	25·6
Norway	30·3	25·4
Denmark	30·0	22·7
England	29·2	22·2
Belgium	28·9	21·9
Switzerland	28·4	21·2
New South Wales	27·4	23·3
Sweden	26·9	21·1
New Zealand	25·7	22·8
Victoria	25·7	21·7
France	22·0	16·5

Thus it will be seen that the superiority of the birth rate of European States, so far as population is concerned, has for the most part disappeared at the end of five years.

In connexion with this subject generally—the association between birth rate and infantile mortality—Mr. F. S. Crum, the assistant statistician of the Prudential Insurance Company of New York, who has conducted investigations into and written upon it for some years past, thus expresses himself:—“In my investigation of the subject I found that the general tendency of the birth rate of Massachusetts was downward, though the rate fluctuated considerably, and in a general way in times of prosperity the rate was higher than in times of commercial depression, crisis, &c. The more children who died before attaining age 1, the more children were born, not only in an equal proportion, but greater, and the lower the infant mortality, the lower was the fecundity of women. In a general way, from my investigation, it seemed that foresight and prudence exercised a more powerful influence in restricting fecundity than in reducing infant mortality. I found that a higher infant mortality was generally coincident with a higher birth rate. It is undoubtedly true that a high infant mortality affects the birth rate, the tendency being to increase the number of births. It is only natural that this should be the case. The death of a child before it has reached one year not only shortens the interval between child-bearing, but leaves a vacancy to be filled by another birth. I believe that in any consideration of birth rates the greatest possible care should be taken to examine and duly weigh all the data which may influence the movement of the rate, and if

this is not done the wildest possible conclusions are likely to be derived from a narrow view of the subject, when if all the facts were taken into account a very reasonable and more just explanation of the phenomenon of a declining birth rate would be found. In this country it seems to be the general opinion of those best qualified to judge that there has been a decline in the number of births in proportion to the population contributing to the same in all or most of the more settled portions of the country. Here the conditions, however, are extremely complex, because of the heavy immigration, and the inter-mixture of native and foreign elements. The average age at marriage in such communities as we have the data for seems to be increasing, and this of itself would account for a part of the decline in the birth-rate."

Deaths in
childbed.

The death rate of women in childbed is usually ascertained by comparing the number of deaths of parturient women with the total number of births. Such deaths are classified in two ways. If the death is supposed to occur merely from the consequences of child-bearing without specific disease, it is set down under the head of childbirth, but if it should arise from puerperal fever or puerperal septicaemia it is placed under puerperal fever. The proportion of deaths of child-bearing women has fallen decade by decade from 64 per 10,000 in 1871-80 to 56 in 1891-00. In the years 1901 and 1902, however, the rate was as high as in the decade 1871-80. This rise was no doubt partly attributable to the increased average age of mothers, previously referred to. The proportions which prevailed in the last four years, and the averages of previous periods back to 1864, are shown in the following table:—

DEATHS OF MOTHERS TO EVERY 10,000 CHILDREN BORN ALIVE.

Period.	The Number of Women who Died Annually of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Child Birth.	Puerperal Fever.	Total.	
1864-70 ..	108	20	128	49·06
1871-1880 ..	127	46	173	64·38
1881-1890 ..	121	64	185	59·19
1891-1900 ..	117	66	183	56·01
1901 ..	130	71	201	64·82
1902 ..	131	68	199	65·32
1903 ..	136	53	189	63·92
1904 ..	113	46	159	53·42·

Deaths in
childbed
from septic
diseases.

The proportion per 1,000 births of deaths in childbirth from septic diseases during the four years 1901-4 was 1'97. In England and Wales for 1903 the proportion was 1'67. These rates are considerably higher than those obtaining in the out-door departments of the large maternity hospitals in London, where, according to Dr. H. O. Cowen, in his paper on "Puerperal Sepsis," in the *Intercolonial*

Medical Journal for August, 1904, the results of the Queen Charlotte and the British Lying-in Hospitals show that out of 34,628 outdoor births attended by trained and skilled midwives attached to these institutions there were only six deaths, or the very small proportion of less than two deaths to every 10,000 births—one-tenth of the Victorian mortality rate from the same cause.

Prior to 1904, deaths from appendicitis were not separately shown, having been included under the heading of "ulceration of intestines." Particulars relating to this disease are therefore now given for the first time for Victoria, and these show that during the past year 86 deaths—58 of males and 28 of females—resulted from this cause. The greatest mortality for both sexes occurred between the ages of 10 and 35 years. The proportion per cent. at the various age groups were as follow:—1 per cent. under 5 years of age, 9 between 5 and 10, 32 between 10 and 20, 27 between 20 and 30, 12 between 30 and 40, 6 from 40 to 50, and 13 per cent. distributed over the group 50 years and upwards. During the year 364 cases of appendicitis were treated in the general hospitals throughout the State, and of this number 32 ended fatally—a proportion of about 1 death in every 12 cases.

Deaths from
appendicitis,
1904.

GENERAL TABLES OF MORTALITY.

The following table shows the death rates of males and females during each year since 1860:—

MALE AND FEMALE DEATH RATES PER 1,000 OF EITHER SEX IN VICTORIA FOR EACH YEAR, 1861-1904.

Year.	Death Rate per 1,000 of each Sex.		Year.	Death Rate per 1,000 of each Sex.	
	Males.	Females.		Males.	Females.
1861	18·84	20·47	1883	15·52	12·95
1862	18·28	18·56	1884	15·49	13·18
1863	17·34	16·25	1885	16·47	13·39
1864	15·52	14·67	1886	16·49	13·72
1865	17·74	16·29	1887	17·14	14·18
1866	19·82	19·16	1888	16·80	13·91
1867	18·39	17·99	1889	19·19	16·20
1868	15·95	14·23	1890	17·59	14·44
1869	16·40	14·32	1891	17·74	14·63
1870	15·59	13·41	1892	14·99	12·15
1871	14·49	12·21	1893	15·69	12·35
1872	15·42	13·14	1894	14·60	11·47
1873	15·91	13·99	1895	14·58	11·74
1874	16·78	14·48	1896	14·73	11·77
1875	20·40	18·29	1897	14·22	11·34
1876	18·25	15·64	1898	17·57	13·99
1877	17·17	14·26	1899	15·48	12·43
1878	16·57	14·22	1900	14·34	11·11
1879	16·04	12·93	1901	14·90	11·48
1880	14·80	12·48	1902	15·13	11·66
1881	15·38	12·77	1903	14·25	11·48
1882	16·91	13·57	1904	13·24	10·60

The next table gives the yearly average proportion of deaths from influenza per 10,000 of the population in age groups, during the four latest census periods, and shows that during the two latter, the proportion of deaths resulting from this disease was eleven times as great as in the two preceding periods:—

DEATH RATES FROM INFLUENZA IN VICTORIA PER 10,000 OF POPULATION.

Age Group.	Males.				Females.			
	1870-2.	1880-2.	1890-2.	1900-2.	1870-2.	1880-2.	1890-2.	1900-2.
0-15 ...	0·69	·34	2·50	1·10	·52	·34	1·86	1·15
15-20 ...	...	·07	·64	·34	...	...	·92	·83
20-25 ...	...	...	1·20	·59	...	...	1·28	·69
25-35 ...	0·05	·07	1·50	·79	·07	·07	2·35	·89
35-45 ...	0·05	...	3·04	1·31	...	·08	4·11	1·86
45-55 ...	0·09	·24	5·12	3·20	·17	...	5·39	2·02
55-65 ...	0·67	·24	12·65	5·25	·39	·62	11·46	5·53
65 upwards...	1·09	2·36	27·13	17·02	·84	3·18	35·22	16·02
All ages ...	0·33	·25	3·94	2·30	·28	·24	3·72	2·13

Since 1890, there were two epidemic outbreaks of influenza—in 1891, and 1899, resulting in 1,035 and 963 deaths respectively. The deaths due to this cause in 1903 numbered 129, which was the lowest during the past fourteen years. In 1904, the number increased to 257. In the period 1890-8, 16 per cent. of the deaths from influenza were of children under five years, and nearly 50 per cent. were aged 55 and upwards. In 1904, the corresponding rates were eleven and 64 respectively, thus showing that it is more fatal to the very young and old than to those of middle ages.

The next table shows the average yearly death rates (for males and females) per 10,000 of the population from respiratory diseases, in various age groups, during the four latest census periods.

DEATH RATES IN VICTORIA PER 10,000 FROM RESPIRATORY DISEASES.

Age Group.	Males.				Females.			
	1870-2.	1880-2.	1890-2.	1900-2.	1870-2.	1880-2.	1890-2.	1900-2.
0-15 ...	22·65	29·02	28·52	16·53	18·50	24·18	24·13	13·85
15-20 ...	3·45	3·30	2·92	2·70	1·88	2·02	3·52	2·34
20-25 ...	5·70	5·34	4·88	4·85	3·54	4·23	3·05	3·34
25-35 ...	4·69	8·31	6·85	5·94	4·51	5·72	5·65	3·75
35-45 ...	10·28	15·80	13·55	9·49	7·94	12·53	11·55	7·68
45-55 ...	20·43	26·59	25·18	18·04	7·87	13·63	17·01	11·80
55-65 ...	41·79	51·65	56·51	38·37	22·97	29·15	32·10	27·42
65 upwards ...	108·11	136·54	141·07	112·38	73·10	116·12	112·38	86·78
All ages ...	17·29	24·48	24·30	18·66	12·63	17·08	17·62	13·28

An examination of the above table shows that the proportion of males dying from diseases of the respiratory system exceeded that of females at each census period. The average mortality rate per 10,000 of the population for the four census years being 21·18 deaths for males, and 15·15 for females. In each age group (except 15-20 in 1890-2), the mortality rate for males was heavier than that for females, and not only was there a considerable decrease in the proportions for both sexes, but, in nearly every group, a reduction is shown during 1900-2, as compared with 1890-2.

AVERAGE YEARLY DEATH RATE PER 10,000 PERSONS DYING FROM
TUBERCULAR DISEASES (PHTHISIS EXCEPTED) DURING THE
YEARS 1870-2, 1880-2, 1890-2, 1900-2.

Ages.	Death-rate per 10,000 persons during—			
	1870-2.	1880-2.	1890-2	1900-2.
MALES.				
0—15	7·53	7·98	10·36	5·64
15—20	·64	·81	1·17	1·12
20—25	1·80	1·23	·89	1·77
25—35	·70	·66	·84	1·91
35—45	·77	·88	·77	1·39
45—55	·95	·85	·67	1·64
55—65	·88	1·07	·78	2·40
65 and over	1·09	2·36	·56	1·17
All ages	3·46	3·55	4·02	2·99
FEMALES.				
0—15	5·89	7·28	8·43	5·33
15—20	·82	1·30	1·27	1·95
20—25	·52	·69	1·23	2·09
25—35	·54	·41	·88	1·98
35—45	1·04	·70	·42	1·77
45—55	·17	·67	·34	1·01
55—65	·39	·62	·69	·71
65 and over	1·69	1·19	·64	·71
All ages	3·10	3·39	3·58	2·91

It will be noticed that the proportion of persons under fifteen years of age dying from tubercular diseases (excluding phthisis), during the last census period, showed a decline of 45 per cent. for males, and nearly 37 per cent. for females. As a reduction of 58 and 35 per cent. for males and females respectively occurred also in the proportion of deaths of persons of the same age from phthisis, it evidences a gratifying decrease in the mortality rates from all tubercular diseases amongst children during the last decennial period.

The number of deaths from phthisis during the past 45 years numbered 52,262, which gives a mean yearly death rate of 13·05 per 10,000 persons living for the whole period.

DEATHS FROM PHTHISIS IN VICTORIA FOR THE YEARS, 1860-1904.

Year.	Deaths from Phthisis.		Year.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.		Total Number.	Number per 10,000 Persons Living.
1860 ...	772	14·46	1899 ...	1,339	11·29
1865 ...	741	12·12	1900 ...	1,387	11·62
1870 ...	888	12·45	1901 ...	1,416	11·77
1875 ...	1,027	13·04	1902 ...	1,412	11·69
1880 ...	1,175	13·82	1903 ...	1,341	11·09
1885 ...	1,384	14·46	1904 ...	1,342	11·11
1890 ...	1,631	14·58	Sum and mean	52,262	13·05
1895 ...	1,567	13·23	of 45 years		
1898 ...	1,520	12·85			

The foregoing table shows a diminishing death rate per 10,000 of the population from phthisis during the past 45 years, especially in the last five years, as compared with earlier periods. This is more fully shown in the following table, which gives the proportion per 10,000 of the population of deaths, for each sex, during the five latest census periods:—

DEATH RATES IN VICTORIA FROM PHTHISIS AT DIFFERENT AGES AT FIVE CENSUS PERIODS, 1860-2, 1870-2, 1880-2, 1890-2, 1900-2.

Ages.	Annual Mortality from Phthisis per 10,000 of the Population.				
	1860-2.	1870-2.	1880-2.	1890-2.	1900-2.
<i>Males.</i>					
0 to 15 ...	2·55	1·22	1·74	·90	·38
15 " 20 ...	7·72	5·71	6·88	3·41	5·06
20 " 25 ...	12·23	18·75	21·19	18·29	14·35
25 " 35 ...	16·53	22·21	30·33	23·70	20·31
35 " 45 ...	21·63	21·83	25·11	28·28	22·07
45 " 55 ...	23·14	22·24	28·65	31·17	25·05
55 " 65 ...	25·63	27·86	31·41	36·48	35·75
65 and upwards ...	23·20	19·56	18·08	25·40	31·07
All ages ...	13·33	12·89	15·33	15·73	13·51
<i>Females.</i>					
0 to 15 ...	3·70	·98	1·76	1·43	·93
15 " 20 ...	14·07	12·37	12·50	9·51	8·18
20 " 25 ...	18·95	19·28	21·00	18·49	12·79
25 " 35 ...	24·76	22·02	26·56	21·77	18·15
35 " 45 ...	25·62	21·65	24·06	22·53	17·74
45 " 55 ...	25·01	19·60	20·72	16·13	14·41
55 " 65 ...	22·59	10·51	14·26	12·35	12·52
65 and upwards ...	18·03	12·61	13·12	8·25	8·18
All Ages ...	14·46	10·62	12·75	11·51	9·72

It will thus be seen that the male death rates per 10,000 of the population from phthisis were greater during the four latest census periods than those of females; but the proportion of deaths of females under 20 years of age, was nearly twice as great as that of males during the five census years, whilst the proportion of males, 45 years and upwards, during the latter period, was considerably greater than that of females. The figures for 1900-2, show that there was a decline in every age group (excepting 15-20 and 65 and upwards amongst males, and 55-65 amongst females) as compared with those for 1890-2.

The yearly average proportion of deaths from influenza and respiratory diseases (combined) per 10,000 of the population living at different ages during the four latest census periods, is shown in the following table:—

DEATH RATES FROM INFLUENZA AND RESPIRATORY DISEASES
(COMBINED), 1870-2, 1880-2, 1890-2, 1900-2.

Age Group.	1870-72.	1880-82.	1890-92.	1900-02.
<i>Males.</i>				
0-15	23·34	29·36	31·02	17·63
15-20	3·05	3·37	3·56	3·04
20-25	5·70	5·34	6·08	5·44
25-35	5·74	8·38	8·35	6·73
35-45	10·33	15·80	16·59	10·80
45-55	20·52	26·83	30·30	21·24
55-65	42·46	51·89	69·16	43·62
65 and upwards	109·20	138·90	168·20	129·40
All ages	17·62	24·73	28·24	20·96
<i>Females.</i>				
0-15	19·02	24·52	25·99	15·00
15-20	1·88	2·02	4·44	3·17
20-25	3·54	4·23	4·33	4·03
25-35	4·58	5·79	8·00	4·64
35-45	7·94	12·61	15·66	9·54
45-55	8·04	13·63	22·40	13·82
55-65	23·36	29·77	43·56	32·95
65 and upwards	73·94	119·30	147·60	102·80
All ages	12·91	17·32	21·34	15·41

Excepting the age group 15-20 during 1890-2, and 1900-2, the proportion of deaths of males from influenza and respiratory diseases combined, was greater in every instance at each census period, than that for females. The mortality rates showed a considerable decrease for both sexes during the last census period, as compared with the two previous ones, such decrease amounting to 26 per cent. in male, and 28 per cent. in female rates.

NATURAL INCREASE.

Natural increase per 1,000 of population in Australasia

The natural increase, *i.e.*, the excess of births over deaths, per 1,000 of the population, in the various Australian States and New Zealand for each of the years 1900 to 1904, and also for the mean of that period, is shown in the following table:—

NATURAL INCREASE PER 1,000 OF THE POPULATION, AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Victoria.	New South Wales.	Queens land.	South Australia.	Western Australia.	Tasmania.	Australian States.	New Zealand.
1900	13.05	16.27	18.47	14.87	18.15	17.14	15.54	16.17
1901	12.56	15.92	16.40	13.87	16.96	17.95	14.88	16.53
1902	11.78	15.22	15.60	12.74	16.46	18.02	14.18	15.39
1903	11.56	13.72	12.24	12.45	17.67	16.61	13.12	16.21
1904	12.73	16.11	17.01	14.48	18.43	18.58	15.29	17.37
Mean	12.34	15.44	15.94	13.68	17.53	17.66	14.60	16.33

The mean natural increase of the Australian States for the period 1900-4, *viz.*, 14.60, is probably not far from that which will be attained under ordinary circumstances when the age constitution of the population will have become normal, and when undisturbed by migration. At the present time, the birth rate and death rate are both below normal, owing to factors in operation which have already been discussed in dealing with the birth and death rates. This annual rate of increase, 14.6 per thousand, will enable a population to double itself in about 48 years. It will, however, be noticed that the rate for the last year was .7 above the average of the five years, and if this increased rate were maintained, the population would take about 45½ years to double itself.

Natural increase per 1,000 of population in European countries.

The following table shows the natural increase per 1,000 of the population in various European countries—the mean of the five years, 1897-1901, being adopted, and the countries placed in order of increase:—

NATURAL INCREASE PER 1,000 OF POPULATION—EUROPEAN COUNTRIES—MEAN OF FIVE YEARS, 1897 TO 1901.

Country.	Natural Increase.	Country.	Natural Increase.
1. Prussia ...	15.5	10. Italy ...	11.0
2. The Netherlands ...	14.8	11. Belgium ...	10.9
3. German Empire ...	14.6	12. United Kingdom ...	10.7
4. Norway ...	14.5	13. Sweden ...	10.6
5. Denmark ...	13.5	14. Switzerland ...	10.5
6. Austria ...	11.9	15. Spain ...	5.0
7. Hungary ...	11.7	16. Ireland ...	4.7
8. Scotland ...	11.6	17. France ...	1.2
9. England and Wales	11.4		

It is seen from this statement that the present Australian rate is below the first two countries shown, but is equal to that of the German Empire. It might be inferred that in Prussia and the Netherlands—where the rate of natural increase is higher than in the

Commonwealth—that those countries were increasing their populations at a greater rate than the Commonwealth of Australia, but emigration must be taken into account when dealing with European countries.

The actual rates of increase in various European countries have been computed and are set forth in the following table, which also shows the periods from which such rates were obtained, and also the periods in which the population would double itself at the computed rate of increase:—

Actual rates of increase of population in European countries.

ACTUAL RATE OF INCREASE OF POPULATION IN VARIOUS EUROPEAN COUNTRIES.

Country.	Annual Rate of Increase per cent.	Experience	Period required to Double Population.
1. German Empire ...	1.12	1872-1901	62½
2. Prussia ...	1.11	1867-1901	62½
3. The Netherlands ...	1.05	1853-1901	66½
4. Denmark ...	1.03	1861-1901	67½
5. Great Britain ...	.91	1864-1901	76½
6. Hungary ...	.97	1876-1901	71½
7. Belgium ...	.84	1853-1901	83
8. Norway ...	.81	1871-1901	86
9. Sweden ...	.77	1852-1901	90½
10. Austria ...	.77	1853-1901	90½
11. Switzerland ...	.72	1868-1901	96½
12. Italy ...	.64	1872-1901	108½
13. Spain ...	.45	1861-1901	154½
14. France ...	.16	1853-1901	433½

Even at the present rate of natural increase in Australia, the period required to double its population, viz., less than 50 years—and which is independent of immigration—is considerably less than that required by any of the European countries, based upon actual experience.

The following table shows the excess per cent. of births over deaths in each of the Australian States and New Zealand for each of the five years, 1900 to 1904, together with the mean of the same period:—

Excess per cent. of births over deaths in Australasia.

EXCESS PER CENT. OF BIRTHS OVER DEATHS, AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australian States.	New Zealand.
1900 ...	102	146	158	139	143	156	132	171
1901 ...	95	136	138	124	127	172	122	169
1902 ...	88	127	129	107	121	165	113	147
1903 ...	90	118	99	115	140	140	109	156
1904 ...	107	152	168	142	155	169	139	181
Mean...	96	136	138	125	137	160	123	165

Excess of
births over
deaths in
European
countries.

From this it is seen that the least excess in Australasia is in Victoria and the greatest in New Zealand. To every hundred deaths that occur in Victoria there are 196 births, in New South Wales 236, in Queensland 238, in South Australia 225, in Western Australia 237, in Tasmania 260, whilst in New Zealand there are 255. The position occupied by Victoria is due to the excessive emigration of adults in recent years, which is also chiefly responsible for the low birth rate, and (compared with Australian rates) to some extent for its somewhat high death rate. But even under these adverse circumstances, the excess in Victoria compares advantageously with those of European countries, as will be seen from the following table, which shows the excess in those countries as derived from the mean of the five years 1897-1901:—

EXCESS PER CENT. OF BIRTHS OVER DEATHS IN EUROPEAN COUNTRIES.

Country.	Excess.	Country.	Excess.
1. Norway ...	92	10. Great Britain ...	60
2. The Netherlands ...	86	11. Switzerland ...	58
3. Denmark ...	82	12. Italy ...	49
4. Prussia ...	74	13. Austria ...	47
5. German Empire ...	69	14. Hungary ...	43
6. England and Wales...	65	15. Ireland ...	26
7. Sweden ...	65	16. Spain ...	20
8. Scotland ...	64	17. France ...	6
9. Belgium ...	61		

Comparison
between
excess per
cent. of
births over
deaths in
Australasia
and
European
countries.

Thus it will be seen that in no European country does the excess per cent. of births over deaths reach the average of the Australian Commonwealth. In Hungary, which has the highest birth rate amongst the European States quoted, viz., 38'9, the death rate is so high, viz., 27'2 per 1,000 of the population, that the excess per cent. of births over deaths is only 43, whilst Australia, with its birth rate of only 26'5 has an excess of 123 per cent. In other words, whilst in Hungary the loss caused by every 100 deaths is replaced by 143 births, in Australia such loss is replaced by 223 births. In New Zealand, which has a birth rate of only 26'28, the 100 deaths are replaced by no less than 265 births. In Germany every 100 deaths are replaced by 169 births, in Great Britain by 160, and in France by only 106. The comparison, it is obvious, is entirely to the advantage of Australasia.

GREATER MELBOURNE.

Vital
statistics
of Greater
Melbourne.

The mean population of Greater Melbourne was 504,960 for the year 1904. This area embraces a radius of ten miles, and is divided into 31 sub-districts. At the end of 1904 there was living within the area an average of 3 persons to the acre. The density varies considerably, however, in the several sub-districts, ranging from 36 persons to the acre in Fitzroy, 32 in North Melbourne, and 31 in Richmond, to 1 person to the acre in Boroondara, and less than 1

in Preston, Oakleigh, and other outlying districts. The density is calculated exclusive of parks, gardens, and other public reserves within the area, which contained, on 31st December, 5,332 acres.

The births and deaths for the two years 1903 and 1904 were:—

	1903			1904.		
	Males.	Females.	Total.	Males.	Females.	Total.
Births ...	6,116	5,896	12,012	6,035	5,851	11,886
Deaths ...	3,772	3,445	7,217	3,439	3,119	6,558
Natural increase ...	2,344	2,451	4,795	2,596	2,732	5,328
The illegitimate births numbered			1,031			1,084
The cases of twins numbered			101			125
The cases of triplets numbered			4			1

The number of illegitimate births, 1,084, is 53 more than in 1903, when the number was 1,031. Over two-fifths took place in the Women's Hospital or in buildings under the supervision of the officers of that institution. The proportion of illegitimate births to the whole number registered in Greater Melbourne was 1 in 11, as against 1 in 12 in 1903, 1902, and 1901, 1 in 11 in 1900, and 1 in 12 in the 8 previous years. The birth rate, exclusive of public and charitable institutions, was 21'45 per thousand of the mean population, and including these establishments it was 23'54. The corresponding averages for the ten years, 1892-1901, were 26'83 and 28'55 per thousand.

The highest rate, 29'18 per thousand, obtained in the sub-district of North Melbourne, and the lowest, 15'77, in Camberwell and Boroondara. In the latter district, however, the population is comparatively small. Further examination will disclose that the birth rate varied in groups of districts, as well as districts, as will be seen by combining Collingwood, Brunswick, Fitzroy, North Melbourne, Footscray, Port Melbourne, and Richmond, and Kew, Hawthorn, Brighton, St. Kilda, Caulfield, Malvern, and Camberwell. In the former, the rate is 24'05, and in the latter, only 18'36, per thousand of the population. The death rate, exclusive of public and charitable institutions, was 9'54 per thousand, and including these establishments, 12'99, whilst the corresponding averages for the 10 years 1892-1901 were 12'39 and 15'76. Although the number of births in 1904 fell off as compared with that in 1903, this diminution was more than compensated by a larger falling off in the number of deaths.

The municipal estimate of population, the births and deaths, and their proportions to the population, the excess of births over deaths, the mean temperature in the shade, the rainfall, and the mean atmospheric pressure in Greater Melbourne, during each of the twenty years ended with 1904, were as follow:—

POPULATION, BIRTHS AND DEATHS, ETC., IN GREATER MELBOURNE, 1885 TO 1904.

Year.	Mean Population.	Number of Births.		Number of Deaths		Excess of Births over Deaths.		Mean Temperature in the Shade.	Rainfall.	Mean Height of Barometer.
		Total.	Per 1,000 of the Population.	Total.	Per 1,000 of the Population.	Number.	Per cent.			
1885 ...	345,380	12,066	34·94	6,960	20·15	5,106	73	deg. 57·1	in. 26·94	in. 30·00
1886 ...	371,630	12,941	34·82	7,590	20·42	5,351	71	57·1	24·00	29·96
1887 ...	391,546	14,583	37·24	8,311	21·25	6,262	75	58·1	32·39	29·94
1888 ...	419,49	15,645	37·30	8,606	20·52	7,039	82	57·5	19·42	29·99
1889 ...	445,221	16,934	38·04	10,412	23·39	6,522	63	58·5	27·14	29·94
1890 ...	473,500	17,859	37·71	9,297	19·63	8,562	92	58·7	24·24	29·92
1891 ...	491,700	18,018	36·64	9,368	19·05	8,650	92	57·6	26·73	29·98
1892 ...	481,550	17,399	36·13	7,698	15·99	9,701	126	57·4	24·96	29·93
1893 ...	457,230	15,338	33·55	7,805	17·07	7,533	97	57·9	26·81	29·88
1894 ...	441,890	13,672	30·94	6,871	15·55	6,801	99	58·4	22·61	29·93
Average for 10 yrs. }	431,914	15,446	35·76	8,293	19·20	7,153	86	57·8	25·52	29·95
1895 ...	446,800	13,208	29·56	7,076	15·84	6,132	87	58·5	17·04	29·93
1896 ...	454,700	12,769	28·09	7,121	15·67	5,648	79	57·8	25·16	29·95
1897 ...	458,900	12,303	26·81	6,833	14·89	5,470	80	57·6	25·85	29·94
1898 ...	471,800	12,116	25·47	8,523	18·07	3,493	41	58·7	15·61	29·91
1899 ...	485,801	12,435	25·60	7,317	15·06	5,118	70	57·1	28·87	29·95
1900 ...	490,100	12,067	24·62	7,021	14·32	5,046	72	56·3	28·09	29·92
1901 ...	498,30	12,375	24·85	7,515	15·09	4,860	65	56·9	27·45	29·95
1902 ...	5,2,120	12,478	24·85	7,496	14·93	4,982	66	56·9	23·08	29·97
1903 ...	502,060	12,012	23·93	7,217	14·37	4,795	66	57·0	28·43	29·92
1904 ...	504,960	11,886	23·54	6,558	12·99	5,328	81	56·7	29·72	29·94
Average for 10 yrs. }	481,527	12,355	25·66	7,268	15·09	5,087	70	57·4	24·93	29·94

The proportion of deaths of elderly persons—aged 75 and upwards—has shown a marked increase in the last fourteen years, thus indicating that the percentage of elderly persons in the population has considerably increased, and has apparently not yet reached a maximum; and this is proved by a comparison of the results of the past two censuses, which show that the male population at those ages has increased from 1,552 in 1891 to 2,795 in 1901, and the females from 1,551 to 3,065. There are now nearly 12 persons aged 75 and upwards in every 1,000 of the population, as compared with a proportion of only 6½ ten years previously.

DEATHS OF PERSONS AGED 75 YEARS AND UPWARDS IN GREATER MELBOURNE, 1891-1904.

Year.	Males.	Females.	Total.	Per cent. of Deaths at all Ages.
1891	286	271	557	5·94
1892	263	219	482	6·26
1893	264	233	497	6·37
1894	284	279	563	8·19
1895	353	284	637	9·00
1896	352	299	651	9·14
1897	327	290	617	9·03
1898	418	372	790	9·27
1899	421	326	747	10·21
1900	402	376	778	11·08
1901	443	415	858	11·42
1902	500	404	904	12·06
1903	432	424	856	11·86
1904	550	470	1,020	15·55

Deaths of females were more numerous than those of males at the age periods between 1 and 5, and 15 and 45, but less at all other periods. The following were the numbers of those of either sex who died at various periods of age in 1904, and the proportion of the deaths at each period to the total number during the year:—

AGES AT DEATH IN GREATER MELBOURNE, 1904.

Ages.	Males.	Females.	Both Sexes.	
			Total.	Proportions per cent.
Under 1 year	608	494	1,102	16·80
1 to 5 years	147	150	297	4·53
5 to 15 "	130	122	252	3·84
15 to 25 "	182	207	389	5·94
25 to 35 "	233	253	486	7·41
35 to 45 "	322	367	689	10·51
45 to 55 "	331	260	591	9·01
55 to 65 "	367	312	679	10·35
65 to 75 "	569	484	1,053	16·06
75 years and over	550	470	1,020	15·55
Total	3,439	3,119	6,558	100·00

DEATHS IN PUBLIC INSTITUTIONS IN GREATER MELBOURNE, 1904.

	No.		No.
Melbourne Hospital ...	729	Benevolent Asylum ...	148
Alfred Hospital ...	186	Infant Asylum ...	2
St. Vincent's Hospital ...	19	Convent of the Little Sisters of the Poor ...	44
Women's Hospital... ..	86	Protestant Refuge ...	18
Children's Hospital ...	159	Eye and Ear Hospital ...	4
Homœopathic Hospital ...	59	Melbourne Gaol ...	10
Austin Hospital ...	87	Pentridge Stockade ...	1
Foundling Hospital ...	11		
Infectious Diseases Hospital	6		
Metropolitan Lunatic Asylum	76	Total ...	1,816
Yarra Bend Lunatic Asylum	75		
Victorian Homes for Aged and Infirm ...	96		

Of the total number, 1,290 took place in Melbourne City, 148 in North Melbourne, 76 in Kew, 59 in South Melbourne, 19 in Fitzroy, 44 in Northcote, 1 in Coburg, and 179 in the remainder of district. These figures, compared with the total deaths (6,558), furnish a proportion of 28 per cent., or, in other words, 1 person in every 3.6 who died in Greater Melbourne during 1904 ended his or her days in a public or charitable institution.

Nearly one-third of all who died at the age of 5 or upwards in 1904, four-sevenths of those who died of typhoid fever, four-sevenths of those who died of diphtheria, about two-sevenths of those who died of cancer, and more than one-fourth of those who died of phthisis, nearly a third of those who died from other tubercular diseases, and accident, ended their days in charitable institutions, as will be seen from the following statement:—

DEATHS OCCURRING IN AND OUTSIDE HOSPITALS, ETC., 1904.

	In Hospitals, &c.	Outside Hospitals, &c.	Total.
Total Deaths ...	1,783	4,775	6,558
Deaths under five years ...	197	1,202	1,399
Deaths from—			
Typhoid Fever ...	41	30	71
Diphtheria ...	41	29	70
Cancer ...	126	298	424
Phthisis ...	181	500	681
Other Tubercular Diseases	78	143	221
Accidents ...	74	134	208
Other Causes ...	1,242	3,641	4,883

The following is a summary of the deaths from some of the principal diseases during each of the last twenty years, the averages of the decades 1885-94 and 1895-1904 being also shown:—

DEATHS FROM CERTAIN DISEASES IN GREATER MELBOURNE, 1885 TO 1904.

Year.	Measles.	Scarlet Fever.	Influenza.	Diphtheria and Croup.	Whooping-Cough.	Typhoid Fever.	Diarrhœal Diseases.	Erysipelas.	Cancer.	Pneumonia.	Tubercular Diseases (exclusive of Pneumonia).	Diseases of the Brain and Nerve.	Heart Diseases, &c.	Diseases of the Digestive System.	Bronchitis and Laryngitis.	Other Lung Diseases.	Diseases of the Urinary System.	Child Bearing.
1885 ...	6	3	15	129	38	183	506	19	214	826	202	855	382	681	305	655	196	75
1886 ...	12	5	9	104	127	294	642	34	239	790	237	897	407	703	290	617	221	81
1887 ...	64	3	2	137	43	338	652	13	248	909	254	988	528	895	344	528	238	92
1888 ...	15	17	3	269	10	326	546	13	232	904	270	886	556	1,064	346	501	243	96
1889 ...	6	18	11	465	179	560	608	15	322	923	305	1,023	583	1,350	381	628	336	72
1890 ...	1	41	57	541	44	403	335	13	288	948	310	962	619	982	358	637	288	96
1891 ...	3	3	406	208	99	192	415	10	325	849	324	970	666	1,104	472	712	255	82
1892 ...	...	13	34	121	76	154	320	8	313	925	260	827	583	1,025	292	536	241	94
1893 ...	386	18	69	43	54	120	251	12	358	846	206	765	572	1,023	322	609	284	86
1894 ...	1	30	55	60	159	155	171	3	362	778	190	738	551	888	237	538	342	78
Average for 10 yrs. }	49	15	66	208	83	273	445	14	290	870	256	891	545	972	335	596	264	85
1895 ...	...	19	134	72	43	144	152	25	377	814	198	732	609	896	270	575	329	97
1896 ...	2	17	49	108	32	149	178	12	381	722	198	693	665	1,110	236	588	352	72
1897 ...	6	26	65	173	3	121	145	11	366	739	182	739	632	847	252	514	355	82
1898 ...	403	12	91	143	52	222	219	14	427	801	244	788	705	1,200	269	765	345	77
1899 ...	3	3	329	69	132	143	172	9	416	654	197	757	685	949	227	596	395	81
1900 ...	95	3	62	80	12	94	104	11	426	698	212	752	757	875	219	549	421	65
1901 ...	10	2	142	52	125	69	124	9	445	771	218	829	810	865	227	557	465	88
1902 ...	35	11	116	43	55	72	153	23	437	721	197	770	785	1,039	243	650	407	105
1903 ...	11	28	59	42	60	65	129	31	450	704	212	696	821	925	220	586	478	70
1904 ...	...	12	97	74	15	71	70	5	424	681	221	651	752	683	153	476	487	71
Average for 10 yrs. }	57	13	114	86	53	115	145	15	415	731	208	741	722	939	232	586	403	81

The following table shows the number of deaths in Greater Melbourne from all causes, also from typhoid fever, diarrhoeal diseases, and diphtheria and croup, registered in each month of the last ten years :—

DEATHS IN EACH MONTH FROM ALL CAUSES, AND FROM TYPHOID FEVER, DIARRHOEAL DISEASES, AND DIPHThERIA AND CROUP, 1895 to 1904.

Months.	Number of Deaths in Ten Years from—			
	All Causes.	Typhoid Fever.	Diarrhoeal Diseases.	Diphtheria and Croup.
January	6,647	197	267	29
February	5,728	192	167	49
March	6,120	190	203	69
April	5,611	196	123	89
May	5,673	120	72	96
June	6,019	56	42	89
July	6,206	24	32	94
August	6,176	25	21	87
September	5,590	13	24	64
October	5,393	18	38	81
November	6,041	27	161	59
December	7,474	92	296	50
Total	72,678	1,150	1,446	856

The estimated mean population, the births and deaths, and their proportions to population, and the excess of births over deaths in each of the metropolitan cities of Australasia in 1904, were as follow :—

VITAL STATISTICS OF AUSTRALASIAN CAPITALS, 1904.

Capital Cities (with Suburbs).	Mean Population.	Births.		Deaths		Excess of Births over Deaths.	
		Total Number.	Number per 1,000 of the Population.	Total Number.	Number per 1,000 of the Population.	Numerical.	Centesi- mal.
Melbourne ...	504,960	11,886	23.54	6,558	12.99	5,328	81
Sydney ...	514,800	13,215	25.67	5,675	11.02	7,540	133
Brisbane ...	125,068	3,301	26.40	1,433	11.46	1,868	130
Adelaide ...	169,397	4,016	23.71	2,022	11.94	1,994	99
Perth ...	48,400	1,780	36.78	823	17.00	957	116
Hobart ...	34,888	999	28.64	555	15.91	444	80
Wellington ...	55,618	1,479	26.59	580	10.43	899	155

The excess per cent. of births over deaths in the metropolitan cities of Australasia in 1904 was 108; or, for every 100 deaths there were 208 births. The number of births to every 100 deaths in each capital city was as follows:—Hobart 180, Melbourne 181, Adelaide 199, Perth 216, Brisbane 230, Sydney 233, and Wellington 255. The average birth rate for the seven capital cities during the same period was 25·24, the highest rate—36·78—obtaining in Perth, and the lowest—23·54—in Melbourne, which was almost on a level with that of Adelaide (23·71).

Excess of births over deaths in Australasian capital cities.

The death rate for the metropolitan cities of Australasia in 1904 was 12·14, Perth being highest with a proportion of 17·00 deaths per 1,000 of the population, and Wellington lowest with only 10·43. Melbourne was slightly above, and Sydney below, the average. Excepting Perth, all the Australasian capital cities show a considerably lower rate than the principal towns of the United Kingdom, and the foreign cities given in the following list, which has been taken from *Whitaker's Almanac* :—

Death rates in Australasian capitals and other cities.

DEATH RATES IN BRITISH AND FOREIGN CITIES, 1902.

Name of City or Town.	Death rate per 1,000 of the population.	Name of City or Town.	Death rate per 1,000 of the population.
Dublin	24·3	Madras	42·1
Liverpool	22·5	Cairo	35·4
Belfast	20·8	St. Petersburg (1901)	23·0
Manchester	20·0	Rio de Janeiro	20·8
Glasgow	20·0	Rome (1901)	20·0
Newcastle-on-Tyne ...	19·9	Vienna	19·4
Birmingham	18·6	Buda Pesth... ..	19·2
Edinburgh	17·8	Buenos Ayres	19·0
London	17·7	New York	18·7
Bristol	17·4	Paris	18·4
Hull	17·2	Berlin (1901)	18·0
Sheffield	17·1	Brussels	16·1

THIRTY YEARS SANITARY PROGRESS IN MELBOURNE.

(By James Jamieson, M.D., Health Officer, City of Melbourne.)

It is as important for a State or a city to take stock of its progress, as it is for a bank or a commercial firm to strike a balance at regular intervals. Not the least important of questions, in connexion with city life, is that of sanitation and its results. As in other places, the number of deaths from different causes, and the death rates, are reported on year by year in Melbourne. In the *Victorian Year-Book* comparison of different periods is regularly made in tabular form; but it may be interesting, and possibly useful, to present some of the general results in a more popular shape, and without too imposing a mass of figures.

It is proposed, therefore, in the present paper, to show, in a way to be easily understood, how we stand with regard to certain causes of sickness and mortality at the present time, as compared with successive earlier periods for which reliable figures are available. For this a few points may suffice, for the practical purpose intended. And for proper comparison it is necessary to take precaution that the figures for different periods are large enough, and based on due allowance for changes in the population of the city as the result of continuous growth. Only periods, therefore, centring round census years will be taken; and with the object of eliminating accidental fluctuations in mortality rates, the average of three years will be taken for the comparisons made.

Starting with the general mortality, the deaths from all causes, the first table shows the variations at regular intervals between 1870 and 1902 :—

—	1870-72.	1880-82.	1890-92.	1900-2.
Death rate per 1,000 of population from all causes	18.42	19.68	18.22	14.78

The only inference from these figures, taken by themselves, is that up to about 1891 there was very little sign of a lowering of the general mortality. On the other hand, from 1892 onwards there has been a marked and almost steady decline, culminating in the exceptionally low rate of 12.99 per 1,000 in 1904. It can be objected that all comparisons of the general death rates, in successive periods, are liable to certain fallacies. The proportion of persons living at different ages may not have been the same, and the accidental occurrence of severe outbreaks of epidemic disease may have sufficed to cause marked fluctuations. There is truth in both contentions, and the comparatively high rate in 1890-92 was partly attributable to such outbreaks of diphtheria and influenza. But no mere change of distribution, or varying prevalence of epidemics, can account for the great and almost steady decline of mortality since 1891. Sanitary improvements of various kinds must get credit for a large share in bringing it about.

One of the best tests of the sanitary condition of any town or city is the degree in which typhoid fever is prevalent. The following table shows the rate of mortality from typhoid in the same periods :—

—	1870-72.	1880-82.	1890-92.	1900-2.
Mortality from typhoid per 100,000 of population	65	58	51	16

A mere glance at these figures makes it plain that the improvement of recent years, in typhoid prevalence and fatality, has been very great, and again notably in the last of the four periods. And the improvement has been so steady and continuous, that it may be taken as definite. In no year since 1900 has the rate been over 14, and in no year previous to 1900 was it less than 26, ranging up to 119 in 1878, and 126 in 1889. Various causes may have concurred in bringing about such an enormous change for the better, bringing the typhoid mortality down to about the London level, and considerably below the average of the great towns of England, which have long provided the world with a standard of urban sanitation. But nothing has contributed in such measure to bring it about as the extension of the system of deep drainage, now happily to a large extent completed.

In connexion with health, no question has more occupied the public mind of late years, than that of the prevalence and prevention of consumption, and other forms of tuberculous disease. The following table shows the death rate, per 100,000 of population, from pulmonary phthisis and from other tuberculous diseases in successive periods as before :—

Deaths per 100,000 of the population from—	1870-72.	1880-82.	1890-92.	1900-0.
Phthisis	210	232	188	146
Other tubercular diseases	55	61	61	42
Total	265	293	249	188

It is apparent from these figures that there was no great lowering of the mortality from consumption and its allied forms of disease, till the third of these periods was passed, though in the last of them the improvement was marked.

This being true, when periods sufficiently far apart are compared, it is unfortunately also true that in more recent years the improvement has not been continuous, as the following table shows :—

Deaths per 100,000 of the population from—	1899.	1900.	1901.	1902.	1903.	1904
Phthisis	135	140	155	143	140	135
Other tubercular diseases	40	43	44	39	42	44
Total	175	183	199	182	182	179

It is not very easy to explain these apparently contradictory results. We are almost compelled to admit that the benefit, which is manifest on a large scale, has not been brought about by the adoption of the methods which have come into vogue as part of the "Crusade against Consumption," since these have been of comparatively recent adoption as public measures. It is almost certain, indeed, that the lessened phthisis mortality of the last ten or twelve years is due mainly to general measures of improved sanitation, as better drainage and house construction, but above all to more general recognition of the benefits to be got from good lighting and ventilation, both in private dwellings, and in factories, workshops, and offices. We cannot claim credit for such great reduction of phthisis mortality as has been attained in many cities of Europe and America, chiefly because we have not adopted such vigorous methods of prevention.

Further and more rapid improvement is to be got by educating the public as to the need of such protection, by the adoption and enforcement of better building regulations, and by the proper supervision and control of all advanced cases at least, either in their own homes or in suitable public institutions. Only by persisting in these and other measures can we hope, within a reasonable time, to reduce to a minimum this greatest plague of civilized life.

Another great test of the sanitary condition of any town or district is the rate of infant mortality. It is of growing importance, when viewed in connexion with such questions as a low birth rate, and a slow increase of population. The rate can be struck at any time, since, for ascertaining it, all that is needed is the number of births in a given year, and the number of deaths in the same year, of infants under one year of age. The rates for 1870-72 not being available, those for 1873-75 have been taken, for comparison with those for later triennial periods, as given in the following table:—

	1873-5.	1880-2.	1890-2.	1900-2.	1904.
Infant mortality per 1,000 births	177·9	174·8	143·8	121·5	92·7

These figures certainly give fair ground of satisfaction. The death rate, and in proportion the sickness, among young children, show a great and steady reduction throughout the whole period of about 30 years.

The return for 1904, however, is exceptionally low, and, probably enough, may not be sustained, favorable conditions having concurred to bring it about; an unusually cool and moist summer, and no great

prevalence of epidemic diseases, which happened also to be mild in type. The causes which have been chiefly operative in leading to this change for the better, between the first and fourth periods, may be summed up in improvement in drainage and house surroundings, and still more in better regulation of milk supply, and the diffusion of knowledge on the subject of infant feeding. With fuller regard to all these points, there need not be reason to doubt that a maximum of 100 deaths per 1,000 births, on the average of years, will be regarded as nothing better than a normal condition, though in very few of the large cities of the world does it seem to be near of attainment, rates of 150 to 200 or more being still common.

Though, in the present state of our knowledge, it cannot be applied as a real test of the sanitary condition of a town or district, the prevalence of cancer is one of the great questions at present receiving careful consideration. It must be taken as almost certain that, in most parts of the civilized world, cancer has for many years been increasingly prevalent and fatal. There are difficulties in fixing the degree of increase, and the increase may in some degree be more apparent than real, but that real it is, in very large measure, can hardly be doubted. When comparing different periods it has to be remembered that the proportion of persons at different ages may not be the same; and in most countries, and notably in new countries, there is a tendency for the number of old persons to increase, out of proportion to children and young adults. Recognising this as a probable source of fallacy, the population taken is not the whole body of the people, but the number of persons enumerated, at the census periods, of 45 years and upwards. Those living at the susceptible ages are thus taken, and a tolerably fair basis of comparison is thus got. In the following table comparison is made of the cancer death rate, in successive periods as before, the proportion being per 100,000 persons at and over 45:—

	1870-72.	1880-82.	1890-92.	1900-2.
Deaths from cancer per 100,000 of the population 45 years and upwards	301	324	420	509

The increase shown is so great and so uniform, that it is hardly conceivable that it is to any degree explained by changes in medical nomenclature, or improvement in methods of diagnosis. Cancer has been and remains the great opprobrium of medicine, but public feeling has been fully roused on the greatness of the problem, and

funds are being freely raised in aid of research, and scientific workers in large numbers are now devoting themselves systematically to its solution.

It has not been thought necessary, or perhaps desirable, to compare Melbourne as regards sanitary condition with other cities, either in Australia or elsewhere. It is not easy to be sure that conditions are similar, and allowances and deductions, as for deaths in hospitals and other public institutions, are made in some returns and not in others. It may be enough to have pointed out wherein improvement has been satisfactory or the reverse, and thereby to suggest what are defective joints in our sanitary armour.

And on the whole it can be claimed that diseases known to be preventable have been in fair measure prevented, though the task for sanitary authorities, as for the public generally, remains a great one, demanding both foresight and self-denial.

PRODUCTION.

LAND SETTLEMENT, WATER SUPPLY, ETC.

The return for 1904 received from the Lands Department shows the total area of the State to be 56,245,760 acres. Of this, 25,797,312 acres are private lands, 21,713,071 acres being alienated in fee simple, and 4,084,241 acres in process of alienation. The balance, 30,448,448 acres, comprises the following:—Roads in connexion with lands alienated and in process of alienation, 1,623,139 acres; agricultural college and water reserves, 447,538 acres; State forests and timber reserves, 4,663,873 acres; State education endowment, temporarily reserved, 1,592,400 acres; other reserves, 598,161 acres; unsold land in towns, &c., 1,871,721 acres; in occupation under grazing area leases, 3,528,986 acres; Mallee pastoral lands, 2,274,317 acres; all other leases, 946,181 acres.

Private and Crown lands.

The present system of disposing of the Crown land of Victoria dates from the passing of the "Land Act 1884" and the "Mallee Pastoral Leases Act 1883," which, with subsequent amendments, were consolidated by the "Land Act 1890." This Act was in turn amended by the Land Acts 1891, 1898, 1900, and 1900 (No. 2); and by the "Settlement on Lands Act 1893," and the "Mallee Lands Act 1896." These Acts were all consolidated into the "Land Act 1901," which, again, has been amended by the Land Acts of 1903 and 1904.

Land Acts.

For the purposes of administration, the State is divided into seventeen districts, in each of which there is a land office under the management of a land officer. These officers are situated at Melbourne, Ararat, Alexandra, Bairnsdale, Ballarat, Beechworth, Benalla, Bendigo, Castlemaine, Geelong, Hamilton, Horsham, Omeo, Sale, Seymour, St. Arnaud and Stawell, and the officers stationed at these centres are in a position to point out the exact localities of

Lands available for occupation.

available lands to intending selectors. The whole of the unalienated lands of the Crown which are now available for selection, excluding available Mallee lands, are divided into the following classes:—

LANDS AVAILABLE FOR OCCUPATION, 31ST DECEMBER, 1904.

County.	Classification.						Total.
	First.	Second.	Third.	Fourth.	Auri-ferous.	Pastoral.	
	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Bull Bull ..	5,677*	28,718†	44,195	..	..	..	78,590
Croajingolong ..	..	..	431,000	47,500	16,740	596,200	1,091,440
Dargo ..	..	..	104,450	..	99,380	223,200	427,030
Tambo ..	..	..	194,320	..	3,800	365,750	563,870
Tanjil ..	..	..	20,615	..	53,500	360,000	434,115
Wonnangatta ..	..	..	91,235	..	..	944,070	1,035,305
Bogong ..	3,927‡	3,687	142,278	..	148,325	219,100	517,317
Benambra ..	..	..	117,330	..	91,470	421,580	630,380
Delatite ..	250	17,417	168,550	..	71,860	178,800	436,877
Moira ..	..	..	3,759	..	..	..	3,759
Anglesey ..	..	4,757	39,372	..	10,499	..	54,628
Bourke ..	..	2,995	..	..	..	..	2,995
Dalhousie ..	20	520	4,802	..	10,132	..	15,474
Evelyn ..	30	21,684	..	..	10,526	..	32,240
Mornington ..	..	1,951	33,543	..	..	..	35,494
Bendigo ..	60	513	792	..	25,005	..	26,370
Rodney ..	..	165	1,680	747	4,139	..	6,731
Borong ..	129	1,724	54,062	..	33,505	9,600	99,020
Gladstone ..	20	3,130	5,289	..	102,535	..	110,974
Lowan ..	..	1,913	49,611	7,160	..	19,415	78,099
Kara Kara ..	63	3,257	2,002	..	39,093	..	44,415
Talbot ..	1,647	361	910	..	86,889	..	89,807
Tatchera ..	..	86	..	..	..	..	86
Heytesbury ..	..	1,200	164,000	..	..	..	165,200
Polwarth ..	1,580	11,700	37,000	..	..	..	50,280
Grant ..	..	..	..	..	22,500	..	22,500
Grenville ..	..	300	..	..	49,000	..	49,300
Ripon ..	..	..	5,871	5,550	11,070	..	22,491
Normanby ..	..	265	74,708	..	..	5,600	80,573
Dundas ..	425	..	13,391	11,920	..	11,150	36,886
Villiers ..	..	..	238	..	..	..	238
Follett ..	..	117	14,552	..	..	..	14,669
Total ..	13,828	106,460	1,819,555	72,877	889,968	3,354,465	6,257,153

* NOTE.—In addition to these lands, there are 1,555 acres of swamp or reclaimed lands, and 19,662 acres of lands that may be sold by auction, available for occupation.

* 4,400 acres in Bulga about to be made available.

† 16,270 acres in Fumina unsurveyed. Not open at present.

‡ Land in Chiltern and Stanley objected to by Mining and Forest Departments.

§ 27,700 acres, 3rd class. Withheld from selection for the present.

In addition there are 6,623,762 acres of Mallee land. The leases of these lands expired in 1903, and since that time the areas are held principally on grazing licences renewable annually—the Government being entitled to resume possession at any time, and thus they are classed amongst those lands available for occupation. The total area of land available is, therefore, 12,902,132 acres.

Land
Boards.

Lands Classification Boards, each consisting of three members, who are officers of the Lands Department, are constituted for the purpose of classifying Crown lands. If any land in either of the first four classes is too highly classed, or if any land in the second, third, or fourth classes is not classed high enough, the proper classification is determined by one of these Boards. The classification of

any land cannot, however, be altered after an application to select the same has been granted; but licensees of third-class land, whose licences were granted prior to 27th December, 1900, are entitled to have their allotments reclassified.

The Land Act 1903 has, however, introduced important amendments in regard to the classification of unalienated Crown lands. It is provided that any such land may, before or after being classified, be made available for selection. Before being made available a plan of the projected subdivision shall be prepared, and a provisional valuation and classification indicated thereon, specifying the rates of licence-fee, rent or purchase money payable therefor. On the completion of a permanent survey of an allotment the value may be determined either before or after an application to select it has been granted by a Classification Board, and the licence-fee, rent, and purchase money shall be fixed to accord with the value so determined, and shall be substituted for the rates which would otherwise have been payable under the provisions of the Land Act of 1901. It is also provided that the Governor in Council may, if at any time it appears that the value of any unalienated land is greater than the value as fixed by the provisions of the Land Act of 1901, increase the rates of the licence-fees, rent or purchase-money payable in respect thereof. The Land Act 1904 deals principally with procedure.

Land Acts
1903 and
1904.

Crown lands technically known as first-class, of which there are now approximately 13,828 acres available for selection, are situated principally in the counties of Buln Buln, Bogong, Talbot, and Polwarth, and consist for the most part of good chocolate soil of volcanic origin, and the grey soil of the coal-bearing country. These areas are heavily timbered. The second-class land is fairly distributed throughout the State, and comprises silurian and granite ranges, and lower lands of tertiary formation. A large portion of this land has chiefly a grazing value, though parts, comprising creek flats and gullies, are suitable for cultivation; but a large proportion is specially suitable for vineyards and orchards. The approximate area of this class available is 106,460 acres. The area of third-class lands, which, like the second-class lands to be found in almost every county in the State, is very extensive, amounting approximately to 1,819,555 acres available for selection. The fourth-class (inferior grazing lands) includes areas formerly held under pastoral lease, and the area available amounts approximately to 72,877 acres, and are situated principally in Croajingalong, Dundas, Lowan, and Ripon.

Agricultural
and grazing
lands.

There are several different methods of tenure of lands of the above four classes. A grazing area lease may be obtained by any person over the age of 18 years of an area not exceeding 200, 640, 1280, or 1920 acres of first, second, third, or fourth class lands respectively, for any term expiring not later than the 29th December, 1920, when the land, together with all improvements—to be allowed for at a valuation limited to 10s., 7s. 6d., 5s., and 2s. 6d. for each of the four classes respectively—reverts to the Crown. The annual rent of a grazing area is 3d., 2d., 1d., and $\frac{1}{2}$ d. per acre according

Grazing
area

to the class of land. The lessee of a grazing area may select thereout as a homestead 200 acres of first-class, or 320 acres of second-class, or 640 acres of third-class, or 960 acres of fourth-class land.

Agricultural
and grazing
allotments.

Persons not below the age of 18 years desirous of selecting and obtaining the freehold may do so by either taking up a grazing area lease and selecting thereout, as just described, or by obtaining direct, without first obtaining a grazing area lease, an agricultural or grazing allotment on the instalment system. The purchase money is fixed at 20s., 15s., 10s., or 5s. per acre, according to the class of the land; and is payable by even annual instalments (without interest) extending, in the case of a residential selector, over a period of 20 or 40 years, at his option; but, in the case of a non-residential selector over a period of 20 years only. The land is occupied during the first six years under probationary *licence*, and during the remainder of the term under lease. During the period of the licence the land must be kept free from vermin, enclosed with a fence, and certain improvements made. After the expiration of the six years' licence, the selector, if all conditions have been complied with, can either purchase his holding by paying up the balance of the purchase money, the six annual instalments (licence-fees) already paid being credited as part payment, or may convert his licence into a lease extending over 14 or 34 years, as the case may be, at the same annual rental, which is also credited to the selector as part payment of the fee-simple. On the expiry of the lease, and after due payment of the rent, the land becomes the freehold of the selector in fee-simple.

Perpetual
leases.

Instead of selecting by way of licence and lease, by which system the freehold is obtained, a settler may lease a larger area of agricultural and grazing lands under perpetual lease, on easier terms. The annual rental is 3d. in the £1 on the value of the land, which is fixed at £1, 15s., 10s., and 5s. per acre for first, second, third, and fourth-class lands respectively till 1909. The rent is subject to revision every ten years, but must not exceed 3d. in the £1 of the unimproved value of the land. Residence on or within five miles of the land for six months during the first year, and eight months during each of the four following years, is necessary; but if one-fourth of the allotment be cultivated during the first two years, and one-half before the end of the fourth year, the residence covenant will not be enforced. Improvements of a certain specified value at least must be effected within specified periods; vermin must be destroyed within two years, and the land must be kept free from vermin and noxious weeds.

Pastoral
occupation.

The total area of the pastoral lands now available for occupation is 3,354,465 acres, situated in various parts, principally in the counties of Wonnangatta, Croajingalong, Benambra, Tambo, Tanjil, Dargo, Bogong, Delatite, and Lowan. A large portion is difficult of access, being in high altitudes, where cultivation is impossible and grazing impracticable except during the summer months. Leases of from 1,920 to 40,000 acres may be issued for any term expiring not later than 29th December, 1909, the rental being computed

according to the grazing capacity of the land, at the rate of 1s. per head of sheep, and 5s. per head of cattle. A lessee of pastoral lands may select and obtain the freehold of a homestead out of his leasehold up to 200, 320, 640, or 960 acres of first, second, third, or fourth-class land respectively.

The total area of swamp or reclaimed lands amounts to upwards of 1,555 acres. The most important of these are situated at Koo-weerup, Moe, and Condah, which have been reclaimed at considerable cost to the Crown. These lands are divided into allotments not exceeding 160 acres. When the value of an allotment has been determined, it may be disposed of in one of four ways, viz., under a 21 years' lease at public auction; under perpetual lease, at a rental of 4 per cent. on the value of the land; under a conditional purchase lease, payment extending over 31½ years by 63 half-yearly instalments, including 4½ per cent. interest on the balance of the unpaid purchase-money; or by public auction, on terms similar to those explained in the following paragraph:—

Lands which may be sold by auction (not including swamp or reclaimed lands) comprise about 19,662 acres. One-eighth of the purchase money must be paid as a deposit, the balance being payable in not more than forty half-yearly instalments. Isolated portions of Crown lands not exceeding 50 acres, or any portion not exceeding 3 acres required as a site for a church or for any charitable purpose, may be sold at auction. There are stringent provisions prohibiting agreements which would prevent fair competition.

The "auriferous lands" comprise upwards of 889,968 acres, and cannot be alienated in fee simple. They are distributed over nineteen counties in various parts of the State. Any portion of these lands which are found to be non-auriferous, or which can be alienated without injury to mining interests, may be transferred to classes under which they may be selected. This class of land is, for the most part, suitable for fruit culture and grazing. Annual licences are issued for areas not exceeding 20 acres, on payment of an annual licence-fee of 5s. for areas of 3 acres or under, 10s. for areas from 3 to 10 acres, and 1s. per acre for areas over 10 acres. The licensee has the right to use the surface of the land only; cannot assign or sublet without permission; must either reside on or fence the land within four months, and cultivate one-fifth of the area. He must post notices on the land, indicating that it is auriferous; and miners have free access to any part of the land not occupied by buildings. Grazing licences, renewable annually at the option of the licensee, are issued for a period expiring not later than the 29th December, 1905, for areas not exceeding 1,000 acres, at a rent to be fixed by appraisalment. Holders of miners' rights, issued under the Mines Acts, 1890 and 1897, are entitled to occupy for the purpose of residence or business a maximum area of one acre or a lesser area fixed by local mining by-laws. The rental is £5 per annum, and a habitable dwelling must be erected on the area within four months. After being in possession for two and a half years, and

having erected buildings or other improvements, the holder may apply to purchase his allotment at a price to be determined by the Board of Land and Works.

Annual
grazing
licences.

Grazing licences to enter with cattle or sheep upon reserves or other Crown lands may be issued annually for any period up to seven years, subject to cancellation at any time during the period. Any fencing erected by a licensee may be removed by him.

Other leases,
purchases,
&c.

Leases up to 21 years at an annual rental of not less than £5, and annual licences at various rates are issued for different purposes, such as sites for residences, gardens, inns, stores, smithies, butter factories, creameries, brickmaking, &c. Any person who has been in possession of land for five years under one of these annual licences, if the land is outside the boundaries of a city, may purchase the site at a price to be determined by an appraiser, in which case any rents previously paid will be credited towards purchase money.

Temporary licences may be issued for purposes of grazing, residence, or timber cutting, on payment of fees, and on approved terms and conditions.

Position of
State
forests and
timber and
water
reserves.

Any person who has made his home or that of his family for five years on forest lands, whether permanently reserved or not, and has improved such lands to the extent of at least £2 per acre, may purchase an area up to 10 acres at a price to be determined by appraisement.

Alienation of timber reserves is forbidden, but licences may be issued to cut timber on payment of the prescribed fee, and under approved terms and conditions. From time to time, as the lands forming these reserves become denuded of timber, and the same is notified in the *Government Gazette*, the lands so denuded may be added either to the pastoral, agricultural, or grazing lands of the State, and dealt with as such.

Alienation of water reserves is absolutely prohibited.

Mallee
lands.

The "mallee country"—so named from the scrub found growing there—occupies about 11,000,000 acres of the extreme north-west portion of the State. The soil is light chocolate and sandy loam, and, in its virgin state, is covered with mallee scrub, interspersed with plains lightly timbered with box, she-oak, and pines. Since the introduction of the "mallee roller" and the "stump-jump" plough, the scrub can be cleared off at a moderate cost. With the extension of railway facilities and by the utilization of some of the surplus waters of the Murray for irrigating, there will be great scope for successful settlement in this country. There are now 6,623,762 acres included in the general list of unalienated lands available for occupation. Land in the mallee is classified into four classes, and the terms of purchase by licence and lease are now very similar to those in respect of agricultural and grazing allotments previously described, viz., for 1st class land, 20s. per acre; 2nd class, 15s.; 3rd class, 10s., and 4th class, 5s., payable during a term of either 20 or 40 years.

Alienation
of land,
1900 to 1904.

During 1900, 494,752 acres were alienated in fee simple, including land selected in previous years; 406,145 acres in 1901; 523,574 acres in 1902; 510,080 acres in 1903; and 584,010 acres in 1904; the

purchase money being £526,650 of that in 1900; £438,363 in 1901; £555,538 in 1902; £542,011 in 1903; and £613,511 in 1904. The Crown lands absolutely or conditionally sold during the last five years were:—232,783 acres in 1900; 523,464 in 1901; 306,806 in 1902; 348,813 in 1903; and 263,180 in 1904. The Crown lands under pastoral occupation on 31st December, 1904, are thus described:

Number of Licences and Leases	...	...	24,330
Area (acres)	...	...	13,693,116
Annual Rental	...	...	£53,888

The "Torrens System," whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system was originated previously in South Australia by the late Sir R. R. Torrens, and has been the means of simplifying procedure in connexion with the transferring of land; gives a title to the transferee free of any latent defect; and cheapens the cost of dealing in real estate by reason of the simplicity of the procedure. All land parted with by the Crown since 1862 is under the operation of the Transfer of Land Act, and the Crown grant issues through the Titles Office; but to bring under the Act land that was parted with prior to that year, application must be made accompanied by strict proofs of the applicant's interest in the property. During 1904 there were 550 applications to bring under the Act land amounting to 113,887 acres in extent, and to £1,086,447 in value, whilst the land brought under the Act during the year by application amounted to 114,830 acres in extent, and to £1,608,851 in value. Up to the end of 1904, there had been brought under the Act 2,210,518 acres, valued at £47,212,884. The value of the land, in regard to which applications were received last year, was higher than in any year since 1891; the number of certificates of title issued was 8,168, and the fees paid thereon were £35,303.

When application is made to bring land under the Transfer of Land Act, a contribution of ½d. in the £1 on the value of land is levied on the applicant to assure and indemnify the Government in granting a clear title against all the world, when there may have been a latent interest of some other person in the property, whom the Government recompenses out of this fund for the loss of such interest. Since 1884-5 the assurance fund has been reduced by £75,073, which amount was advanced towards the purchase of land adjoining the Titles Office, and on which the fund receives 4 per cent. per annum from the general revenue. Since its first formation, 30 claims have been made, and sums amounting to only £6,457 (including costs) have been paid to claimants.

From the period of the first settlement of the State to the end of 1904, the amount realized by the sale of Crown lands was £30,627,053, or at the rate of £1 8s. 3d. per acre. It must, however, be remembered that payment of a considerable portion of this amount extended over a series of years without interest, allowance for which, at the current rate would, it is evident, materially reduce the amount the State actually obtained for the land. It may be calculated that, with interest at 5 per cent., if the payment of the

"Transfer of Land Act."

Assurance funds.

Total amount realized by sale of lands.

£1 per acre by equal annual instalments be extended over ten years without interest, the amount of purchase money is really equivalent to only 15s. 6d. per acre, and if it be extended over twenty years, it is reduced to 12s. 6d. per acre.

VILLAGE SETTLEMENT.

Although there is at the present time very urgent need of adopting means whereby the people of the State may be settled on its lands, yet this important matter has not been altogether lost sight of in the past, as effort was made as early as 1893 to provide work for the unemployed labour of the State by means of village communities, homestead associations, and labour colonies.

Village
settlement

Chiefly with a view to providing an outlet for the unemployed labour of the colony, an Act (the *Settlement on Lands Act* 1893, No. 1311) was passed on the 31st August, 1893, providing for the establishment of three descriptions of rural settlements, viz. :—Village Communities, Homestead Associations, and Labour Colonies. For the Village Communities certain lands were set apart and divided into allotments of from 1 acre to 20 acres in extent, to occupy which for periods of three years permits are granted to approved applicants. An applicant must not be under the age of eighteen, nor the owner in fee simple of 2 acres or upwards, nor the lessee of a pastoral allotment of grazing area, nor a licensee under sections 42 or 49 of the *Land Act* 1890, nor a lessee of a homestead association allotment. During the period over which the permit extends the occupant pays a rental of 3d. per acre per annum, or if he occupy Mallee land, 1d. per acre per annum, and on the expiration of that period he is granted a lease for twenty years, during the currency of which he is required to pay half-yearly, in advance, a sum equal to the fortieth part of the price set upon the allotment, which is generally £1 per acre, except in special cases when the price is considerably higher; he has also to repay, in equal yearly instalments extending over the currency of his lease, any moneys which have been advanced to him, and to pay the cost of surveying his allotment in ten half-yearly instalments extending over the first five years thereof. The lessee is bound to bring one-tenth of his land under cultivation within two years of the date of his lease, and one-fifth within four years of such date; and is, moreover, to put on the land permanent improvements to the value of £1 per acre within six years of such date. All conditions having been complied with, the lessee is entitled to receive a grant in fee of the land he occupies, at any time after six years from the date of lease.

Homestead
associations
and Village
Communi-
ties.

The Homestead Associations were originally combinations of not less than six persons who desire to settle near each other. These Associations, however, proving unsuccessful, the part of the Act relating to them was repealed last year.

The area originally made available for Village Communities and Homestead Associations was 156,020 acres in 85 different localities in the State. A large portion of this area was, however, found to

be unsuitable for Village Settlement purposes, and has been withdrawn from the operation of the Act. After the Act had been in operation for some time, it was generally recognised that the area which a settler could acquire under Part I. of the Settlement on Lands Act, viz., 20 acres, was too small, in many cases, to make a living on, it was decided to allow settlers to acquire additional area under Conditional Purchase Leases, the value of which, together with original holding, should not exceed £200. This was provided for in the *Land Act 1901* (Secs. 344-346), and settlers have largely availed themselves of the privilege. The area now occupied is 57,588 acres, and this is divided among 1,891 settlers, giving an average of 30 acres each. At the time of the last inspection (June, 1904), there were 1,758 settlers actually residing, of whom 1,417 were married and 341 were single. In addition to these, 133 settlers were improving their holdings, but were not residing on the land. Including wives and families, the total souls numbered 8,536. On 30th June, the stock numbered 9,196 bullocks, cows, and calves, 2,208 horses, 26,500 fowls, 2,399 pigs, which, together with other stock (goats, sheep, &c.), were valued at £71,858. The area under cultivation was 24,165 acres, and the total value of improvements effected was £254,955.

The numbers specified above do not include a considerable number of settlers who have surrendered their Village Settlement leases and obtained licences in lieu thereof, under Section 47 of the *Land Act 1901*.

The total amount of monetary aid advanced to settlers was £67,379, and up to 30th June, 1904, £15,431 were repaid. During the last four or five years very little monetary assistance was afforded, and now it has ceased altogether.

CLOSER SETTLEMENT ACT 1898.

A system by which the Government was enabled to purchase private lands for closer settlement from persons willing to part with them at a fair price, was introduced in 1898, by Part III. of the *Land Act* of that year. That part, with several subsequent amendments of minor importance, became Part IV. of the *Consolidated Act of 1901*, since superseded by the *Closer Settlement Act of 1904*. After favorable report and valuation being obtained, the Minister was empowered to enter into a provisional contract for the purchase of land, copies of which contract and report were to be laid before Parliament; and if the Legislative Assembly, by resolution, declared it expedient to acquire such land, a Bill for the purchase thereof was introduced. The price to be paid by settlers of the land so acquired was so fixed as to cover cost of purchase, survey, and subdivision, value of land absorbed by roads and reserves, cost of constructing roads, cost of clearing, draining, fencing, and other improvements which the Board of Land and Works might effect prior to disposal as farm allotments, and any other incidental expenses. Any person aged 21 (not holder of rural land valued at £1,250, or who would not thereby become holder of land exceeding such value) could be granted one farm allotment under conditional purchase lease.

Private
lands—
Purchase
for closer
settlement.

The purchase money, with interest, at $4\frac{1}{2}$ per cent., had to be paid by 63, or a lesser number of, half-yearly instalments, two of which were required to accompany the application. The conditional purchase lease issued was for a term not exceeding $31\frac{1}{2}$ years, and contained, so far as consistent, the usual conditions of perpetual leases, and also the following:—(a) Improvements to the value of 10s. per acre; or, if Board so determined, to value of 10 per cent. of the purchase money, before end of third year; and to the same extent, in addition, before the end of the sixth year; (b) Personal residence or by wife or child over eighteen years of age for eight months during each of first six years; (c) Not to transfer, assign, mortgage, or sublet within first six years; and any other conditions prescribed by the regulations. The fee-simple could be acquired after the first six years, if conditions complied with, on payment of balance of principal. Forfeiture for non-payment of an instalment, could be prevented by payment thereof, with a penalty of 5 per cent., within three months, or of 10 per cent. within six months. Any tenant of land acquired by the Crown from his landlord could be granted a prior right to conditional purchase of any area not exceeding £1,250 in value, or £2,000 if there were a homestead. Power was given to close unused roads, and portions of the land acquired could be used for experimental farms.

CLOSER SETTLEMENT ACT 1904

On 30th November, 1904, an important Act was passed further providing for the acquisition and disposal of land for closer settlement—this Act, the Land Act of 1901, and any other Acts amending the same being now treated as the land legislation of the State. The Act of 1904 is administered by a Board consisting of three persons appointed by the Governor in Council intrusted with power to acquire, either by agreement or compulsorily, blocks of private land in any part of the State for the purposes of closer settlement. Such land as may be acquired by the Board is to be purchased by money the proceeds of the sale of debentures or stock under this Act; or, with the consent of the Treasurer, of Victorian Government Stock. The Governor in Council during the first five years of the operation of the Act may for the purposes of the Act increase the amount of the Victorian Government Stock by a sum not exceeding £500,000 in any one financial year; or, instead of increasing the Victorian Government Stock, may issue debentures for the whole or any portion of such sum. The principal and interest on all stock and debentures issued is to be a charge on the Closer Settlement Fund created from all moneys received by the Board, and the fund heretofore known as the Farm Settlements Fund transferred to the Board.

Acquisition
and
Adminis-
tration.

The Minister administering the Act may authorize the inspection of private land, and the Board shall affix its value when deemed suitable. If the Minister agrees with the Board's valuation the land may be acquired either by auction or other sale of the estate, or by purchase or exchange of land equivalent at a price not exceeding the Board's valuation, or by compulsory acquisition by resolution passed by both Houses of Parliament. Where money has been lent on land unless with the consent of the mortgagee, no less sum shall be paid as purchase money for such land than the amount of money so lent

with interest up to time of purchase. Difference of opinion as to the value of any land desired by the Board is to be referred to a compensation Court for determination.

The Board may dispose of all lands thus acquired on conditional purchase, lease as farm allotments, or as allotments for workmen's homes, or as allotments for agricultural labourers at fixed prices. The farm allotments to consist of an area of land not exceeding £1,500 in value, the workmen's homes £100, and the agricultural labourers £200. No lease of an allotment shall be granted to any person who is already the holder of land of the value of £1,500 (township land excepted), or who would thereby become the holder of land exceeding the value of £1,500, and not more than one allotment is to be held by one lessee. Conditional purchase leases are to be issued for such a term of years as may be agreed upon by the lessee and the Board, and provision is made for payment of the value of the allotment, and interest at a rate of not less than £4 10s. per cent. per annum, by not more than 73 half-yearly instalments. The leases provide for the destruction of vermin, the eradication of noxious weeds, for fencing and its maintenance, and other improvements of a permanent character; residence of eight months each year; and that the lessee shall not transfer, assign, mortgage, sublet, or part with possession of the whole or any part of the allotment within the first six years of the lease, special provision being made in cases of death or insolvency. A Crown grant may be acquired at any time after twelve years. In the case of workmen's home allotments, the lessee must, within one year from the date of the lease, fence the allotment and erect a dwelling house, and no more than one dwelling house and one place of business shall be erected upon any one allotment. The condition regarding improvement for the lease of agricultural labourers' allotments is that the lessee must within one year erect a dwelling house upon the allotment, and within two years fence the allotment. Advances out of the fund up to £50 may be made by the Board to lessees of workman's home and agricultural labourers' allotments. Such advances, with interest at 5 per cent., are made repayable by equal half-yearly instalments extending over a period not exceeding sixteen years. In lieu of such advance, and subject to similar conditions, the Board may cause cottages to be erected at a cost not exceeding £100 each.

Under the authority of the Act of 1898, the following purchases were made:—

Estates
purchased.

- (1) The Wando Vale Estate, containing 10,446 acres, situated in the County of Dundas, was purchased on the 23rd March, 1900, for £63,984.
- (2) The Walmer Estate, 13,769 acres, in the County of Borung, on the 23rd October, 1900, for £44,750.
- (3) Brunswick Lands—91 acres, in the County of Bourke, on the 7th November, 1900, for £2,644.
- (4) The Whitfield Estate—4,246 acres, in the County of Delatite, on the 1st November, 1900, for £36,095.
- (5) The Eurack Estate—5,108 acres, in the County of Grenville, on the 13th November, 1901, for £53,640.

The total of the purchase money and the incidental expenses, amounting to £210,095, represents part of a loan of £400,000 raised under the authority of Acts No. 1602 and No. 1749 for the purposes of closer settlement. The vendors of the Whitfield and Eurack estates accepted £56,095 in Government 3 per cent. stock, and the balance in cash, the total cash payment over the five estates being £153,245. A sum of £56,544 has been repaid to the Farm Settlements Fund up to the 30th June, 1905, and of this amount £28,477 has been transferred from that fund to revenue to meet interest due to stock holders; £23,510 has been drawn from the same fund for redemption and cancellation of stock; the balance to the credit of the fund on the 30th June, 1905, being £3,367, now transferred under the authority of the *Closer Settlement Act 1904*, to the Closer Settlements Fund, managed by the Lands Purchase and Management Board. The balance of the unredeemed stock was £186,585.

Wando Vale,
mer,
Eurack,
and
Whitfield
Estates.

As all these estates have been purchased since the end of 1900, it will be of interest to see what amount of work and settlement has taken place on the lands omitting the lands purchased for workmen's homes. The agricultural statistics of the last year show that the number of holdings on the four estates was 186, as against 120 in the previous year; but it is probable that there was some deficiency of collection in the former year. The estates are all fully occupied. The hands employed in 1904 were 270 men and 160 women. The total amount of land under crop was 9,719 acres; in fallow and sown grasses, 2,773 acres; whilst 21,400 acres still remained under natural grasses. The agricultural produce was 139,300 bushels of grain of various kinds; 2,276 tons of hay, as well as potatoes, onions, and other root crops. The stock on all the holdings numbered 885 horses, 4,212 cattle, 11,511 sheep, and 1,692 pigs. There were 27 cream separators at work, and 2,000 lbs. of butter was made at Wando Vale, 3,162 lbs. at Walmer, and 2,240 lbs. at Whitfield; at Eurack, no butter was made; 14,966 lbs. of hams and bacon were cured on the four estates. The wool produced was 61,949 lbs., and the number of animals slaughtered, 1,701. The general progress made during last year will be seen from the following tables:—

CLOSER SETTLEMENT: RETURN FOR 1903-4 AND 1904-5.

	Wando Vale.		Walmer.		Eurack.		Whitfield.	
	1903-4.	1904-5.	1903-4.	1904-5.	1903-4.	1904-5.	1903-4.	1904-5.
Number of holdings returned ..	28	66	20	39	42	46	30	35
Area occupied .. acres	10,446	10,446	13,769	13,769	5,108	5,108	4,246	4,246
Area under crop .. "	2,661	3,442	3,914	4,624	749	440	914	1,213
Area in fallow .. "	7	..	884	2,472	..	3	55	50
Area under sown grass ..	39	109	..	..	9	21	16	118
Hands employed, number								
—Males ..	63	83	34	61	54	62	54	64
—Females ..	37	50	21	24	38	45	38	41
Area under cereals acres	2,881	2,640	3,914	4,166	707	166	972	595
Area under root crops ..	27	30	..	..	42	52	135	50

CLOSER SETTLEMENT: RETURN FOR 1903-4 AND 1904-5—continued.

	Wando Vale.		Walmer.		Eurack.		Whitfield.	
	1903-4.	1904-5.	1903-4.	1904-5.	1903-4.	1904-5.	1903-4.	1904-5.
Produce of cereals—								
Grain .. bushels	22,920	74,115	57,082	47,560	7,363	1,913	20,714	15,712
Hay .. tons	996	1,362	560	353	1,044	198	362	363
Lucerne .. "	2	..	..	..	..	21	3	1
Produce of root crops—								
Potatoes .. tons	..	44	..	..	..	24	..	142
Mangel wurzel .. "	33	23	..	..	258	31	40	..
Beet, Carrots, Parsnips, &c .. "	..	..	..	..	..	75	..	..
Onions .. "	20	..	..	..	103	15	3	..
Stock returned—								
Horses and foals ..	265	339	119	249	138	145	177	152
Horned cattle ..	1,083	1,274	71	312	1,047	1,435	1,001	1,191
Sheep ..	3,536	7,264	1,421	4,044	248	163	341	50
Pigs ..	259	584	20	65	185	554	294	489
Number of cream separators in use ..	12	19	1	5	..	..	4	3
Butter made .. lbs.	10,722	2,000	..	3,162	..	..	..	2,240
Cheese made .. "	1,400	..	..	..	..	..	..	..
Hams and bacon cured ..	9,289	9,006	..	1,710	..	950	2,958	3,300
Wool produced ..	17,142	33,595	2,684	27,354	300	850	1,330	150
Stock slaughtered, number of animals ..	874	1,089	80	443	..	43	446	126

CLOSER SETTLEMENT: PRODUCTION 1903-4 AND 1904-5.

	1903-4.	1904-5.	Increase.	Decrease.
Area under crop .. acres	8,238	9,719	1,481	..
Area in fallow and sown grasses ..	1,010	2,773	1,763	..
Hands employed, male .. No.	205	270	65	..
Hands employed, female .. "	134	160	26	..
Area under cereals .. acres	8,474	7,567	..	907
Area under root crops .. "	204	132	..	72
Produce—				
Grain .. bushels	108,079	139,300	31,221	..
Hay .. tons	2,962	2,276	..	686
Stock—				
Horses .. No.	699	885	186	..
Cattle .. "	3,202	4,212	1,010	..
Sheep .. "	5,546	11,511	5,965	..
Pigs .. "	758	1,692	934	..
Cream separators .. "	17	27	10	..
Butter .. lbs.	10,722	7,402	..	3,320
Cheese .. "	1,400	Nil	..	1,400
Hams and bacon .. "	12,247	14,966	2,719	..
Wool .. "	21,456	61,949	40,493	..
Stock, slaughtered .. No.	1,400	1,701	301	..

In the short time these estates have been settled fair progress has been made, and there is now a reasonable hope of their ultimate prosperity. During the past year, the hands employed have increased by 91, the land under cultivation and in fallow by 3,244 acres, the grain crops by 31,221 bushels, the live stock, horses,

cattle, sheep, and pigs by 8,095 head, and the stock slaughtered by 301 head. A decrease occurred in the quantity of butter and cheese returned—principally at the Wando Vale Estate, where in 1903-4, 10,272 lbs. of butter and 1,400 lbs. of cheese were made; whereas in 1904-5, the quantity was only 2,000 lbs. of butter and no cheese. On this estate, however, the live stock has considerably increased, notably the sheep. In 1904-5, there were 37,200 head of sheep, and 16,453 lbs. of wool more than in the previous year. Although an increase of ten cream separators is shown, the cream appears to have been forwarded to butter factories already established in the neighbourhood of the settlement. Assuming that each holding consists of the average household, there would probably be a population of close upon 1,200 persons on the estates.

Workmen's
homes.

At Brunswick, 4 miles from the city, 91 acres of land were purchased on 17th October, 1900, for £2,644, where workmen might devote their spare time and labour to create for themselves comfortable homes under healthy and cheerful conditions. After providing for roads and public reserves, it was subdivided into 56 workmen's homes allotments, and made available for application on 4th February, 1901, under certain conditions, amongst which residence is compulsory for the first six years and improvements of a stated value have to be effected. All these allotments have been disposed of and the general appearance of the district has been quite changed. There is a population of 227 on the Estate, and improvements to the amount of £8,352 have been effected by the lessees. Two bridges have been erected by the Department, and the Metropolitan Board of Works have laid down water mains along the principal streets. A public hall and also a fire brigade station have been erected on the estate.

At Warrnambool 46 acres of Crown land was subdivided and made available 17th June, 1903, in 28 workmen's homes allotments. At Bacchus Marsh the old police paddock, of 13 acres, was subdivided into 1-acre allotments, and disposed of to local workingmen, 5th November, 1903. At Leongatha 53 acres of the southern portion of the labour colony were subdivided into five small farm allotments and made available, 27th November, 1903. Since then the Government has secured the Dal-Campbell Estate, of 45 acres, adjoining the Brunswick sub-division, and made it available for settlement; also thirty acres in the city of Footscray, which has been cut up into $\frac{1}{4}$ -acre allotments, and through which streets have been formed and water mains laid preparatory to sale. At Mortlake, 2,349 acres of Crown lands were subdivided into thirteen farm allotments and fifteen agricultural labourers' allotments, and disposed of on 18th April, 1905. Other sites at Clifton Hill, Ballarat, &c., are being secured, and will be subdivided and disposed of later on.

Up to the end of the year 1904, no land was acquired under the authority of the Act of that year; but up to date (June, 1905) the following purchases have been sanctioned:—

Wyuna, 23,016 acres, in the Goulburn Valley, for £120,834.
Springvale, 3,396 acres, in Kiewa River Valley, for £25,895.
Memsie, 10,027 acres, on the Loddon River, for £57,153.
Overnewton, 11,336 acres, Keilor Plains, for £70,540.

The Springvale Estate has been subdivided into twenty farm allotments, and will be made available forthwith; the other three properties are now being subdivided.

WATERWORKS.—DOMESTIC SUPPLY

The Victorian Waterworks are of two classes, viz., those designed chiefly for domestic supply and those intended for irrigation purposes. By an Act of the year 1890, waterworks trusts were constituted for the purpose of controlling the stock and domestic supply within the area of their respective districts. Prior to the constitution of these trusts, extensive works for the storage and supply of water for domestic and mining purposes had been constructed by the Government and by local bodies in various parts of the State. The principal of these—the Yan Yean Waterworks—has been transferred to the Melbourne and Metropolitan Board of Works. The following table contains a summary of the cost of all waterworks controlled by the Government, Trusts, Corporations, and the Metropolitan Board of Works, and the reservoirs for the supply of water on goldfields:—

Victorian
water-
works.

COST OF WATERWORKS TO 30TH JUNE, 1904.

Waterworks under—	Cost.
	£
Government—Domestic—	
Coliban	1,153,946
Geelong	441,259
Broken River	14,853
Kerang Lakes	9,401
Mallee Supply	134,628
Government—Irrigation—	
Goulburn River	562,026
Loddon River	153,603
Kow Swamp	179,889
Trusts—Irrigation—	
21 Working Trusts	1,056,704
3 Trusts (now transferred for domestic supply)	9,938
2 Drainage and Irrigation Trusts	31,994
5 Abandoned Trusts	22,014
Waterworks Trusts (73)—Domestic—	
By free Grant from State, £72,219; from Loans, £979,205	1,051,424
Municipal Corporations (27)—Domestic	675,161
Metropolitan Board of Works—Domestic	3,753,024
Municipal Control—on Goldfields—Mining and Domestic	55,860
Miscellaneous Expenditure	99,398
Total	9,405,122

GOVERNMENT WORKS: DOMESTIC SUPPLY.

The Coliban Scheme provides water to the Bendigo and Castlemaine districts for domestic and mining purposes, as well as for irrigation to a limited extent. The main reservoirs of this scheme are

Coliban
Water-
works.

on the Coliban River, one about half a mile below the junction of the Little Coliban, and the other at Malmsbury, with capacities respectively of 4,100 and 3,337 million gallons. The cost of the works to the 30th June, 1904, was £1,153,946; whilst the gross revenue during the year 1903-4 was £28,279; and the expense of maintenance and supervision, £10,591. The net revenue was thus £17,688, being equivalent to £1 10s. 8d. per cent. on the capital cost. The deficiency in 1903-4, after allowing interest on the capital cost at the rate of 3½ per cent., was £22,700.

Geelong
Water-
works.

The Geelong Waterworks provide water for domestic supply to Geelong and suburbs. The storage works in this scheme, the chief of which are the Upper and Lower Stony Creek reservoirs, have a capacity of 571 million gallons. The Upper Reservoir receives supplies through a channel from the Eastern Morabool River to supplement the run off from the local catchment. The whole scheme has cost up to the 30th June, 1904, £441,259. The gross revenue for 1903-4 was £13,010, and the cost of maintenance £3,986. The net revenue was thus £9,024, or £2 os. 11d. per cent. on the capital cost. After allowing interest on capital at 3½ per cent., the deficiency for 1903-4 was £6,420.

Other
Govern-
ment
works.

The Broken River Waterworks supply water to Tungamah, Numurkah, and Shepparton. The Kerang Lakes are estimated to contain 4,000 million gallons, and supply the district surrounding the lakes. The Mallee Water Supply is obtained from Lake Lonsdale Reservoir, containing 1,981 million gallons, and the Lower Wimmera storages containing 125 million gallons.

The following return shows full particulars of these schemes:—

WATERWORKS UNDER GOVERNMENT CONTROL AT 30TH JUNE, 1904,
FOR STOCK AND DOMESTIC PURPOSES.

Town or District Supplied.	Reservoir or Source of Supply.		Cost, Including Expenditure on Channels and Reticulation
	Name.	Storage Capacity.	
		Gallons.	£
COLIBAN.			
	Upper Coliban ..	4,100,000,000)
	Malmsbury ..	3,337,000,000	
Taradale	Taradale	65,000	
Fryerstown	Crocodile Gully ..	5,407,000	
	Green Gully ..	1,500,000	
Maldon	Pumping Station Basin ..	350,000	
	Upper Reservoir ..	4,800,000	
	Lower Reservoir ..	3,428,000	
	Expedition Pass ..	120,000,000	
	Monument Hill ..	1,000,000	
Castlemaine, Chewton and Harcourt	Slate Quarry ..	30,000	
	Barker's Creek ..	629,135,000	
	Harcourt	20,000	

WATERWORKS UNDER GOVERNMENT CONTROL AT 30TH JUNE, 1904,
FOR STOCK AND DOMESTIC PURPOSES—*continued.*

Town or District Supplied.	Reservoir or Source of Supply.		Cost, Including Expenditure on Channels and Reticulation.
	Name.	Storage Capacity.	
		Gallons.	£
	<i>COLIBAN—continued.</i>		
Bendigo and Eaglehawk	Spring Gully ..	150,000,000	1,153,946
	Upper Grassy Flat ..	58,860,000	
	Lower Grassy Flat ..	26,800,000	
	Solomon's Gully ..	1,250,000	
	High Level Pipe Head Basin	2,000,000	
	Big Hill	68,000,000	
	Big Hill Tank ..	300,000	
	Crusoe	320,000,000	
	New Chum Tank ..	23,000	
	Sparrowhawk ..	1,500,000	
Lockwood and Marong	Green Gully ..	2,500,000	}
	Marong Pipe Head ..	330,000	
	Lightning Hill, Blue Gully Jacket	7,000,000	
Raywood and Sebastian	Raywood	2,500,000	}
	Sebastian	239,000	
	<i>GEELONG.</i>		
Geelong and Suburbs	Upper Stony Creek ..	417,000,000	441,259
	Lower Stony Creek ..	143,000,000	
	Anakie Pipe Head Basin	1,280,000	
	Lovely Banks ..	6,000,000	
	Montpellier ..	3,000,000	
	Newtown Tank ..	500,000	
	<i>BROKEN RIVER.</i>		
Tungamah, Numurkah, and Shepparton	Broken River Works	..	14,853
	<i>KERANG LAKES.</i>		
District surrounding Lakes	Reedy, Middle, Third Charm, Race-course, Cullen, Kangaroo, and Tutchewop Lakes	Cubic feet. 4,000,000,000	9,401
	<i>MALLEE WATER SUPPLY.</i>		
North-Western District, including Wimmera and Mallee	Lake Lonsdale Reservoir	1,981,000,000	134,628
	Lower Wimmera Storages (Drung Drung, Dimboola, Antwerp, and Jeparit Weirs)	125,000,000	
Total	1,754,087

IRRIGATION.

The problem of irrigation is one which, notwithstanding the outlay of large sums of money, yet remains to be solved. It may seem futile to attempt an objection to a policy which, almost self-evidently, cannot be a false one; yet there are many matters which must of necessity weigh upon our deliberations upon the subject. The cost of irrigation works in Victoria, up to 30th June, 1904, was, exclusive of interest, over two million pounds; and for this enormous outlay, only about 157,000 acres were irrigated in 1904, although the area in irrigation trust districts is over two and a quarter million acres. That the farming community should be so remiss in taking advantage of this means of improving their produce-yielding lands is a matter for wonderment, especially in a State like Victoria, where the distance from the centre of the world's markets renders necessary for successful competition therein the exercise of every method of increasing the return. At Mildura, where the settlers have had to encounter many and unforeseen difficulties, and where they were placed at enormous disadvantages in the way of markets—irrigation, improved methods of culture, and increased production have overcome many of these difficulties, and the settlement is now in a fair position to be successful and prosperous, the latest accounts being of a most satisfactory character. There is no reason why all the settlers in any district, which may have the advantages of irrigation, should not have as bright and prosperous a future before them as those at Mildura. Although the efficacy of irrigation works has more than once been questioned, and doubt has been expressed as to the wisdom of incurring expense in this direction, which by some is regarded somewhat in the light of a costly experiment—yet it must be remembered that a policy of national irrigation is now by no means in an experimental stage. Its value has been too often demonstrated in various countries of the world, possessing perhaps fewer facilities than Victoria. The Honorable Alfred Deakin, who made special visits to America and other places, twenty years ago, to inquire into the most modern developments of irrigation, furnishes a wealth of information as to the extent and utility of the system. His conclusions are embodied in reports on irrigation in Western America, in Egypt, and in Italy. There can, he says, be no doubt as to its success in these countries. In the older countries of the world, where irrigation has been carried on extensively, its value has ever been perceived. Egypt is a natural desert, but irrigation transformed it into the garden of the ancient world. The decadence, as a producing country, into which it fell, was due to the neglect of its people to conserve the water in the proper seasons. The British Government has been so fully alive to the necessity of this artificial means of watering the country, that enormous sums have been expended in providing the means whereby irrigation may be practised even much more extensively than in days long gone by. In China, the valley of the Yang-tse-Kiang, where probably the population is denser than in any other part of the world, is reticulated by a network of canals, and indeed, it would be an impossibility for these millions of people to live were it not

for the intense culture which irrigation induces. In Mexico, irrigation was practised before the advent of the Spaniards. In the United States, the territory about Salt Lake City has been converted from a wilderness into a highly and intensely cultivated country. The productiveness of California has also been enormously increased; whilst other territories of the Continent have practised irrigation extensively. Much has been done in France, Italy, and Spain, particularly in the two first named countries, in artificially watering fruit, cereals and pasture lands.

In view of the importance which irrigation must of necessity have upon the future welfare and prosperity of the State, it may be well to see what has already been done in this direction. Irrigation in Victoria.

The more important irrigation works, or those connected with the principal rivers (which form the main supply in some cases for several local schemes), are undertaken by the State. These are known by the name of National Works, or those works which are of such magnitude as to affect sources of water supply, and command such large areas of country that it is advisable that they should be constructed by and retained under the direct control of the State, and declared by Act of Parliament to be National Works. Full details are in the following statement:—

WATERWORKS UNDER GOVERNMENT CONTROL AT 30TH JUNE, 1904, FOR IRRIGATION SUPPLY.

Town or District Supplied.	Reservoir or Source of Supply.		Cost, Including Expenditure on Channels and Reticulation.
	Name.	Storage Capacity in Cubic feet.	
Rodney Trust, Echuca and Waranga Trust, and the Campaspe-Loddon District	GOULBURN RIVER.		£
	Goulburn Weir ..	900,000,000	} 562,026
	Waranga Reservoir ..	8,600,000,000	
Tragowel Plains, East Boort, North Boort, Wandella, Twelve Mile, Leaghur, and Meering Irrigation, &c., Trusts, and the Loddon United Waterworks Trust	LODDON RIVER.		153,603
	Laanecoorie Weir ..	610,000,000	
Gunbower West, Macorna North, Kerang East, Kerang South, Dry Lake, Wandella and Marquis Hill Irrigation, &c., Trusts	KOW SWAMP.		179,889
	Kow Swamp Reservoir	1,780,000,000	
Total ..	.. .. .	11,890,000,000	895,518

WATER CONSERVATION.

Extracted from a paper by G. Garson, Esq., Deputy Chief Engineer of Water Supply, Victoria, published in the "Victorian Settlers' Guide."

One of the most promising directions in which closer settlement may be expected to develop is in connexion with the national schemes of water conservation and irrigation inaugurated some fourteen years ago by the construction of the Goulburn weir. This work, which is situated about eight miles up stream from Murchison, serves to raise the water level of the river so that the water may be diverted therefrom. A channel of 120 feet mean width, and seven feet carrying depth, has been constructed on the west bank of the river to the Waranga basin, now in course of construction—a distance of 24 miles—and is capable of filling that large storage of nine thousand million cubic feet capacity in fifty days.

The construction of the reservoir embankment, $4\frac{1}{2}$ miles in length, and about 24 feet high, commenced in December, 1902, will be completed, and the reservoir filled, during the winter of 1906. The area commanded by the existing works comprises the Rodney Irrigation Trust, 275,000 acres in extent, and the Echuca and Waranga Waterworks Trust, 300,000 acres in extent. The former is completely reticulated with irrigation channels, while the latter has a very effective system of stock and domestic supply channels, which also serve in some measure for irrigation.

A main eastern channel, drawing its supply from the weir, will command an area of about 205,000 acres on the east side of the Goulburn as far north as the Broken Creek; while a main western channel from the Waranga Reservoir to the Loddon, crossing the Campaspe about two miles north of the town of Rochester, will, besides providing an irrigation supply for the Echuca and Waranga Trust district before mentioned, command a further area of 627,000 acres between the Campaspe and the Loddon. Of this area, about 270,000 acres (comprising the Tragowel Plains and other Loddon River irrigation trusts) have a complete system of irrigation channels. These are supplied from the Loddon River, which is regulated by the Laanecoorie weir, a national work constructed in 1891. The supply from this source, though valuable in winter and spring, is quite inadequate for the summer requirements of the district; and the carrying of the Goulburn waters westward is required to make good the deficiency, and to place irrigation here on a satisfactory basis. The extension of the channel from the Loddon westward to Tyrrell Creek will provide an ample stock and domestic supply to the eastern Mallee as far north as Tyntynder, and embracing an area of 1,700,000 acres.

The following are the quantities of water which it is estimated will be available from the Goulburn-Waranga-Loddon scheme, delivered at the irrigators' fields, in a year of typical low river

discharge, after providing for losses by evaporation and percolation in the storages and channels:—

Cold weather irrigation, 1st July to 31st August, 162,000 acre feet.

Warm weather irrigation, 1st September to 30th April, 405,000 acre feet.

The total area of the districts commanded is 1,400,000 acres; and the irrigable area about 1,200,000 acres. Exclusive of the supply for the irrigation of cereals and other crops during the months of July and August, the water available would thus serve to irrigate 405,000 acres to a depth of 12 inches, or one-third of the whole area commanded, during the summer period.

Careful estimates of annual expenditure have been prepared by the Water Supply Department in connexion with this scheme, which shows that the cost of water delivered to the irrigators will average about 4s. per acre foot.

Within the area of the Rodney Trust, which, as mentioned above, has a complete system of irrigation channels, considerable progress has been made with irrigation over an extended area; and it is here we find practical evidence of the success attending the application of water to farming lands in the Goulburn Valley.

The assured prospects of rapid development in irrigation are to be found in the dairying and stock fattening industries, which, with the aid of irrigation, are carried on under the most favorable conditions in our northern districts. The rapid increase of the area under lucerne in Rodney during recent years, together with the successful establishment of local butter factories, give ample proof of this. Rodney is not singular in this respect. Similar results may be observed throughout our northern areas wherever water is available for summer irrigation.

Turning to the Kow Swamp irrigation district, supplied from the national works of the same name:—Water is diverted from the River Murray at Torrumbarry head works, when the river reaches a height of 5 feet above summer level. Up to this point no diversion takes place. During the winter months the Kow Swamp storage, containing about eighteen hundred million cubic feet, is filled; and, in addition, water is conveyed direct from the river, through a main channel 42 miles in length, to supply the irrigation trusts dependent on the system; while, during the summer months, when the river is low, the storage is drawn upon for the necessary supplies. The works have proved most successful and have contributed greatly to the prosperity of the district (84,000 acres in extent), supplied by them.

Other national works are the Kerang Lakes (eight in number), which have been linked together by connecting channels, and are filled in winter by diversion from the River Loddon at Kerang, supplemented by the Kow Swamp works. These lakes, intended primarily as storages for stock and domestic supply, are also used for irrigation, the water being raised by pumping to the level of the fields to be irrigated.

The Goulburn-Waranga-Loddon scheme, now being actively carried out, commanding an area of about 1,240,000 acres of land admirably adapted for irrigation, stands out prominently as the principal irrigation scheme of Victoria. The water supply available from the Goulburn weir at Waranga Reservoir, great as it is, can be supplemented, when the necessity arises, by storage on the Upper Goulburn, where there are several sites suitable for the construction of large reservoirs.

To properly develop the resources of the Goulburn-Loddon district by means of the water which will be available from the Goulburn weir and the Waranga Reservoir, a large increase of the farming population will be necessary. The obligations placed on the landholders to recoup to the State, within a reasonable time, the annual expenditure on the works, will be a strong incentive to make them use the water allotted to their lands to the best advantage, and to do so labour must be employed. The cultivation of cereals, mainly carried on by machinery, will probably, to a considerable extent, be given up in favour of fodder crops required for dairying and the raising of stock, which involve the employment of much more labour. The increased productiveness resulting from irrigation will inevitably tend to reduce the size of the farms by enabling a smaller area to maintain a family in comfort. Dairy farming is most profitably carried on when the farm is small and can be worked by the owner and his family with little outside assistance. Wheat-growing, on the contrary, while it requires the employment of comparatively few hands, is most profitably carried on in large areas.

The success of the Goulburn scheme, when realized, will undoubtedly lead to others being undertaken, the Murray River plains lying to the east of the Goulburn offering great inducements to the undertaking of irrigation schemes from the Murray. The works involved, however, would be partly of an Inter-State character; and, for this and other reasons, it will probably be some considerable time before they can be entered upon.

Besides national works supplying water for irrigation, there are four trusts, viz., Benjeroop and Murrabit, Cohuna, Koondrook and Myall, and Swan Hill, comprising a total area of 147,000 acres, which draw their supplies partly by gravitation and partly by pumping from the river Murray, between the Kow Swamp head-works and Swan Hill. In spite of the heavy cost entailed by pumping, the advantages accruing are found to justify the annual outlay.

Originally there were 31 public water trusts established throughout the State. Of these, one (Dookie) is now used solely for the supply of water to the College, and is in no sense a public trust. Two (Emu Valley and Harcourt) have been transferred to and amalgamated with the Coliban scheme for domestic service. Two (Carrum and Yat-chaw) are principally drainage trusts. Five are practically abandoned. The remaining 21 are still carrying on irrigation works, but to a very limited extent. The following table shows their general

Present
position of
irrigation
trusts

financial condition, and the very meagre results that have followed the enormous outlay: —

IRRIGATION, ETC., TRUSTS—COST OF IRRIGATION WORKS, AND AREA OF LAND IRRIGATED.

Trust.	Cost of Works.			Written off.		Arrears of Interest Accumulated from 30.6.99 to 30.6.04.	Land capable of being Irrigated	
	Advances.	Grants.*	Total.	Capital.	Interest to 30.6.99.		Area of Trust District—exclusive of Roads and Reserves.	Irrigated
	£	£	£	£	£	£	Acres.	Acres.
WORKING TRUSTS.								
Bacchus Marsh	13,906	..	13,906	8,906	5,486	97	910	342
Balnrsdale	31,439	..	31,439	23,439	7,739	156	..	..
Benjeroop and Murrabit	12,936	..	12,936	7,200	4,379	340	19,740	7,347
Boort North	6,978	238	7,216	4,867	2,835	73	10,000	1,242
Boort East	21,567	112	21,679	14,866	7,902	445	30,000	1,467
Campaspe	62,000	..	62,000	52,685	18,131	182	44,590	1,272
Cohuna	151,213	334	151,547	93,968	46,770	3,390	94,230	29,452
Dry Lake	1,704	20	1,724	686	567	26	1,510	1,236
Gunbower West	5,889	..	5,889	..	..	274	9,790	3,943
Kerang East	14,025	256	14,281	6,984	4,910	652	18,100	7,961
Koondrook and Myall	14,404	..	14,404	12,080	5,100	33	12,590	5,629
Leaghur and Meering	5,043	8	5,051	2,543	1,864	49	10,300	1,391
Macorna North	18,557	18	18,575	8,082	4,337	797	27,300	12,776
Marquis Hill	14,477	262	14,739	9,076	5,466	543	10,930	3,551
Rodney	222,798	11,789	234,587	149,949	52,726	1,404	275,000	24,491
South Kerang	633	..	633	..	..	22	2,630	1,072
Swan Hill	24,800	..	24,800	19,799	10,126	186	14,400	9,346
Tragowel Plains	159,848	1,871	161,719†	124,534	80,141	1,658	180,900	31,768
Twelve Mile	5,050	53	5,103	3,250	2,343	64	9,030	2,068
Wandella	30,754	444	31,198	20,929	5,280	399	23,200	9,595
Western Wimmera	213,943	9,335	223,278	132,835	51,218	2,782	1,578,030	1,574
Total Working Trusts	1,031,964	24,740	1,056,704	696,678	320,320	13,572	2,373,180	157,523
TRANSFERRED TRUSTS.								
Dookie	630	..	630	630	171	..	..	..
Emu Valley	8,166	..	8,166	8,166	2,907	..	..	..
Harcourt	1,142	..	1,142	1,112‡	335	..	..	..
Total Transferred Trusts	9,938	..	9,938	9,908	3,413	..	..	..

* Free gift from State towards construction of headworks. The whole originally made to Waterworks Trusts, Act 760, £100,000; but portion transferred to Irrigation Trusts as works were taken over from the Waterworks Trust.

† Tragowel Trust works constructed by Trust, £3,209 (not included in cost above), taken over by State under Loddon Works.

‡ £30 paid to redemption fund by Trust.

IRRIGATION, ETC., TRUSTS—COST OF IRRIGATION WORKS, AND AREA OF LAND IRRIGATED—*continued.*

Trust.	Cost of Works.			Written Off.		Arrears of Interest Accumulated from 30.6.99 to 30.6.04.	Land capable of being Irrigated.	
	Advances.	Grants. *	Total.	Capital.	Interest to 30.6.99.		Area of Trust District—exclusive of Roads and Reserves.	Irrigated
	£	£	£	£	£	£	Acres.	Acres.
DRAINAGE TRUSTS.								
Carrum ..	25,732	..	25,732	7,732	7,146	1,186	..	..
Yatchaw ..	6,262	..	6,262	1,661	514	90	..	..
Total Drainage Trusts	31,994	..	31,994	9,393	7,660	1,276	..	..
ABANDONED TRUSTS.								
Lerderberg ..	447	..	447	447	169	..	..	..
Millewa ..	973	..	973	..	..	..	..	..
Pine Hills ..	2,051	243	2,294	2,050	1,065	..	..	..
Torrumbary Nth.	12,300	..	12,300	6,300	4,612	1,200	..	..
Werribee ..	6,000	..	6,000	..	..	3,752	..	..
Total Abandoned Trusts	21,771	243	22,014	8,797	5,846	4,952	..	..
Total all Trusts	1,095,667	24,983	1,120,650	724,776	337,239	19,800	2,373,180	157,523

* Free gift from State towards construction of headworks. The whole originally made to Waterworks Trusts, Act 760, £100,000; but portion transferred to Irrigation Trusts as works were taken over from the Waterworks Trust.

‡ Exclusive of £58,700 advanced to the Mildura Irrigation Trust.

From these figures it would appear that £1,120,650 has been expended in constructing irrigation works, exclusive of national works, £895,518. Of this, £9,938 was advanced to trusts since transferred, £31,994 to drainage trusts, and £22,014 to trusts since abandoned, leaving the total amount invested in working trusts, £1,056,704. There has been written off the capital a total of £724,776—£9,908 from transferred trusts, £9,393 from drainage trusts, £8,797 from abandoned trusts, and £696,678 from present working trusts. The total amount of interest written off up to 30th June, 1899, was £337,239—£3,413 being from transferred trusts, £7,660 from drainage, £5,846 from abandoned, and £320,320 from trusts now in operation. The interest accumulated to 30th June, 1904, was £19,800—£1,276 belonging to drainage, £4,952 to abandoned, and £13,572 to operating trusts. It will be seen that out of a total cost of £1,477,689 (capital and interest) we have arrived at the result of having provided water to irrigate land

which is capable of being irrigated to the extent of 2,373,180 acres, and out of this all we have irrigated is 157,523, or 6 per cent., equivalent to a capital cost of nearly £10 per acre.

Full particulars respecting the various irrigation trusts now in operation are furnished in the following statements:—

This service is procured by means of gravitation and a pumping plant, and supplies water required for domestic purposes as well as for irrigation. The total cost of the works (defrayed from loans) up to 30th June, 1904, was £13,906, of which £8,906 capital and £5,486 accumulated interest have been written off, £160 has been repaid, and £4,840 is still outstanding. There is also £97 interest due. The intake to the main channel is at a point on the Werrabee River, in the parish of Gorrockburkhap. The channel is thence continued easterly for about three miles, and empties into a service basin at Maddingley. This basin supplies the town and railway station, and the surplus water is used for irrigation. When pumping has to be resorted to, there is only sufficient water for domestic purposes.

Bacchus
Marsh
Trust.

The rate charged is based on the municipal valuation, being 1s. 6d. in the £1 in the town area, and 2s. in the £1 in the irrigation area. An extra charge, varying from 2s. 6d. to 7s. 6d. per day, is paid for a supply of water for irrigation purposes. During the year 1904 £739 has been received from water rates, and the proceeds of the sale of water were only £52. In connexion with this scheme, there are 910 acres within the trust district, but only 342 were irrigated during the year.

The source of this supply is the Mitchell River, and there is connected with it a pumping plant and weir. £31,439 was spent up to the 30th June, 1904, £23,439 was written off under Act No. 1625, and £180 was repaid. The debt is now £7,820. Interest accumulated to 30th June, 1899, amounting to £7,739, was also written off, and £156 has accrued since. The scheme is combined with one to supply the town with water for domestic purposes, but the irrigation part of it is not yet complete. Application is being made for an additional loan of £7,800 for improving and enlarging the water supply scheme. The income derived from water rates was £690, and £209 from sale of water and other sources.

Bairnsdale
Trust.

The supply is from levee works on the river Murray and Reedy Creek. £12,936 was the total expenditure up to 30th June, 1904. £7,200 was written off and £64 has been repaid, the debt, on 30th June, 1904, being £5,672. The amount of interest due on 30th June, 1899—£4,379—was also written off. The accumulated interest from that time to 30th June, 1904, is due, and amounts to £340. Rate receipts (including arrears) during 1904 were £350, and the sale of water realized £329. Out of 19,740 acres in the trust area, only 7,347 acres are being irrigated.

Benjeroop
and Murra-
bit Trust.

Boort North
Trust.

The origin of the supply is the Loddon River National Works. Its cost to 30th June, 1904, was £7,216. £4,867 was written off, and £31 paid to redemption fund, leaving a total indebtedness on the date named of £2,318. £2,835 interest to 30th June, 1899, was written off, and £73 had accumulated to 30th June, 1904. The rates collected for the twelve months ended 31st December, 1904 (including arrears) was £187, and the proceeds from sale of water, also including arrears, and from other sources, were £107 for the same period. The area irrigated is 1,242 acres; that irrigable is 10,000 acres.

Boort East
Trust.

The source is the Loddon River National Works. The expenditure up to 30th June was £21,679. £14,866 was written off the capital account, £142 was paid to the redemption fund, leaving a total debt of £6,558 on the date named, £112 having been granted for preliminary works. £7,902 interest has been written off, and £445 is again due. During the year 1904 the receipts were—rates (including arrears) £304, and sale of water £170. The trust area is 30,000 acres, that irrigated, 1,467 acres.

Campaspe
Trust.

The origin of the supply is the Campaspe River. The cost up to 30th June, 1904, was £62,000. £52,685 was written off and £203 paid to redemption, leaving a debt of £9,112; £18,131 accumulated interest was also written off, and £182 interest is due. The area irrigated is 1,272 acres; that irrigable, 44,590 acres. The amount received from rates during 1903-4 was £853; and for the sale of water, £42.

Cohuna
Trust.

A pumping plant on the river Murray and gravitation by Deep Creek and other streams, are the means of supply. The total cost to 30th June, 1904, was £151,547; £93,968 was written off, and £512 paid to redemption, leaving £57,067 due. £46,770 interest to 30th June, 1899 was also written off, and £3,390 has accumulated since. Rates received amounted to £157, and £1,596 from sale of water. The area irrigated is 29,452 acres; the area of the trust's district is 94,230 acres.

Dry Lake
Trust.

The supply comes by gravitation from the Kow Swamp National Works. £1,724 was the total cost to 30th June, 1904. £686 was written off capital, and £567 off interest; £275 was repaid, and £763, besides £26 interest, is due. In this trust no rates are fixed, nor is a collection made for the sale of water, but the sum of £84 has been levied from the respective land-owners within the area. Out of over 1,510 acres capable of irrigation, 1,236 are irrigated.

Gunbower
West Trust.

This supply has its origin in the Kow Swamp National Works. Up to 30th June, 1904, the total cost was £5,889, and there was also £274 interest due. Nothing was written off. The receipts from rates during 1904 were £293, and from sale of water, £193. The area of the trust's district is 9,790 acres, of which 3,943 acres are irrigated.

This supply has its origin in the Kow Swamp National Works. The cost up to 30th June, 1904, was £14,281. £6,984 was written off capital, and £4,910 off interest, and £18 repaid towards redemption. The debt on the date named was £7,279, and the amount of outstanding interest, £652. During 1904, £794 rates have been received. For the sale of water the receipts were £284. The area irrigated is 7,961 acres; that of the trust's district, 18,100 acres.

Kerang East Trust.

This supply has its origin in the River Murray, and is connected by means of a pumping plant. £14,404 was the total cost to 30th June, 1904, of which £12,080 was written off the capital, £34 repaid, and £2,291 is still due. £5,100 accumulated interest to 30th June, 1899, was written off, and £33 has accrued since. The general rates yielded £375 during 1904, and the sale of water £298; 12,590 acres are irrigable, and 5,629 acres irrigated. During the past year a gravitation channel has been constructed from the Gunbower Creek to the existing channels, also a dam across the Gunbower Creek, with the necessary bridges and stops. The Water Supply Department granted a further loan of £2,000 for the purpose, £1,451 of which has been spent. The trust obtained a large quantity of gravitation water through this channel during 1904.

Koondrook and Myall Trust.

The source is the Loddon River National Works. £5,051 was the cost to 30th June, 1904. £2,543 was written off capital, and £60 has been repaid towards redemption, leaving £2,448 now due. £1,864 interest accumulated to 30th June, 1899, was also written off, and £49 has accrued since. £132 was received from the rates during 1904, and £89 from sale of water. The trust area is 10,300 acres, 1,391 acres being irrigated.

Leaghur and Meering Trust.

This water is supplied by means of the Kow Swamp National Works. The cost was £18,575 up to 30th June, 1904. £8,082 was written off, and there is now £10,493 due. £4,337 interest to 30th June, 1899, was written off, and £797 has accumulated since. In 1904, the rates totalled £1,095, and the sale of water £456; 27,300 acres are included in the trust area, and 12,776 acres are irrigated.

Macorna North Trust.

The source is the Kow Swamp National Works. On 30th June, 1904, £14,739 had been spent. £9,076 was written off capital, and £2 paid to redemption, the debt was £5,661. £5,466 interest to 30th June, 1899, was also written off, and £543 has since accrued; 3,551 acres are irrigated, but there are 10,930 acres in the trust's district. The rates received amounted to £290, and for sale of water £205 was realized.

Marquis Hill Trust.

The district of this trust (comprising an area of about 275,000 acres) is situated in the North-Eastern portion of the County of Rodney, and the supply to it is from the Goulburn National Works. The trust's district includes about 500 miles of main and secondary channels and subsidiary works. The amount advanced to the 30th June, 1904, was £234,587. £149,949 capital, and £52,726 interest has been written off, and £2,153 repaid; leaving the indebtedness,

Rodney Trust.

on the date mentioned, £82,485, exclusive of £1,404 interest. The municipal valuation of the irrigation district for 1904 was £58,977, and the rate made by the trust for that year was one of 1s. 9d. in the £1 on such valuation, amounting to £5,160. Of this rate, £3,389 was paid while current, leaving arrears amounting to £1,771. Arrears from previous years to the amount of £2,453 were also paid during the year; the total revenue received on account of rates thus being £5,842. The other principal source of revenue for the year was from sales of water for irrigation purposes, &c., in respect of which £1,873 was paid. The greater portion of the district is commanded for irrigation purposes, but the moist natural conditions prevailing for the past two irrigation seasons have retarded irrigation operations during that period. The net area watered from the works of the trust during the year 1904 was 21,210 acres, or (including re-waterings) a gross area of 24,491 acres. The trust, however, compiles its returns on this subject as for the watering seasons—comprising the last quarter of the one calendar year and the first quarter of the next. The following summary, so based, will give an idea of the progress of irrigation operations within the district for the last eleven seasons:—

Season.	Gross Area Irrigated.	No. of Irrigators.	Value Water Used.
	acres.		£ s. d.
1894-5	3,159	145	263 13 9
1895-6	22,634	384	1,481 18 6
1896-7	65,422	554	3,522 1 8
1897-8	19,311	409	1,634 0 1
1898-9	18,059	393	1,401 2 4
1899-00	28,368	490	2,324 13 5
1900-01	25,606	489	1,535 6 1
1901-02	40,813	544	2,334 1 6
1902-3	81,913*	689	5,448 11 6
1903-4	23,612†	504	1,346 17 0
1904-5‡	5,481§	264	387 0 0

* Net area, 60,000 acres (about).

† Net area, 20,268 acres.

‡ First half (to 31.12.04) of season only.

§ Net area, 5,275 acres.

South
Kerang
Trust.

The source is the Kow Swamp National Works. The cost to 30th June, 1904, was £633, of which only £5 has been repaid, and there is thus a sum of £628 outstanding; £22 interest is also due. All the district works were constructed by the land-holders at their own cost, so that no money was written off this trust. In 1904, £47 was received from rates, and £39 from sale of water. The trust area is 2,630 acres, but only 1,072 acres are irrigated.

Swan Hill
Trust.

By means of two pumping plants, the water is procured from the River Murray. The cost to 30th June, 1904, was £24,800. In

discharge of this amount, £19,799 capital was written off, and £19 was repaid, the debt being £4,982 on the date named. In addition, £10,126 interest accumulated to 30th June, 1899, was written off, and the amount of interest accrued since is £186. The revenue in 1904 was £1,150 from water rates. Of the total trust area of 14,400 acres, there were irrigated in 1904, 9,346 acres.

The source is the Loddon River National Works. The expenditure up to 30th June, 1904, was £161,719. £124,534 was written off, £444 was paid to redemption, leaving a debt of £36,741 on that date. £80,141 interest was written off, and that due on 30th June, 1904, was £1,658; 31,768 acres are irrigated out of the total trust area of 180,900 acres. The supply of water is quite inadequate for the whole area; not more than 10 per cent. of the irrigable allotments can be supplied. The losses in the distribution of the water are approximately 30 per cent., being greatest in minor distributaries. Water is not delivered by measure, the irrigator is charged at a rate per acre, irrespective of the quantity used. The amount of rates received during the year, including arrears, was £2,143, and £1,157 was realized from the sale of water.

Tragowel
Plains
Trust.

The water is taken from the Loddon River National Works, and run down the Twelve-mile Creek for about four miles, where there is a weir, and an off-take from this point into a channel carries the water into the parish of Tragowel. There are two other short off-take channels, carrying water for the purposes of the trust. The cost to 30th June, 1904, was £5,103. £3,250 capital was written off, and £14 repaid, leaving due £1,839. £2,343 interest accumulated to 30th June, 1899, has also been written off, and since that date £64 has accrued. For the year 1904 revenue from rates gave £161, and sale of water £83; 9,030 acres comprise the trust's district, of which 2,068 acres are irrigated.

Twelve Mile
Trust.

The Loddon River National Works is the source of the Wandella supply. Up to 30th June, 1904, the works had cost £31,198, and £20,929 had been written off capital. Only £105 had been paid towards redemption, the total debt on the date named being £10,164. £8,280 interest accumulated to 30th June, 1899, was also written off; and since that date a further sum of £399 has accrued. In 1904, the receipts from rates, including arrears, were £280, and from the sale of water £650. The trust area is 23,200 acres, but only 9,595 acres are irrigated.

Wandella
Trust.

The source of supply is the Wartook Storage, with which are connected thirty-four dams and two pumping plants. Water for domestic purposes, as well as for irrigation, is supplied. Up to 30th June, 1904, £223,278 had been expended, of which £132,835 capital has been written off, £1,814 repaid, leaving due £88,629. £51,218 interest, which had accumulated to 30th June, 1899, was also written off; but £2,782 has since accrued. Rates yielded £6,573 in 1904, and sale of water £3,244. Of 1,578,030 acres in the trust area only 1,574 acres were irrigated in 1904.

Western
Wimmera
Trust.

Revenue expenditure, and debt of water supply trusts.

The following return furnishes full particulars as to the revenue and expenditure of all these trusts:—

REVENUE, EXPENDITURE, AND INDEBTEDNESS OF IRRIGATION AND WATER SUPPLY TRUSTS ON 31ST DECEMBER, 1904.

Irrigation and Water Supply Trust.	Revenue from—				Expenditure on—					Amount of Govern-ment Loans out-standing, 30th June, 1904.
	Water Rates.	Sale of Water.	Other Sources.	Total.	Maintenance and Management.	Salaries and Wages.	Interest and Redemption.	Other Services.	Total.	
	£	£	£	£	£	£	£	£	£	£
Bacchus Marsh	739	52	..	791	192	278	219	5	694	4,840
Bairnsdale*	690	205	4	599	297	291	354	12	954	7,820
Benjeroop and Murrabit	350	329	..	679	29	197	336	6	568	5,872
Boort East	304	170	..	474	27	129	332	4	492	6,558
Boort North	187	96	11	294	57	76	188	2	323	2,079
Campaspe	853	42	1	896	382	70	416	..	868	9,112
Cohuna	157	1,596	4	1,757	1,125	729	26	8	1,888	56,733
Dry Lake	..	84	..	84	19	1	72	..	92	743
Gunbower West	293	193	..	486	81	46	278	4	400	5,889
Kerang East	794	284	..	1,078	81	199	784	24	1,088	7,023
Koondrook and Myall	375	298	2	675	258	245	115	..	618	1,912
Leagbur and Meering	132	89	..	221	..	69	166	..	235	2,441
Macorna North	1,095	456	11	1,562	262	236	821	42	1,361	10,475
Marquis Hill	290	205	..	495	80	101	257	..	438	5,398
Rodney	5,842	1,873	51	7,766	2,977	651	3,193	83	6,904	70,696
South Kerang	47	39	..	86	12	31	37	..	80	628
Swan Hill	1,150	..	7	1,157	271	457	350	25	1,103	4,852
Tragowel Plains	2,143	1,157	65	3,365	577	810	2,006	62	3,455	34,870
Twelve Mile	161	83	..	244	13	40	185	7	245	1,787
Wandella	280	650	22	952	93	174	643	12	922	9,720
Western Wimmera	6,573	3,244	6	9,823	4,355	620	5,355	..	10,330	79,254
Total	22,455	11,145	184	33,784	11,188	5,450	16,133	296	33,067	28,672

* Domestic and Irrigation supply. Irrigation works not yet complete.

Drainage trusts.

One of the drainage trusts is situated at Carrum, connected with the Dandenong Creek, having 10 miles of main channel and 35 miles of branches. This trust has now passed into the hands of the Auditor-General, under the authority of the Water Act of 1890, which empowered the Audit Commissioners to take over and manage any waterworks trust, irrigation and water supply trust, or the water works of any local governing body, which might be three months over two half-years in arrear in the payment of interest on loans. The following is a statement of the present financial position of the Carrum Trust:—

CARRUM IRRIGATION AND WATER SUPPLY TRUST.—LIABILITIES AND ASSETS, 31ST DECEMBER, 1904.

Liabilities.			Assets.		
	£	s. d.		£	s. d.
To interest due	1,544	14 11	By cash in bank	64	1 4
Redemption due	417	5 11	Arrears of rates	555	0 0
Sundry accounts	70	0 0	1904 rate (approximate)	1,744	0 0
Balance	331	0 6			
	£2,363	1 4		£2,363	1 4

The loan outstanding at 31st December, 1904, was £17,950 9s. 6d.

The Yatchaw Irrigation and Water Supply Trust is also a drainage trust connected with McIntyre's Creek, having 5 miles 72 chains of main drains, and 4 miles 72 chains of branches. The revenue of the trust for the year ended 31st December, 1904, was £268, the expenditure £267.

TRANSFERRED AND ABANDONED TRUSTS.

Name of Trust.	Source of Supply.	Cost to 30th June, 1904.	Remarks.
Dookie	Tank	£ 630	Used in connexion with the Agricultural College
Emu Valley ..	Coliban National Works	8,166	
Harcourt ..	Coliban National Works	1,142	} Now form part of Coliban scheme
Lerderderg ..	Lerderderg River ..	447	
Millewa ..	Murray, Goulburn, and Campaspe Rivers	973	} These Trusts are practically defunct
Pine Hills ..	Kow Swamp National Works	2,050	
Torrumbarry North	Murray River ..	12,300	
Werribee ..	Werribee River ..	6,000	

At Lerderderg, Dookie, and Pine Hills, the total cost of the works has been written off by Act No. 1625, as well as £169 at Lerderderg, £171 at Dookie, and £1,065 at Pine Hills for interest which had accumulated on 30th June, 1899. £6,300 at Torrumbarry North has been written off by the same authority, together with £4,612 accumulated interest to 30th June, 1899; but £1,200 interest has accumulated from that date to 30th June, 1904. The works at Dookie may be regarded as still valuable, as they are the means of supplying the college with water. The Emu Valley and Harcourt works have been transferred, but the money spent on the last five of the above trusts, amounting to £21,770, seems to have been entirely wasted.

The chief reservoirs under the control of municipalities are those at Ballarat (now under the Ballarat Commission), having an aggregate capacity of nearly 842 million gallons, the Gong Gong Reservoir alone containing 427 million gallons: the Beechworth Reservoir, at Lake Kerferd, containing 191 million gallons; the Clunes, at Newlyn, 225 million gallons; and the Talbot, at Evansford, 200 million gallons. The following return contains particulars of these waterworks:—

Waterworks under control of municipalities and trusts.

PARTICULARS OF WATERWORKS CONTROLLED BY TRUSTS AND CORPORATIONS.

Under what Control.	No. of Municipalities and Trusts.	Amounts of Loans and Grants Advanced to 30th June, 1904.	Principal as Reduced by Payments to Redemption to 30th June, 1904, and Amounts Written off.
Municipal Corporations ..	27	£ 675,161	£ 436,182
Water Trusts	73	1,051,424	841,050
Total	100	1,726,585	1,277,232

The above figures do not include interest capitalized, £50,503—£6,870 for trusts and £43,633 for corporations.

The number of trusts and corporations controlling waterworks (exclusive of those controlled by the Government, the Metropolitan Board, and those on goldfields) was 100 on 30th June, 1904. The amount advanced was £1,726,585, of which £72,219 was by way of grant, the balance being advances on loan. The capital was reduced by £449,353 written off and paid to redemption, leaving a balance of £1,205,013, to which has to be added £50,503 for interest capitalized, making the capital indebtedness on the date specified, £1,255,516.

Melbourne
Water-
works.

The waterworks for the service of Melbourne and suburbs were originally constructed by the General Government. The cost to 31st December, 1904, was £3,753,024. At the present time, these works consist of nine storage reservoirs, as under:—

Situation.	Storage Capacity in gallons.	Situation.	Storage Capacity in gallons.
Yan Yean ...	6,400,000,000	Caulfield ...	10,000,000
Toorourrong ...	60,000,000	Kew ...	3,000,000
Preston ...	16,000,000	Surrey Hills ...	9,000,000
Essendon, No. 1 ...	1,000,000	Morang (Pipe Head) ...	3,000,000
„ No. 2 ...	6,000,000		
		Total	6,508,000,000

The transfer of these works to the control of the Melbourne and Metropolitan Board was made in 1891. The Board consists of 40 members, one of whom is a Chairman elected every four years by the other members, the retiring Chairman being eligible for re-election. Seven of the members are elected by the Melbourne City Council, four by the South Melbourne, three by the Prahran, two each by the Fitzroy, Richmond, St. Kilda, and Collingwood, and one each by the other suburban municipal councils. In 1891, the rateable property within the area to be served was valued at about £6,600,000, of which about £1,000,000 was for vacant land. The collapse of the land boom was followed by a heavy shrinkage in the value of rateable property. A partial recovery in values has taken place, and the total assessments, inclusive of vacant land, now reach £4,568,784. The main source of supply is the Yan Yean Reservoir, in which are stored the waters of the eastern branch of the Plenty River and Jack's Creek, from the southern slopes of the Great Dividing Range, and those of Wallaby and Silver Creeks, brought over the range in an aqueduct from the northern slopes. These streams are collected in the Toorourrong Reservoir, and taken thence in a pitched channel to the Yan Yean Reservoir. A second supply is brought to Melbourne by means of the Maroondah Aqueduct, which conveys water from the Maroondah River, the Graceburn, and Donnelly's Creek, but without, at present, any provision for storing the surplus winter waters thereof, except the small service reservoirs in the suburbs at Preston, Essendon, Caulfield, and Kew. By means of these systems, Melbourne is provided with an ample supply of pure water at a high pressure. The total catchment areas for both systems aggregate 62,000 acres, the whole of which is under the control of the Board, and free from settlement

or grazing. The Yan Yean is an artificial lake situated 22 miles from the city, 602 feet above sea level. It covers an area of 1,300 acres, or rather more than two square miles, and receives water from a catchment area of 35,000 acres. The length of aqueduct and mains laid up to 31st December, 1904, was 262 miles, and of reticulation pipes (under 12-inch diameter), 965 miles, or a total length of aqueduct, mains, and pipes, of 1,227 miles. The storage capacity of the main reservoir is 6,400 million gallons, and of the eight subsidiary reservoirs 108 million gallons. The population supplied with water is about 500,000, and the average daily consumption 59 gallons per head in 1904.

DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE AND SUBURBS, 1904.

Month.	Gallons.
January	32,714,000
February	31,708,000
March	31,381,000
April	30,438,000
May	27,492,000
June	24,437,000
July	24,387,000
August	25,752,000
September	24,479,000
October	27,659,000
November	34,127,000
December	39,696,000
Mean for the year	29,522,000

Connected with the water service of Melbourne and suburbs, the Board also controls the sewage system of the metropolis. The particulars of the system are as follow:—The whole of the sewage of the metropolis is being gradually collected by means of two principal main sewers leading to the pumping station at Spottiswoode. On the 31st December, 1904, the sewerage system, including mains, branches, and reticulation, had been laid over the following districts, viz.:—Port Melbourne, South Melbourne, Melbourne proper, Richmond, the greater part of Prahran and St. Kilda, the populated part of Malvern, a large portion of Hawthorn, Collingwood, Fitzroy, Caulfield, and Kew, together with nearly the whole of Footscray, Flemington, Kensington, and North Melbourne. In all, 629 miles of reticulation, and 68½ miles of main and branch sewers have been completed, the system being so advanced that the sewage from 74,859 houses could be collected, including nine houses in Brunswick. Of these, 68,361 have been actually connected, embracing altogether 10 public conveniences, 36 public urinals, 75,553 water closets, 137 latrines, 5,335 urinals, 754 slop-hoppers, 49,480 baths, 14,143 lavatories, 36,764 sinks, 27,558 sets of wash-troughs, 6,223 stables, 87 dairies, 1,068 polluted areas, and 1,288 cellars. There are also

921 3.5 miles of house connexions laid (916 1.5 miles of vitrified stoneware pipes, and 5 2.5 miles of cast-iron pipes), or a grand total of 1,619 4.15 miles of work done. The whole of the sewage when collected at Spottiswoode is raised about 125 feet, to the head of the outfall sewer, through 2 $\frac{3}{4}$ miles of wrought-iron rising main, whence it gravitates to the farm in a partly open and partly closed channel 11 feet in diameter, at a grade of 2 feet to the mile. It is then spread over properly prepared areas of land by a series of main and lateral carriers. The effluent, after filtering through the prepared areas, is discharged into Port Phillip Bay in a perfectly clear and transparent condition. The prepared blocks are laid down with prairie grass and lucerne, on 1,700 acres of which, during the financial year ending 30th June, 1904, 30,330 sheep have been fattened and sold. During the same year the Board were grazing 464 bullocks on 345 acres, while on 400 acres, cattle and horses have been placed for agistment. The profit on sheep for the same period amounted to £9,421. Of the whole farm area of 8,847 acres, there remain 2,450 acres, comprising land in the course of preparation, plantations, roads, and drains; and 3,952 acres, not used in connexion with sewage distribution, but let on lease to farmers at an average rental of 16s. 5.09d. per acre.

Goldfields
reservoirs.

There are 21 goldfields reservoirs, having an aggregate capacity of 531 million gallons—the largest, at Back Creek, Creswick, containing 135 million gallons. These cost £55,860 to the 30th June, 1904, and were originally constructed by the Government chiefly for mining purposes, though some are now used solely for domestic purposes. Full particulars respecting each reservoir appear in the following table:—

RETURN OF RESERVOIRS CONSTRUCTED ON GOLD-FIELDS.

Showing the names of their Controlling Bodies, Names, Storage Capacity of Reservoirs, Purposes for which Provided, and Cost to the 30th June, 1904:

Under what Control.	Name of Reservoir.	Capacity.	Purpose.	Cost.
		Gallons.		£
Shire Council of Ripon	Beaufort ..	85,881,000	Mining	1,991
Shire Council of Ballan	Blackwood ..	38,000,000	Mining	1,090
Borough of Dunolly ..	Dunolly (old) ..	17,200,000	Mining	1,912
Borough of Daylesford	Hepburn ..	31,284,000	Mining	2,527
Shire of Avoca ..	Homebush ..	5,000,000	Mining	328
Borough of Inglewood	Inglewood (old)	5,670,000	Mining	1,112
Borough of Inglewood	Inglewood (new)	22,000,000	Domestic	4,951
Shire of Kilmore Water-Works Trust	Kilmore ..	14,466,000	Domestic	2,986
Borough of Maryborough	Maryborough ..	21,000,000	Domestic	1,839
Borough of Stawell ..	No. 1 Quartz Reef	5,000,000	Mining	..
Shire of Stawell ..	No. 9, Four Posts	3,100,000	Mining	802

RETURN OF RESERVOIRS CONSTRUCTED ON GOLD-FIELDS—*continued.*

Under what Control.	Name of Reservoir.	Capacity.	Purpose.	Cost.
		Gallons.		
Shire of Tullaroop ..	Nuggety Gully ..	25,000,000	Domestic	2,384
Borough of Ararat ..	Oliver's Gully ..	24,000,000	Domestic	5,000
Shire of Avoca ..	Redbank ..	27,100,000	Mining	2,785
Borough of St. Arnaud ..	St. Arnaud ..	40,000,000	Domestic	15,343
Borough of Tarnagulla ..	Tarnagulla ..	8,000,000	Domestic	1,430
Shire of Korong ..	Wedderburn ..	12,000,000	Domestic	2,590
Government* ..	Back Creek ..	135,000,000	Mining	4,211
Government* ..	Gapsted ..	5,700,000	Mining	1,150
Government ..	Mateking ..	400,000	Domestic	429
Creswick Shire* ..	Broomfield and Allendale	5,000,000	Domestic	1,000
	Total ..	530,801,000	..	55,860

For many years past Governments of the State have recognised the importance of irrigation, and under the provisions of the various Water Supply Acts that have been passed, arrangements have been made for the conservation and supply of water, and its conveyance to areas suitable for irrigation. A Bill to consolidate and amend these laws was introduced into the Legislative Assembly by the Minister of Water Supply on 17th September, 1904, by means of which it was proposed to secure for the water service of the State one management, with one system and one policy, by the appointment of a Board of three "State Rivers and Water Supply" Commissioners, in whom, existing trusts being abolished, all State water-works should vest. The Crown also was to resume possession of the natural waters of the State, and of beds and banks of creeks, rivers, lakes, &c. All existing water rights were to be submitted, so that they might be inquired into, and registered or disallowed. It would also be the duty of the Commission to encourage irrigation in every possible way; while the apportionment of definite water rights would give the necessary security to the cultivators. No irrigation charges would be made in respect of any lands until the works were so far completed as to render a supply of water available for the irrigation thereof. The completion of the whole scheme would take several years, not less than six or seven; but the construction of the distributary channels would proceed simultaneously with the main channels; and thus the area supplied would be extended year by year until the whole was overtaken. After considerable discussion, the Bill was passed through all its stages in the House of Assembly, but in the Council, owing to the lateness of its introduction, and in order to give Councillors opportunity to more carefully study its provisions, it was postponed till next session, arrangements being made, however, that it should be taken up at the precise stage where it was dropped.

Proposed
Legislation
for Irriga-
tion.

* Constructed under *Mining Development Act 1896.*

MILDURA IRRIGATION SCHEME.

HISTORY OF THE SETTLEMENT.

Inception of
the scheme.

A Royal Commission was appointed in December, 1884, to consider the best means of conserving water in Victoria for irrigation, and for other purposes. The Hon. Alfred Deakin, then Minister of Public Works and Water Supply, was appointed President; and, in due course, he visited California and elsewhere, concerning which glowing accounts had been received as to the success achieved by intense culture on small holdings, with the aid of irrigation. Among the settlements inspected by Mr. Deakin were those of Riverside and Ontario, the latter of which had been often cited as an example for Victoria to imitate in the establishment of irrigation colonies under private enterprise. He there met one of the Messrs. Chaffey, who had been identified with that settlement from its commencement. In September, 1885, an advance agent visited Victoria on behalf of the Messrs. Chaffey, in regard to obtaining a concession of land suitable for irrigation purposes and the establishment of irrigation colonies. In February, 1886, Mr. Geo. Chaffey arrived in Victoria, and after some months of inspection, Mildura was chosen as the site for the proposed irrigation settlement. The first proposal by Messrs. Chaffey's representative was for a grant of 500,000 acres free, and a subsidy of £200,000. This was not entertained; and an agreement was then submitted by which the promoters were to acquire 250,000 acres at Mildura under certain conditions. The agreement was placed before Parliament, and, after a long debate, in the course of which the scheme was adversely criticised by many members, it was decided to throw the concession open to competition by public tender. Tenders were invited, and, as there was no other tender, the proposal of Messrs. Chaffey was accepted.

Chaffey
Brothers
concession.

Under the terms of the indenture of 31st May, 1887, made between the Government and George Chaffey and William Benjamin Chaffey, of Toronto, in Canada, but then resident in Melbourne, it was agreed that 250,000 acres be set apart for the settlement at Mildura. Messrs. Chaffey were licensed to enter upon and occupy two blocks of about 25,000 acres each, contiguous to the River Murray, which blocks had about half of the total frontage to the river, to hold the same for 20 years, subject to the usual conditions for resumption, on payment of compensation, of any portion required for public works, and subject to usual conditions as to the entry for mining. The licensees were to be entitled to a grant in fee simple of one acre for every £5 of expenditure on the 50,000 acres in irrigation works and substantial improvements; but an expenditure of £2 per acre was to be deemed sufficient in respect of any of these lands subject to flooding. After three years, the licensees would be entitled to occupy for 20 years the remaining block of 200,000 acres, or part thereof, and grants in fee simple were to issue in respect of any of these lands, subject to an expenditure on improvements thereon to the extent of £1 per acre, and of payment to the Treasury of a further £1 per acre. Every grant in fee simple should contain a condition

that the licensees should not sell or dispose of any part of the 250,000 acres, except in parcels of not more than 80 acres for fruit growing, or 160 acres for growing other products, and not more than one block to one person; and that every parcel should have a sufficient water-right to run with the title as a perpetual easement; and it was provided that the licensees should not retain themselves more than 5,000 acres of cultivated and irrigated land out of that granted to them in fee simple. A licence to divert water from the Murray sufficient for the purposes of the settlement was granted for 25 years, renewable for successive periods of 25 years.

In consideration of the concession, and the foregoing benefits, the licensees covenanted to expend £300,000 in irrigation works, in accordance with general plans approved by the Government, within twenty years, as follows:—In the first five years, £35,000 (£10,000 in the first year); in the second five years, £140,000; in the third five years, £75,000; in the fourth five years, £50,000. Covenants were also made by the licensees, *inter alia*, to have all engines and machinery made in Victoria, except such as may be necessary for patterns; to destroy all vermin; to provide bridges over channels; to make and maintain roads; to establish within five years works for fruit-drying, preserving, and canning, and to carry on the business during the licence; to set apart one-fifteenth of all irrigated land, in detached blocks, for an agricultural college, and to build such college as soon as 100 families should be resident. It was also provided that in the event of any breach of covenants, the Government might call on the licensees to show cause why it should be permitted, or require the breach rectified. If no sufficient cause were shown, or if the breach were not remedied, the Government might remedy same at the cost of the parties; or if the breach were deemed sufficiently serious, might determine the licence and resume the licensed lands, except such as were sold for valuable consideration, or conveyed in trust for the agricultural college.

On 30th September, 1887, the Chaffey Brothers Limited Company was formed, to which was assigned all the Messrs. Chaffey's interests and rights in the agreement with the Government. In December of the same year, the Mildura Irrigation Company was formed, in order to provide some expedient for securing the water right as a perpetual easement to purchasers of land, the law recognising no property in running water; this easement to be thereafter inseparable from each block sold.

Formation
of com-
pany.

Agents were then appointed by the promoters in almost every city or town of note in the United Kingdom, and the lavish system of advertising induced many settlers to emigrate and invest their capital in Mildura. The class of settlers who were attracted to the settlement was of the very best. A large number were British, and there were also a number attracted from America, Germany, and the other Australian States; whilst there were also a considerable number of Victorians, most of whom were the sons of well-to-do citizens.

Advertising
of Scheme.

Brief official and semi-official visits were from time to time made by successive Ministers of Water Supply and officers of the Department. None of these visits involved detailed examinations of the machinery

Complaints
by the
settlers.

employed for lifting the water from the river, or of the channels constructed for its conveyance and distribution to the lands of the settlers; but were directed rather to learning the extent and character of the settlement, the products grown, the facilities for disposing of them, and the prospects of the settlement proving permanent. About the middle of 1892, complaints began to be made by the settlers of the non-performance of the covenants of the agreement on the part of the licensees, and continued to be very persistently urged by a section of the resident land owners, until the relations became so strained, that the most serious consequences seemed possible. The principal complaints made were:—That the pumping plant was unequal to the duty of raising water for the irrigation of 40,000 acres; that the machinery was badly designed and imperfectly constructed, and the boilers of an obsolete type; that the plant and machinery were not manufactured in the colony, as provided by the indenture, and that payment of the duty on it had been evaded; that the plant had not been legally conveyed to the Mildura Company, nor to any other body representative of the settlers, and that it was liable to seizure by the creditors of Chaffey Bros. Limited; that the channels were so badly constructed that a large proportion of water was lost by leakage, thus rendering barren large areas purchased by the settlers; that the channels had been carried through considerable areas of land which contribute nothing to the rates, thus increasing the rates levied on the settlers; that the Billabong dam had been imperfectly constructed; that the agricultural college had not been established, although more than 100 families had for some time been resident; that the lands set apart for the college were inferior; that the licensees had not established fruit canneries and preserving works; that purchasers were led to believe the water rate would be no more than 6s. per acre per annum, whereas it was then 20s. per acre per annum. There were also several other matters of complaint.

Report by
the Chief
Engineer
of Water
Supply.

In compliance with a request made by the Minister in March, 1893, Mr Stuart Murray, the Chief Engineer of Water Supply, visited Mildura, to inquire into the complaints of the settlers, and to inquire into the state of affairs generally. In his report, dated 1st August of the same year, it is stated that the total expenditure to date exceeded the amount the licensees were required to incur under the indenture; that the licensees had obtained grants in the fee simple to the extent of 50,195 acres, of which about 10,000 acres had then been planted; that of this 50,195 acres, 15,831 had been sold, 1,338 acres were reserved for college, 185 leased, 450 provisionally sold, 350 acres reserved by licensees, and the balance was still held by licensees; that the existing plant when complete would be equal to a much higher duty than the supply for irrigation of 26,020 acres commanded, or even of 40,000 acres previously mentioned, and that the full normal duty of the plant was sufficient for 76,800 acres; that the channels were not maintained in good order, and the banks were overgrown with weeds extending below the waterline, so as to interfere with the flow of water and reducing the volume of discharge; that the loss of water by percolation was undoubtedly great; that the soakage renders the soil in places affected so saturated that plants

cannot thrive or live; that the rates levied for water were much higher than was stated in the earlier advertisements, and were higher than would, under favorable conditions of working, be warrantable; that, in regard to the allegation that the plant has not been legally conveyed to the Mildura Company for the settlers, the only conclusion that can be arrived at is that it was still in the possession and under the control of the firm; that the lands set apart as an endowment for the college were of inferior quality; that the Billabong dam had been roughly built, but could be made a thoroughly sound work for a trifling sum, probably under £150.

In December, 1895, an Act was passed establishing the First Mildura Irrigation Trust, consisting of six Commissioners and two Auditors, to be elected by the occupiers and owners of rateable land. The land upon which the irrigation works are erected, and all approaches and works, are vested in the trust. The promoters were to put all works in a state of efficiency by 1st January, 1899—that is, to be capable of raising, conveying, and distributing the maximum quantity which they would under the concession, be entitled to take and divert from the acreage now administered by the trust, and that not more than one-fifth of the water shall be lost in conveyance and distribution. The word “promoters” includes the successors or persons in ownership or control of the rights, privileges, and licences contained in the original indenture, either by purchase or by operation of law, but does not include any mortgagee or purchaser from a mortgagee. If the Chief Engineer reports that reasonable progress is not being made, the trust may have same done, and recover the costs and expenses from the promoters. No rates shall be struck by the trust to exceed £1 per acre, except by resolution of two-thirds of the ratepayers, voting at a general meeting. All land in the irrigation area shall carry with it a sufficient water right as a perpetual easement, and the trust is entitled to take and divert from the Murray the quantity of water the promoters could take for the area. Any other district, forming part of the irrigation area, may be constituted under a trust. The rights of the promoters are preserved, subject to the provisions of the Act.

Establishment of irrigation trust.

In May, 1896, a Royal Commission was appointed, under the presidency of the Hon. A. L. Tucker, M.L.A., to inquire into and report upon the condition and prospects of the Mildura settlement. Without any delay, the Commission proceeded to Mildura, inspected the machinery and apparatus, and examined 54 witnesses. The Commission issued its report in September of the same year, from which it appears that foremost amongst the causes of failure were the grave errors made in laying out the settlement, and in making provision for the supply of water for irrigation. The second was the non-fulfilment of the obligations undertaken in the agreement, whereby the reasonable expectations of the settlers were disappointed; and thirdly the hopeless financial management of the company. The Commission was “forced to the conclusion, after the fullest inquiry, that the Messrs. Chaffey had but little means, and, indeed, the settlement may be said to have been initiated by persons who obtained the enormous concession of dealing with 500,000 acres of public territory in both colonies with capital practically amounting to nothing. We are

The Royal Commission in 1896.

confirmed in that opinion by the fact that the company borrowed £10,000 during the first year, that being the amount required to be expended under the indenture."

The inefficient condition of the main channels was the principal drawback, and the evidence went to show that, on the average, fully 50 per cent. of the water pumped into the channels was lost through soakage. Other difficulties under which the settlers laboured were the inferiority of the quality of the fruit trees supplied in the first instance, and defective means of communication with the markets. The method of conveying produce to the market was by steamer up or down the Murray to the nearest railway station, the river being closed to navigation during a portion of the summer months.

The report goes on to state that the public failed to subscribe more than the very limited sum of £44,000, and the financial struggle to carry on the company must have been very great. Various methods were resorted to for the purpose of raising money, resulting always in the payment of large interest for accommodation, and finally in the financial wreck of the whole concern. The course adopted from the start was to rely mainly upon the money received from the sale of land to the settlers. The rapid success during the first few years, so far as the sale of land was concerned, led the company to quickly expend what resources it had, and to spread out the settlement in a very disadvantageous way, in the hope of rapidly disposing of the intervening country, which hope was not realized. One cause, which assisted in curtailing sales, was the agitation by the settlers to be supplied with water free of charge, as had been the rule up to 1890, and which they claimed to be entitled to under the terms of the indenture. The fall in prices of the produce was another serious factor.

Advances were obtained by the company from various financial institutions, which required heavy rates of interest and a wide margin of security amounting to three or four times the face value, the security being mortgages by settlers for future instalments of purchase money. In addition to capital raised by this means, £200,000 was borrowed in London by the issue of debentures. By a decision of the Supreme Court, the debenture-holders have been adjudged as now possessing all the unpledged assets of the company, and also the original concession; and are, consequently, now the representatives of the company, and have become the owners of all that belonged to the company at the time of its liquidation.

The Commission recommended that a loan be granted to the Mil-dura Irrigation Trust, not exceeding £30,000, with interest at 4 per cent. and a sinking fund of $\frac{1}{2}$ per cent.; that the concession in the original indenture be cancelled to the extent of freeing 188,000 acres not disposed of, and reverting same to the Crown, that £5,000 of the loan be for the purpose of improving the pumping plant; and that a further advance of £400 per month be made to subsidize the work of distributing water. It was also urged that the Department of Agriculture should supply the want of an agricultural college by forming a small experimental station, and by appointing an expert to visit the settlement at certain periods, to afford instruction and advice as

to the most advanced methods of dealing with fruit and its preservation and packing in the most attractive form for market.

To meet pressing necessities, an overdraft was guaranteed by the Treasurer, and, as recommended by the Commission, a loan was authorized to the extent of £34,700 to clear off the overdraft, and to improve, line, and consolidate the channels; and to add to the appliances for raising water for irrigation to improve any other portion of the works; and for doing any work which the Chief Engineer should declare to be necessary. In September, 1897, further assistance was granted by the Government, by increasing the loan by £10,000, and by providing for further annual loans not exceeding £2,000 in any one year, to make up for any deficit of expenditure over revenue of the trust. These future advances were conditional upon the debenture-holders and holders of mortgages contributing specified sums. Up to the 30th June, 1904, the total amount advanced was £58,700, which, together with interest accumulated to that date, £11,584, represents the total indebtedness of the trust to the Government.

Loans by Government to the trust.

In October, 1900, an Act was passed authorizing the construction of a railway, commencing at the terminus of the Birchip and Cronomby Railway, at or near Woomelang, and proceeding thence for about 124 miles north-westerly, and terminating at or near Yelta. The construction of the line was conditional on the Shire Council of Mildura entering into a bond for ten years from the opening for traffic to pay any deficiency on the cost of working the line, and $3\frac{1}{2}$ per cent. interest on cost of construction and rolling-stock over and above the receipts. Such contribution is limited to a sum produced by a 1s. rate on all rateable property in the shire. It is provided that the expenditure on the construction of the line should not exceed £2,000 per mile. The line has been constructed, was opened for traffic towards the close of 1903, and the settlement is now on a fair way to prosperity.

Railway to Mildura.

An Act was passed in April, 1903, extending the rating powers of the Irrigation Trust, raising the maximum rate leviable to £2 per acre, and providing for a differential maximum rate on the several classes of lands in the settlement, and for the rate and scale of charges when water is supplied by measure.

Differential rating.

In a report on the position and prospects of irrigation in Victoria, published in the issue of this work for 1892, Vol. II., Appendix D., Mr. Stuart Murray, Chief Engineer of Water Supply states:—"The crucial test of competition in the open market, upon which hangs the ultimate success or failure of the undertaking, is yet to come. . . . The Mildura fruit-growers must look further than the Victorian, or even the Australian, market for the success of their industry." The same doubt appears to have been entertained by the Royal Commission in 1896, which, in its report, stated that the expenditure of the loan recommended would place Mildura upon such a footing as to be able to prove conclusively whether the permanent and profitable continuance of the settlement may be realized; that after the local demand of Victoria was fully supplied, the remaining produce of Mildura must be exported and meet competition in the world's market; that on the prospective success of so doing, there were many

Future prospects of Mildura.

and varied opinions; and that the high cost of the land and the expense of bringing it under culture is a most important factor in this connexion. The Commission was of opinion that, as the settlers had been attracted under the terms of the agreement between the Government and Messrs. Chaffey, which terms were not complied with by the latter, it behoved the Government to come to the aid of the settlers.

The Federation of the Australian Colonies has, however, resulted in opening up a wider protected market for home consumption, and the customs returns show that Victoria now exports to the other States, New Zealand, South Africa, and the United Kingdom, a considerable quantity of canned fruits, raisins, and dried fruits, most of which are the produce of Mildura. The following were the quantity and value of these exports during 1903:—

EXPORTS DURING 1903 OF CANNED AND DRIED FRUITS PRODUCED IN VICTORIA.

Country to which Exported.	Canned Fruit—Value.	Dried Fruits.			
		Raisins.		Other.	
		Quantity.	Value.	Quantity.	Value.
	£	lbs.	£	lbs.	£
Western Australia ..	13,225	57,861	1,022	4,319	145
Other Australian States	13,347	1,941,687	41,355	365,741	8,289
New Zealand ..	119	414,736	5,264	206	5
South Africa ..	1,129	5,132	60	..	..
United Kingdom ..	98	22,400	340	398	14
Other Countries ..	2,881	6,073	96	2,912	178
Total ..	30,799	2,447,889	48,137	373,576	8,631

It will be seen from this and the following table that Victoria is building up an export trade in canned and dried fruits, and that the exports are not confined to the local protected market. The following were the exports of these articles since 1895:—

EXPORTS OF CANNED AND DRIED FRUITS PRODUCED IN VICTORIA, 1895 TO 1903.

Year.	Canned Fruits.	Dried Fruits.	
		Raisins.	Other.
		£	£
1895	2,625	3,941	1,286
1896	3,904	835	1,777
1897	6,849	1,147	4,510
1898	5,823	7,388	6,674
1899	9,672	7,524	8,286
1900	20,396	10,150	5,121
1901	31,015	15,095	4,963
1902	30,223	23,730	20,519
1903	30,799	48,137	8,631

It will be seen from this table that, while the export of canned fruits in 1903 remained about the same as in 1902, there was a large increase in that of raisins. The quantity of other dried fruits exported was somewhat above the average, but greatly below the quantity of 1902.

Mildura has risen superior to difficulties which a few years ago appeared almost insurmountable—difficulties caused by adventurous speculation, bad management, fall in prices, and ignorance of methods and products most suitable for growth. The errors of the past are now being retrieved, and the latest reports are of the most sanguine description, it being stated that healthy progress is visible everywhere, and that the conditions of soil, climate, and water supply are being thoroughly mastered by practical experience. The grit, energy, and enterprise displayed have been remarkable. The products which have been found to give most payable results are raisins, currants, dried apricots and peaches.

The following figures, showing the population of the settlement since 1891, are a fair indication of its recovery:—

POPULATION OF MILDURA, 1891 TO 1904.

1891 Census	...	...	2,321	1897 September	...	...	2,500
1891 September	...	...	3,000	1898	..	...	2,800
1892	..	...	3,500	1899	..	...	3,020
1893	..	...	3,000	1901 Census	...	...	3,325
1894	..	...	3,000	1902 September	...	...	3,625
1895	..	...	3,000	1903	..	...	4,050
1896	..	...	2,000	1904	..	...	4,100

The following is a statement of the revenue and expenditure of the Irrigation Trust during the year ended 30th June, 1904:—

REVENUE AND EXPENDITURE OF THE TRUST, 1903-4.

Revenue.		£	Expenditure.		£
Arrears, Horticultural Assessment	..	2,350	Expenditure on Pumping Stations	..	8,040
Current Rates, Horticultural Assessment	..	8,233	Expenditure on Town Supply	..	821
Arrears, Town Assessment	..	406	Distribution of Water	..	2,625
Current Rates, Town Assessment	..	466	Interest	..	2,347
Special Rate, 1902	..	76	Other Expenditure	..	887
Extra Rate, 1903	..	2,689			
Miscellaneous	..	272			
Total	..	14,672	Total	..	14,720

Revenue and expenditure of Mildura Irrigation Trust.

The following were the revenue from rates, &c., and the expenditure on pumping distribution and town service, during the last five years:—

Year.	Revenue.	Year.	Expenditure.
	£		£
1900	9,801	1900	9,647
1901	10,756	1901	9,987
1902	11,461	1902	11,650
1903	13,738	1903	13,842
1904	14,672	1904	11,486

FIRE BRIGADES.

Connected with the water service of the State generally, is the service of water required for fire extinction.

Under the *Fire Brigades Act 1890*, there are constituted a metropolitan fire district, controlled by the Metropolitan Fire Brigades Board, and nine country fire districts, controlled by the Country Fire Brigades Board. The supervisors are the chief officers of the respective boards, who are aided by deputies and other assistants.

The arrangements for fire extinction in the metropolis are closely allied to those for the Melbourne water supply, the service having been provided under the clauses of the *Fire Brigade Act 1890*, and its amendments.

The metropolitan fire district embraces the area included in the various municipalities within a radius of ten miles from the General Post Office. The area vested in the Metropolitan Board of Works is included in this area, but the Metropolitan Fire Brigades Board has jurisdiction over portions of the shire of Wyndham, Braybrook, Keilor, Broadmeadows, Darebin, Whittlesea, Heidelberg, Templestowe, Nunawading, Mulgrave and Moorabbin within the ten-mile radius, not vested in the Metropolitan Board of Works.

The Metropolitan Fire Board is controlled by three members appointed by the Governor in Council, three by the municipal councils, and three by the insurance companies.

The Country Board, like that of the metropolis, consists of nine members—three of whom are appointed by the Governor in Council, two by the municipal councils, two by the insurance companies, and two by the fire brigades in the country districts. Under the supervision of this Board, local committees supervise the working of the Act. These consist of three members—a chairman, elected by the municipal councils, and one member each, elected by the fire brigades and the insurance companies; if there are no fire brigades in the municipal districts, the Governor in Council appoints the member.

For the purpose of extinguishing any fire, the chief officers of the fire brigades may in the areas under their respective control "cause water to be shut off from any main or pipe in order to obtain a greater pressure and supply of water for the purpose of extinguishing any fire, and no persons or body having the management of any water supply shall be liable to any penalty or claim by reason of any interruption of the supply of water occasioned by compliance with the provisions of this section."

Another section provides that "each board, its officers, and servants, any local committee, its officers and servants, and any brigade registered under this Act shall have the use of any water mains, water plugs, valves, pipes, vested in or belonging to the Board of Land and Works, or any public or municipal corporation, or local body whatsoever, and of all water therein, or in any well or tank, free of charge, for the purpose of extinguishing any fire, or for the purpose of drills, competitions, and practice, conducted under the authority of either board or any local committee."

Local councils have the right, in the interests of fire prevention with the approval of the Governor in Council, of making, altering.

or repealing by-laws for the purpose of regulating the height of all buildings erected in their own municipality, or in any part of it, and also for providing means of escape from such buildings during a fire.

The general duties of the Fire Brigades Boards are defined to be those "of taking, superintending, and enforcing all necessary steps for the extinguishment of fires, and for the protection of life and property in case of fire, and the general control of all stations and of all fire brigades shall be vested in the boards for the metropolis and country districts respectively. The boards may purchase or lease property for fire brigade stations, and control the formation of permanent and volunteer fire brigades, and schools of instruction, the maintenance of fire alarms, and the establishment of communication, telephonic, and other."

The Metropolitan Board of Works under the *Water Act* 1890 must, upon the request of any municipal council within its boundaries, fix proper fire plugs, in the main and other pipes belonging to the board at convenient distances, and at such places as the board may consider proper and convenient for the supply of water for extinguishing any fire which may break out within its limits. The cost of fixing fire plugs and notice boards, together with their maintenance, must be defrayed by the municipal council within whose limits the fire plug is fixed. The board may also fix fire plugs for private owners, provided they pay the cost and maintenance.

The Metropolitan Board of Works is bound to keep all its pipes, to which fire plugs are affixed, charged with water, unless prevented by unusual drought or other unavoidable cause, or during necessary repairs, and shall allow all persons at all times to take and use such water for extinguishing fires. On 31st December, 1903, it had fixed 425 pillar hydrants, 13,285 ball fire plugs, 157 "Tregear" hydrants, to its 950 miles 65 chains of reticulation mains, and except in case of accident, repairs, or cleansing, these mains are kept constantly full of water under pressure. The Metropolitan Fire Brigades Board on the same date had under its control the following:—45 stations, 147 permanent men (of all ranks), 6 men at theatres, 150 auxiliary firemen, 9 steam fire engines, 3 manual engines, 35 horse hose reels, 60 hand hose reels, 10 extension ladders and fire escapes, 12 exercise and supply carts, 2 salvage vans, 1 brake, 1 motor car, 58 horses, 84,022 feet of hose, 36 hand pumps, 2 smoke helmets and jackets, 112 telephones in stations, 103 fire alarm circuits, having 158 fire alarm points, and 345 fire alarm and telephone points. The total length of wire in use outside the stations for fire alarms and telephones being about 276 miles.

During 1903, the State contributed towards the maintenance of this board £12,700, the insurance companies £12,658, being equal to £4 11s. 6d. for every £100 of premiums paid on insured property, and the local municipalities £12,793, or '67d. in the £1 over an area wherein the property is valued at £4,571,777.

The Country Fire Brigades Board exercises control over 94 brigades, and had at the end of 1904 a roll of 1,942 members. There were 592 fires and alarms during the year. Most of the country towns are now provided with brigades, but in a great many the supply of water for fire extinction purposes during the summer months is a source of trouble and anxiety to the firemen. These brigades are gradually being provided with up-to-date fire stations. There were 41 fire insurance companies included within the operation of the Act, from whom £3,659 was received. The 84 municipal councils within the sphere of influence of the board contributed £3,715, and £3,636 was received from the State Treasurer, besides which amounts there was £10 general receipts. The total revenue was £11,020, the expenditure £10,185.

RAINFALL TABLE.

The following table shows the average yearly amount of rainfall in each of the 26 basins or regions constituting the State of Victoria, from 1893 to 1904, and the rainfall during 1903 and 1904:—

Name of Basin.	Rainfall.		
	Yearly Average, 1893 to 1904.	During 1903.	During 1904.
	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	28·49	31·46	24·27
Fitzroy, Eumerella, and Merrie Rivers	31·03	33·01	27·02
Hopkins River and Mt. Emu Creek	26·65	31·63	26·22
Mt. Elephant and Lake Corangamite	25·17	28·78	26·85
Otway Forest	40·52	42·11	37·69
Moorabool and Barwon Rivers ..	26·80	28·82	25·99
Werribee and Saltwater Rivers ..	27·26	29·66	23·17
Yarra River and Dandenong Creek	34·86	39·95	40·92
Koo-wee-rup Swamp	36·28	38·03	37·64
South Gippsland	40·35	38·79	35·81
Latrobe and Thompson Rivers ..	38·45	35·33	35·40
Macallister and Avon Rivers ..	27·03	20·04	17·45
Mitchell River	30·88	25·22	22·09
Tambo and Nicholson Rivers ..	30·23	25·86	21·29
Snowy River	37·08	34·20	31·17
Murray River	24·94	21·76	20·54
Mitta Mitta and Kiewa Rivers ..	36·27	34·36	35·70
Ovens River	44·14	34·89	36·65
Goulburn River	28·02	28·93	26·36
Campaspe River	26·72	28·83	25·37
Loddon River	20·39	24·93	18·30
Avon and Richardson Rivers ..	17·20	22·55	14·77
Avoca River	19·40	23·45	15·22
Western Wimmera	21·91	21·64	17·45
Eastern Wimmera	24·55	27·05	20·16
Mallee Country,	16·01	18·01	12·17
Weighted Averages	26·68	27·36	23·28

TABLE SHOWING AVERAGED AMOUNT OF RAINFALL.

In each of the 26 basins or regions constituting the State of Victoria, for each quarter, and for the whole year, with corresponding quarterly and yearly averages, for each basin, deduced from all available records to date:—

Name of Basin.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.		Total Amount for the Year 1904.	Yearly Average.
	Total for 1st Quarter.	Average for 1st Quarter.	Total for 2nd Quarter.	Average for 2nd Quarter.	Total for 3rd Quarter.	Average for 3rd Quarter.	Total for 4th Quarter.	Average for 4th Quarter.		
Glenelg and Wannon Rivers ..	4.82	3.38	7.07	8.68	7.35	9.97	5.03	6.46	24.27	28.49
Fitzroy, Eumerella, Merric Rivers	5.63	3.78	8.29	9.63	8.23	10.81	4.87	6.81	27.02	31.03
Hopkins River and Mt. Emu Creek	6.64	3.71	7.31	8.08	7.24	8.09	5.03	6.77	26.22	26.65
Mt. Elephant and Lake Corangamite	8.01	3.79	6.14	7.37	7.16	7.49	5.54	6.52	26.25	25.17
Otway Forest ..	9.69	4.75	9.66	12.56	11.62	14.02	6.72	9.19	37.69	40.52
Moorabool and Barwon Rivers	8.89	4.15	6.22	7.70	6.52	7.81	4.56	7.08	25.99	26.80
Werribee and Saltwater Rivers	8.84	4.79	5.65	7.70	4.99	7.35	3.69	7.42	23.17	27.26
Yarra River and Dandenong Creek	14.03	5.53	9.71	9.65	10.80	9.85	6.38	9.83	40.92	34.86
Koo-wee-rup Swamp ..	11.93	5.16	9.05	10.56	9.50	10.91	7.16	9.65	37.64	36.28
South Gippsland ..	9.99	6.03	8.11	11.83	9.84	12.24	7.87	10.25	35.81	40.35
Latrobe and Thomson Rivers	9.40	6.04	7.61	10.11	9.62	10.90	8.77	11.40	35.40	38.45
Macalister and Avon Rivers	7.32	5.95	2.47	6.68	4.24	6.06	3.42	8.34	17.45	27.03
Mitchell River ..	7.85	6.70	4.49	7.88	6.17	7.31	3.48	8.99	22.09	30.88
Tambo and Nicholson Rivers	6.82	6.16	5.09	7.75	5.73	8.21	3.65	8.11	21.29	30.23
Snowy River ..	8.88	7.76	7.56	9.88	10.55	9.07	4.18	10.37	31.17	37.08
Murray River ..	4.80	4.50	4.52	7.65	6.09	6.83	5.13	5.96	20.54	24.94
Mitta Mitta and Kiewa Rivers	7.01	6.15	9.06	11.19	11.32	10.38	8.31	8.55	35.70	36.27
Ovens River ..	5.09	6.73	9.97	13.33	12.54	13.66	9.05	10.42	36.65	44.14
Goulburn River ..	6.11	4.21	6.27	8.58	7.85	8.20	6.13	7.03	26.36	28.02
Campaspe River ..	7.08	4.03	6.41	8.36	7.33	7.78	4.56	6.55	25.37	26.72
Loddon River ..	4.52	3.06	5.03	6.54	5.33	5.46	3.42	5.33	18.30	20.39
Avon and Richardson Rivers	3.72	2.26	4.06	5.48	4.25	4.94	2.74	4.52	14.77	17.20
Avoca River ..	3.81	2.32	4.12	6.46	4.57	5.22	2.72	5.40	15.22	19.40
Western Wimmera ..	2.80	2.22	4.91	6.86	5.18	7.39	4.56	5.44	17.45	21.91
Eastern Wimmera ..	4.25	2.72	5.73	7.84	6.08	7.40	4.10	6.59	20.16	24.55
Mallee country ..	2.73	1.92	3.32	5.19	3.26	4.48	2.86	4.42	12.17	16.01
State ..	5.83	4.00	5.89	7.99	6.76	7.77	4.80	6.92	23.28	26.68

RAINFALL IN REGIONS, DURING EACH QUARTER, 1903 AND 1904.

Percentage above the average, + (plus); below the average, - (minus).

Regions.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.		Year.	
	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.	1904.
Western Districts ..	+58	+71	+5	-15	+6	-18	+4	-23	+12	-6
Cape Otway Forest ..	+50	+104	+11	-23	-12	-17	-5	-27	+4	-7
Counties surrounding Port Phillip Bay	+31	+122	+4	-14	-12	-12	+23	-36	+9	+2
South Gippsland ..	+24	+66	-11	-31	-10	-20	-4	-23	-4	-11
Basins of the Latrobe, Macalister, and Mitchell Rivers	-30	+31	-25	-41	-1	-17	-13	-45	-16	-22
Basins of the Tambo and Snowy Rivers	-50	+13	-8	-28	+8	-6	-1	-58	-10	-22
All Northern Areas between the Ranges and the Murray, West of the Campaspe River	-3	+17	*	-26	+38	-4	+17	-14	+15	-10
All Northern Areas between the Ranges and the Murray, East of the Campaspe River	-3	+51	-18	-29	-4	-18	+5	-36	-7	-18

*Very slightly above average.

AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS FOR THE SEASONS
AND FOR THE YEAR DEDUCED FROM ALL RECORDS OBTAINED IN
PAST YEARS AT THE MELBOURNE OBSERVATORY.

Meteorological Elements.	Spring.	Summer.	Autumu.	Winter.	Year.	
<i>Averages.</i>						
Mean pressure of air in inches	29·893	29·838	30·005	30·000	29·934	
Monthly range of pressure of air— Inches	0·896	0·803	0·806	0·979	0·871	
Mean temperature of air in shade —Fahr.	56·8	64·8	58·5	49·2	57·3	
Mean daily range of temperature of air in shade—Fahr.	18·8	21·4	17·7	14·3	18·0	
Mean percentage of humidity. Sat. = 100	70	65	73	79	72	
Mean rainfall in inches	7·29	6·00	6·70	5·75	25·69	
Mean number of days of rain	37	24	30	41	129	
Mean amount of spontaneous evaporation in inches	10·07	17·10	7·60	3·72	38·49	
Mean daily amount of cloudiness —Scale 0 to 10	6·0	5·3	5·9	6·4	5·9	
Mean daily duration of sunshine h. m.	5 58	7 21	4 26	3 28	5 18	
Mean total of hours of sunshine h.	549	710	427	322	2008	
Percentage number of hours during which the wind blew from the various points of the compass	North	16·0	7·7	16·1	28·5	..
	North-West	9·4	4·1	7·6	13·0	..
	West	15·2	9·5	12·2	14·9	..
	South-West	16·8	20·4	12·6	10·8	..
	South	16·5	24·1	14·9	6·3	..
	South-East	9·8	19·2	14·1	5·0	..
	East	3·7	5·6	5·6	2·7	..
North-East	11·2	8·1	15·2	17·3	..	
Calm	1·4	1·3	1·7	1·5	..	
Mean number of days of fog	1·2	0·7	5·0	9·9	16·8	

Extremes.

Pressure of air.	Inches.	Temperature of air in shade.	Fahr.
Greatest monthly range	1·503	Greatest monthly range	69·1
Smallest	0·489	Smallest	23·4
Greatest yearly range	1·719	Greatest yearly range	82·6
Smallest	1·169	Smallest	66·0
Highest air pressure on record	30·678	Greatest mean daily range	27·8
Lowest	28·868	Smallest	7·7
		Highest temperature on record	111·2
		Lowest	27·0
		Fahr.	
Solar radiation—highest on record . . . . .	..	..	178·5
Terrestrial radiation—lowest on record . . . . .	..	..	20·4
		Inches.	
Greatest rainfall on record . . . . .	..	..	44·25
Smallest rainfall on record . . . . .	..	..	15·61
Horizontal motion in miles . . . . .	..	..	92,221
Mean hourly velocity of wind . . . . .	..	..	10·5

AGRICULTURAL EDUCATIONAL ESTABLISHMENTS.

An Act for the establishment of Agricultural Colleges was passed towards the close of 1884. Five areas were reserved as sites for colleges and experimental farms—at Dookie, Longerenong, Gonyah Gonyah, Olangolah, and Bullarto. Subsequently two further reservations were made—at Rutherglen and Edi. The total areas of these reserves amounts to 14,324 acres. Particulars are as follow:—

AREAS OF AGRICULTURAL COLLEGE AND EXPERIMENTAL FARM LANDS,
1904.

Name.	Area.			How Used.
	A.	R.	P.	
Dookie and Currawa	4,889	0	0	College and Experimental Farm
Longerenong (Jung Jung)	2,386	0	0	Experimental Farm
Edi	18	3	25	Tobacco Farm
Rutherglen	913	0	24	Viticultural Station, Model Orchard, and Experimental Farm work
Gonyah Gonyah and Jumbuk	2,500	0	0	Not in use
Olangolah	2,800	0	0	
Bullarto	817	0	0	Let for grazing
Total	14,324	0	9	

In order to carry out experiments, devised for the purpose of ascertaining the suitability of the Victorian climate and soil for various kinds of useful products and of obtaining data respecting the rotation of crops, but more especially for the instruction of students in agriculture, a block of 4,806 acres, subsequently increased by 40 acres, was reserved in 1874, at Dookie, situated in Moira, a county in the North-eastern district of Victoria, on which to found, under the direction of the Council of Agricultural Education, a State Experimental Farm. The following account of the present state of the farm has been furnished for this work by Mr. E. G. Duffus, Secretary for Agriculture:—

Experimental farm,
Dookie.

The farm has, under the provisions of the *Agricultural Colleges Act 1884*, been vested in trustees, and all moneys received from the sale of stock and produce since June, 1885, have been paid into the Agricultural College fund.

A new dairy has been erected, at a cost of £1,069, on the most scientific plans, and is fitted with a complete dairying plant of latest pattern, including a pasteurizer, refrigerator, &c.

A wine cellar and fermenting house has been erected at a cost of about £1,100, and students are instructed in the art of wine-making. There are in cellar about 10,000 gallons of wine, representing vintages from 1894 to 1903, and also 230 gallons of spirit made

from the by-products of the vintage; while during the same period 9,000 gallons of wine were disposed of. There are 32 acres under vines, consisting of 4 acres table grapes, planted in 1887; 5 acres Gordo, Blanco, and Zante currants, planted in 1888; 11 acres Red Hermitage, 7 acres planted in 1889 and 4 acres in 1895; 10 acres Carbenet, planted in 1894; 2 acres Baxter Sherry, planted in 1895; and 2½ acres of Red Hermitage, planted in 1903. There are 20 acres under fruit trees of all the approved varieties.

A new implement and grain shed, 174 feet long, is now being erected, and other improvements have been carried out. A new chemical and biological laboratory has been built. This is one of the best fitted up laboratories in the State, and gives ample opportunities for the scientific teaching.

During the year the rainfall recorded was 21·66 inches.

Considerable attention is paid to experimental work in connexion with the cereals. The rearing of new varieties of wheat, suitable for the different parts of this country, has special attention paid to it.

Manurial tests are carried out each year, and the results are published for the benefit of the farmers.

There is a good and growing demand for seed wheat, oats, and barley from the college farm; whilst, for the commercial training of the students, a good deal of grain is marketed. The threshing and the harvesting in general are carried out by the students under competent instructors. The cropping also is mainly carried out by the students, who are taught how to use the ploughs, cultivators, seed-drills, and all other farming implements.

Experiments with new fodder plants and with others of economic importance are carried out, whilst attention is also paid to the indigenous grasses. A variety of medicinal and other plants is also grown on the farm for educational purposes. There is a 4¼ acre plantation of fifteen-year-old olives, of six varieties.

Accommodation has been provided for 66 students, to whom the charge per head per annum is £25 for maintenance, £1 5s. for medical attendance and medicines, and £1 15s. for books and other school materials, or £28 in all. No charge is made for instruction.

Attention is being given to the breeding of draught horses and Indian remounts. Most of the horses used on the farm have been bred on it. There are several highly-bred Clydesdale mares, and a first-class stallion has been purchased by the Council of Agricultural Education, to be used for stud purposes on the farm and for approved mares of the farmers from the surrounding districts. The cattle on the farm include Ayrshires principally, also Herefords and Short-horns. Farmers, on paying a small fee, may have the use of the stud bulls for their cows. The breeds of sheep kept are Lincolns, Merinoes, Hampshire Downs, and South Downs. The raising of early lambs

for the market occupies considerable attention. The pigs kept are pure Berkshires. There is a good demand for them for stud purposes. The poultry industry is fostered, and pens of the best breeds are kept. A very successful laying competition commenced on 1st May, 1904. Thirty-seven pens of fowls, of different breeds, entered for the competition, which ended on the 30th April, 1905.

The Longerenong Experimental Farm, under the control of the Council of Agricultural Education, is situated about seven and a half miles from the town of Horsham, and two miles from the Doon railway station and post-office. It consists of 2,386 acres of land, fairly representative of the Wimmera district, with the exception of 700 acres of low-lying swampy land, which is only fit for grazing purposes, with a carrying capacity of about one sheep to every two acres. The balance is good wheat-growing land.

Longerenong Experimental Farm.

Experiments are being conducted in growing different varieties of wheat, oats, and fodder crops. Two hundred acres of wheat crop on the farm this year averaged 30 bushels per acre, and although the season was not so favorable for oats, 27 bushels per acre was obtained from 40 acres. There are also 30 acres of well-kept orchard, 5 acres of which are devoted to raising American phylloxera-resistant vines. There are also 35 acres laid down in lucerne, which can be irrigated, and provide excellent green fodder for stock during the summer months.

Water is obtained from the Western Wimmera Irrigation Trust, and is conveyed in open channels from the trust's pumping station at Doon.

The stock consists of 18 draught horses, and a herd of Ayrshire cattle. Considerable attention is devoted to the raising of Shropshire sheep, and there is a flock of pure Shropshires from the best imported pedigree sheep obtainable. A number of flock sheep, principally breeding ewes, is also kept.

The Government Tobacco Experimental Station, containing 18 acres of land, is situated at Edi, in the North-eastern district of Victoria. It is used for the purpose of conducting experiments in the culture of the better classes of tobacco and their treatment, also for manuring experiments, which are intended to be an object-lesson to farmers generally, and aim at ascertaining the varieties of tobacco best suited to the soils and climate, and the manures best adapted for improving the quality of the leaf and producing the largest returns.

Edi Tobacco Farm.

For the present year (1905), investigations in tobacco culture will continue along similar lines to those of the preceding year. The variety tests which might be considered the most important will be continued both at the Edi farm and in co-operation with growers. Experimental fields, including twelve varieties, have been established on eleven farms. The varieties in each field include the following:—Blue Pryor, Medley Pryor, Yellow Pryor, Kentucky Yellow, Bonanza,

Oronoco, Comstock Spanish, Connecticut Seed Leaf, Hyco, Hester, Conqueror, Bullion. In addition,, tests on the effect of closer planting in modifying the texture of the leaf will be carried out. The experiment of growing cigar-leaf under shade will be continued on a larger scale.

The analysis of soils carried out last year, indicates an abundance of the more important plant foods, and these results, together with the returns from the manure tests, suggest no immediate benefit to be derived from the application of fertilizers. The most valuable results from a practical point of view will probably follow the attempts which are being made by field experiment to determine the particular varieties of tobacco for which the soils and climate of the district might be specially adapted. Should the co-operative system of experimenting in this direction be found to be a promising one, its extension to other parts of the State will be recommended.

Experiments, to a small extent, are also carried out in connexion with wheat and forage crops.

Rutherglen
Viticulural
Station.

The chief work being done at the Viticultural Station is in connexion with the propagation and grafting of the American and Franco-American resistant vines for the reconstitution of phylloxerated vineyards.

As is well known, the ordinary European vines rapidly succumb to the attack of phylloxera—a tiny insect that injures the vine roots and quickly destroys vineyards wherever it has obtained a footing. Phylloxera was discovered in Victoria in 1877. By its inevitable spread it soon destroyed the vines in the districts to which it had been introduced. Other districts became infected. The seriousness of these attacks led to the trials of many methods to exterminate the pest, all of which have unfortunately proved futile. French investigators had discovered that certain American vines were able to resist the deadly action of the tiny but formidable phylloxera. These are used as stocks on which to graft the desired producing kinds, as their roots were able to withstand the attacks of the insidious insect foe.

There are a number of American vines known, but all are not equally suitable for all soils, nor adapted as graft-bearers for all European varieties, hence the work undertaken at the viticultural station is to discover the most eligible kinds. To test their adaptability to the different soils, sub-stations were founded in each viticultural district of the State, and data were carefully collected regarding the growth of each variety in the very diverse soils purposely selected for these tests. Only such as are of vigorous growth are recommended.

To ascertain the grafting affinities of each kind of stock and scion, some of each of the principal wine and table varieties were grafted on each kind of resisting stock. These were then planted out permanently and the results noted. Growers can readily see by this plot which stock suits a certain variety best. The grafting of those

European vines (of wine, table, and drying varieties that are in greatest demand) on suitable resistant stocks is carried out extensively during the season. The work is done both by hand and machines. A few rootlings are used as stocks, but the majority of the grafts are cuttings. A large number of the cuttings grown at the station are utilized in grafting chosen varieties for vigneron, who may not have facilities or time to carry out this operation for themselves. In addition, many thousands of American vine cuttings are supplied direct to the growers.

About 10 acres are planted out permanently at the viticultural station with "motherstocks" for the production of cuttings. These have grown so luxuriantly that fully half a million can be supplied during the ensuing season, and this number can be largely increased if necessary during the following year. There are also two nurseries of considerable area, each containing many thousands of healthy rootlings both grafted and ungrafted. To practically prove the efficacy of resistant stocks, grafted vines have been planted on the very sites of phylloxerated vines that had to be uprooted. These are growing luxuriantly, and afford striking testimony to their resistant value, as they are still surrounded by vines that are badly infected by the pest.

The principal resistant stocks grown belong to the genera *Riparia* and *Rupestris*, with their hybrids. As its name indicates, the *Riparia* in its native habitat loves moist, fertile soils along water-courses. Its root system is spreading and horizontal. Placed in such conditions as it is naturally accustomed to, it grows luxuriantly, but from the character of the root system, it is susceptible to drought. The species of *Rupestris* that are cultivated are more erect in habit than the *Riparias*, which are trailing. They are generally deeper rooted plants, and hence are better able to thrive in districts with a less generous rainfall. The Hybrids—usually designated by numbers—apparently inherit the good qualities of both parent plants, and have so far proved themselves most suitable for all conditions of soil and climate. They have also a wider range of affinity as graft bearers.

As a rule American vines do not take kindly to calcareous soils. The *Berlandieri* is one of the best for planting under such conditions, while for saline soils *Solonis* has so far proved itself most suitable.

Recently fourteen varieties, mostly new to Australia, of wine-making grapes have been imported. They are largely cultivated in South-eastern France, and will be grown and tested at the Viticultural Station with a view to proving their value as wine producers. The average yield of wine per acre in Victoria compares very unfavorably with that of Europe, and it is to be hoped that among this new importation varieties will be found which will increase the yield without diminishing the quality of the product. Two of the varieties are white grapes from the famous *Sauterne* vineyards, and are calculated to improve the quality of white table wines, which are becoming more and more popular every year. A further importation

is expected in time for the next grafting season, which will include varieties from the Duro Valley in Portugal, and the Sherry district of Spain. Already wines of a port and sherry type of very considerable merit are produced in Victoria, chiefly from French grapes. With the Portuguese and Spanish varieties about to be imported the quality of this class of wines should be improved out of all knowledge, and permanently enhance the reputation of Australian wines.

Wine-making is carried out at the station cellars, and about 2,500 gallons are being made this vintage. The treatment of wines, including pasteurization, receives considerable attention, and growers often visit in search of advice on this topic. A small still is utilized for the manufacture of spirit for fortifying sweet wines.

An excellent laboratory has been erected, and should permit of excellent work being done in the chemical analysis and bacteriological examination of wines.

In the vineyard attached to the station, interesting and useful experiments are being conducted in methods of pruning, cultivation, manuring, &c.

As a college for the sons of vine-growers the Viticultural Station never became popular. The buildings are now being filled with boys from the Neglected Children's Department, who are being trained in vine-growing and general farming, and will eventually become a means of supplying vine-growers with skilled labour of a class now difficult to obtain.

Experimental work is carried out with manures, cereals, grasses, fodder, and reputedly drought-resisting plants. A model orchard has been planted, and is worked under the supervision of the horticultural branch.

Experimental dairying and the cross-breeding of dairy strains of cattle has been started at the Viticultural Station, with a view to investigating the possibilities of dairying in the dryer districts of the State.

The station is open to inspection on all week days, and is well patronized by visitors anxious to learn.

These reserves have never been used for the purposes of colleges. The two former sites, containing 5,300 acres are not in use, and the latter, containing 817 acres, is now let for grazing.

In addition to the college and farm lands provision was made, by the Act of 1884, to permanently reserve from sale an area of not more than 150,000 acres of Crown lands, and to vest it in trustees to be appointed, who should hold it in trust for the benefit of and by way of an endowment for State agricultural colleges and experimental farms. The land so reserved now amounts to 144,294 acres,

Gunyah
Gunyah,
Olangolah,
and Bul-
larto.

Endowment
lands.

and is described in the following table, but nothing appears to have been done with it beyond letting for grazing:—

ENDOWMENT AREAS.

Parish.	Acres.	Parish.	Acres.
Ararat	1,100	Leeor	125
Ardno	210	Moyston	242
Alexandra	79	Moyston West	319
Bellellen and Illawarra	750	Mullroo and Yelta	28,600
Beveridge Island	2,732	Meering	690
Brankeet	387	Myrree	394
Berringama	199	Mooroopna	98
Bealiba	135	Miloo	120
Bumbang	10,000	Miran Piram	99
Byawatha	108	Moirra	136
Buckrabanyule	220	Mologa	107
Bringalbart	79	Nurcoung	230
Bangerang	58	Pental Island	17,350
Broadwater	198	Pannoomiloo	100
Carraragarmungee	1,864	Peecheember	50
Cudgewa	732	Purnim	3,678
Colac Colac	420	Quantong	495
Corack East	474	Quambatook	380
Charam	331	Furrumberry N.	615
Carchap	99	Tullich	400
Charlton East	228	Terrick Terrick East and West	160
Dropmore and Ruffly	454	Terrick Terrick E.	40
Dinyarrak	359	Tallandoon	116
Dartagook	120	Tarwin	167
Estcourt	2,831	Turrumberry	281
French Island	340	Tallygaroopna	430
Gooram Gong	582	Tragowel	250
Granya	586	Toolongrook	160
Gowangardi and Currawa	272	Wychitella	1,015
Glenpatrick	100	Walwa	200
Glynwylln	524	Windham	452
Jumbuk	2,641	Wabba	335
Kunat Kunat	700	Warrenbayne	145
Karramomus and Tamleugh	672	Wappan	293
Kerrisdale	148	Woorak	630
Kaarimba	429	Waratah	148
Knowsley	103	Wareek	100
Knowsley East	296	Warrenmang	120
Korrak Korrak	150	Wail	240
Kinypanial	80	Wonthaggi North	2,535
Koonik Koonik	37	Yarck	569
Konnepra	126	Yanac-a-Yanac	168
Kerang	90	Yeringa	160
Lindsay Island	42,000	Yeerung	1,400
Laen	887		
Longwood	242		
Lang Lang and Yallock	4,780	Total	144,294

The total annual rental for endowment areas was £7,180 6s. 9d.

SCHOOL OF HORTICULTURE.

The school is situated in the Richmond Park. The site covers 40 acres of ground, and was originally part of the old police paddock. In 1890 the Government decided to start on this site an institution for the training of orchardists and small settlers, and during the past

seven years much has been done to provide for teaching the regular and casual students, and those visitors calling in search of special information.

Effective roads and culverts have been laid, model orchard blocks, gardens, and a students' training ground have been prepared, and a large variety of instructive implementa got together for use in the class and field work.

Class room instruction is given in horticultural science, vegetable pathology, botany, physical and commercial geography, entomology, measuring, levelling, designing, and plotting of homesteads, orchards, and garden areas, and the most approved methods of raising and managing fruit trees and plants. Practical work includes the propagation and management of orchard trees, citrus, table grapes, bush fruits, harvesting, storing, packing, marketing, drying and canning fruit, vegetable culture, clearing, grading, and trenching of land, management of soils, manures, drainage, and villa gardening.

The principal and his assistant carry out this programme by affording lessons daily in the class room and field. Much of the landed estate has recently been placed in order to receive domestic and farm animals of all kinds, and these are now added, and form a helpful source of instruction to students.

In 1899, women students were first admitted, and up to the present year about 170 have passed through the institution. They have for the most part devoted their attention to the designing and making of villa gardens, vegetable and herb culture, and the special cultivation of table grapes and lemons—branches of commercial horticulture most suited to women.

Previous to 1903, instruction was free, but a fee of £5 per annum is now charged. There is a steady advance in the number of students, and every indication of the school doing generally helpful work in the service of the State. The flower gardens surrounding the principal's residence are noted for their beauty, and the instructional character of the work ever in progress makes the place well worth a visit at any season. The school year extends from February to December. Application for admission should be made to the Secretary for Agriculture, Public Offices, Melbourne.

AGRICULTURAL SOCIETIES.

There are altogether 93 agricultural societies in the State, receiving aid from the Government. During the year ended 30th June, 1904, the total of such aid amounted to £2,000, including £40 which was expended in the purchase of medals. Particulars respecting the most important of these societies are as follow:—

In any account of the origin of the Royal Agricultural Society of Victoria, it is necessary to allude to the old Port Phillip Farmers' Society, as it was practically from the ashes of that institution that

the present society arose. The Port Phillip Society, after years of useful work, gradually became disintegrated, largely through internal dissensions, and was allowed to collapse. Then, as the result of a public meeting, in November, 1870, it was resolved—in the absence of any central society to promote the interests of producers—to form a new agricultural society on a wide basis, and this was accordingly done, the institution being called the National Agricultural Society of Victoria. In February, 1871, the foundation council was elected (with the Hon. W. Degraives as first president). The trustees of the old institution afterwards handed over their balance of funds and rights to a show ground site to the new society. With some fluctuations during its progress, this society—now the Royal Agricultural Society of Victoria, having had its title altered in 1890—has grown to be the most important agricultural institution in Australasia. Its objects are to promote the development of the agricultural, pastoral, and industrial resources of the State in the manner following:—

- (1) By holding exhibitions at such places and times as the council shall appoint; and by offering and awarding prizes and premiums at all such exhibitions, if deemed desirable.
- (2) By holding meetings at such places and times as the council shall appoint, at which meetings papers may be read and discussed.
- (3) By collecting such information from agricultural publications, scientific and other works, as may be useful in promoting the objects of the society.
- (4) By corresponding with agricultural and other kindred societies at home and abroad, and collecting from such correspondence all information which, in the opinion of the council, may lead to practical benefit in the cultivation of the soil and breeding of stock, as well as in the prosecution of other important industries.
- (5) By encouraging the attention of men of science to the discovery of better methods of cultivation, to the improvement of agricultural implements and machinery, the construction of farm buildings, the application of chemistry to the general purposes of agriculture, the destruction of insects injurious to vegetable life, and the eradication or utilization of weeds.
- (6) By promoting the discovery and introduction of new varieties of cereals, vegetables, or grasses suitable to the climate, and capable of being cultivated with profit; and also the introduction of desirable kinds and varieties of live stock.

- (7) By collecting information regarding the management of plantations, live-fences, and other subjects connected with rural improvement.
- (8) By investigating the nature of diseases in animals or plants, and taking measures for the publication, at such times and periods as the council may appoint, of the information thus collected, together with all approved original essays sent in, lectures delivered, or papers read to the society; besides making provision for the establishment of a library and reading-room for the use of members.
- (9) By remunerating any person, if thought fit—who shall ascertain by experiment how far such information may lead to useful results in practice—for any loss incurred by such experiments.

The society possesses the Crown grant of show grounds at Flemington, 30 acres in extent, together with 5 acres added by purchase, on which over £51,500 has been spent in permanent improvements.

This large sum has been derived from the general income of the society, excepting £3,000 provided by the Government as a recompense for all buildings and fencing on the site previously held on the St. Kilda road. At the beginning of last year the society was quite out of debt, but owing to recent heavy expenditure, principally incurred in altering the conformation of the grounds, and erecting new buildings, its present overdraft is over £7,000.

The annual exhibition, in the first week in September, is one of the most important public events of the year. Last year the prize money offered for competition amounted to over £2,600, and there were over 5,600 entries of exhibits of a very high standard of excellence. Every year the show is patronized by an increasingly large number of visitors, its importance being recognised and accentuated by the annual proclamation of a public holiday on the Thursday of show week.

The society has a membership roll of 1,438 subscribers, and a general income of over £8,000, its principal sources of revenue being gate money, entry fees, subscriptions, and donations. Its expenditure is mainly incurred in providing additional accommodation at the show grounds for the annually increasing number of exhibits, in prize money, and in working expenses in carrying out the objects of the society.

The institution is governed by a council of 36 members. Of these, three are trustees, who hold office continuously, the remaining 33 being elective members, of whom eleven, or one-third, retire each year, and are eligible for re-election. The society

occupies, on lease, commodious offices in the Equitable Building, Collins-street, with a reading-room and a good agricultural library.

This society was established in 1856, but it possesses no records of earlier date than 1861. It is managed by a council of not more than 75 members, consisting of the president of the society, three vice-presidents, one honorary treasurer, and 70 ordinary members of council, of whom ten form a quorum. No person is eligible for election as a member of the council unless he has been a subscriber for the previous year.

Ballarat
Agricultural and
Pastoral
Society.

The objects of the society are the improvement and advancement of agricultural and pastoral pursuits, of implements and machinery incidental thereto, and of the breed of stock.

Ballarat, being the centre of the great merino district of the State, holds a special sheep show each year, in the month of August. Since 1876, when these special shows were first inaugurated, they have been most successful, the prizes awarded up to date having reached the amount of £11,424.

The agricultural show of the society is usually held each year in the month of November. It is amongst the most important in the Western District, and always attracts a large number of entries. The prize money awarded and paid from 1861 to 1903 inclusive was £30,840.

In 1877, the late Sir W. J. Clarke offered prizes amongst his tenants for the best managed farms within the Ballarat Shire. The prizes are now continued by his sons, Messrs. E. E. D. and W. L. R. Clarke, who give £70 per annum for the purpose. The money is divided in prizes of £20, £10, and £5; (1) for farms over 160 acres, and (2) for farms under 160 acres. The competitions create a large amount of interest amongst the tenants, and are partly the means of keeping their farms in deservedly high repute.

The total amount of prize money paid since 1861 is £55,697, awarded as follows:—Ploughing matches, £9,245; farm and garden produce, £1,877; agricultural shows, £30,840; sheep shows, £11,424; tenant farms, £2,028; reaper and binder trials, £283. A sum of £13,266 has been expended in improvements and repairs to the show yards, keeping them in first class order, and providing proper accommodation for all exhibits. On the 30th April, 1904, the society's debit bank balance, covering all liabilities, was £290. The total receipts for the year ended 30th April, 1904, was £1,827, and the expenditure £1,686.

This society was founded about 40 years ago. It is governed by a president and 33 members of committee, and holds a very important position amongst the kindred societies of the State. The shows are held on a portion of Rosalind Park, of which the society holds a permissive occupancy from the Bendigo City Council. The

Bendigo
Agricultural and
Horticultural
Society.

position is central, being practically in the very heart of the city. The progress of the society of late years has been most marked, and buildings of a substantial character for the accommodation of exhibits and the public have been provided. In point of attendance and number of exhibits, the society holds a very high position.

Its annual spring show is held in the second week of October, and extends over three days, the average attendance being about 15,000 persons. About £1,100 in cash and trophy prizes are disbursed. It is practically free from debt, and has valuable assets in the form of buildings and freehold land.

The show room is 200 feet long by 48 feet wide, and in it dairy produce, flowers, fruits, and vegetables are exhibited. There are also capacious poultry and dog show rooms, capable of accommodating nearly 1,200 exhibits. The sheep pens provide for 150, and the pig pens for 70 entries. Horse and cattle stalls furnish the accommodation required. The two grandstands will seat about 2,000 visitors. The refreshment and luncheon rooms are permanent structures.

Kyneton
Agricultural Association.

This association was informally established in September, 1856, by the holding of a ploughing match, when prizes amounting to £62 were offered for the best work by horses and by bullocks. A public meeting was held in October, 1856, when the society was formally inaugurated, and the rules and regulations governing the Port Phillip Farmers' Association, slightly modified, were adopted. In October, 1857, permissive occupancy was obtained of a piece of land opposite the hospital for a show ground, and here the shows were held for the next 30 years. The first grain show was held in March, 1858, and the first show for stock and implements in November of the same year. In 1886, the society had made such progress, and the entries had become so numerous, that it was necessary to procure a more suitable site for show purposes. This site was found on the racecourse reserve, where about £4,000 was spent in the erection of fencing and buildings, £3,000 being contributed by the society, and the balance by the District Racing Club. The reserve, which consists of about 87 acres, is controlled by a committee of management, three of whom are nominated by the society, three by the racing club, three by the residents of the district, and one by the Federal Defence Department. The exhibits of draught horses have always been regarded as of a very high order; and notwithstanding declining grants from the Government, the committee has been able to keep the prize list up to from £450 to £500 annually. The whole of the loan is now repaid, and the society had to its credit £16 4s. 6d. at the end of 1904.

Tatura and
Goulburn
Valley
Agricultural,
Horticultural,
and Pastoral
Society.

This society came into existence about twenty-nine years ago. It is governed by a president and 75 members of committee, consisting of the leading pastoralists and agriculturists throughout the district. Its objects are to further the agricultural and pastoral industries of the State by holding shows, awarding prizes, and

generally promoting the best interests of the farming, dairying, and grazing industries. Its show grounds, which are situated at Tatura, cover 25 acres, and provide comfortable and extensive accommodation for stock of all kinds. The land is valued at £650, buildings and improvements at £4,500, and represent a total asset of £5,150. The annual show, held in the third week in October, is popular, and commands up to 3,000 entries annually. Liberal and comprehensive prizes are offered, amounting to between £700 and £800 per annum. The annual revenue is about £1,400; members' subscriptions amounting to £700. The show is very successful, situated as the grounds are, within the district controlled by the Rodney Irrigation Trust.

The first agricultural classes, inaugurated by Mr. Wallace, the Director of Agriculture, were held under the auspices of this society. For many years past the society has held a special fruit display, showing the production of the irrigation district, and prizes are offered for the best managed farm, orchard, and vineyard.

During 1904, agricultural classes for young farmers were carried out by the Department of Agriculture, under the society's auspices, and the students have been for the second time successful in winning the A.N.A. gold medal for competition amongst all classes in the State. At the last Melbourne Royal Agricultural Society's show; this society had the honour of winning the 2nd prize (£50) in the Grand District Exhibit Competition.

In 1877, the farming and business people of Shepparton decided to form an agricultural society, and in the following year "The Shepparton and Lower Goulburn Valley Agricultural and Pastoral Society" was inaugurated. In 1885, the Horticultural Society of Shepparton was amalgamated with the larger body, and the term "Horticultural" was added to the title. In 1892, the name was abbreviated to the "Shepparton Agricultural Society." The original committee numbered 28 members, but the governing body to-day consists of a president and 150 committeemen, an excellent influence for the prosperity of the society being obtained by the large number of office-bearers. The objects of the society are stated to be "to promote the advancement of agricultural, horticultural, pastoral, and industrial pursuits, in such manner as from time to time may seem most advisable." In October, 1878, the first show was held upon a small allotment of land about an acre in extent, in the western portion of the town, close to the Goulburn River; but after the holding of the second show, this ground was found to be too confined for the purpose of the society, and, accordingly, a valuable site, 8 acres in area, was secured at the east end of the town, and close to the railway station, and here the third show was held. Subsequent additions have brought the area covered by the society's grounds up to 18 acres, and on it are now erected extensive and durable buildings, yards, and all necessary appurtenances for the display of exhibits, at an outlay of £3,500. In the early days, ploughing matches were held. In 1886 and 1896, the Grand National Show was held at

Shepparton
Agricultural
Society.

Shepparton. Up to 1900, one day was found sufficient, but since that time it has been necessary to extend the duration of the show to two days. In addition to conducting the show, the society gives attention to agricultural and producing measures, and in 1898 the Agricultural Society's Scholarship was founded for members' sons, the successful student gaining admission to the Dookie Agricultural College for one year. Visits of experts of the Department of Agriculture are also encouraged, and lectures on subjects appertaining to agriculture, manuring, and stock-rearing arranged. The society also undertakes annual visits to the Dookie College, accompanied by farmers of the district, and valuable knowledge of the different methods of farming, and the profitable culture of cereals, is thus attainable by producers. At the end of the year, the buildings and improvements were estimated to be worth £2,450. The receipts were £1,577, and the expenditure £1,354.

North
Gippsland
Agricultural
Society.

The North Gippsland Agricultural Society was founded in 1861, at Sale, and was the first institution of its kind in Gippsland. It is governed by a president and a committee of 40 members. The annual show is held in the last week in October, on a good ground, 13 acres in area, situated about one mile out of Sale. There are numerous entries, and the attendance is a large one. In 1902, the Grand National Show was held on these grounds. The number of members is 220. The total receipts for the year were £593, and the expenditure £592. The bank overdraft was £13, and a liability on account of loan amounted to £900.

Other Agri-
cultural
Societies.

There are 87 other societies, all possessing ample and commodious show grounds, situated in or adjoining the more important towns throughout the State, and carrying out work of a similar, though perhaps not of so extensive a character.

LAND SETTLEMENT.

A very useful lesson can be drawn from a close study of the information which is contained in the following table, showing the total amount of land of one acre and over in occupation in Victoria in 1904, according to the collected agricultural and pastoral statistics for that year, to be 32,181,048 acres, distributed amongst 52,598 holders. Of the total quantity about 13 per cent. is cultivated, 3 per cent. has been sown down in clover and lucerne, 76 per cent. is still under natural grass, and 8 per cent. uncleared. These figures need but little comment, and, when carefully analyzed, a very unsatisfactory state of affairs is seen to prevail in the various districts of the State.

At the present time, those districts which are apparently the least designed by nature for the purposes of cultivation are those which show the greatest area under tillage, whilst those districts which, lying close to the seaboard, enjoy a fairly uniform rainfall throughout the year, and which may be said to court the acquaintance of the

Reducing the matter to percentages, as is done in the second and third parts of the table, the results are more clearly seen. In the Western District, containing some of the richest agricultural land in the State, there is only 3'52 per cent. of the total land occupied now brought under cultivation, whilst no less than 92 per cent. is left in its natural condition, and used solely for grazing purposes, and this notwithstanding its proximity to shipping facilities, and while it contains no less than 19'38 per cent. of the total occupied land in the State, it contributes only 5'25 per cent. to the total cultivated land. In the comparatively arid Wimmera, Mallee, and Northern Districts, the percentages of cultivated to the total land occupied, are 23'58, 20'75, and 25'38 acres respectively. Although the number of holders of one acre or more in these districts form but 33'20 per cent. of the total holders of the State, no less than 79'83 per cent. of the area cultivated belongs to these three districts. The Central, North Central, and Western Districts contain 46'51 per cent. of the holders, but only 15'39 per cent. of the cultivated area.

In the next table the distribution of cattle and sheep on pastoral lands is given for the year 1904-5. Horses and pigs have not been taken into account, as the former are found in large numbers in urban districts, and the latter on agricultural and dairying holdings; dairy cattle, store stock, and sheep only have been tabulated: —

AREA CULTIVATED AND STOCK, 1904-5.

District,	Acres Occupied, 1904-5.		Stock, 1904-5.		Stock— Equivalent of Sheep— per 100 acres of Pastoral Land.*
	For Agricultural Purposes,	For Pasture (including that classed as unproductive).	Cattle.	Sheep.	
Central ...	251,956	2,250,192	270,316	919,669	161
North Central ...	171,482	1,662,115	123,427	715,195	117
Western ...	219,346	6,016,536	360,122	4,173,458	129
Wimmera ...	1,173,592	3,804,582	52,871	1,859,428	63
Mallee ...	895,334	3,419,255†	31,249	185,996	15
Northern ...	1,264,209	3,716,587	225,421	1,372,545	98
North-Eastern ...	127,920	3,288,163	227,845	52,5443	85
Gippsland ...	71,775	3,848,004	403,725	415,957	116
Total ...	4,175,614	28,005,434	1,694,976	10,167,691	97

* Reckoning ten sheep as the equivalent of one head of cattle—as has heretofore been the basis of combination in Victoria and New South Wales.

† Excluding 2,624,037 acres of uncleared mallee.

It thus appears that, of a total of 32,181,048 acres in occupation, 4,175,614 acres, or something under 15 per cent., are used for agriculture, and that the remainder, the pastoral lands, are, on an average, carrying in sheep and cattle, only the equivalent of 97 sheep to the 100 acres. The Central District lands carry the equivalent of 161

sheep per 100 acres; the Western, 129; North Central, 117; Gippsland, 116; Northern, 98; North-eastern, 85; Wimmera, 63; and the Mallee, only 15. On the agricultural lands (4,175,614 acres), 121,231 hands were employed on 31st December, 1904; and on the pastoral (28,005,434 acres), 21,098 hands.

Generally speaking, only about one-sixth of the land privately held in the State by 70,000 owners is under cultivation and artificial grasses; the remaining five-sixths being in its natural state. There is no doubt whatever that the future prosperity of the State will mainly depend upon the cultivation of the soil, and at the present time the question of population is therefore one of the most important matters for consideration. From 1891 up to the end of 1904, no less than 157,462 persons, mostly adults, have left the State, and the exodus is still continuing, of the very class it is most desirable to retain in, or to attract to, the country. Upon increased population will depend the revenue and security of our national debt. With such larger population, the railways would not only pay, even at rates much lower than the present, thus enabling farmers to obtain larger returns for their produce in all markets, but would be a considerable source of income, instead of a burden, as at present. The Customs revenue would be enormously increased at comparatively little extra cost of collection. All this, however, presupposes that the population is distributed throughout the State as the great agricultural and mineral resources of Victoria warrant, and not, as at present, with great urban aggregations.

Public lands in suitable localities, and of a character fit for agriculture, are not now available to any great extent, and the practice which has lately been established of large land-owners cutting up portions of their estates into small areas suitable for farms, is not altogether satisfactory, since the price is often beyond, and the terms unsuitable to, those requiring the land. To retain this desirable class of yeomanry in the State, it appears to be necessary not only to aid them in obtaining settlement on private lands, but also to place easily within their reach such areas of Crown lands as may be suitable for agriculture, and will support an average family. The value of such *bonâ fide* settlers to the community should form an element in the consideration of the purchase money or rental.

It is unfortunate that much of the State in common with the rest of the Commonwealth, is subject to recurrence of drought. The average rainfall is not to be depended on, if the mean of a period be derived from a series of extremely wet and extremely dry years, as is generally the case in Australia in districts more than 50 miles from the coast. As matters now stand, however, although land might be selected and profitably used perhaps for one or a few successive seasons, the producer becomes, on account of the almost certain return of drought conditions, unable to depend on the rainfall for the necessary watering of his land. There is no doubt that the prosperity of this State is largely dependent on its agricultural returns, which last year were valued at £9,400,519, and this dependence will probably be more and more pronounced as time goes on. As most of

the best land in the vicinity of markets or seaports is in many cases in private hands, but unused for other purposes than grazing, the Crown lands now available lie at distances remote from markets, where there are no good roads giving ready access to railways. If entirely dependent on the rainfall, the question of receiving a certain and adequate reward for industry would be problematical, since no certain forecast of the season can be made. Irrigation must, therefore, be resorted to, to render land cultivation profitable in all years. Small areas of intense cultivation, where the soil is good, as is generally the case, would then be able to yield sufficient return to support a family. With a judicious policy of irrigation, and resuming large estates for closer settlement, working hand in hand, people will be settled on land from which they may be certain of obtaining a good living; and the wealth and commerce of the State will also be increased by the population thus attracted from other places.

AGRICULTURAL EDUCATION.

Extracted from "A Survey of the Work and Progress of the Victorian Agricultural Department," by S. Williamson Wallace, Esq., Director of Agriculture.

Agricultural education has been intrusted to a council. The form this education has taken has been that of establishing two colleges, one of which, that at Dookie, has been a success, both as a college and as an experimental farm. I maintain, however, that what is of more immediate service to the agricultural community is the education of the farmers already engaged in farming, and their sons who are working with them, rather than the education of prospective farmers. The sons, in many cases, of those not at present engaged in farming may ultimately never take to the business.

The Department of Agriculture has for years had officers on the staff whose duty it has been to give single lectures on agricultural subjects to meetings of farmers, held under the auspices of agricultural societies. This work, although useful and interesting, cannot be called very educational, as the information given in one lecture does not lead to a better understanding of the next. To meet this difficulty I have had classes of instruction for farmers and farmers' sons, extending over several weeks, held during the last two winters, and this winter the classes are more popular than ever. Seven centres have been selected, namely, Nhill, Warragul, Tatura, Benalla, Wodonga, Rushworth, and Wangaratta, and the average attendance will exceed that of former years, possibly 50 students per class. The Department has made no special effort to form classes this season, as the agricultural societies secured students in sufficient number to form as many classes as could possibly be attended to with the officers available for giving instruction. This method of instruction has come to stay in Victoria, and will probably extend over the whole of Australia. Inquiries have reached me from other States, and it is only a matter of time before Australian agriculturists will realize that that is the best method of instruction for the greatest number which can be had at the least sacrifice of time

and money. However excellent this system may be, the winter season as a rule, is the only time when farmers and their sons can devote their days to lectures and study.

To meet all demands for classes during the winter months, the Department would require to maintain for a whole year a staff of lecturers who would work for three or four months only, or depend on picking up suitable men for the work during the winter season. Engaging men specially can be done to a small extent, but if it were attempted on any large scale failure would be the result. I have, therefore, after a great deal of consideration, and after consultation with Dr. Howell, who is now supervising the work of the lecturers, matured a plan of keeping them employed throughout the year, and I think there is every chance of making this scheme a success. To organize the matter thoroughly it would be necessary to form an educational branch of the Department of Agriculture, with a chief officer, who, besides teaching, would make all necessary arrangements and have the teaching staff under his control.

The method I propose is to hold evening classes of two weeks' duration at farm houses—the number of farmers attending at any centre to be from ten to twelve, and the classes to be held all the year round, except in the winter time, when the officers would be engaged at the farmers' classes, held in the townships, as is being done at present. If this system is to succeed, the co-operation of leading farmers in every district would be necessary—those who would lend a room for the purpose, and invite their neighbours to attend.

The lectures would be held in the evening, say one and a half hours' lecture, and half-an-hour devoted to asking and answering questions. Four lecturers would be required, one of whom would arrive on a Monday and stay three days lecturing and discussing such subjects as manuring suitable to the district, tillage, rotation of crops, and kindred subjects. On the fourth day he would leave for another centre, say 20 miles away, and would be replaced by an officer competent to lecture on farm stock, their breeding, and management. In two days the second lecturer would leave, being replaced by a third, who might lecture upon poultry, the best breeds to be kept for export and laying purposes, their management and feeding. Two days later this lecturer would be replaced by a fourth, who would lecture on other agricultural subjects. The course of instruction at this particular farm-house would then terminate after ten days' instruction. Four classes would be in progress at one time, in farm-houses sufficiently far apart to prevent overlapping, and yet near enough for the officer to reach the next centre and lecture on the same day. It will be at once seen that the success of such a scheme depends very largely on the patriotism of the leading farmers, as it is not every one who has a room that would accommodate ten or twelve farmers, and who would be willing to give that room up for two hours each evening for two weeks. As to the lecturers, they would find their way to the nearest township after the lectures were over—to cycle eight or ten miles on a summer evening would be no obstacle. I would not like the scheme to fail from any idea that it would be necessary to offer hospitality to lecturers.

I propose that these farm-house classes should be tried in August, when the farmers' classes held for a month in townships are finished, and the officers are available to do the work.

GENERAL REMARKS ON THE TOBACCO PLANT.

Extracted from a pamphlet by F. J. Howell, Esq., Ph.D., Chemist for Agriculture, &c.

The ready adaptability of the tobacco plant to a wide range of soil and climatic conditions makes its growth an easy matter, but the extreme sensitiveness of the plant to the slightest variations in these conditions, as manifested in the flavour and quality of the leaf, restricts the possibility of the successful growth of any one type to exceedingly limited areas. It is only a tobacco possessing certain well-defined qualities, and meeting the specific requirements which in the present highly-specialized condition of the industry are demanded, that is worth the trouble of growing. As Whitney remarks: "A nondescript tobacco is not worth growing, and should not be grown, as it lowers the price of really good types of tobacco, to the detriment alike of the grower and consumer." As there are certain tobaccos then in demand—suited by their particular characteristics for certain specific purposes, and as these characteristics are the resultant mainly of particular soil and climatic conditions—it appears that the two lines of activity to be taken up in investigations connected with the industry are—first, to find out what kinds of leaf are in demand, and then to investigate the existence of the climatic and soil conditions capable of producing the desired characteristics. The second line of inquiry would involve laboratory investigations in the chemical and mechanical analyses of soils, as well as the establishment of numerous and widely-distributed observation stations, or, as the term is used here, experimental plots, where tests would be carried out with different varieties.

With respect to the kinds of tobaccos in demand in different parts, an extract from a recent paper by Milton Whitney will convey an idea of the wide existing differences of opinion prevailing in different parts on the characteristics constituting desirable qualities in the product.

"The differences in the export type, known to the trade as 'foreign,' which are cured and manipulated according to the demands of the various foreign countries, are worthy of special consideration."

"To the general public such differences are sometimes hardly perceptible, but in the trade the slightest difference in shade, colour, thickness, shape or length of leaf, is taken into account in determining to what country or trade the tobacco is best suited. For example, Great Britain gives preference to a long, narrow olive-green leaf, which is required to be heavily fired; in fact, the stronger the odour of hard wood smoke, the more acceptable the tobacco is to the British trade. The Austrian Government prefers a long, broad, silky leaf, from medium to light brown colour. The Italian Government uses

the same type, only of shorter size and darker in colour, while the French prefer a tobacco that has been made exceedingly dark by means of steaming and hard pressure while hot."

The commercial grouping of tobacco is one of classes, types, and grades. The adaptability of a tobacco for a particular use, such as cigarettes, cigar, or smoking, marks it off as belonging to a class. The possession of certain qualities as flavour, texture, and colour, determines the type, while the grade expresses the measure of excellence of the leaves from any one type. The production of the different classes and types is the outcome principally of climatic conditions and the texture and physical properties of the soil. It will be recognised then that the production of the different classes and types cannot be successfully attempted on the same class of soil—that a soil adapted by its physical properties for the production of a large, heavy leaf of a high oil or gum content, will not produce a light tobacco. The adaptability of various soils to different classes and types of tobacco has received great attention at the hand of Whitney, in America, with the object of determining the conditions favourable to the best development of each type. The ultimate object, as stated, has been "to give a basis for the classification of tobacco soils, and for the improvement and modification of the conditions in many soils which are not, under present methods of manuring and cultivation, well adapted to any particular type of tobacco."

Prior to similar investigations being taken up in Victoria, the introduction of new and untried varieties is necessary.

The establishment of experimental fields, covering a wide range of soils, in which various varieties might be tested, would indicate the suitability of particular areas and particular soils for the production of different types. The examination of the soils, on which certain of these types might have succeeded, would then afford data for expressing opinions on the results of analyses as to the adaptability of untried areas for the same type. Until this data resulting from field experiment is available, the chemical and physical analysis of a soil will have a limited value only. Up to very recently, one type only has been almost exclusively grown in the North-Eastern district, as the general crop, and the large body of facts resulting from the experience of growers themselves, apart from the investigations of the expert, which affords so much valuable data to the investigator in America, is not available in the case of Victoria. From the experience of growers themselves in America, it has been found that certain varieties, through the yields and excellence of the product, have given a distinct character to certain districts. The work of the expert is to investigate the conditions producing these distinctive characteristics, and, by a comparative study of untried areas, to discover and suggest the possibilities of expansion beyond these restricted localities known by experience to be adapted for the production of these characteristics. In Victoria, in the absence of the growers' initiative, a wide distribution of variety tests must precede any large system of soil investigation. From the variety tests of last year, reported on by Mr. Smith, there is every evidence of the growers of the North-Eastern district being able to produce a tobacco very much superior to the

one formerly placed on the market. To obtain some general idea of the character of the soil in the district, a chemical and mechanical analysis of a number of samples taken from different localities was carried out in the laboratory. This examination reveals the presence of the most important plant foods in exceptionally large quantities. The soils may be regarded as of high fertility. The mechanical analysis discloses a texture indicating no very high retentive power for water, and therefore not adapted for the production of the heaviest types of leaf. The clay content, however, is higher than that of American soils producing the finest types of light yellow tobaccos.

As, however, the type of a tobacco is the resultant of climatic as well as soil conditions, no reliable opinions as to specific adaptability can be formed by comparing the composition of a soil on one side of the world with that on the other; in fact, the determinative influences of climate on the tobacco plant have been shown to be so subtle as to fail detection by even meteorological instruments. We must find that answer from the plant itself.

The chemical composition of the soil in relation to the tobacco plant.

No plant is so profoundly affected by soil characteristics as tobacco, but it is rather to physical character of soil than to chemical composition that we must ascribe the paramount influence exerted on the physiology of the plant. To quote Whitney again:—"It is practically true of tobacco, to a greater extent, perhaps, than of any other crop, that the texture and physical properties of the soil influence the physiology of the plant to such an extent as to determine and control the distribution of the widely-differing distinct types of tobacco. Soils producing a heavy shipping tobacco will not produce fine tobacco of any variety. Soils containing a large proportion of clay, or which for other reasons are very retentive of moisture, tend to produce large, heavy plants which cure to a dark brown or red. A lighter sandy soil produces a plant having a thinner and more delicate leaf, which, by proper treatment, can be cured to a bright red mahogany, or fine yellow colour. So marked is this influence of soil upon the quality of tobacco that a fine bright tobacco land may be separated by only a few feet from a heavy clay soil which will produce only a heavy manufacturing or export leaf."

Although the paramount influence of the physical composition of a soil is clearly recognised, the chemical composition also cannot escape consideration. A knowledge of this, by revealing deficiency or over abundance in a particular plant food, may suggest means by fertilization on one side or the reduction of "raging fertility" on the other, of so bringing soils under control as to exercise a decided improvement on the quality of the product.

A comparison of the average figures of the four important plant foods in the six Edi fields, with two American districts—Kentucky and North Carolina—discloses percentages in the Edi soils equally in three ingredients to the Kentucky, and considerably surpassing in all the North Carolina. It is possible that an addition of lime to some of the Edi soils might prove of advantage, but in all other respects the figures would appear to indicate that the use of fertilizers will probably prove of little effect.

FIELD EXPERIMENTS IN MANURING, 1903-4.

Extracted from a paper by F. J. Howell, Esq., Ph. D., Chemist for Agriculture.

I.—HAY MANURING EXPERIMENTS.

The co-operative manuring experiments in Southern Victoria conducted during the season 1902-3 afforded facts of great value to the Southern grower. The marked operative effect of phosphatic manures in these experiments in the production of increased yields revealed a response to applications of phosphoric acid in the bulk of Southern soils, almost as striking as earlier experiments in Northern areas had shown to be the case in that part of Victoria. A new fact brought to light in the Southern experiments, which might be accepted as contradictory of earlier Northern results, appeared to be the large contributory share in the production of increased yields which applications of nitrogenous manures might be expected to play in certain crops of Southern agriculture. With respect to potash, the effective action of additions of this ingredient in the majority of the fields of the South agreed with what appeared to be the universal experience in the North. There appeared, however, indications that on certain types of soil in the South, potash might require to enter into consideration in a system of manuring intended for the production of maximum crops.

The experiments conducted during the season of 1902-3 were, it will be remembered, carried out under climatic conditions which might be regarded as exceptional. The country is just emerging from the serious position which followed as the result of these conditions. It appeared then necessary to seek confirmation of returns obtained under such conditions by results secured under more normal circumstances. The experiments in the South were, therefore, repeated over a large area, and in a more comprehensive way last year, and although the rainfall of this year inclined rather to the other extreme than the normal, the results taken together with the experience of the preceding year, may be accepted as a basis for expressing opinions generally as to manurial requirements. It is satisfactory to find that the results of two extreme seasons agree in the main points the experiments were intended to elucidate, and that the knowledge gained may be regarded as of distinct value to the agriculturist.

All the tests were carried out in co-operation with farmers who provided the land, and gave the necessary assistance in putting in and taking off the crops. Special efforts were made in the present tests to gain regular and reliable results. Each crop was sown by a Government field officer, with a grain drill specially adapted for the continuous regular discharge of fertilizer and seed. The crops were inspected during growth by the officer, who himself applied the top dressings where necessary. Each plot was harvested with the binder, and stooked, under the supervision of the officer, and the same precautions were afterwards observed in weighing results. Prior to the sowing of the crop, the land, which had been set aside for the purpose by the farmer, was inspected, with a view to determining its suitability. In a percentage of cases there was not that regularity

The system
of experi-
menting.

in the nature and treatment of the soil which is so desirable a feature in tests of this character. Depressions and rises, clay or sand patches, introducing differences in both chemical composition and mechanical character, finishing furrows and other disturbing factors not considered deserving of notice by the ordinary observer, but of supreme concern to the experimenter, were too frequently present, all helping to contribute in places to those irregularities in returns which at times appear to flatly contradict results obtained from another portion of the field. It will be recognised, however, that these are conditions which must be expected, and to an extent accepted in any system of co-operative farm experimenting. They may be met, and their disturbing effects largely obviated by the elimination of returns from portions of a field so affected; by the introduction of double checks, and by the consideration of the average returns of large numbers of fields in which individual irregularities are made to disappear, and certain broad features, generally characteristic of the soils of a district, brought into prominence. It must be recognised, however, that, under the most favourable circumstances the conditions for experimenting obtaining on a farm can never equal those possible at an experimental station, where continuous takes the place of intermittent observation, and where the selection of locality, the preparation of the soil, time of sowing, and time of harvesting can be suitably arranged, and the whole set of operations adjusted to the attainment of an ideal set of conditions. But, admitting disadvantages in these particulars, a wide system of co-operative field tests carries advantages in other directions, and the Victorian farmer, I think, has recognised the fact.

On each farm the area experimented on was 1 1-3 acres, and plots were selected so that the width corresponded to one sweep of a small fertilizer drill, and also adapted itself to easy harvesting by one sweep of the binder. Variations in regard to the manures used were introduced, to meet differences in climatic conditions, and make the range of tests wider.

The scope of the field of inquiry covered by the experiments is a wide one, and answers have been sought, not only as to soil deficiencies, but as to particular forms of plant food, and combinations best meeting these deficiencies, in dealing with the tests to which the various manures were subjected, effort was made to answer the following questions:—

1. The effects of applications of phosphoric acid alone.
2. Of phosphoric acid and potash.
3. Of phosphoric acid and nitrogen.
4. Of phosphoric acid, nitrogen, and potash.
5. The comparative effects of sulphate of ammonia and nitrate of soda in combination with phosphoric acid alone, as well as in combination with phosphoric acid and potash.
6. The effect of light, heavy, and medium additions of a nitrogenous manure to medium dressings of superphosphate.
7. The effect of light addition of nitrogenous manure to light applications of a superphosphate.

8. The comparative effect of equal quantities of the three forms of phosphate manure, viz., superphosphate, Thomas phosphate, and bonedust.
9. The comparative effect of equal quantities of Thomas phosphate and superphosphate, both alone and in combination with the two forms of nitrogen and the two forms of potash.
10. The effect of equal quantities of sulphate of ammonia with the sulphate and chloride of potash.
11. The effect of equal quantities of the chloride of potash with nitrate of soda and sulphate of ammonia.

There were more than 70 fields established last year in Southern Victoria, but, owing to the loss of many crops through caterpillars and heavy and continuous rains during harvesting, results of reliability were finally available from 50 fields only, which were fertilized. The results confirm in a remarkable manner the returns obtained in the preceding year's tests, both in regard to the average returns of the unmanured plots, and in the increased yields following applications of manure—whether phosphatic manure or the combination of a phosphatic with a nitrogenous and potassic. The experiments attest the splendid effect produced by phosphatic applications on soil productivity, and the stronger operative effect of superphosphate, as compared with Thomas phosphate. Experiments with bonedust indicate the absence of any marked difference from the superphosphate, particularly in rainy seasons.

Results of
the year's
experi-
ments.

The results of the hay manuring experiments are summarized as follow:— Summary.

1. The effect of phosphatic fertilizers on Southern soils is most pronounced.
2. In the comparative tests between the three phosphatic forms of superphosphate, Thomas phosphate, and bonedust, results point to an undoubted superiority on the part of the first manure, both in the larger yields produced where equal quantities of the three have been used, and the larger accruing money value of the increase in produce over the cost incurred.
3. Bonedust, owing to an improvement in mechanical condition and probably to its nitrogen content and the response of Southern soils to this ingredient, has, used in equal quantity with the two other forms produced, increased yields larger than Thomas phosphate, and almost equal to superphosphate. Owing, however, to its much higher price it cannot compare from the point of view of resulting profits with the second manure.
4. Thomas phosphate fails to show, in the increased yields produced by the use of equal quantities, figures equal to those of bonedust, but owing to its much lower cost, the difference in resulting profits is not so great as the first consideration would appear to indicate.

5. Numerous comparative tests between equal quantities of superphosphate and Thomas phosphate, both alone and in combination with nitrogenous and potassic manures, establish firmly the greater effective power of the first fertilizer, and although the market rates for Thomas phosphate are lower than those ruling for the great bulk of superphosphates, the profits resulting from the latter are very considerably in excess of those of the former. It should, however, be noted that the analysis of last year's Thomas phosphate showed a grade of that manure below the standard formerly obtainable on the market, and much below what European analysis shows it ought to be, and it seems probable that with an improvement in quality it will compare very favorably with superphosphate.
6. Nitrogenous manures find an almost universal response on southern soils, and have resulted generally in increased yields sufficiently large to give substantial profits.
7. In the results of the tests between the nitrate and ammonia form, there seems sufficient evidence to justify the premier position in effective power being given to sulphate of ammonia.
8. In the tests to decide the effect of light, medium, and heavy dressings of a nitrogenous manure, it appears that the progressive increase in yield following heavier applications are not sufficiently marked to justify the larger quantities used.
9. Increased yields appear to follow a light application of a phosphatic fertilizer (1cwt. per acre) used in combination with a light application of a nitrogenous manure ($\frac{1}{2}$ cwt. per acre)—superior to those produced by a heavy dressing of a purely phosphatic fertilizer.
10. Medium and heavy dressings of a nitrogenous fertilizer (1cwt. and $1\frac{1}{2}$ cwt.) in combination with medium dressings of a phosphatic manure (2cwt.), show a considerably reduced effect, relatively, to light applications in combination with light phosphatic dressings.
11. The effect of potash generally has not been sufficiently pronounced to merit marked consideration.
12. Where the two forms of the sulphate and chloride of potash have been used, there has been a striking regularity in the operative effect shown by each, both in combination with superphosphate and Thomas phosphate alone, as well as in combination with the addition of a nitrogenous manure to the two phosphatic forms.
13. Chloride of potash used with sulphate of ammonia—a combination in which poisonous compounds resulting under certain conditions are supposed to act injuriously to plant life—appears, with a few exceptions, to have produced results closely corresponding to those obtained from a combination of potash sulphate with the same ammonia salt.

14. The financial aspect of the results of the experiments are most satisfactory, and taking the mean of the extreme prices ruling at different periods for the crop in question as a basis for calculation, it appears that for an expenditure of from 12s. to 15s. per acre in manure, increased returns of a money value, taking a low estimate, of from 30s. to 40s. may be expected. These remarks are not, of course, intended to apply to soils of well recognised exceptionally high fertility requiring no fertilization. The productivity of his farm will indicate to each farmer the necessity or otherwise of considering in his case the questions here dealt with.

II.—GRAIN MANURING EXPERIMENTS, NORTHERN AREAS.

The very numerous experimental manure fields established throughout the whole of the northern wheat-growing area, during the years 1899-1902, appeared to give conclusive answers to the most important questions of fertilization concerning that portion of Victoria, and left little to be attempted in that part in the solution of manurial problems of immediate concern. It, however, appeared desirable to be in a position to anticipate possible future requirements, and to secure indications of the possible effect of the continuous exclusive use of phosphatic manures over long periods of time. With this object in view, as well as with the idea of gaining an insight into the effect produced by different systems of cultivation, a number of large experimental fields was established on various farms in the north. In only two cases out of six originally established have the experiments been continued up to the present time. Although it is yet early to make comparisons between results obtained from the different systems of cropping and cultivation, a few important facts appear evident in the returns already obtained, and it appears desirable to now give these publicity. It must be recognised that such tests, conducted on the same plots for 10 or 15 years, would afford information of incalculable value to the northern wheat-grower. The arrangement with the farmer terminates at the end of six years, and a renewal of the term for a like period is certainly advisable.

A comparison of the yields obtained in 1903 on the plots continuously cropped, with those obtained from the plots where a year's bare fallow has intervened, reveals the increases due to the latter system, and such a comparison ought, after some years, to indicate pretty clearly the system to be adopted with advantage by the farmer.

The effects
of fallow-
ing.

The good effect of fallowing may be due to various causes. It may follow on the results of conservation of moisture, from the disintegration of mineral matter, from improved physical conditions, or from organic operative agencies, working in the direction of the conversion of unavailable forms of nitrogen into available forms. With the magnificent rainfall of last season, it can hardly be thought that the larger yields of the fallowed plots were in any way due to a larger soil moisture content.

The effect of
sub-soiling.

The various cultivation tests are not yet in a sufficiently advanced stage to admit of discussion. The effect of sub-soiling, however, appeared sufficiently marked to justify some reference. Both in the appearance of the growing crop and the actual results obtained in weight of grain and straw, there appears evidence for concluding that a deeper cultivation in the more compact clay soils of the north will result in a considerable improvement in yields.

The residual
effects of
manures.

The fact of the full profits, resulting from the use of phosphatic manures, not being contained in the first year's returns, has already been demonstrated to the farmer by field tests conducted by this branch. In these tests, the residual effects on a second year's crop have been determined and made known. It is, however, a little surprising to find that such small quantities as 10 and 20 lbs. of a superphosphate are capable of exercising so marked a residual effect after a period of four years from the first application. In the year 1900 a small field embracing 15 plots, each 1-5 of an acre in area, was put down on a farm at Wycheproof. In the following year the field was let out to grass, fallowed the next year, and then cropped the succeeding season without manure. The increased yields due to manures, both in the first and fourth years, were very evident. With the exception of one or two irregularities the effects appear consistent throughout.

The
Northern
results
sum-
marized.

The pronounced effect of phosphatic fertilizers is only confirmatory of the results of former experiments, but the whole of the present returns tend to show a considerably more marked effect from these fertilizers, under the ample moisture supply of last year, than under the prevailing drier conditions of preceding seasons. The limits, however, of an effective application with an ample moisture supply, are lower in these returns than expected, and appear to be somewhat below, rather than above, 80lbs. of superphosphate to the acre. The natural fertility of the soils under review, judging from the returns of the unmanured plots, may, however, be considered a high one, and on soils below this standard larger quantities would probably prove effective. The wet season appears to have specially favoured the effective action of Thomas phosphate, raising it apparently in instances to an equality with that shown by the higher grades of superphosphate at present on the market. There appears, further, in the returns, evidence for concluding that northern soils which hitherto, with few exceptions, have remained passive to nitrogenous applications, may show, under an ample moisture supply, a response to such treatment, and indications are also present that continuous grain cropping, year after year, with phosphatic fertilizers, may, after some years, lead to soil conditions in which the application of a nitrogenous manure, in addition to a phosphatic, may also become a necessity. It is, with the data at present to hand, a little early, perhaps, to draw such conclusions, but the easy possibility of such an occurrence demands attention. Such a contingency suggests the advisableness, where the three year course of crop, grass, and bare fallow is not the practice, of occasionally intervening some leguminous winter crop, such as peas, the cost of which might be profitably covered by feeding

of in spring. Such a practice has in instances been successfully carried out in the north. The returns appear also to show that the use of small quantities of gypsum mixed with the superphosphate may prove of some slight value on certain soils of the north—deficient possibly in lime, or of a mechanical condition tending to set the soil and interfere with the development of the plant in its earlier stages of growth. The few tests carried out on different methods of applying manures favour largely the application with the drill, equal quantities of superphosphate applied broadcast as a top dressing after sowing the grain, as well as ploughing in prior to sowing, showing considerably smaller yields than those obtained from the applications made with the drill.

GENERAL REMARKS ON DISEASES PREVAILING IN THE LIVE STOCK OF VICTORIA.

*By A. A. Brown, Esq., M.B., B.S., Inspector of Foods for Export,
&c., Department of Agriculture.*

The remarks made and published in the *Year-Book* for 1902 on diseases prevailing in stock in Victoria admit of certain amendments, as further investigations revealed diseases not hitherto encountered in certain species.

Horses are particularly free from malignant infectious disorders. Horses.
Glanders and Farcy do not prevail anywhere in Australia. Pneumonia and Strangles are the principal infectious disorders to which they are subject. Tuberculosis does not have a place in the category of Victorian horse diseases. Stringhalt, a condition concerning which no definite pathological knowledge at present exists, is prevalent in many districts. The common parasitic diseases in our horses are (1) Bots—the larvæ of the gadfly (*Gasterophilus Equi*)—inhabit the stomach, and another variety (*Gasterophilus Hæmorrhoidalis*) inhabit the rectum; (2) Round Worms—the *Spiroptera Megastoma*, or *Reticulata*, or *Sclerostomum Tetracanthum*, produces tumours in the stomach of the horse. This worm in the course of development passes through the body of the meal worm, the larvæ of the meal beetle (*Tenebrio Molitor*). The *Tenebrio Molitor* is now extensively found in Victoria. A few years ago it did not exist on the farms nor about stables, but was confined to the grainhouses. By means of the meal worm, the embryos of the *Spiroptera Megastoma* are carried far and wide. The *Strongylus Armatus* is found in the mature state in cysts in the intestines, and in an immature state in aneurisms of arteries of the abdominal cavity, particularly the anterior mesenteric. A large round worm (*Ascaris Megalocephala*) and a small thread worm (*Oxyuris Curvula*) inhabit the intestines; (3) a tapeworm (*Tænia Perfoliata*) is frequently observed.

The infectious diseases observed in cattle are Tuberculosis, Actinomycosis, Anthrax, Symptomatic Anthrax (Black quarter) and Pleuro-pneumonia. Rinderpest, Eczema-epizootica (foot and mouth disease), Texas Fever, or Tick Fever, a disease dependent on a malarial organism, *Pyrosomum Bigeminum*, and introduced into the Cattle.

blood of cattle by the cattle tick (*Ixodes Bovis*), do not exist in the State. The herds of Victoria are not seriously affected with tuberculosis. In consequence of the mildness of the climate, cattle can be kept in the open all the year round, and this continuous life in the open is conducive to the health of animals, and to the suppression of this disease. Tubercle does not prevail to any greater extent than about 5 per cent. in Victorian cattle, and, as greater care is now being exercised by stock-owners in the feeding and shelter of milch cows, it is hoped that in a few years the percentage will undergo a material decline. Parasitic diseases are rare in Victorian cattle. The stomach fluke (*Amphistoma Conicum*) and the liver fluke (*Distomum Hepaticum*) are occasionally seen. "Measles" (*Cysticercus Bovis*), the hydatid stage of the *Tænia Mediocanellata* (a large tapeworm in man) has only been once noticed, but small tumours in various situations amongst the muscles caused by the *Spiroptera Megastoma* have been occasionally found. "Warbles," tumours in the skin, caused by the *Hypoderma Bovis*, or ox gadfly, do not exist in our herds.

Sheep. The infectious diseases prevailing in sheep are Multiple Abscess or Pseudo-tuberculosis, Malignant Œdema, Tetanus, Foot-rot, Pneumo-enteritis, and Anthrax. Tuberculosis does not occur. Pneumo-enteritis, or Epizootic Catarrh, the "Bradsot" of Europe, a disease due to a sporulating bacillus about 3.5 micro-millimetres long, prevails to some extent. The disease probably prevailed extensively in New South Wales in 1834-5, causing great mortality in those years. The symptoms are, fever, running at the eyes and nose, and great prostration of strength. Putrefaction sets in very early after death, and the smell emitted is offensive and sickening. The carcass rapidly swells up, and turns black, and the wool is readily pulled out. The germ is an anærobie, growing on gelatine and agar, and liquefies gelatine. The parasitic diseases are, fluke (*Distomum Hepaticum*, *D. Lanceolatum*), stomach worms (*Strongylus Contortus*), lung worms (*Strongylus Rufescens*, or *Filaria*) and tapeworms (*Tænia Expansa*). The Sheep Blowfly (*Calliphora Oceanicæ*) is a source of great trouble in some parts, particularly in New South Wales. Other flies besides the *Calliphora* may also be concerned in producing the annoyance which may be provocative of considerable mortality. Scab (*Dermatodectes Ovis*) and sheep-gadfly (*Cestrus Ovis*) do not exist.

Swine. Swine Fever, Tuberculosis, and Actinomycosis are the contagious diseases in our swine. In 1901 there were 350,370 pigs in the State. In March, 1903, I announced the outbreak of swine fever, and since that time the plague has caused great loss. The Government Statist estimated that there were 286,075 pigs in Victoria at the end of 1904, and this shrinkage was no doubt due to mortality caused by the prevalence of swine fever. As regards parasitic diseases, hydatids (*Echinococcus Veterinorum*) are occasionally seen. Trichinosis (*Trichina Spiralis*) and "Measles" (*Cysticercus Cellulosæ*) the hydatid stage of the tapeworm, *Tænia Solium* of man, do not exist here.

Rabies (Hydrophobia) does not exist in Victoria. Distemper is Dogs. the chief infectious disease prevailing. Worms (round and tape varieties) are common parasites.

There are no infectious diseases prevailing in goats in Victoria. Goats.

Tuberculosis, Roup, Avian Diphtheria, and Fowl Cholera, are Poultry. the infectious disorders. The common parasites are the hen mite (*Dermanyssus Avium*) and a mite (*Cytodites Nudus*) which lives in the subcutaneous tissues, and in the lungs, and on the pleural and peritoneal surfaces. Round worms (*Ascaris Inflexa*) *Heterakis Papillosa*, and *Sclerostoma Syngamis* and Tapeworms (*Tænia Proglottina* and *T. Infundibuliformis*) are very rife. Fowl ticks (*Argas Americanus*) prevail in limited areas, and are very destructive, causing fever and death. The Department of Agriculture is putting forth efforts to eradicate this pest from the State.

ENTOMOLOGY.

Extracted from the Report of C. French, Esq., F.L.S., F.E.S., Government Entomologist.

During the year investigations and experiments have been extensively carried on. The root-borer experiments have proved that trapping in itself is insufficient to stamp out this pest, and although a reward has been offered for the best means of exterminating the insects, no real practical solution of the trouble has as yet been brought under notice. The root-borer is one of our very worst pests, as for years the fruit-growers were unaware of the cause of the trouble, and when this was found out, in most cases, the badly affected trees were either dead or dying, the grubs in the roots being most difficult to treat successfully. This matter is receiving careful attention.

Investigations and experiments.

The grasshopper fungus tests have been followed up. The fungus, which is fatal to grasshoppers, but harmless to all other forms of life, is supplied in tubes, for diffusion over infested districts. My suggestion as to making a small charge for the material has made a large difference in the number of tubes applied for, the number of tubes sent out during the present year being 842, and the amount received for them £36 6s. The letters received as to the value of this important discovery continue to be most satisfactory. The tubes on the present occasion have all been prepared at the chemical laboratory over which Dr. Howell presides. Experiments on the San José Scale with lime, sulphur, and salt, are still being carried out. A new material placed on the market in the shape of "red oil" gives promise of excellent results.

The peach aphides, both kinds, have not been so bad as in former years, constant treatment having had a very marked effect, the peach crop of last season having been an exceptionally heavy one.

The onion land in many parts of the rich Drysdale district has still resisted our efforts to free it from the eel-worm, though the experiments carried out demonstrated that the wire-worm and other pests of

a caterpillar nature could not be destroyed by means of gypsum, sulphate of iron, and other materials. The experiments will be continued—we trust with success.

Further experiments for the eradication of the St. John's Wort have been made, and now that a sum of money has been granted for the purpose, we hope to be able to state what we have found to be the cheapest and most effectual methods of treatment. It is satisfactory to know that this plant can be permanently destroyed by means of certain chemicals, and the publication of a pamphlet, with coloured plates, and methods of treatment, has been authorized, and is now in course of publication, for broadcast circulation amongst country municipalities, farmers, graziers, State schools, &c. Dried specimens of the plant have been sent to most of the municipalities throughout the State.

Lectures upon various subjects have been delivered by the field members of the staff (inspectors under the Vegetation Diseases Act), and have been well attended.

Inspections.

The inspection of orchards, nurseries, and gardens, has been carried on energetically, but the operations connected with the eradication of St. John's Wort have increased the work of the inspectors. Some indication of the extra work entailed upon the officers may be gleaned from the fact that, according to the report of the Government Statist, the area under orchards has increased at a rapid rate, and in 1902-3 consisted of 45,885 acres¹, the latter being the area of orchards cultivating fruit for sale, and in addition to the above there are no less than 5,976 acres², laid down in private gardens growing fruit for home consumption.

Inspection of the nurseries still continues on a satisfactory basis, this being one of the most urgent portions of the inspectorial work. These nurseries are inspected every six months, and when found clean and free from disease are passed by the visiting inspector and a certificate to that effect given. The system of nursery examination has been very successful, especially in the United States, and it should be equally successful here. It is to be hoped that the other Australian States may soon follow our example, as it is in the nursery that the real danger lies, and it is to it that San José Scale and other serious pests have invariably been traced. During the year 1931 certificates have been issued by this branch, the number of packages of plants exported under our certificate being 3,637.

The work of destroying old and worn-out infected orchards, mostly relics of land-boom times, continues, and no pains will be spared to get rid of this nuisance, as well as menace, to the grower, be he growing for sale or otherwise.

Plants and cuttings coming into Victoria from foreign parts, or from the other States, are fumigated at the Burnley Gardens, if a certificate that they have been treated at the port of shipment does not

Fumigating
and treat-
ment of
used fruit-
cases.

¹ In 1904-5 this area had increased to 47,205 acres.

² In 1904-5 this area had decreased to 5,546 acres.

accompany the consignment. Even when they have been thus certified, the entomologist reserves the right of examination, and, if necessary, a second fumigation. In the North-eastern districts, many orange and lemon orchards have been treated by means of the cyanide gas, the tent being available to those applying for it. Owing, however, to the capricious changes in our climate, the results have not always been quite satisfactory. The necessity for dipping, *i.e.*, scalding, used fruit cases, appears to be plainer than ever, as it is largely through the agency of these cases that the grubs of the codlin moth are distributed. The matter is now under consideration, the trouble being in working out a scheme for the proper treatment of a large number of cases with a minimum of inconvenience and expense to the grower. Dipping the cases is of the greatest importance, but on a large scale extremely difficult.

The grasshopper pest having been successfully tackled, it remains for this branch to devise some practical means for the suppression of the caterpillar plague, so much dreaded by the farming community. The trench system on large areas, and the food poisoning by means of arsenic, bran, and treacle, for small holdings, have been tested and found to be quite satisfactory.

Miscellaneous insect and bird troubles.

With regard to the probable introduction of "fruit flies," there appears to be a grave and increasing danger, no less than fourteen larvæ of the Mediterranean fruit fly having been found in one mandarin orange, taken from one lot, which was promptly condemned. This consignment had been sent from Maryborough (Queensland) and had not been fumigated, and if it had been so treated the results would probably have been the same, as the cyanide would be unlikely to affect grubs inside any fruit.

Whilst on the subject of fruit flies, I desire to point out that the inspection here is as perfect as circumstances will permit; but that the said inspection will keep out the fruit flies, the enemy to fruit-growers most of all to be dreaded, is impossible, and I take this opportunity to point out this fact to the fruit-growers of the State. There is but one of two evils, either to prohibit all citrus fruits and bananas, in fact all soft fruits, from certain outside sources, or to take the risk of introducing these pests into our State, and, as I mentioned previously, this matter is of the gravest importance, and should have the best consideration of all concerned. As showing the importance of our banana and orange imports, it may be mentioned that during the past year the value of the former was no less than £81,700, and of the latter, £68,000.

The arrival of an enormous quantity of rice, 136,586 sacks, badly infested with the larvæ of the "dried-flour moth" (*Ephestia Kuhnella*) has given us some concern, but as this rice is to be converted into starch we have allowed it to be treated under our supervision. The grain sent from India and other countries is very dirty, and should be fumigated at the port of shipment. This is important.

The English starlings, after having driven off most of the small insect-eating birds, are increasing with extraordinary rapidity, and if some prompt and decisive measures for their destruction be not soon taken, the fruit-grower has a serious time before him.

Examina-
tion of
imports
and
exports.

No less than 653,639 bunches of bananas were imported during the year, out of which number 59,849 bunches were condemned, either on account of the presence of fruit fly larvæ, or as having become heated on the voyage, the refuse being either towed outside the Heads by means of barges, or given to the cow-keepers, who have, under our supervision, to steam all fruit before carting away.

Besides lectures, inspections and experiments, the entomological branch carries on a great deal of correspondence, possesses a library of books and publications on technical matters, and controls a valuable museum of economic entomology and ornithology, which teachers from the Education Department, pupils of the Veterinary College, and members of the Field Naturalists and Science Clubs have visited, and from which collections are sent to exhibitions and shows of agricultural societies.

FORESTRY.

Previous issues of this work emphasized the desirability of cur-tailing, in the interests of economic forestry, the facilities granted to saw-millers and splitters to denude Crown lands of their timber. The beneficial effects on climate of the presence of forests should insure their preservation. Where observation has extended over a prolonged period, as in the countries on the Mediterranean border, marked changes of climate have been noted, and are ascribed by scientists to the denudation of the forests. The evenness and comparative mildness of the seasons have given place to alternations of drought and flood, and consequent desiccation and erosion of the soil, with diminution of fertility. Forest mould is deep and absorbent, and the trees protect it from the direct action of the sun's rays, and the springs and small streams thus originated regulate the irrigation of the lower lying areas. In Victoria there is a marked difference in the rainfall of open, treeless districts, and that of forest regions, and the clearing effected by settlers has reduced the volume of water in the rivers and creeks.

Forest legislation in this State has done little in the way of preserving the trees. Of a total area of 56,245,000 acres, Victoria has a forest area of 11,797,000 acres. There are 4,327,142 acres of existing forest reserves, and 332,133 acres of timber reserves, the remainder of the 11,000,000 acres being the area of practically inaccessible mountain ranges, where economic forestry is rendered difficult. Extensive areas of the best natural forest country, such as the Dividing Range, have long since passed from the Crown. The Conservator of Forests and his officers have striven during the past seventeen years to preserve intact the limited areas now left to the State. A Bill

drafted by a Royal Commission on State Forests has, however, been shelved in favour of other legislation, and its salutary provisions have not yet become law.

The Governments of the principal European nations, as well as those of Canada and the United States, have seen the necessity for forest conservation, and many of them have taken steps towards re-forestation. But in Victoria the area of woodland is proportionately less than those of Russia, Sweden, Norway, Prussia, Baden, Württemberg, Austria, and Hungary. In the report of the work of the Forestry Branch for 1903-4, published in the Journal of the Department of Agriculture, the following facts are noted:

Restrictions enabling proper modes of conservation to be carried out are strenuously resented by interested parties, and the urgent necessity for systematic and regulated foresting is apparently unperceived. Good forest conservation work was, however, achieved during the year. The timber needs of the community can only be met by an immediate strengthening of the hands of the administrators, in order that the perpetual encroachments of interested persons and corporations may be withstood. The regulations made by the Governor in Council give no kind of security for consistent administration or fixity of purpose, and legislation to prevent further alienation of forest lands is sadly needed. Such alienation means a perpetual loss to the State, and the Minister has stopped it for the time being. The continuance and expansion of the royalty system lately introduced is advocated. Grazing on the forest and timber reserves should be under the control of the Forest Branch, and subsidiary to the larger forest interests. It is more profitable to reproduce valuable eucalypts than to rent the areas for grazing. The issue of licences is unwise, the timber-getters often using fire carelessly, thus originating extensive bush fires. Stringent precautions were taken by the officers of the Department in the summer to prevent bush fires. The heavy rains, however, proved the salvation of the trees. An annual lesson to State-school scholars on the "Careless use of fire" is recommended, and an article in the *School Paper*. Sleeper-hewing has been continued throughout the year. It is pointed out that if the Railway Department would accept a proportion of lesser-sized sleepers in their contracts for full-sized ones, some waste, at present necessary, would be avoided. Wattle plantations have been extended; but, in view of the fact that a substitute for tan bark will probably be forthcoming shortly, any large development of wattle-growing for purposes of profit is discountenanced. Strict supervision has prevented the waste of valuable timber; but the field staff has been greatly hampered by the total inadequacy of the fines inflicted for serious forest offences. Thinning for the improvement of the reserves has also been carried on, and inferior and crooked timber removed. The exploitation of the forests for the benefit of other great industries, which has been the rule in the past, prevents any large revenue being obtained from the forest industry. Insect pests and parasitic growth cause the foresters some concern, the prevalence of the former being due to the enormous mortality of

insectivorous birds, through the laying of poisoned grain for vermin destruction purposes. The discontinuance of ringbarking permits is recommended, unless operations are carried out under the direct supervision of a forest officer. In the near future it will probably be necessary to close for a term of years, either in whole or part, for particular kinds of forest produce, certain areas of forest.

A useful and informative paper on "Forestry in Victoria" is furnished by H. Mackay, Esq., as follows:—

FORESTRY IN VICTORIA.

By H. Mackay, Esq.

The true aim of forestry is the preservation of the forests of a country by wise use. In practice, it embraces a knowledge of rocks and soils, the food of the plant life which covers them; of botany, the knowledge of vegetable living bodies; of chemistry, the science which reveals the nature and properties of bodies; and of silviculture, the rational treatment and working of forest areas, so as to maintain them in a timber-yielding condition. It includes also planting and sowing where Nature has clothed the surface of a country with niggard hand, or where, by the action of man or the ravages of fire or tempest, areas have been denuded of tree vegetation and rendered unprofitable. But the primary function of the forester in a newly-settled country is to maintain and increase the sylvan wealth with which Nature has clothed hill, valley, and plain, by regulating and correcting wasteful or inferior growth, while at the same time carefully restricting the yearly output of timber and other produce to such quantity as the forest can safely yield without deterioration.

FOREST AREA AND PLAN OF WORKING.

Victoria, with a total area of 56,245,000 acres, has about twelve million acres of woodland. Of the latter, over 4,600,000 acres are set aside as climatic reserves and for the production of timber, but no portion is formally dedicated in perpetuity for the purpose of forest and water supply. Of the State forest domain, some 3,000,000 acres are situated on the slopes of high mountain ranges, and their protection is essential for the maintenance of streams and springs; over half-a-million acres are situated in the extreme Eastern part of the State, but, owing to difficulties of transport, are not at present accessible for practical working; half a million acres, chiefly in the central district, which have been cut over, are closed for the protection of the young timber; while in the remaining area, over 600,000 acres, timber cutting is carried on in various parts. The bulk of the forest revenue is, however, derived from a total area of about 100,000 acres, the trees being felled on the selection system of treatment; while for the supply of mine-props and fuel, large blocks are allotted and worked as coppice, or coppice under standards, thinnings only, light or severe as the circumstances require, being taken out in some districts. The Government having accepted the principle that the forests should not be worked at a loss, it has been the duty

of the present writer to assess royalty charges in such a way that the State may obtain a fair return for its timber and other forest produce. The licence system, which enabled cutters to get timber irrespective of quantity at a fixed charge per month or per quarter, is now happily abolished in the greater part of Victoria, and while the revenue from all sources is expected this year to exceed £20,000, leaving a credit balance for plantation work, the stricter control which can be enforced over the operations of timber-getters is of much more importance than mere revenue.

TREE DISTRIBUTION.

In the early days of settlement little care was exercised to delimit and protect for the use of the community the best forest areas on the plains and lowlands. In some instances, indeed, good agricultural land bore excellent hardwood, such as redgum, and with some reason the claims of the State yielded to the pressure of settlers, whether the land was required for tillage or pasture. But in the case of the poorer lands, such as the auriferous belts of Silurian formation, bearing ironbark and grey box, which stretch from the river Goulburn westward to the Northern Pyrenees, there was seldom any valid reason for alienating inferior soil, fit only for the grazing of sheep. It bore, naturally, the best crop the soil was fit to yield, but this was speedily ringbarked and destroyed on thousands of acres in the endeavour to improve the pasture. In the same way, in Gippsland, the areas of forest redgum, a timber of exceptionally fine quality, were quickly alienated, so that, to-day, the State possesses only 300 acres of this hardwood in the whole of the Eastern division.

The early sale, in large tracts, of the fine volcanic lands of the Western District, and their long retention as a vast sheep-walk, have undoubtedly had an evil effect on the proper settlement of Victoria. Not the least mischievous result has been that, as the population increased, land selectors had to endeavour to make homes for themselves in the thick virgin forests of the Otway Peninsula and Western Gippsland, thus destroying by axe and fire in a few years enormous areas covered with valuable hardwood, as well as woods of fine grain. Despite, however, the reckless destruction of bluegum, mountain ash, messmate, blackwood, and beech, on the mesozoic sandstone ranges of the Southern District, and of ironbark and box on the central tablelands, Victoria is still the best wooded of all the Australian States. This, however, is obviously due to the extent of her mountain territory and average rainfall, and not to any protective action on the part of her people. The best forests of commercial value are now chiefly confined to the uplands and mountain slopes of the Eastern and South-Eastern Districts, but along the course of the Murray there are still valuable areas covered with redgum in all stages of growth; while in the Central District there are extensive tracts bearing healthy young messmate, box, and ironbark. One remarkable feature of settlement and the restriction of the destructive forest fires which used to burn for weeks without check is the gradual encroachment of thick belts of young timber on the lower slopes and foothills of the mountain

ranges. This is especially noticeable between Mount Wellington and the Snowy River, in the Otway District, and between the North-Eastern Railway and the head of the Owens River. Where open forests of large trees once stood, a close and in many cases almost impenetrable growth of spar timber and saplings has taken their place. Again, where, within the memory of men still living, the country consisted of thinly timbered or bare grassy slopes, the surface is now completely covered with stringybark, box, and whitegum, and on the higher levels mountain ash. This extension of young forest is, of course, confined to districts with a regular rainfall, and, from a forester's point of view, it is not an unmixed benefit, since inferior trees of the stringybark family in many instances dominate and crowd out more valuable species.

It may be well to point out here that the natural reforestation of grey and yellow box areas, and to a less extent of redgum, is greatly impeded by the maintenance of dual authority in connexion with forest grazing. The control of grazing in many valuable forests is still retained by the Lands Department, and exercised in a manner which often greatly injures them. Sheep especially eat greedily box seedlings and stool shoots, even when grass is abundant. They thus destroy all hope of obtaining regular hardy crops of natural growth. To this cause alone is due the absence of young pole timber in many of the valuable box forests, where rabbits are scarcely ever seen. Every endeavour has been made, but generally without avail, to put a stop to this senseless practice of sacrificing young forest growth to what is at best a small grazing revenue, and until the Conservator is given statutory power to regulate all grazing in the forests, there is no likelihood of proper control being conceded.

Many alarmist statements having been made by ill-informed persons that there is an increasing scarcity of timber of commercial value here, it is only right to correct this error. The supplies of useful hardwood, such as bluegum, spotted gum, blackbutt, mountain ash, messmate, stringybark, and peppermint, which, owing to the extension of railways, are now accessible, are probably greater than at any time since the beginning of settlement in the State. It is true that many areas of redgum, ironbark, and grey box are closed for a period of rest, the mature trees having been cut out, but on the other hand timber of the three kinds mentioned is used to a less extent than formerly, and is chiefly in demand for railway, harbor, and municipal works, where strength and durability are essential. Although the percentage of waste in conversion, owing to hollows or "pipes," is considerable, a large stock of redgum of fine quality is still obtainable in the Murray and other river reserves, while some sixty thousand acres of healthy young forest, with a stem diameter of six to twenty inches, is strictly protected. It is significant that last year, owing to the large supplies of redgum sleepers which were offered, the Railway Department was able to reduce its schedule price for this line material to 2s. 10d. a sleeper, a lower price than any in force for a long period. It is to be regretted that our

railway engineers will not consent to use bluegum in re-sleeping lines. Records which cannot be questioned show that in the early days of railway building here it was so employed, and proved to be durable. In Tasmania, with a wetter climate than Victoria, its average life in the track is about sixteen years. On a section of the Geelong to Ballarat line, bluegum sleepers cut near Apollo Bay are reported to have lasted about forty years. It is estimated that in one district alone nearly two million sleepers could be hewn from faulty trees of this species which the mills have passed by, and which are now going to waste. With regard to the supplies of hardwood in our mountain forests, such as the Upper Yarra and Otway reserves, when it is borne in mind that a sound mill tree of fair size will yield from 700 to 1,200 feet of sawn timber, and that many trees will give up to 1,500 feet, while the yield per acre in a good virgin forest varies from 20,000 to 50,000 feet to the acre, according to the species, it will be realized that a mill of ordinary size, cutting, say, from a million to a million and a half feet annually, makes very little impression on the standing crop at the end of a year's output. Taking, as a standard for yield per acre, trees such as mountain ash or blackbutt, which give a fairly mature crop in a rotation of sixty years, there are belts on the Yarra water-shed, in a reserve of 300,000 acres, which, under selection cutting, leaving many young immature trees standing, yield about 25,000 feet per acre, or an output of two and a half million feet from less than 100 acres. The yearly output of sawn timber from Victorian forests is, roughly, 18,000,000 super. feet, and of this quantity the Yarra and Otway reserves yield nearly 14,000,000 feet.

VICTORIAN TIMBERS.

With respect to hardwoods which have a commercial value, Victoria has some twenty, all species of the eucalyptus family. In addition, there are about forty woods of fine grain, most of them, however, being trees of small size, and confined to a limited area in the deepest recesses of the hardwood forests. At the head of the latter, for size, beauty of grain, fitness for cabinet work, and general utility, stand the blackwood and evergreen beech. Both of these are now chiefly confined to creek valleys in the Otway Peninsula, Gippsland, and Wilson's Promontory. A description of the smaller timbers of fine grain would be beyond the limits of this short paper, but steps have lately been taken by the Forest Service to make a complete collection of them (as well as of the hardwoods), and a small handbook will also be issued setting forth their characteristics and the purposes for which they can be utilized. The hardwoods of Victoria are of a class well known in Australia and Tasmania, and have been in general use for all kinds of building and construction, as well as for railway lines, telegraphs, and harbor and bridge work, since the first settlement of the country. They may be divided into two main classes—in the first rank, for hardness, durability, toughness, and general utility, are redgum, red ironbark, white ironbark, grey box, bluegum, N.S.W. blackbutt or flintwood, yellow stringybark, and Gippsland mahogany; while in the second class may be placed spotted

gum, messmate, mountain ash, the three stringybarks, woollybutt, and bloodwood. In addition to these hardwoods and woods of fine grain, we have, among many inferior species, five acacias, which yield tanning bark of good quality, the most valuable being the golden or broad-leaf, and the black feather-leaf varieties.

PLANTATIONS AND NURSERIES.

In plantation work, and gifts of trees for shelter belts to small settlers, a great advance has been made during the past few years. State plantations are established near Geelong, Maryborough, and Creswick, and the experience thus gained in the propagation and growing of Australian hardwoods, as well as exotic conifers, has been of great benefit to the community. In addition to the young trees reserved for the plantations, from eighty to a hundred thousand transplants are distributed every year, the bulk of the stock being issued to farmers in the Northern district, State schools, and municipal councils. For plantation work, Victoria may be divided roughly into three main districts, the Northern, Midland, and Southern. In the Southern district, evergreen oaks, elms, planes, Himalayan and Californian cypresses, deodars, and Mt. Atlas cedars; hardy pines, such as *pinus insignis*, *Canariensis*, *pinaster*, *laricio*, and *Austriaca*; and eucalypts, such as the sugar gum, Gippsland mahogany, yate, and swamp mahogany, flourish. The same trees thrive fairly well in the sheltered areas of the central lowlands, while on the higher levels, silver and spruce firs, the Douglas fir, Californian redwood, and the mammoth sequoia show fair growth. It is, however, one thing to grow trees in a shrubbery or park, and quite another to plant them in close lines for the production of timber. Unquestionably, no eucalypt so far has given the State such uniformly good results for the latter purpose as the sugar gum, the timber of which, in its original home (South Australia), is in high repute for railway and harbor works and telegraphs. Among conifers, the handsome *pinus insignis* easily distances all rivals in height and stem growth. Of late years it has been propagated solely for shelter-belts, as its timber, although it affords material for interior construction and case-making, cannot compare with the better class of merchantable pines, or with the redwood of its native State. Its great utility here is as a shelter tree. It exhausts the soil in its neighbourhood, and should not be planted in or near a garden or orchard; but on the windward side of homesteads, outbuildings, or farmyards, it is a great protection. The Lambert and Lawson cypresses of California have also come into favour for shelter-belts and hedges in Gippsland and the Southern district generally. The former thrives even in the dryer climate of the Northern plains, its range extending eastward from St. Arnaud to the Goulburn. In the Northern district, owing to the irregular rainfall, and the desiccating winds of the summer season, the choice of trees for shelter and shade is very limited. At the head of the list stand the sugar gum and pepper tree, for loamy and clay soils, while the locust or false-acacia, the silky oak, and the white cedar or *Pride-of-India* come next. In saline soils in this region, the Aleppo pine, tamarisk, *ailanthus*, false-acacia,

and Moreton Bay fig have given the best results. Even to the extreme Northern limit of the State, no hardwood transplant equals the sugar gum, its one drawback being that, especially when planted out towards the end of winter, it is very sensitive to frost. It has now been propagated and grown here for some sixteen years, and as it has attained in the plantations in that period a girth of 35 to 40 inches, its hardy habit, quick growth, and comparative freedom from insect or fungoid disease, have amply justified its selection as a standard eucalypt. At one time the blue gum was extensively planted, too often without any regard to the climate and soil which suit it. On the plains of the central and coast districts it has not been a success. It is peculiarly liable to the attacks of wood-boring beetles, and so far there is no demand for its timber for mine-props; while, so long as box, ironbark, and red gum are available, the general public will not use it for fuel. Undoubtedly the blue gum is one of the finest of Australian hardwoods, but, as a whole, the plantation-grown trees of this species do not equal in the quality of their timber the natural growth in the forest reserves. Worked as coppice for the production of pole timber and fuel, blue gum in the plantations will yield, in a short rotation of 15 to 20 years, from seven to ten tons of dry fuel per acre per annum. The State has still fairly large areas of this timber, in the Otway Peninsula, North-Eastern reserves, Gippsland, and Mt. Cole. The belts of limestone country which form the sea-front to the Southern Ocean have a climate of their own, and here, owing to the prevalence of strong south-westerly winds, only the hardiest trees suited to calcareous soils flourish. Among conifers may be mentioned the handsome Norfolk island pine, the Lambert cypress, and the Aleppo, Austrian, and Cluster pines. Among Australian trees, the erect and drooping varieties of sheoak rank first, as they not only furnish shelter and shade, but also yield excellent fuel. Next to these, come the *Lagunaria* of Queensland, the local Boob-yalla, and the coastal wattle (*acacia longifolia*, var. *sophorae*). The latter, in conjunction with marram grass, is also a most valuable sandstay on the dunes.

The plantations established during the past twenty-five years must be regarded as, to a large extent, experimental. The choice of the Monterey pine (*p. insignis*) as the standard conifer for the production of softwood while trees, such as the Douglas fir (Oregon pine), the pitch pines of America, the Californian redwood, and the Corsican pine were neglected, was unwise, for the reason, among others, that it has caused the loss of so long a period of growth of the more valuable species. The further mistake made of planting conifers twelve feet apart, which resulted in broad-crowned trees with strong lateral branches, thus greatly weakening the timber by excess of knots, and retarding the free development of stem-growth, has been avoided in later work, close planting being now the rule. Even in the growth of such useful trees as the white willow, Carolina and Canadian poplars, basswood, and tulip tree, which will flourish in many parts of Victoria, and furnish a light, tough timber useful for furniture, parts of vehicles, and box-making, nearly a generation

of time has been lost. Happily, during the past few years steps have been taken to test the growth of such trees as these. Many of our hardiest eucalypts are now sown broadcast, instead of being raised in nursery lines and put in their permanent sites as transplants, but this method, of course, involves the thorough working of the soil to a fine tilth. Where transplants of such trees as sugar gum are used, the best results have been obtained by laying down properly prepared nursery beds at the plantation, and raising the young trees on the spot.

Planting or sowing is costly, and in the case of indigenous trees, is only advisable at present on open or denuded lands, where there is no tree growth. To remove useful forest growth, native to the soil, and plant inferior exotics in its place is simply folly, and a very expensive folly in the long run. The first cost of laying down a plantation ranges from £2 to £3 10s. an acre, and the maintenance expenses are afterwards heavy. The area chosen must not only be substantially fenced, but also wire-netted, to prevent the ravages of rabbits and hares, and this netting is a serious item when a large tract has to be enclosed. It is sound policy to encourage plantations of conifers which yield timber of good quality, but as regards our own eucalypts, the hardiest and most vigorous trees are those which spring up from seed in the natural forest. Artificial re-stocking in these forests is not necessary, as by light thinnings and cleanings, valuable young crops can be greatly improved at less than a quarter of the cost of raising them in plantations, while on denuded areas healthy germination can nearly always be obtained from dormant seed after the surface has been fired at the proper season. As regards the raising of trees for general distribution, Macedon has not been happily chosen as a site for a general nursery. It has defects of soil, subsoil, and situation which unfit it for the early production of transplants for the Northern district, and also for the raising of deciduous trees. The sugar gum especially is a standard tree for the Northern district, and it is difficult to raise it open-root at Macedon, and then transport it safely to any distance, while, in addition, the young trees of this species are not ready to issue for autumn planting. This difficulty does not exist with seedlings for forest plantations, as they can be raised locally open-root in properly prepared beds, and quickly transferred to their permanent sites. Some little time ago the writer chose a site for a new nursery near Bendigo, with the view of raising there all trees required for the Northern plains, and thus reducing the cost of upkeep at Macedon. The place chosen has a strong, useful soil and subsoil, and has the Coliban water supply near it. The early opening of this nursery will enable the department to raise a much larger quantity of tree plants at a low cost, and will be a first step to the laying down of plantations northward of Bendigo.

TREE PLANTS FOR SETTLERS.

As regards grants to small settlers, it has been the aim of the State to encourage by a generous distribution of useful transplants,

the growth of trees around homesteads for shelter and shade. The fact that settlers too often wantonly destroy valuable forest in preparing their land for tillage and pasture is to be deplored, but they will only be brought to recognise their error by seeing the benefit derived from planting even a few useful trees to protect their homes, as well as live stock, from stress of weather. The demand for shelter trees is greater than the State nurseries can meet, and issues to farmers are now chiefly confined to quick-growing eucalypts, pepper trees, and hardy pines. The annual grant of trees has greatly improved the appearance of homesteads on the Northern plains and in other treeless districts, and so long as it is confined to struggling farmers who could not afford to purchase plants from private nurseries, no reasonable objection can be urged against its extension.

CLIMATIC EFFECT OF TREE DENUDATION.

There is another aspect in regions formerly well-wooded which must not be lost sight of. As settlement creeps up from the plains denudation of tree cover goes on apace. The American wood-lot, the strip or belt of live timber which is so marked a feature on farms in the North-eastern States, and even in Quebec and Ontario, is scarcely ever seen in Victoria. Here the axe is set to every tree, and often not a shrub is left for shelter or shade. In summer the cattle and sheep vainly seek restful shade. The dam or creek has no cover from the fierce rays of the sun. Evaporation quickly empties the stock supply, which under dense canopy might well outlast any ordinary summer. Around the homesteads may be seen a few sickly pines, keeping the air from the living-rooms, and ruining the soil of the small garden enclosures, but the stockyards and outbuildings are left unsheltered. Often on bleak winter evenings the writer has seen dairy cattle shivering near naked homesteads, vainly trying to escape from the driving rain, while in the paddock hard by native trees, which would have afforded warmth and shelter, stood leafless and dead. What this neglect of shelter means to the dairyman in shrinkage of milk supply is only now being realized. Even in sheep paddocks the same neglect of cover commonly prevails. One of the earliest settlers on the plains of the Western district some twenty-five years ago determined to plant shelter-belts on his property, choosing, under advice, blue gums, with outside hedges of kangaroo acacia, Osage orange, and boxthorn. The protected hedges gave warm cover, but the blue gums, with their bare poles and their open crowns, afforded but little shelter, and were gradually used for fuel, and replaced with sugar gum and Monterey or Aleppo pines. It was soon found that the flocks kept in the paddocks provided with windbreaks not only kept in better condition than the rest, but that the clip of wool obtained from them materially improved in staple and weight. The experiment was soon followed by neighbouring owners, and to-day the strip of country referred to, between Skipton and Yally-a-poorra, although thinly and partially planted, is in marked contrast with the bareness of the neighbouring plains.

But the benefit of shelter-belts is not confined to sheep and cattle. Their influence on standing crops must not be undervalued. In the Portland district there are stretches of limestone land, mixed with sandy loam, which 40 years ago yielded over 50 bushels of wheat to the acre, but which now, even with careful tillage, and the strongest manures, will scarcely yield a poor crop of rye. The live timber between these farms and the coast line has been destroyed, and harsh sea winds laden with salt prevent the healthy growth of cereals. Nor is this a solitary instance of deterioration of climate in our State following denudation. In the Ballarat district there are rich uplands where the peach and apricot flourished and yielded heavy crops about a generation ago. Now, in the same soil, the face of the country being denuded for miles, even the hardiest fruits cannot be grown with success. On the northern slopes of the main Divide westward of Woodend, where the soil is a red volcanic loam, the destruction of timber round the holdings has made it difficult to raise crops of pulse, where heavy yields were once the rule, while the yields of oats and potatoes vary greatly according to whether the fields are protected or not by belts of the neighbouring forest. Moreover, it is admitted by the settlers themselves that the naked stretches of country are subject to severer frosts, and it is a common sight to see potato lands in the open burnt up from this cause, while well-sheltered fields are scarcely touched.

How, it may be asked, can the people of this country be brought to see that their true interest and profit in farming and grazing lies in planting, or in preserving shelter-belts of trees on the weather side of their holdings. Some of the American States strive to attain this object by granting a lower scale of municipal taxation to holdings where tree cover is systematically maintained. Such a law in Victoria could not well be of general application, since our climate and rainfall varies so much. Even at this day, in Gippsland and the North-eastern district there are long stretches of valley and hill country occupied by settlers where thorough clearing is necessary in order to get the benefit of sunlight and heat for the growth of cereals and grass. But such districts are the exception, and the fact remains that unwise destruction of useful timber goes on throughout this State without legislative check or control. The Department of Public Instruction has, in a tentative way, taken up the subject of tree-planting at the schools, but judging from the condition of the young trees in many school reserves, much has yet to be learnt in the matter by teachers and scholars alike. It is questionable whether any marked advance in forest protection will be achieved by appealing merely to sentiment in the minds of children. By bringing home to the minds of parents the common-sense view that it is their interest to protect all healthy or useful tree growth on their lands, and by putting before them in a simple and attractive form the elementary truths of forestry, much more is likely to be gained, and this work, which properly belongs to the Forest Department, has been taken in hand.

LEGISLATION ESSENTIAL.

Now that the systematic working of the reserves has been authorized, the necessity for a controlling law is more than ever apparent. Three things are essential to the maintenance of the forest domain of this State: an Act of Parliament, conferring large powers of management and control on the executive officers; a detailed survey and delimitation of the permanent reserves; and the framing of working plans to insure proper exploitation. A commencement has been made by the writer with these plans, but unless the reserves are protected from alienation by law, and provision is made in the Act for their strict enforcement, all the care taken in their preparation will be simply wasted labour. In this matter, Victoria is singularly backward, not only in comparison with the best-governed States of Europe, but even with Turkey, which, since the year 1870, has had a useful forest law. Many of the States of the American Union, the provinces of Canada, and the Cape Colony, have recognised the necessity of such a law, and have made provision accordingly, while Japan has not only framed and put in force such legislation, but controls her forests on the most conservative lines, and by liberal assistance and encouragement has, during recent years, secured the training of her most promising executive officers in the best schools of Germany and France.

One of the first duties to be taken in hand, and steadily pursued till the work is complete, is a timber survey of the State, which will record, with precision and fulness of detail, the distribution of species, condition and fitness for conversion, and average yield per acre, of the tree-growth in all the reserves. This survey is especially necessary in remote forests which are not yet recorded in any working plan, so that future exploitation may be on a safe basis. In any undertaking of mill associations to build up an export trade, not only secure tenure, but the assurance of unfailing supplies is necessary. Now that British, South African, East Indian, Chinese, and Philippine railways are using Australian hardwood for sleepers, and supplies of timber true to name in some of the States of this group cannot be depended on, it should not be difficult for shippers to foster an export trade in railway and building timber from this State.

FOREST TRAINING.

In 1902 the writer drew up a scheme for the creation of a Forest School at Macedon, with the object of giving the protective staff, together with pupil foresters who might enter as recruits from time to time, a regular course of instruction in forestry as well as in nursery and plantation work. Although only £500 a year was asked for as a grant to meet the cost, the severe economy exercised at the time in State finance prevented its adoption, and after the entry of one pupil (who has since been successful in passing excellent examinations in botany, geology, and general forestry), the work was perforce abandoned for a time. Now that public funds are set aside for the

advancement of forestry, one of the first things to be taken in hand should be this school. As a first condition the scheme provides that all applicants for entry as pupil foresters must pass a searching physical test, and also be successful in a competitive examination in botany, geology, chemistry, French or German, and theoretical forestry. The course of study for those who are successful extends over two years, and embraces geometrical and freehand drawing, surveying, geology, and mineralogy, chemistry, physics, botany, entomology, with theoretical and practical forestry, and one modern language, either French or German. The proficiency of candidates is to be tested by half-yearly examinations, and it is intended that at the end of the second year, a "pass" or "pass with credit" certificate shall be issued to those who are successful, which will qualify them for forest employment. At the same time the school should prove an admirable training ground for the foresters on service, who desire to improve their technical education, or to qualify for promotion. It is unfortunate that Dookie, the chief agricultural school of the State, is distant from any tract of natural forest. It is essential that pupils in forestry should have the advantage of practical training in the work which lies before them. Hence the science classes at Dookie could not well be utilized, and the classes would best be concentrated at Macedon, as that place has suitable buildings and appliances available, and also has Wombat State Forest for practical work in the immediate vicinity.

There is another means by which useful information on the general subject may be given to the staff, as well as the public, and which may be alluded to here. Towards the end of last year the writer made arrangements with the late Director of Agriculture for the monthly publication of a Forestry Division under the covers of the *Journal of Agriculture*. Contributions were not to be limited to Victoria, and the list of writers proposed included some men with special knowledge in neighbouring States. A Notes and Queries column for the dissemination of information on minor points of botany, entomology, and sylviculture was also provided for. This project would have cost little, as copies would have been subscribed for in the other States, and we should soon have had, fully established, a really useful journal of Australian forestry. The arrangement, however, has not been carried out, owing to changes in the control of the department, and as a consequence the journal required for the Australian forest service will probably be established shortly in Sydney.

A great responsibility rests on the Executive and Parliament of Victoria to provide the administrative powers which are absolutely necessary if the forests are to be preserved from irreparable injury. Apart from the question of timber altogether, it must never be forgotten that the forest governs the water supply. In this country, subject to extremes of drought and flood, the protection of the mountain watersheds should be a public duty of the first importance. But, while very large sums of money have been spent—and lost—by the State in subsidizing irrigation trusts on the lowlands and plains, but little foresight has been exercised, or care shown, to protect from

alienation lands at the head of streams and springs, which, in Europe or North America, would be carefully retained under forest cover, since they, and they alone, feed the rivers which supply the irrigation channels. It may be conceded that cycles of drought probably occurred in South-eastern Australia before the axe of the settler touched a forest tree, but while great periodic rains are doubtless due to complex laws affecting ocean and air currents, the influence of large masses of live timber, on local rainfall, cannot be gainsaid. The writer has on many occasions observed a marked diminution in the rainfall over bare plain country, as compared with that on a forest-clad portion of the same plain, and has seen it raining heavily over inland forests scarcely above sea-level, while the surrounding country escaped even light showers. Moreover, as tests made with the rain gauge *under similar conditions* bore out these observations, the difference cannot be attributed to the absorptive property of cultivated soil, or to any marked elevation above sea-level. As regards the influence on local rainfall of forests on the crests and slopes of mountain ranges, this is usually admitted, even by those investigators who question or deny that forests have any marked influence in determining the climate and general rainfall of a country.

THE WEATHER OF THE YEAR 1904.

By P. Baracchi, Esq., Government Astronomer.

The first two months of the year were remarkable for the excessive amount of rain and the abnormally large number of wet days which interfered with, and retarded, harvest operations; for the relatively low temperatures which gave to the hottest period of the year the character of the Autumn season; and for the frequency and severity of thunderstorms and gales which swept over the State, causing considerable damage to property. The worst thunderstorms occurred during the latter half of January, and the worst gales at the beginning of February. Snow was reported from the eastern highlands towards the end of January. At Melbourne 5.53 inches of rain were registered in the first month of the year, the average for which is 1.88 inches. The wettest January on record at Melbourne in any year previous to 1904 was that of 1897, when 5.46 inches of rain fell.

Fine, dry, pleasant weather was experienced throughout the month of March and the first half of April. By this time the country was in great need of rain, as the delay in commencing operations owing to the dryness of the soil, was now becoming discouraging. Fortunately a good general rainfall came shortly after the middle of April.

For the greater part of May, fine, mild Autumn weather prevailed; but at about the 23rd May the first snow of the season fell on the eastern ranges, also at Ballarat, and in the Colac district, after which date the weather suddenly assumed its winter characteristics.

In the winter months some periods of intense cold and more than usually frequent frosts were experienced in the northern plains, and in the lower intermediate districts between the coast and the dividing range. There was a prevalence of strong south-westerly gales along the coast. A violent storm raged in the north-eastern districts on 16th July, and was very destructive at Avenel, where it damaged several buildings, and caused the deaths of two persons. But in general, this season was favorable to country interests, and the agricultural outlook at the beginning of August was generally good. Atmospheric disturbances and intense weather changes prevailed throughout the month of September. This month commenced with general heavy rains, and snowfalls over the eastern ranges and south-eastern districts. The Moe swamp and the Carrum swamp were flooded. During the latter half of the month strong south-westerly gales were of frequent occurrence on the coast, and exceptionally cold weather prevailed inland, with severe frosts, and snow at many places in the elevated localities. The October rains fell almost entirely in the first half of the month, after which the prospects of a good harvest were assured. The weather during this month, and up to the middle of November, was, however, subject to violent disturbances. Many parts of the State were visited by destructive thunderstorms, gales, and hailstorms. One of these occurred in the Warracknabeal district, where rabbits and geese were killed by hailstones. Very little rain fell after the middle of November. Hot, dry weather set in at this time, and continued till the end of the year.

During this period exceptionally high temperatures were registered, and even the highest thermometer reading on record in this State was exceeded. The previous highest record for any place in Victoria in any year was 120 degrees F., and the maximum temperature of air in shade registered at Mildura, on the 30th December, 1904, was 121.5 degrees F. The year ended with a veritable heat wave, and bush fires, which commenced early in the month, had by this time extended over many localities, and assumed a most alarming aspect.

The
rainfall.

Regarding the State as a whole, the total amount of rain of the year 1904 was 3.40 inches, or nearly 13 per cent., below average. The only localities where the average was reached or surpassed were the districts around Mount Elephant and Lake Corangamite, the basins of the Yarra River and Dandenong Creek, and the Koo-wee-rup Swamp, where the excess over the average was respectively 6 per cent., 17 per cent., and 4 per cent. On the other hand, the greatest deficiency is found in the Gippsland districts, extending over the basins of the Macallister, the Avon, the Mitchell, the Tambo, and the Nicholson Rivers, where the total rainfall of the year was from 28 to 35 per cent. below average.

Next in order of relative dryness come the Mallee country, with a deficiency of 24 per cent., the Murray districts, and the Wimmera, with a deficiency of from 21 to 18 per cent.; the basins of the Ovens, the Snowy, the Avoca, the Richardson, the Werribee, the Saltwater, the Glenelg, and the Wannon Rivers, with a deficiency of from 17 to

14 per cent. ; the basins of the Loddon, the Fitzroy, the Eumerella, and the Merri Rivers, and South Gippsland, with a deficiency of from 12 to 10 per cent. ; the basins of the La Trobe, the Thompson, the Goulburn, and the Campaspe Rivers, and the Otway Forest, with a deficiency of from 8 to 5 per cent. ; and finally, the basin of the Moorabool, the Barwon, the Hopkins, the Mitta Mitta, and the Kiewa Rivers, and Mount Emu Creek, where the annual rainfall was only from 3 to 1 per cent. below average.

As regards the seasonal distribution of the total amount of rain of the year, the most noteworthy characteristics are as follows:—

The rainfall of this quarter was remarkably excessive over the greater part of the State, and the only locality which experienced relatively dry weather during this period was the basin of the Ovens River, where a deficiency of 24 per cent. below average was registered.

The first quarter of the year.

The greatest excess was 153 per cent. above average over the basins of the Yarra River and Dandenong Creek ; and the least, 7 per cent. above average, in the Murray Districts. The average rainfall was exceeded to the extent of from 104 to 131 per cent. over the basins of the Moorabool and Barwon Rivers, the districts around Mount Elephant and Lake Corangamite, the Koo-wee-rup Swamp, and the Otway Forest ; from 65 to 85 per cent. over the basins of the Avoca, the Avon, the Richardson, and the Campaspe, the basins of the La Trobe, the Thompson, the Werribee, the Saltwater, and the Hopkins Rivers, the basin of Mount Emu Creek, and South Gippsland ; from 42 to 56 per cent. in the Mallee country, in the eastern areas of the Wimmera, and over the basins of the Loddon, the Goulburn, the Fitzroy, the Eumerella, the Merri, the Glenelg, and the Wannon Rivers ; 26 per cent. on the western areas of the Wimmera ; 23 per cent. over the basin of the Macallister River ; 17 per cent. over the basin of the Mitchell River ; 14 per cent. over the basins of the Mitta Mitta, the Kiewa, and the Snowy Rivers, and 10 per cent. over the basins of the Tambo and Nicholson Rivers. Nearly the whole of these excessive rains fell during the first six weeks of the year, and were the consequence of an exceptional prevalence of heavy thundersstorms.

Rains of this quarter were below average throughout the State ; but the deficiency was to a very great extent compensated by the fortunate circumstance that most of the total amount fell soon after the middle of April, when the country was in the greatest need of moisture. The average rainfall for the quarter was reached only over the basins of the Yarra River and Dandenong Creek. There was only a slight deficiency of from 9 to 14 per cent. in the Western districts, extending over the basins of the Hopkins, the Eumerella, and the Merri Rivers, the Koo-wee-rup Swamp, and the basin of Mount Emu Creek.

The second quarter.

The deficiency ranged from 18 to 23 per cent. below average in the districts around Mount Elephant and Lake Corangamite, the Otway Forest, and over the basins of the Glenelg, the Wannon, the Moorabool, the Barwon, the Snowy, the Mitta Mitta, the Kiewa, the Campaspe, and the Loddon Rivers ; from 25 to 28 per cent. below

average over the basins of the Wimmera, the Avon, the Richardson, the Goulburn, the Ovens, the La Trobe, the Thompson, the Werribee, and the Saltwater Rivers; from 31 to 36 per cent. below average over the basins of the Avoca, the Tambo, and the Nicholson rivers, the greater part of South Gippsland, and the Mallee country; from 41 to 43 per cent. in the Murray districts, and over the basin of the Mitchell river; and finally 63 per cent. below average over the basins of the Macallister and Avon Rivers, which were relatively the driest regions at this period of the year.

The third
quarter.

The rainfall of the third quarter exceeded the average to the extent of from 9 to 16 per cent. over the basins of the Mitta Mitta, the Kiewa, the Snowy, and the Yarra Rivers, and the basin of the Dandenong Creek, but it was below average in every other part of the State. The deficiency was only from 2 to 6 per cent. below average over the basins of the Loddon and the Goulburn, and the Campaspe rivers, and in the districts around Mount Elephant and Lake Corangamite; from 10 to 15 per cent. below average over the basins of the Hopkins River and Mount Emu Creek, the Koo-wee-rup Swamp, the basins of the La Trobe, the Thomson, the Mitchell, the Ovens, the Avoca, the Richardson, and the Avon rivers, and the Murray districts; also from 16 to 20 per cent. below average in the Otway Forest, in South Gippsland, in the eastern areas of the Wimmera, and over the basins of the Moorabool and the Barwon rivers; and lastly from 24 to 30 per cent. in the Mallee country and Western Wimmera, and over the basins of the Tambo, the Nicholson, the Macallister, the Avon, the Werribee, the Saltwater, the Fitzroy, the Eumerella, the Merri, the Wannon, and the Glenelg rivers.

The last
quarter.

The rains of the last quarter of the year were below average over the whole of Victoria, and the deficiency was considerable, and even great, in many parts, more especially in Eastern Gippsland. The nearest approach to the average was recorded in the Mitta Mitta and Kiewa districts, where the deficiency was only 3 per cent. Less than one-half the average rain of the quarter was registered over the basins of the Macallister, the Avon, the Mitchell, the Tambo, the Nicholson, and the Snowy rivers, the basins of the Werribee and Saltwater rivers, and the basin of the Avoca River, in all of which regions the deficiency was greatest, and ranged from 50 to 60 per cent. below average. There was a deficiency of from 13 to 16 per cent. in the Murray districts and Western Wimmera, and over the basins of the Goulburn and the Ovens rivers; from 18 to 27 per cent. below average in South Gippsland, in the Koo-wee-rup Swamp, and over the basins of the La Trobe and Thomson rivers, in the Otway Forest, in the districts around Mount Elephant and Lake Corangamite, over the basin of Mount Emu Creek, and the basins of the Hopkins, the Glenelg, and the Wannon rivers; and lastly a deficiency of from 30 to 39 per cent. over the remaining districts, comprising the Mallee country, Eastern Wimmera, and the basins of the Avon, Richardson, Loddon, Campaspe, Yarra, Barwon, Moorabool, Merri, Eumerella, and Fitzroy rivers, and Dandenong Creek.

It will be seen from this account that the behaviour of the rains in the last quarter of the year resembled that of the second. The

totals for each of these two periods were everywhere in the State below average, and the deficiency was great in many parts, especially in Eastern Gippsland, but fortunately, again, most of the spring rains fell in the months of October and September, and were sufficient to satisfy the needs of the country at one of the two most critical times of the year, the turning-point which determines the success or failure of the season. This is another instance, therefore, which may be pointed out to students of rainfall statistics, as showing how important it is to analyze and to give due weight to the distribution of rainfall at different periods of the year before drawing conclusions from the mere totals and averages of the year, or even of the quarters.

A detailed tabular account of the rainfall of the year 1904 is given in a previous part of this work. In the small table following, the records from some 850 stations are grouped and summarized, so as to show in a concise form the amount and distribution of rain over the principal subdivisions of the State during each quarter of the year, and the percentage above or below the corresponding average, based on all available records of past years:—

Basins.	First Quarter.		Second Quarter.		Third Quarter.		Last Quarter.		Year.	
	Amount of Rainfall recorded.	Percentage above or below Average.	Amount of Rainfall recorded.	Percentage above or below Average.	Amount of Rainfall recorded.	Percentage above or below Average.	Amount of Rainfall recorded.	Percentage above or below Average.	Amount of Rainfall recorded.	Percentage above or below Average.
	in.		in.		in.		in.		in.	
Glenelg and Wannon Rivers ..	4.82	+41	7.07	-18	7.35	-26	5.03	-22	24.27	-15
Fitzroy, Eumerella, and Merri Rivers	5.63	+49	8.29	-14	8.23	-24	4.87	-34	27.02	-12
Hopkins River and Mount Emu Creek	6.64	+79	7.31	-9	7.24	-10	5.03	-26	26.22	-2
Mount Elephant and Lake Corangamite	8.01	+111	6.14	-17	7.16	-4	5.54	-18	26.85	+7
Cape Otway Forest and South Coast	9.69	+104	9.66	-23	11.62	-17	6.72	-27	37.69	-7
Moorabool and Barwon Rivers	8.69	+109	6.22	-20	6.52	-16	4.56	-35	25.90	-3
Werribee and Saltwater Rivers	8.84	+85	5.65	-27	4.98	-32	3.69	-50	23.17	-15
Yarra River and Dandenong Creek	14.03	+153	9.71	0	10.80	+10	6.38	-35	40.92	+17
Koo-wee-rup Swamp ..	11.93	+131	9.05	-14	9.50	-13	7.16	-26	37.64	+4
South Gippsland ..	9.99	+65	8.11	-31	9.84	-20	7.87	-23	35.81	-11
La Trobe and Thomson Rivers	9.40	+65	7.61	-25	9.62	-12	8.77	-23	35.40	-8
Macallister and Avon Rivers ..	7.32	+23	2.47	-63	4.24	-30	3.42	-59	17.45	-35
Mitchell River ..	7.85	+17	4.49	-43	6.17	-15	3.48	-61	22.06	-28
Tambo and Nicholson Rivers ..	6.82	+10	5.09	-34	5.73	-30	3.65	-55	21.25	-30
Snowy River ..	8.88	+14	7.56	-23	10.55	+16	4.18	-60	31.17	-16
Murray River ..	4.80	+7	4.52	-41	6.09	-11	5.13	-14	20.54	-18
Mitta Mitta and Kiewa Rivers ..	7.01	+14	9.06	-19	11.32	+9	8.31	-3	35.70	-14
Ovens River ..	5.09	+24	9.97	-25	12.54	-10	9.05	-13	36.65	-17
Goulburn River ..	6.11	+45	6.27	-27	7.85	-4	6.13	-13	26.30	-6
Campospe River ..	7.08	+75	6.41	-23	7.33	-6	4.55	-30	25.37	-5
Loddon River ..	4.52	+47	5.03	-23	5.33	-2	3.42	-36	18.30	-10
Avon and Richardson Rivers ..	3.72	+65	4.06	-26	4.25	-14	2.74	-59	14.77	-14
Avoca River ..	3.81	+64	4.12	-36	4.57	-12	2.72	-50	15.22	-21
Western Wimmera ..	2.80	+26	4.91	-28	5.18	-30	4.56	-16	17.45	-29
Eastern Wimmera ..	4.25	+56	5.73	-27	6.05	-18	4.10	-38	20.16	-18
Mallee Country ..	2.73	+42	3.32	-36	3.26	-27	2.86	-35	12.17	-24
	5.83	+46	5.89	-26	6.76	-13	4.80	-30	23.28	-12

Tempera-
ture.

The frequency of thunderstorms, gales, and heavy rains which prevailed during the first six weeks of the year 1904 mitigated the temperatures of this period, and rendered the summer heat moderate almost throughout the State. Frosts and snow were recorded in January, and the highest thermometer readings in January, February, and March were generally about 10 degrees Fahr. below the extremes on record for the months. In the early autumn and up to the last week of May fine and mild weather prevailed, with temperature slightly above the average. Cold weather set in suddenly towards the end of May. During the winter months short spells of intense cold were experienced in the northern plains, where low temperatures were registered from 2 to 5 degrees below the lowest readings on record for these localities. In the coastal districts, on the contrary, the winter temperatures were generally higher than the average, and remained from 4 to 11 degrees above the extremes of the coldest years. The lowest temperatures on record for the highlands is 17 degrees in June and July, but the minimum temperatures registered in the year 1904 were from 6 to 8 degrees higher. In the intermediate districts, the extreme cold of winter was experienced in May and August, when the minimum temperatures, especially in the north-eastern areas, fell as low as, or slightly lower than, the lowest reading of any previous winter. The month of September was colder than in average years, more especially towards the end of it, when heavy falls of snow and frosts were reported from many places. The October temperatures did not deviate from the average value to any great extent. Hot weather set in shortly after the middle of November, and continued throughout the month of December with increasing severity, culminating at the end of the year with a phenomenal heat wave. On this occasion the thermometer rose to 121½ degrees Fahr. at Mildura on 30th December, which is the highest reading ever recorded in the State. The maximum and minimum temperatures of the summer and winter months of the year 1904, together with the corresponding extreme values recorded in any previous year, are briefly summarized in the following tables:—

TABLE GIVING THE HIGHEST TEMPERATURES OF AIR IN SHADE,

For the five warmest months of the year 1904, and the extremes on record for the corresponding month:—

Region.	Highest Readings in 1904.					Extremes on Record.					
	Jan.	Feb.	Mar.	Nov.	Dec.	Jan.	Feb.	Mar.	Nov.	Dec.	
	°	°	°	°	°	°	°	°	°	°	
Eastern Ranges	70.0	86.0	94	89	78	80	86	
Highlands	87.0	89.0	83.0	84.0	102.0	108	107	103	101	105
Coast	96.0	96.0	85.0	89.0	93.0	109	105	105	103	105
Intermediate Distcs.	100.0	99.0	96.0	92.2	111.5	111	110	106	106	112
Northern Plains	110.0	111.0	111.0	104.0	121.5	120	120	115	112	115

TABLE SHOWING THE LOWEST TEMPERATURE OF AIR AT NIGHT,

For the four coldest months of the year 1904, and corresponding extremes on record :—

Region.	Lowest Temperature in 1904.				Extremes on Record.			
	May.	June.	July.	August.	May.	June.	July.	August.
	°	°	°	°	°	°	°	°
Eastern Ranges ..	18.0	22.0	24.0	22.0	17	16	17	19
Highlands ..	28.0	23.0	25.0	22.0	18	17	17	19
Coast ..	35.0	38.0	32.0	35.0	31	27	27	30
Intermediate Districts	25.0	26.0	27.3	27.0	27	24	24	27
Northern Plains ..	23.0	23.0	21.0	24.0	28	25	23	24

THE MELBOURNE CLIMATE.

The values of the climatic elements registered at the Melbourne Observatory in the year 1904 are given in Table I. and IA. .

The corresponding values showing the average and extreme conditions of the Melbourne climate deduced from the records of nearly half a century are exhibited in Table II. A comparison of these two tables indicates the following general characteristics of the season of the year under review :—

The mean pressure of air for the year 1904 was equal to that of average years. The mean pressure of air for each month remained throughout within 0.12 inches of the average, being from 0.07 to 0.10 inches above in April and July, from 0.06 to 0.12 inches below in January, February, and June, and within 0.03 inches in the remaining months. Atmospheric pressure.

The lowest reading for the year was 29.195 inches, and the highest 30.475 inches, which gives a maximum range of 1.280 inches.

The corresponding extreme values on record are as follow :—

Lowest air pressure registered in any year, 28.868 inches.

Highest air pressure registered in any year, 30.678 inches.

Greatest annual range, 1.709 inches.

The summer was relatively cool, the mean temperature of January, February, and March being from 2 degrees to 4 degrees below average. Temperature.

The only period of intense heat was experienced in December, when a great heat wave swept over the State, and the thermometer rose on one occasion to 102 degrees F., the highest record of the year.

During the five warmer months, viz., January, February, March, November, and December, the average temperature in the hottest part

of the day ranged from 68·3 degrees in March to 78 degrees in December. It rose above 100 degrees only once, above 90 degrees eleven times, six of which were in December, and above 80 degrees twenty-five times. At night the thermometer remained on a single occasion above 70 degrees, and twenty-one times above 60 degrees.

The mean temperature of air in the three coldest months, June, July, and August, was equal to that of the corresponding months of an average year. The average maximum temperature of the day was from 55 degrees to 58 degrees F., and the average lowest temperature at night was from 43 degrees to 45 degrees F. The thermometer never failed to exceed 50 degrees in the day, and fell below freezing-point on a single night, on which 31·5 degrees was registered, this being the lowest temperature recorded in the year.

In the more temperate months of April, May, September, and October we find the mean temperature 2 degrees above the average in April and May, during which the weather was exceptionally fine and mild; and 3·3 degrees below average in September, which was a month of comparatively very cold and considerably disturbed weather; and only a small fraction of a degree within the average in October, which was a normal month.

Rainfall.

The months of January and February were abnormally wet. Two-fifths of the rain of the whole year fell in its first six weeks, and was the heaviest recorded for the like period in any previous year since 1856.

Rain was also excessive in the months of June and August, and differed only slightly from the average in May, July, and October; but the months of March and April were very dry, and hardly any rain fell during December.

There were 128 wet days in the year, or four days below the average number. The total rainfall amounted to 29·72 inches, which is about 4 inches above the average of 49 years.

Winds.

The number of hours during which the wind blew from each of the eight points of the compass will be found in Table I. These numbers show that wind blew—

From the North, 16 per cent. of the total number of hours in the year.

From the North-west, 8 per cent. of the total number of hours in the year.

From the West, 15 per cent. of the total number of hours in the year.

From the South-west, 14 per cent. of the total number of hours in the year.

From the South, 14 per cent. of the total number of hours in the year.

From the South-east, 10 per cent. of the total number of hours in the year.

From the East, 5 per cent. of the total number of hours in the year.

From the North-east, 11 per cent. of the total number of hours in the year.

Calms, 7 per cent. of the total number of hours in the year.

North winds were most frequent in May, June, July, and August.

South winds were most frequent in January, February, March, and December.

East winds were most frequent in April and December.

West winds were most frequent in June, September, and November.

Also intermediate land winds from the N.W. and N.E. quadrants were most frequent in May, July, and August, and intermediate sea winds from the S.W. and S.E. quadrants were most frequent in January, February, March, and December.

In the warmer months of the year, January, February, March, November, and December, which contain 3,648 hours, cool sea winds preponderated over the warm land winds in the following proportions:—

Duration of cool sea winds, 2,705 hours, or 74 per cent. of the whole number of hours in the five warm months.

Duration of warm land winds, 686 hours, or 19 per cent. of the whole number of hours in the five warm months.

Duration of calms, 257 hours, or 7 per cent. of the whole number of hours in the five warm months.

The above conditions were reversed in the colder months, May, June, July, and August, when the land winds preponderated over the sea winds thus:—

Duration of sea winds from the S.W. and S.E. quadrants, 1,215 hours, or 41 per cent. of the 2,932 hours comprised in the four colder months.

Duration of land winds from the N.W. and N.E. quadrants, 1,539 hours, or 52 per cent. of the 2,932 hours comprised in the four colder months.

Duration of calms, 198 hours, or 7 per cent. of the 2,932 hours comprised in the four colder months.

In the remaining months of April, September, and October, which contain 2,184 hours—

Sea winds from the S.W. and S.E. quadrants blew for 1,200 hours, or 55 per cent. of the total number of hours.

Land winds from the N.W. and N.E. quadrants blew for 815 hours, or 37 per cent. of the total number of hours.

Duration of calms, 169 hours, or 8 per cent. of the total number of hours.

The most remarkable feature of the winds of the year 1904 was the occurrence of gales of unusual violence and frequency during the months of February, July, August, September, and November.

Sunshine.

The number of hours recorded in each month of the year 1904, during which the sun was not covered by cloud while it remained above the horizon of Melbourne, and the mean daily duration of bright sunshine obtained by dividing the said number of hours by the number of days in each respective month, are shown in Table I. On comparing these with the corresponding average and extreme values given in Table II., we find that the actual duration of bright sunshine was greater than the average in the months of April, May, October and December; approximately equal to the average in June, July, September, and November; and less than the average in the remaining months—January, February, March, and August; the excess in the first case being 15 per cent., and the deficiency in the last case 16 per cent. The duration of bright sunshine in the various months varied from a minimum of 80 hours 13 minutes for June, the shortest month, to a maximum of 264 hours 53 minutes in December, the longest month. The respective averages for these two months are 88 hours 49 minutes, and 243 hours 34 minutes, showing that the extreme range of the year 1904 was practically equal to the average. It may be interesting to compare these values with those of exceptional years. Thus the total duration of bright sunshine for June was only 36 hours 57 minutes in the year 1891, and 122 hours 32 minutes in 1882; for the month of December, 188 hours 28 minutes in 1902, and 308 hours 22 minutes in 1897; showing a possible variation of nearly 100 per cent. of the average in winter, and 50 per cent. in summer. In the year 1904 the sun remained above the horizon of Melbourne 4,420 hours, but was covered by clouds during 2,420 of these hours, the remaining 2,000 hours being the total duration of bright sunshine of the year, which is only $9\frac{1}{2}$ hours less than the average, and represents a mean daily duration of 5 hours 28 minutes, or only 5 minutes below the mean daily duration of a normal year. The highest and lowest number of hours of sunshine recorded in any year since 1881 are as follow:—2,335 hours in 1898, and 1,737 hours in 1901.

Solar radiation.

The maximum temperature of direct solar radiation ranges, in normal years, from 116 degrees F. to 159 degrees F. the lowest value taking place in June and the highest in January; but there are records of very exceptional years in which the maximum thermometer reading in the sun has barely reached 109 degrees in June, and exceeded 178 degrees in December, the extreme values on record being 108.6 degrees for the lower limit and 178.5 degrees for the upper. The range in 1904 was from 117.8 in June to 160.2 degrees in December. The solar heat was less intense in January, February, March, and November, and more intense in May, June, October, and December than that of the corresponding months in average years, and was approximately normal in the remaining three months.

Terrestrial radiation.

The lowest temperature to which the layer of air near the ground falls at night is a very important climatic factor, as showing the extent to which the ground cools by throwing off into space the heat which it may have accumulated during the day.

In clear wintry nights the ground thermometer has been known to fall as low as 20·4 degrees, which is the lowest record for Melbourne, and nearly 2 degrees below freezing-point, even in the hottest period of summer.

In average years the minimum temperature near the ground, at night, ranges from 35 degrees to 40 degrees in the first four months, and in the last two months of the year, and from 26 degrees to 31½ degrees in the intermediate months. In 1904 it remained, within 1 degree (one degree) of the average during the months of April, June, July, August, October, and November; from 1½ degrees to 2½ degrees above average in the months of January and February, and about 2 degrees below average in March, May, and September. The only exceptional condition of the year in respect to terrestrial radiation was the minimum ground temperature for December, which was 5 degrees below average, and the lowest ever recorded in this month at Melbourne.

The figures given in Tables I. and II., to indicate the varying degree of humidity of the atmosphere, are based on a scale in which saturation is represented by 100, and are the monthly means derived from the daily values, which latter depend on three daily observations of the dry and wet bulb thermometers. The relative humidity during the first quarter of the year 1904 was greater than that recorded for the same period in any previous year of observation. It was also above average, but to a much less extent, in October; below average in December, and approximately normal in the remaining months. Humidity.

Under ordinary conditions the amount of water lost through evaporation at a free water surface is greatest in January. It decreases gradually to its minimum value in June, then rises steadily to the end of the year, thus following the seasonal variations of temperature. But it depends also on the behaviour of other climatic elements, such as the frequency and strength of the winds, the relative humidity, the duration of sunshine, and other conditions. Evaporation.

Thus in the year 1904 we find the evaporation below average in the dull and relatively cool summer, above average in the fine, mild, sunny months of April and May, and in the extremely dry month of December, while in the other months, in which the general character of the average Melbourne climate prevailed, evaporation was approximately normal. The total amount of water which passed into the atmosphere in the state of vapour during the year 1904 was 36.16 inches, which amount is about one inch less than the average, also 9 inches less than the highest value, and 5 inches more than the lowest value on record.

(1) Pressure of Air.—Under this heading are given, for each month, the mean, the highest, and the lowest readings of a standard barometer, placed at an elevation of 93 feet above mean sea level, Explanation of Table I., *infra*.

the readings being reduced to the temperature of freezing point. The daily means from which the monthly mean is computed are based on three observations made each day, at 9 a.m., 3 p.m., and 9 p.m., Melbourne Mean Time.

(2) Temperature of Air in Shade.—The eight columns under this heading give respectively:—

- (a) The mean for each month, as computed from the daily means, which are based on three observations made each day, at 9 a.m., 3 p.m., and 9 p.m.
- (b) The monthly average of the highest temperature recorded every day, technically called "Mean of Daily Maxima," or more briefly, Mean Max.
- (c) The monthly average of the lowest temperature recorded each night, technically called "Mean of Daily Minima," or, more briefly, Mean Min.
- (d) The daily average range, viz., the monthly mean of the daily differences between the highest and the lowest temperature of air in shade observed each day.
- (e) The highest and the lowest readings of the thermometer observed in each month, with the dates on which these extremes concerned.

(3). Solar Radiation.—The three columns under this heading give respectively:—

- (a) The monthly mean of the highest readings, shown by a black bulb thermometer in vacuo, on each day in the corresponding month, popularly known as "the heat in the sun."
- (b) The highest reading registered by the black bulb thermometer in each month, with date on which it occurred.

These values represent the varying heating powers of the solar rays after passing through the atmosphere.

(4). Terrestrial Radiation.—Under this heading are given:—

- (a) The monthly mean of the lowest readings shown each night in the corresponding month, by a self-registering thermometer placed horizontally near the surface of the ground on top of short grass.
- (b) The lowest reading registered in each month, with date on which it occurred.

(5). Mean Humidity.—The values in this column show the average monthly amount of invisible water vapour which the atmosphere actually contained, expressed as a percentage of the maximum amount which it could have held, or would have required to become saturated, under the same conditions of temperature.

(6). Spontaneous Evaporation.—In this column are given the values representing the height in inches of a layer of water which was lost in each month of the year, through evaporation, at the free surface of water contained in a cistern fully exposed in the open, slightly below the surface of the ground. These values serve to give an approximate idea of the amount of water which passes from the free surface of rivers, lakes, ponds, &c., into the atmosphere, in the state of water vapour, under the conditions of the Melbourne climate.

(7). Cloud.—The amount of cloud at any moment is usually expressed by a number, in the series 0 to 10, which is intended to represent the proportion of the area covered by cloud at the time of observation to the area of the whole visible sky. Thus, 0 indicates total absence of cloud, 10 an entirely overcast sky, and intermediate numbers partial cloudiness. Several observations are made daily, from which the average cloudiness of each day is computed. The monthly values given in this column are the means of the daily values in the corresponding months.

(8). The Rainfall.—Number of wet days and of foggy days are given in the next three columns, which do not require explanation.

(9). Number of hours of sunshine.

(10). The number of hours during which the wind blew from each of the principal 8 points of the compass, and the duration of calms.

(11). The mean velocity of winds, in miles per hour.—The quantities given in this, the last column of the Table I., represent the velocity of a steady flow, which, if continued uniformly throughout a month, would be equivalent to the total motion of air actually registered in that month.

In this table, which is based on all available records of past years, it is only necessary to explain the process by which the three different sets of values, namely, "Average," "Highest," and "Lowest," as set down for each month and for each element, have been arrived at.

Explanation
of Table II
infra.

We may take as an example the element, "Absolute Maximum Temperature of Air in Shade" for January. We have on the Observatory register 48 values of the highest temperature recorded in the month of January during the past 48 years; the mean of all these values is 102·6 deg., which is the average absolute maximum temperature for January. But amongst the same 48 values we find one of 111·2 deg., which is the greatest, and another 94·7 deg., which is the smallest of all. Thus, we say in regard to this particular element, that the highest temperature of air in shade at Melbourne in the month of January is on an average 102·6 deg., but there have been other years in which it has been as high as 111·2 deg., or as low as 94·7 deg. in January. These are the three values given in the table as the Average, Highest, and Lowest for the Absolute Maximum for January. The same reasoning applies to all the elements throughout the table.

TABLE I.—MELBOURNE CLIMATE. METEOROLOGICAL MEANS AND EXTREMES FOR EACH MONTH OF THE YEAR 1904.

Month.	Pressure of Air.			Temperature of Air in Shade.							Solar Radiation.			Terrestrial Radiation.			
	Mean.	Highest.	Lowest.	Mean.	Mean Max.	Mean Min.	Mean Daily Range.	Absolute Extremes.				Mean.	Highest.	Date.	Mean.	Lowest.	Date.
								Highest.	Date.	Lowest.	Date.						
January ..	29.819	30.148	29.292	64.1	74.9	57.0	17.9	94.2	9	48.1	27	137.3	151.2	9	50.6	41.0	22
February ..	29.764	30.191	29.361	63.2	73.7	56.8	16.9	96.7	18	49.0	29	134.9	153.2	18	51.5	41.8	29
March ..	29.995	30.209	29.597	59.2	68.3	52.7	15.6	79.2	31	41.7	24	127.9	141.9	1	47.0	33.4	24
April ..	30.116	30.409	29.347	60.4	71.3	50.9	20.4	86.0	7	41.8	1	128.8	140.1	1	42.7	34.2	24
May ..	30.052	30.423	29.537	55.3	64.3	48.2	16.1	77.8	13	35.9	25	115.3	132.9	9	40.4	28.9	24
June ..	29.947	30.277	29.321	49.7	56.9	45.0	11.9	64.9	21	32.0	18	103.1	120.1	21	38.6	26.8	18
July ..	30.037	30.475	29.279	48.2	55.7	42.8	12.9	64.4	23	31.5	23	98.9	117.8	3	35.8	26.6	23
August ..	30.013	30.398	29.489	49.8	57.5	43.9	13.6	62.8	22	34.0	26	107.0	125.3	17	37.0	27.0	26
September ..	29.941	30.303	29.473	49.3	59.1	43.3	15.8	69.2	24	35.1	12	120.5	133.9	13	36.8	27.6	12
October ..	29.875	30.359	29.281	56.8	68.1	48.9	19.2	83.7	31	33.2	3	128.5	147.9	31	42.9	31.0	3
November ..	29.859	30.252	29.195	59.6	71.0	50.8	20.2	92.2	16	41.6	20	134.6	146.7	16	43.5	33.0	20
December ..	29.841	30.159	29.511	64.3	78.1	53.4	24.7	102.0	24	44.7	22	140.2	160.2	24	45.2	33.2	1

Month.	Mean Humidity per cent. — Satn.=100	Amount of—			No. of Days of		No. of Hours of Sunshine.	Number of Hours during which the Wind blew from—								Calm.	Mean Velocity in Miles. per hour.
		Spontaneous Evaporation.	Cloud. — Scale. 0 to 10.	Rain in inches.	Rain.	Fog.		N.	N.W.	W.	S.W.	S.	S.E.	E.	N.E.		
January ..	0.73	4.95	5.6	5.68	14	0	221	79.0	54.5	66.5	107.5	172.5	107.5	35.0	86.5	35.0	8.9
February ..	0.74	3.91	6.3	6.24	10	1	176	67.5	21.5	72.5	147.0	150.5	109.0	32.5	34.0	61.5	8.8
March ..	0.78	2.97	6.6	6.95	8	2	156	19.0	12.0	99.0	135.5	180.0	165.5	29.0	21.5	82.5	6.5
April ..	0.74	2.39	4.2	0.77	3	3	192	62.5	57.5	42.5	66.0	105.0	103.5	79.0	125.0	79.0	5.4
May ..	0.75	1.37	5.7	2.56	16	2	119	204.0	110.5	74.0	35.0	45.0	50.0	29.0	140.0	56.5	6.9
June ..	0.80	1.35	7.7	3.29	18	3	80	171.5	62.5	139.0	109.0	14.0	10.0	26.0	79.5	58.5	8.0
July ..	0.81	0.89	6.4	1.57	12	5	103	175.5	105.5	101.5	89.5	27.0	92.5	10.0	103.0	37.5	7.8
August ..	0.75	1.42	7.1	3.28	13	1	101	195.0	90.0	146.5	92.5	41.5	9.5	21.5	102.0	45.5	8.4
September ..	0.70	2.16	6.0	1.26	12	1	151	159.0	62.5	158.0	102.0	78.5	30.5	18.5	69.0	42.0	8.9
October ..	0.74	2.85	5.0	2.72	11	0	203	120.0	61.5	114.0	109.0	115.5	46.5	32.0	92.5	53.0	7.5
November ..	0.67	4.93	5.4	1.29	8	0	232	73.0	71.0	177.0	112.5	121.5	77.0	17.5	32.5	38.0	9.5
December ..	0.58	6.79	4.7	0.11	3	0	265	42.0	20.0	108.0	125.0	193.5	110.0	53.5	50.5	39.5	8.6

TABLE IA.—The table below contains the values of the principal meteorological elements for the whole year 1904, with the corresponding averages and extremes based on the Climatic elements.

OBSERVATORY RECORDS OF 48 YEARS.

Meteorological Elements.	Year 1904.	Average for 48 years.	Extreme between which the Average Values have oscillated in 48 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches)	29.942	29.936	..	..
Highest " " " "	30.475	30.678	..	..
Lowest " " " "	29.195	28.868	..	..
Range " " " "	1.280	1.364	1.719	1.169
Mean temperature of air in shade, Fahr. ..	56.7	57.4	58.7	56.3
Mean daily maximum	66.6	67.3	69.0	65.8
Mean daily minimum	49.5	49.3	51.2	47.2
Absolute maximum	102.0	102.6	111.2	96.6
Absolute minimum	31.5	31.6	33.9	27.0
Mean daily range	17.1	18.0	20.3	14.6
Absolute annual range	70.5	74.3	82.6	66.0
Solar radiation (maximum)	160.2	139.3	178.5	108.6
Terrestrial radiation (minimum)	26.6	33.0	46.2	20.4
Rainfall (in inches)	29.72	25.55	44.25	15.61
Number of wet days	128	132	165	102
Year's amount of free evaporation (in inches) ..	36.165	37.5	45.65	31.59
Percentage of humidity (saturation = 100) ..	73	72	..	..
Cloudiness (scale 10 = overcast, 0 = clear) ..	5.9	5.9	..	..
Duration of sunshine (number of hours) ..	1,999	1,997	..	..
Number of days of fog	18	17	..	..

TABLE II.—CLIMATE OF MELBOURNE. CLIMATOLOGICAL TABLE, BASED ON THE RECORDS OF THE MELBOURNE OBSERVATORY FOR THE PERIOD 1858-1903.

Meteorological Elements.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	Year.
Pressure of Air—													
Mean for each Month..	in. 29.883	in. 29.885	in. 29.964	in. 30.024	in. 30.025	in. 29.995	in. 30.023	in. 29.983	in. 29.920	in. 29.884	in. 29.875	in. 29.820	in. 29.936
Highest recorded in each month	30.265	30.413	30.456	30.502	30.678	30.664	30.640	30.582	30.610	30.489	30.385	30.281	30.678
Lowest recorded in each month	29.135	29.199	29.342	29.233	29.051	29.119	29.165	29.033	29.030	29.002	29.123	28.868	28.868
Range ..	Average 0.767	0.744	0.707	0.804	0.903	0.969	0.974	0.992	0.965	0.916	0.795	0.849	1.361
	Highest 1.071	0.998	1.039	1.143	1.399	1.298	1.399	1.503	1.337	1.346	1.081	1.309	1.709
	Lowest 0.564	0.511	0.489	0.542	0.551	0.667	0.677	0.667	0.665	0.695	0.554	0.645	1.169
Temperature of Air in Shade—													
Mean for each month	Average 66.2	66.3	63.8	58.6	53.2	49.7	47.6	50.3	53.1	56.7	60.5	63.6	57.4
	Highest 71.5	73.8	67.8	60.8	56.4	53.4	50.8	53.0	55.5	59.5	64.1	68.5	58.7
	Lowest 60.6	62.7	59.8	54.6	50.9	46.4	45.3	47.1	50.3	53.5	56.8	57.9	56.3
Absolute Maximum for each month	Average 102.6	100.1	95.5	84.7	71.7	64.0	63.1	69.2	74.6	84.5	93.4	99.1	102.6
	Highest 111.2	109.5	105.5	94.0	82.1	68.1	68.4	77.0	81.8	96.1	105.7	110.7	111.2
	Lowest 94.7	89.6	86.7	74.0	66.0	57.5	58.7	61.9	71.0	73.8	83.5	86.6	96.6
Absolute Minimum for each month	Average 47.2	46.9	44.3	41.3	36.8	33.6	31.5	33.4	35.6	38.3	41.9	45.3	31.5
	Highest 52.0	53.5	51.4	45.5	42.0	38.0	39.0	39.6	41.5	42.8	45.5	48.8	33.9
	Lowest 42.0	40.3	37.1	34.8	31.3	28.0	27.0	28.3	32.1	32.1	36.5	40.0	27.0
Mean of daily Maximum	Average 78.1	77.8	74.8	68.6	61.4	56.8	55.5	58.8	62.7	67.1	71.3	75.3	67.3
	Highest 85.2	86.4	79.2	73.3	67.4	61.8	58.2	61.6	65.4	71.1	78.1	81.2	69.0
	Lowest 73.0	72.4	69.2	62.5	58.3	52.9	52.2	56.0	59.3	63.5	66.9	70.1	65.8
Mean of daily Minimum	Average 56.4	56.6	54.6	50.6	46.5	43.8	41.4	43.1	45.4	48.1	51.0	53.7	49.3
	Highest 60.4	62.2	61.7	54.7	49.4	49.2	45.6	45.8	48.5	50.8	53.8	57.6	51.2
	Lowest 53.2	52.5	50.3	47.4	43.4	40.7	38.8	39.7	43.1	45.4	46.6	50.4	47.2
Mean daily range in each month	Average 21.7	21.2	20.2	18.0	14.9	13.0	14.1	15.7	17.3	19.0	20.4	21.5	18.0
	Highest 26.2	26.7	24.1	24.2	20.2	17.5	17.6	19.5	20.5	23.2	27.2	27.8	20.3
	Lowest 16.8	16.4	15.9	12.4	11.1	7.7	10.3	12.7	13.7	15.6	15.1	16.2	14.6
Monthly range	Average 55.4	53.2	51.2	43.6	34.9	30.3	31.6	35.8	40.5	46.2	51.5	53.7	..
	Highest 63.6	68.6	62.2	58.9	47.0	37.0	39.8	45.3	47.9	59.6	64.2	69.1	..
	Lowest 45.2	38.4	39.6	23.8	24.8	25.9	23.4	26.0	34.6	33.4	40.9	41.9	..

TABLE II.—CLIMATE OF MELBOURNE. CLIMATOLOGICAL TABLE—continued.

Meteorological Elements.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	Year.	
Temperature of Air—	°	°	°	°	°	°	°	°	°	°	°	°	°	
Terrestrial Radiation	Average	39.6	39.3	36.6	34.7	30.6	27.7	25.5	27.4	29.5	31.4	34.9	38.1	24.7
	Highest	45.6	46.2	44.2	41.0	36.0	32.7	29.8	34.2	34.4	39.2	40.6	45.0	28.4
	Lowest	30.2	30.9	28.9	25.0	23.2	20.4	20.5	21.3	25.3	25.9	24.6	34.0	20.4
Solar Radiation	Average	153.7	155.8	150.9	140.5	127.4	118.3	117.7	125.9	124.1	142.8	149.9	153.3	161.2
	Highest	178.5	167.5	164.5	152.0	140.6	128.5	125.3	137.4	141.7	154.3	159.6	170.3	178.5
	Lowest	144.6	143.0	139.9	129.7	117.5	108.6	109.0	115.5	121.1	136.8	139.7	142.3	108.6
Monthly Amount of Registered Rainfall	Average	1.88	1.70	2.15	2.46	2.13	2.08	1.83	1.79	2.34	2.71	2.30	2.25	25.61
	Highest	6.83	6.78	6.36	6.71	6.94	5.22	7.02	7.62	5.87	7.61	12.13	7.18	44.25
	Lowest	0.04	0.03	0.16	0.57	0.45	0.60	0.49	0.48	0.61	0.28	0.25	0.17	15.61
Number of Days of Rain Recorded each month	Average	7	7	8	11	13	13	15	13	14	13	11	9	132
	Highest	14	15	19	19	20	21	20	18	22	21	16	20	165
	Lowest	1	1	3	5	6	7	7	7	8	7	3	4	102
Amount of Evaporation at a Free Water Surface for each month	Average	6.37	5.00	3.86	2.26	1.49	1.11	1.07	1.47	2.29	3.29	4.49	5.71	38.24
	Highest	8.33	6.38	5.15	2.99	2.09	2.31	1.66	2.11	3.23	5.80	5.79	7.50	45.65
	Lowest	4.84	3.84	2.79	1.57	0.97	0.61	0.66	1.03	1.64	2.56	3.19	3.70	31.59
Percentage of Humidity. Saturation=100	Average	0.64	0.65	0.68	0.73	0.79	0.80	0.80	0.75	0.72	0.70	0.67	0.65	0.72
	Highest	0.72	0.75	0.75	0.84	0.86	0.88	0.88	0.81	0.81	0.79	0.75	0.72	0.76
	Lowest	0.57	0.54	0.61	0.63	0.70	0.75	0.74	0.65	0.63	0.64	0.59	0.55	0.67
Mean Daily Amount of Cloudiness	Average	5.1	5.2	5.5	5.8	6.5	6.6	6.3	6.3	6.1	6.0	5.9	5.6	5.9
	Highest	6.7	6.8	7.4	7.7	8.0	7.7	7.5	8.0	7.4	7.1	7.2	6.9	6.4
	Lowest	3.9	3.2	3.7	3.1	4.7	3.2	5.1	4.7	5.0	4.8	4.7	3.8	5.4
Mean Daily Duration of Sunshine in Hours	Average	8.16	7.36	5.40	4.37	3.38	2.57	3.19	4.11	4.55	5.43	7.16	7.51	5.33
	Highest	9.57	9.12	8.19	5.56	4.59	4.50	5.16	5.32	6.21	7.18	9.10	9.57	9.57
	Lowest	6.33	5.32	4.18	2.13	2.18	1.14	2.30	2.34	3.35	4.13	6.60	6.50	1.14
Total Number of Hours of Sunshine in each Month	Average	256.25	214.60	175.16	138.0	112.52	89.12	103.48	130.15	147.40	181.37	218.14	242.36	2010.2
	Highest	309	258	241	178	154	123	164	172	191	274	206	308	2335
	Lowest	203	155	133	66	71	37	64	80	107	131	180	188	1738
Number of Days of Fog	Average	0.1	0.4	0.6	1.6	2.8	4.0	4.0	2.0	0.7	0.4	0.2	0.2	16.9
	Highest	2	3	2	7	10	14	11	8	6	2	2	4	39
	Lowest	0	0	0	0	0	0	1	0	0	0	0	0	5

Production.

THE BUTTER INDUSTRY.

The growing importance and value of the butter industry is such as to warrant special notice of anything which may possibly affect it. During the course of the past year a very important Commission was appointed by the Government to inquire into and report upon the industry generally. The Commission was the outcome of the intense dissatisfaction of the butter producers throughout the State as to the manner in which the trade was conducted and the consequent losses which they themselves suffered. The labours of the Commission have now been completed and its report, containing many valuable suggestions for the improvement and better development of the industry, has been promulgated for general information. In view of the enormous importance of this industry, a short history of its progress, compiled by the Commission and published as part of its report, is inserted:—

HISTORY OF THE BUTTER INDUSTRY.

*An Extract from the Report of the Royal Commission on the
Butter Industry.*

The butter industry in Victoria prior to the year 1888 had received little or no assistance from the Government towards developing the trade. The supplies during the spring and summer seasons were more than equal to the local demand, but most unsatisfactory during the winter months. The value of the industry to the people of Victoria was recognised by the Government in 1888, and practical attention given to the development of the trade. It was important that the quality of the butter should be improved, and more economical methods of production adopted, before the product could be profitably sold in London and foreign markets. Many obstacles presented themselves to this development. That modern methods and appliances should be introduced was absolutely necessary, and, with the object of educating the farmers and dairymen in scientific manufacture, a travelling dairy and experts were employed to give practical demonstrations, and lectures were delivered on the working of a modern dairy. A model dairy and school of instruction, conducted by Government experts at the Centennial Exhibition 1888-9, received much attention from country visitors and students. The simplicity and economical working of these dairies awakened the producers to the wealth in the industry when developed under the favorable conditions existing in Victoria.

That a profitable export trade to London should be immediately established was of vital importance to Victorian producers. The State was losing the intercolonial trade, which had been the outlet for surplus cask butter. In addition to the butter made on farms, a number of factories had been established, so that in 1889 the question of finding a market for the surplus supply was very pressing.

A system of inspection and stamping butter for export had been organized, and, subject to this inspection and approval, the Government of the day, out of the grant of £233,000 made in 1889-90 to promote the agricultural, dairy, fruit, and wine industries, set aside a sum of £30,000 "for the giving of bonuses for dairy produce and fruit of best quality and in best order exported to foreign markets." This bonus was payable on produce exported after the 21st October, 1889, subject to regulations gazetted 2nd May, 1890. The £30,000 provided proved inadequate, and an additional sum of £23,000 was, on the 23rd December, 1891, diverted from the purposes set out in the original grant 1889-90, and made available for a bonus on butter and fruit exported. Another amount of £26,000 was similarly diverted on the 24th October, 1892, and an additional sum of £40,000 was appropriated by Parliament in 1892-3 as a bonus on dairy produce and fruit exported for the year ending 30th June, 1893, subject to regulations gazetted 24th March, 1893. Butter factories and creameries were also entitled to and received bonuses on buildings, subject to the regulations for the distribution of £37,000 granted by Parliament in respect to factories in the original *Special Appropriation Act 1889-90*.

The bonuses paid on butter exported amounted to £103,599 13s. 1d.; on cheese exported, £1,500 19s. 10d.; on buildings, £30,387 16s. 2d.; making the total £135,488 9s. 1d. In addition to this amount the expenses of handling and freezing the butter prior to export and attending to the marketing of the early shipments were paid by the Government out of the sums granted for bonuses. With the object of assisting the producers in preserving surplus butter during the summer season refrigerating works had been established at Newport, where owners could store their butter in the chambers free of charge for three months. This business was afterwards removed to Melbourne. Refrigerating cars had been provided by the Railway Department, and cool storage erected at the stations.

The facilities afforded by the Government supervision and handling, together with the large sums paid in bounties, were attended with immediate improvement in quality, and a rapid development of the export trade. In 1895, 174 factories were manufacturing butter of a quality not previously attainable, and by means of the modern scientific methods first grade butter was produced in the driest and hottest districts, and the surplus was sold at good prices on the London market.

The factories were, to an extent, established on a co-operative principle, assisted by the Government bonus, but in many instances the butter agents and company promoters more readily realized the profitable nature of the investment, and taking advantage of the bonus, induced the farmers to join with them for the purposes of obtaining control and marketing of the producers' supplies. It is to be regretted that a number of the companies and factories gradually

reverted to the original promoters, or became the sole property of interested agents, the country shareholders consequently losing their subscribed capital.

At the inception of the export trade in 1889 the Government arranged the ocean freights with the mail companies at $1\frac{1}{2}$ d. per lb., and Government officers attended to the bills of lading. During the following four years, 1890-3, the rate of freight was 1d. per lb., with the exception of 1891-2, when a supposed Sydney firm had secured the whole of the refrigerated space in the steamers, and the Government was compelled to pay an extra $\frac{1}{2}$ d. per lb. to this firm during that season. In 1894 the rate of freight was $\frac{3}{4}$ d. per lb. An alteration in the shape of the butter boxes had the advantage of increasing the quantity of butter in a ton (shipping measurement) from 1,400 lbs. to 1,764 lbs., but the P. and O. and Orient lines refused to accept lower freights. A contract entered into by the Minister of Agriculture with another line of steamers on the 1st May, 1896, at $\frac{3}{4}$ d. per lb., forced the mail companies to reduce the rate of freight to that figure, and as a number of shippers decided to support the P. and O. and Orient lines, the Department had to compromise with these companies and the outside line that had effected a reduction of $\frac{1}{2}$ d. per lb. The mail steamers have retained the advantage gained in 1896 until the present year, 1905, when the contracts expire, and the freight on butter to London remained under contract with these companies and the factories at $\frac{3}{4}$ d. per lb., whilst shippers outside the contract have been shipping their butter by other lines at $\frac{1}{2}$ d. per lb. New contracts are now being entered into with other lines at $\frac{3}{4}$ d. per lb., and advantages are offered to shippers which the mail companies refused to grant.

After the Government withdrew the assistance rendered to the factories by attending to all the bills of lading and arranging for the sale of a number of the early shipments to London, the factories continued to send their butter direct to the Government Cool Stores, and employed agents to arrange for insurance, and negotiate with the banks for advances on bills of lading. The actual commission charged by these agents in the early history of the trade cannot be definitely stated, but it was gradually reduced to 6, 5, and 4 per cent. This charge covered Melbourne and London commissions. When a number of factories co-operated in 1901 to do their own agency business in Melbourne, it was considered that $3\frac{1}{2}$ per cent. was sufficient to allow for the export, and 4 per cent. for the local business. This allowance was practically reduced by a $\frac{1}{2}$ per cent. after deducting the bonuses returnable to the factories. Since the appointment of this Royal Commission, English firms have agents in Victoria who have secured a good proportion of the trade, and are doing the business at $2\frac{1}{2}$ per cent. Some local agents are now prepared to accept 3 per cent.

In 1893 the Government occupied fifteen chambers of the Melbourne City Council's building in Flinders-street for the purpose of freezing and chilling perishable produce for export prior to shipment. The chambers included a space of 3,491 square feet, and the Department of Agriculture paid the Council 6s. a ton for chilling and 10s.

a ton for freezing the produce. In 1894 the Government leased the chambers at a rental of £2,750 per annum, the space being extended to 5,327 square feet. The space and the rental were gradually increased till 1900, and the cool storage space occupied by the Government since that year has been 36,681 square feet. For the chambers and the refrigerating plant, supplies, engineers, and assistants provided by the City Council, the Department of Agriculture pays £15,000 per annum. Butter usually occupies one-third of the space, but in the height of the export season one-half is utilized. The stores are under the immediate control and supervision of the Dairy Expert, Mr. Robert Crowe, who is assisted by five butter experts in the inspection and grading of butter for export, and in the duties of educating the farmers and the inspection of dairies. A large number of the factories are now realizing the benefits to be obtained from grading by Government officers, and 66 factories are having their butter graded at these stores. Prior to the issue of the First Report by this Royal Commission only 22 factories had voluntarily taken advantage of Government grading and certificate. The charge made by the Government for freezing, inspection, issue of bills of lading, and supervision of shipments to steamers is 8s. 4d. per ton, or 2½d. a box (56 lbs.). With the object of encouraging uniform grading, no extra charge is made for this or the issue of certificate which accompanies each consignment graded by the Government experts.

The primary object of grading and use of certificate are to educate the factory managers and dairymen to improve the quality of the butter, and consequently obtain higher value for the product.

The business of attending to the freight on the butter and tallying the quantities in and out of the cool stores, including such clerical work in connexion with the bills of lading, &c., has been in the hands of Messrs. Mullaly and Byrne since the inception of the export trade. This firm receives 1s. 3d. per ton on all the butter shipped, which is paid by the Agricultural Department. The Railway Department charge an additional 5s. per ton freight for conveying the butter from the Stores to Port Melbourne.

In the years 1889 to 1893, butter for export was packed in casks and "ponds" boxes. The casks held from 50 to 120 lbs., and were sold to the factories and shippers at the rate of 5s. for 112 lbs., equal to a cost of slightly more than ½d. per lb. on the butter packed. The "ponds" enamelled boxes were imported from New Zealand in parts and had to be screwed together by the Victorian shippers and factories. These boxes held 56 lbs. and cost 6s. 4d. each, over 1¼d. per lb. on the butter packed. The casks were not suitable for stowing in the ships' chambers, nor were the "ponds" boxes economical in this respect, as the sides, tops, and bottoms projected, the ends being let into grooves. The cube form of box at present in use was introduced in 1893-4, and the prices for these cases have varied from as high as 1s. 6d. down to 10d. each. The price fixed by the "butter-box combine" for the past two years has been 1s. 4d. per box, equal

to 2-7d. per lb. on the butter packed; since the sittings of the Commission closed the price for these boxes has been reduced by 3d. per box—this will effect a saving to the industry of nearly £10,000 per annum. Experiments are being made with composition boxes that promise well to meet the requirements of the trade. The boxes used in Canada and United States of America are made of American spruce wood, and it is to be expected that the competition arising out of the introduction of this wood, and the composition cases, will have the effect of insuring the producers against higher charges for the New Zealand pine boxes at present used, the prices for which have been controlled by a Melbourne combine.

The drought which for a period during the last ten years so seriously affected the production of grain and wool did not, in comparison, so severely influence the Victorian dairy industry. The exports of butter to London and foreign markets, which, at the inception of the trade in 1889-90, were 400 tons, valued at £50,300, rose rapidly till the season 1894-5, during which 11,600 tons, valued at £1,081,243, were exported. The decline in the quantity exported during the seasons 1895-6 to 1898-9 was, in a measure, due to the Australian demand for Victorian butter increasing. The production in the other States had been reduced in consequence of the drought. The recuperative powers of Victoria are emphasized in a marked degree in the seasons 1899-1900 and 1900-1901, which followed immediately on the break-up of the very dry period; 17,107 tons of butter, valued at £1,604,600, were exported in 1899-1900, and 16,163 tons, valued at £1,664,790, in 1900-1901. No such records have since been established, but it is estimated that the season 1904-5 will equal, if not surpass, them.

The prices obtained for Victorian butter in London has averaged, so far as it is possible to ascertain, 10½d. per lb., or 98s. per cwt. Satisfactory as this average is when compared with that for other Colonial butters, it is much below the average for Danish, which, during the season when Victorian butter is on the London market, has averaged 11¾d. per lb., or £5 8s. 10d. a cwt. Independent experts have expressed the opinion that choice Victorian is equal to choice Danish, and others have gone further and stated that the Victorian is a better keeping butter than Danish. The difference in the value, after allowing ½d. per lb., or 4s. 8d. a cwt., in favour of the freshness and the regularity in the supply of Danish butter, would be 6s. 2d. a cwt. This anomaly in the values would appear to be due to causes other than the difference in quality. Danish butter has the advantage of Victorian, inasmuch as the marketing of the produce is not controlled or influenced by speculators, nor liable to suffer from deterioration, due to too high a temperature in transit.

A measure of success that has attended Victorian butter in the London and foreign markets is due to the fact that the product is made from the milk of cows fed upon natural pastures. The attractive flavour of the butter is due to the natural pasturage, which also adds to its keeping qualities. These favourable qualities and the

supervision of Government experts have been specially noted by buyers, and have been the means of obtaining a high price as compared with some other Colonial and foreign butters.

It is to an extent due to the advantageous geographical position of Victoria, where the spring and summer seasons fit in with the European winter months, and the supervision organized by the Government that have, in a degree, protected the producers against the practices adopted to secure for the middlemen the bulk of the profits from this important national industry.

This outline of the butter industry of Victoria would show that the Government has recognised the right and duty of the State to educate and assist the producers. While realizing the stimulus given to the butter trade by the bonuses and other material assistance, we are of opinion that a more perfect system of education and more complete supervision are essential for the advancement of the trade, as well as for the protection of the scientific as against the ignorant or careless producer.

Legislation for the betterment of the trade should be in the direction of prohibition of abuses rather than the extension of bounties or concessions. The export trade for Victorian butter is now established and to advance and guard its reputation on London and foreign markets require such restrictive legislation, and as a means of suppressing certain trade practices to which the industry has been subjected this legislation is as urgent as it is necessary.

In the matter of education and legislation it has been almost unanimously acknowledged that the benefits to be obtained from scientific education for the encouragement of the industry and legislation for the purpose of protecting the trade will only prove partially successful unless universally followed and adopted throughout the Commonwealth.

AGRICULTURAL, DAIRYING, AND PASTORAL INDUSTRIES.

The Constitution Act provides that, after the inauguration of Federation, the control of the payment of bounties shall pass to the Executive Government of the Commonwealth. A State is therefore precluded from offering bounties on the production or export of its products, and the Department of Agriculture is now only dealing with applications for the bonuses to the extent for which provision had been made at the time of the establishment of the Commonwealth. Out of the provision that had been made prior to that time, the State Government, up to the end of June, 1904, had paid out of the general revenue the sum of £373,673.

Expenditure on agricultural bonuses.

A sum of £35,000 was authorized under the *Treasury Bonds Act* 1896, £100,000 under Act 62 Vict.No. 1566, and £100,000 under Act 59 Vict. No. 1440. Of the £35,000, the sum of £31,239 had been spent up to the 30th June, 1904, leaving a balance available on that date of £3,761. The amounts authorized out of that

sum (£35,000) for green fruits exported; honey exported; raisins, currants, and figs made; assistance to wineries, for viticultural education, and for other purposes, have been practically exhausted. Of the £100,000 authorized under Act No. 1566, the expenditure up to the 30th June, 1904, amounted to £57,260, and of that under Act No. 1440 to £62,000. Particulars appear in the following table in respect to all bonuses granted under various Loan Acts:—

BONUSES GRANTED UNDER LOAN ACTS.

Subject of Bonus.	Period during which Bonus operated.	Rate of Bonus.	Amount Authorized.	Expenditure to 30.6.1904.
<i>Under Treasury Bonds Act 1896.</i>				
Green Fruit exported	prior to 24.7.96 after 6.11.96	2s. per case	£ 5,500	£ 5,404
Honey exported		1s. "		
Raisins, Currants, and Figs made	prior to 9.11.95	1d. per lb.	61	61
Vegetable Oil manufactured	1895	£5 per ton	2,134	2,134
Flax and Hemp Fibre produced	...	1s. per gall.	1,500	197
General Vegetable Products grown	...	£5 per ton	1,000	557
Wineries (assistance in building machinery and appliance producing 60,000 gallons of wine in three years)	1895	£2 per acre	5,000	3,624
Wineries (assistance in building machinery and appliance producing 60,000 gallons of wine in three years)	...	£2,000 each	8,000	8,000
Viticultural Education	...	...	8,000	7,999
Fruit Pulp exported	...	½d. per lb.	3,805	3,263
Total ...	...	...	35,000	31,239
<i>Under Act 62 Vict. No 1566.</i>				
District Co-operative Wineries and Viticulture Industry	...	...	20,000	15,085
Dairy Schools, Experimental Stations, purchase of Live Stock, Machinery, Implements and other Appliances, and Technical Agricultural Education	...	...	30,000	29,988
Development of the Export trade	...	...	32,500	7,565
Bonuses for the encouragement of the Cultivation, Manufacture, and Export of Fruit, Tobacco, Flax, Hemp, Silk, and of other Rural Industries	...	...	17,500	4,622
Total ...	...	...	100,000	57,260
To Beet Sugar Factory under Act No. 1440	...	...	100,000	62,000
Grand Total	...	...	235,000	15,0499

In addition, various sums have been advanced from loans and votes for the purpose of aiding closer settlement, for the resumption of mallee lands, and for relief to farmers on account of bush fires, flood losses, and purchase of seed wheat and fodder. A portion of these advances has been repaid, and interest as it becomes due is duly collected.

Particulars of subsidies paid in aid of agricultural industries during each of the five financial years ended with 1903-4, are as follows:—

SUBSIDIES IN AID OF AGRICULTURE, &C.: RETURN FOR FIVE YEARS.

	1899-1900.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Agricultural and Horticultural Societies, &c.	3,948	6,529	6,484	2,392	2,392
Carriage of Grain at reduced Rates—Allowance to Railway Department	45,000	62,000	75,000	6,521	48,000
To promote the Agricultural, Dairying, Fruit, and Wine Industries	1,047	1,607	1,146	370	153
Expenses in connexion with export of Dairy Produce, Fruits, Meat, Rabbits, and other produce	28,303	28,602	33,503	33,672	27,500
Development of Export Trade	...	...	...	...	1,679
Viticultural Education and inspection of Vineyards	...	...	...	...	1,871
Eradication of Vine Diseases	2,954	426	50	...	...
" Noxious Weeds	2,258	2,335	2,983	3,804	4,147
" and Insects	...	...	...	...	...
Scab Prevention and Stock Diseases	5,772	5,180	4,970	5,358	7,417
Rabbit and Vermin Extermination	14,801	15,817	17,250	16,489	15,759
Maffra Beet Sugar Company—Expenses in connexion with	2,358	839	1,015	486	454
Seed Advances	37	23	17	110	67
Technical Agricultural Education	...	...	...	9,786	12,077
Publishing Agricultural Reports	...	...	...	3,990	2,739
Total	106,478	123,358	142,418	82,978	124,255

The net increase in expenditure on subsidies in aid of agriculture has been £41,277. The details of increases are:—Allowances to Railway Department for carriage of grain at reduced rates, £41,479; eradication of noxious weeds and insects, £343; scab prevention and stock diseases, £2,059; technical agricultural education, £2,291. The added items are:—Development of export trade, £1,679; and viticultural education and inspection of vineyards, £1,871. The reductions are:—Promotion of agricultural, &c., industries, £217; expenses in connexion with export of dairy produce, &c., £6,172; rabbit and vermin extermination, £730; Maffra beet sugar company, £32; seed advances, £43; and publishing agricultural reports, £1,251.

In addition to the sum given above for 1903-4, there was expended by the State a sum of £7,465 on salaries and contingencies in the Department of Agriculture, and £2,085 in aid of village settlements and labour colonies. ...

Occupations
of persons
settled on
the land—
Agricul-
tural
(Census).

The occupations of persons settled on the land are only collected in the census years in full detail. In 1891 the number engaged in agricultural pursuits was 82,482, and in 1901 that number had increased to 95,920. The following return gives particulars of persons mainly engaged in agricultural pursuits when the last census was taken:—

RETURN OF PERSONS ENGAGED IN AGRICULTURAL PURSUITS, 1901.

Persons Following Agricultural Pursuits.	Employers of Labour.		In Business on their own account.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
Farmer and Relative Assisting	13,267	1,099	15,096	1,693	—	—	16,361	13,238	—	—	
Farm Manager, Overseer	—	—	—	—	359	6	—	—	3	—	
Farm Servant, Agricultural Labourer	—	—	—	—	20,204	599	—	—	956	5	
Market Gardener	859	19	1,647	32	1,518	9	576	132	22	—	
Fruit Grower, Orchardist	493	44	868	91	700	43	465	172	14	—	
Hop, Cotton, Tea, Coffee Grower	10	2	7	—	48	48	9	2	—	—	
Tobacco Grower	10	—	25	—	24	—	1	—	—	—	
Vine Grower, Vigneron	174	18	72	8	1,131	6	86	39	6	—	
Sugar Planter	1	—	—	—	—	—	—	—	—	—	
Horticulturist, Gardener	237	7	571	17	2,132	7	107	39	214	—	
Agricultural Department Officer	—	—	—	—	41	—	—	—	—	—	
Others, Threshing Machine Owners and Workers, &c.	20	1	26	—	72	2	4	3	103	—	
Total	15,071	1,190	18,312	1,841	26,229	720	17,609	13,625	1,318	5	
Total Males					78,539						
Total Females					17,381						
Grand Total					95,920						

Occupations
of persons
settled on
the land—
Pastoral
and
dairying
(Census).

In 1891 the number of persons engaged in pastoral and dairying pursuits was 15,296, and in 1901, 30,920. The full particulars for last census year are as follow:—

RETURN OF PERSONS ENGAGED IN PASTORAL AND DAIRYING PURSUITS, 1901.

Persons Following Pastoral and Dairying Pursuits.	Employers of Labour.		In Business on their own account.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
Grazier, Pastoralist, Stock Breeder and Relative Assisting	2,242	177	2,422	303	—	—	1,159	1,062	—	—	
Station Manager, Overseer, Clerk	—	—	—	—	593	4	1	7	39	—	
Stock Rider, Drover, Shearer, Shepherd, Pastoral Labourer	47	—	100	—	4,540	7	5	—	248	—	
Dairy Farmer, and Relative Assisting	2,205	276	3,007	756	—	—	3,263	4,456	—	—	
Dairy Assistant, Milker	—	—	—	—	3,194	386	—	—	32	3	
Poultry Farmer	19	8	132	79	17	3	16	41	1	—	
Stock and Brands Department Officer	—	—	—	—	18	—	—	—	—	—	
Others, including Pig Farmers	3	1	10	—	34	—	2	—	2	—	
Total	4,516	462	5,671	1,138	8,396	400	4,446	5,566	322	3	
Total Males					23,351						
Total Females					7,569						
Grand Total					30,920						

The total occupied lands of the State on 31st December, 1904, ^{Land in occupation.} consisted of 32,181,048 acres, and are described below, with particulars for the previous year. These lands are used principally for farming, dairying, and pastoral purposes, and for market gardens, orchards, vineyards, &c. :—

1903.				1904.			
Private Lands—			Acres.	Private lands—			Acres.
Freehold	...	...	16,382,752	Freehold	...	...	16,811,076
Leasehold	...	...	7,642,637	In process of purchase from the Crown	...	...	2,893,882
Crown Lands (leased)	7,051,823	Leasehold	...	...		4,879,384
				Crown lands (leased)	...	...	7,596,906
Total	...	...	31,077,212	Total	...	...	32,181,048

Of the total occupied, 3,389,069 acres were under crop in 1903, and 3,321,785 acres in 1904.

Of these occupied lands, the number of holdings are described as ^{Holdings.} follow :—

Holdings for—				1903.	1904.
				No.	No.
Farming principally	...	...	...	32,477	32,740
Dairying principally	...	...	...	10,384	11,720
Pastoral pursuits principally	...	...	...	6,141	8,138
Total	...	...	...	49,002	52,598

As the collection of pastoral holdings was made for the first time in 1903, it is considered that it was not only incomplete, but that many holdings used for pastoral purposes were returned under the head of dairying. The return of pastoral holdings for 1904 is regarded as accurate. The increase of nearly 2,000 for the year, shown in the table, is therefore almost certainly not a real one. Prior to 1903, cultivated and dairying holdings only were returned.

Persons
engaged
in rural
pursuits.

The number of persons employed on these holdings is shown in the following statement:—

				Number.	
				1903.	1904.
Hands Employed—					
Farming principally	...	...	males	55,194	53,933
" "	...	...	females	27,202	27,166
Dairying principally	...	...	males	19,205	21,509
" "	...	...	females	16,409	18,623
Pastoral principally	...	...	males	12,923	14,954
" "	...	...	females	4,950	6,144
Total	...	...	males	87,322	90,396
"	...	...	females	48,561	51,933
Total	...	...		135,883	142,329

Comparing the two years, it is noticeable that a considerable falling off has taken place in the number of male hands employed in farming, and a slight decrease in the number of females. In dairying, there has been a material increase in the number of both males and females, corresponding to the increase in the number both of holdings and of dairy cattle in the State. The number of hands ordinarily employed on any holding includes the occupier or manager, and those members of his family who actually work on it; but persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are not included, neither are domestic servants nor cooks.

Comparing the figures of 1904 with those of the census of 1901, an increase of 15,489 persons is shown as having been engaged in agricultural and pastoral pursuits in 1904. There is, however, a falling off in the number of males of 11,494, and an increase in the number of females employed of 26,983—mostly in dairying and farming work—and this result is probably to be accounted for by the large emigration of men since 1901.

Area under
cultivation.

In the following table will be found figures showing the land under cultivation in 1903 and 1904:—

Cultivated for—				1903.	1904.
				acres.	acres.
Wheat	...	...	...	1,968,599	2,277,537
Other Grain Crops	...	...	...	504,189	415,292
Root Crops	...	...	...	55,684	52,038
Hay	...	...	...	733,353	452,459
Green Forage	...	...	...	33,165	29,902
Vines	...	...	...	28,513	28,016
Orchards	...	...	...	51,357	52,751
Market Gardens	...	...	...	8,455	7,904
All other Crops	...	...	...	5,754	5,886
Land in Fallow	..	...	...	632,521	853,829
Total Cultivation	...	...	...	4,021,590	4,175,614

The area under cultivation, exclusive of permanent and artificial grasses, increased from 50 acres sown down with wheat in 1836 to 4,175,614 acres, which were under crops of various kinds, in 1904-5. The first returns of oats, maize, potato, and tobacco crops were obtained in 1838, barley and rye in 1839, hay in 1841, green forage and vines in 1842, peas and beans in 1849, mangel wurzel, carrots, parsnips, turnips, and onions in 1855-6, garden and orchard produce in 1856-7, and chicory, grass and clover seeds, and hops in 1867-8. Returns of land sown with artificial grass were first procured in 1855-6, and since that year steady and uninterrupted progress has been made in this direction. The quantity of land in fallow has also been increasing since 1858-9.

For the ten years—1894-5—1903-4—the total area under cultivation, its proportion to the area of the State—56,245,760 acres—and the yearly increase or decrease, actual and centesimal, were:—

AREA UNDER CULTIVATION: RETURN FOR TEN YEARS.

Year.	Area under Tillage (exclusive of area under artificial Grass).	Proportion to Area of Victoria.	Yearly Increase (+) or Decrease (-) in Area.	Percentage Increase (+) or Decrease (-) Yearly.
	Acres.	Per cent.	Acres.	Per cent.
1895-6	2,704,263	4.80	...	...
1896-7	2,925,416	5.20	+221,153	+8
1897-8	3,144,574	5.59	+219,158	+7
1898-9	3,727,765	6.63	+583,191	+19
1899-0	3,668,556	6.52	-59,209	-2
1900-1	3,717,002	6.61	+48,446	+1
1901-2	3,647,459	6.48	-69,543	-2
1902-3	3,738,873	6.65	+91,414	+3
1903-4	4,021,590	7.15	+282,717	+8
1904-5	4,175,614	7.42	+154,024	+4

The land under cultivation, including land in fallow, but excluding land under artificial grasses, in 1895-6, was 2,704,263 acres, and in 1904-5, 4,175,614—an increase of 1,471,351 acres in the ten years, or over 54 per cent. The increase has been fairly and almost constantly maintained. There are, however, three years in which a slight reduction appears—due probably to accidental causes, or to the influence of bad seasons and adverse climatic conditions. The quantity of land actually under crops of various kinds in 1904-5 was 3,321,785 acres.

The average area in cultivation (exclusive of artificial grasses) to each person, in each of the Australian States and New Zealand, on 31st December, 1903, was as follows (the figures for 1904 for some of the States are not yet available):—

Victoria	...	3.33 acres	Western Australia	...	1.61 acres
New South Wales	...	2.14 "	Tasmania	...	1.66 "
Queensland	...	1.21 "	New Zealand	...	2.14 "
South Australia	...	8.83 "			

Cultivation
per head in
Austral-
asia.

In the following return will be found a statement of the production from cultivated lands for the past two years:—

Crop.	1903.	1904.
Wheat bushels	28,525,579	21,092,139
Other Grain "	15,800,515	7,982,987
Root Crops tons	224,138	125,884
Hay "	1,233,063	514,316
Vines cwt. of grapes	654,965	452,433
Green Forage £	74,621	74,755
Orchards £	370,802*	375,685
Market Gardens £	211,375	197,600
All other Crops £	42,864	51,879

* Amended since last publication.

Regarding the production of the State in 1904-5 as a whole, the returns are very much below those of the preceding year, notably in wheat, other grain crops, root crops, and hay.

At the end of the years 1903 and 1904 a collection was made for the stock in the State. The results are in the following statement, together with the results of the Census of 1901:—

Stock.	Census, 1901.	1903.	1904.
Horses	392,237	330,763	372,397
Cattle—			
Dairy Cows, milking	521,612	520,433	478,913
" Dry			53,568
" Heifers			100,007
Other (including Calves)... ..	1,080,772	903,327	1,062,483
Sheep	10,841,790	9,047,655	10,167,691
Pigs	350,370	180,587	286,070

Detailed information regarding all the summarized particulars of land, cultivation, and production, contained in the foregoing statements, will be found for the years 1903 and 1904, tabulated under the heading of Counties in part "Production" of the Statistical Register of 1904.

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay.

Wheat. Wheat was first grown in Victoria in 1836, and there was a general increase in the area under cultivation up to 1899-1900, when 2,165,693 acres were sown. In the following seasons there was a decline in the area, until in 1904-5, the quantity of land sown was 2,277,537 acres, the largest recorded, the yield from which is returned at 21,092,139 bushels, which is equal to an average of 9.26 bushels per acre.

Estimated wheat yield, 1904-5. An estimate of the area under, and the probable yield of wheat for the season 1904-5, was made in November, 1904. The following are the results:—

Estimated area under wheat for grain	2,240,400 acres
" " hay	150,000 "
Total	2,390,400 acres
Estimated produce	21,299,850 bushels
Average per acre	9.51 "

The results of the wheat harvest, as ascertained by the collectors of statistics, are shown in the accompanying table:—

RETURN SHOWING THE WHEAT YIELDS FOR THE SEASONS
1904-5 AND 1903-4 IN COUNTIES.

Districts and Counties.	Area.		Produce.		Average per Acre.	
	1904-5.	1903-4.	1904-5.	1903-4.	1904-5.	1903-4.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.
Central District—						
Bourke ..	3,184	2,953	48,972	49,482	15.38	16.76
Grant ..	7,190	2,757	111,766	46,975	15.54	17.04
Mornington ..	129	219	1,205	1,933	9.34	8.83
Evelyn ..	33	266	710	5,724	21.52	21.52
North Central Dist.—						
Anglesey ..	1,383	1,523	20,143	26,168	14.56	17.18
Dalhousie ..	6,720	6,305	81,694	86,201	12.16	13.67
Talbot ..	24,082	15,231	384,531	287,898	15.97	18.90
Western District—						
Grenville ..	2,420	809	39,018	14,405	16.12	17.81
Polwarth ..	254	41	2,936	1,123	11.56	27.39
Heytesbury ..	8	20	189	256	23.63	12.80
Hampden ..	483	377	7,795	5,960	16.14	15.81
Ripon ..	58,272	38,562	965,719	590,937	16.57	15.32
Villiers ..	414	732	7,816	10,176	18.88	13.90
Normanby ..	719	1,482	11,466	14,500	15.95	9.78
Dundas ..	3,399	2,501	61,963	34,903	18.23	13.96
Follett ..	974	1,162	16,157	12,621	16.59	10.86
Wimmera District—						
Lowan ..	165,977	147,188	1,878,996	1,982,825	11.32	13.47
Borong ..	380,492	424,224	4,198,169	5,800,568	11.03	13.67
Kara Kara ..	122,512	109,413	1,531,858	1,747,420	12.50	15.97
Mallee District—						
Millewa ..	..	..	..	..	..	..
Weeah ..	20,756	19,788	150,234	245,206	7.24	12.39
Karkaroc ..	360,881	262,963	1,345,789	2,830,194	3.30	10.76
Tatchera ..	342,022	245,723	1,146,768	2,945,289	3.35	11.99
Northern District—						
Gunbower ..	43,555	36,687	381,872	533,406	8.77	14.54
Gladstone ..	107,534	93,021	1,328,792	1,551,823	12.36	16.68
Bendigo ..	110,926	93,575	1,490,773	1,735,104	13.44	18.54
Rodney ..	131,822	122,471	1,634,132	2,130,836	12.40	17.40
Moira ..	328,811	292,888	3,572,725	5,031,670	10.87	17.18
Nth-Eastern Dist.—						
Delatite ..	11,520	9,070	153,758	160,335	13.35	17.68
Bogong ..	36,972	33,243	451,349	577,618	12.21	17.38
Benambra ..	1,013	1,023	15,750	24,441	15.55	23.89
Wonnangatta ..	24	17	424	363	17.67	21.35
Gippsland District—						
Croajingolong ..	88	70	1,092	1,202	12.41	17.17
Tambo ..	16	8	147	132	9.19	16.50
Dargo ..	17	40	189	653	11.12	16.33
Tanjil ..	2,743	2,174	44,340	35,931	16.16	16.53
Buln Buln ..	192	73	2,902	1,301	15.11	17.82
Total ..	2,277,537	1,968,599	21,092,139	28,525,579	9.26	14.49

After the sowing had been completed in 1904, and in view of the extra amount of land laid down under wheat, a favorable season would undoubtedly have produced a crop equal to that of the previous year. The scarcity of rain during the month of September, however, caused grave apprehension as to the harvest prospects, but with the copious rains of October, the outlook was considerably brighter, and the estimate made ($21\frac{1}{4}$ million bushels) has closely approximated to the yield, which, although much less than was anticipated after the sowing, is still second only to that of the previous year, when it was 28,525,579 bushels.

Wheat
districts.

The principal wheat-growing districts in the State are the Wimmera, comprising the counties of Lowan, Borung, and Kara Kara; the Mallee, comprising those of Weeah, Karkaroc, and Tatchera; and the northern, comprising Gunbower, Gladstone, Bendigo, Rodney, and Moira. The total area under wheat in the State in 1904-5 was 2,277,537 acres; that in the counties enumerated, 2,115,288 acres, or 93 per cent.

The following table shows the area of each of the principal wheat-growing counties, the cultivation for the years of first and largest record, and for the year 1904:—

WHEAT-GROWING COUNTIES: AREA AND PRODUCTION.

District and County.	Area of County.	First Cultivation Recorded.			Largest Cultivation Recorded.			Cultivation for 1904-5.	
		Year.	Area.	Average Yield Per Acre.	Year.	Area.	Average Yield Per Acre.	Area.	Average Yield Per Acre.
Wimmera Dist.—									
Lowan ..	3,181,440	1871-2	232	18·69	1892-3	257,685	8·58	165,977	11·32
Borong ..	2,740,480	1871-2	4,590	15·59	1903-4	424,224	13·67	380,492	11·03
Kara Kara ..	1,472,640	1871-2	7,987	14·34	1899-00	125,345	9·68	122,512	12·50
Mallee District—									
Weeah ..	2,562,560	1891-2	40	21·00	1902-3	22,592	·46	20,756	7·24
Karkaroc ..	3,797,120	1870-89	233	10·87	1902-3	371,069	·22	360,881	3·30
Tatchera ..	2,138,240	1871-2	2	12·00	1904-5	342,022	3·35	342,022	3·35
Northern Dist.—									
Gunbower ..	862,720	1871-2	181	13·36	1880-1	75,114	9·29	43,555	8·77
Gladstone ..	1,153,280	1869-70	7,988	17·46	1904-5	107,534	12·30	107,534	12·36
Bendigo ..	1,247,360	1869-70	21,038	16·26	1904-5	110,926	13·44	110,926	13·44
Rodney ..	1,087,360	1855-6	6	26·66	1898-9	132,273	13·92	131,822	12·40
Moira ..	1,986,560	1871-2	14,936	15·93	1904-5	328,811	10·87	328,811	10·87

The following table shows the area of each county, and the rise and fall in the cultivation of wheat in the central and north central districts:—

TABLE SHOWING DECLINE OF WHEAT CULTIVATION IN CERTAIN COUNTIES.

District and Area.	Area of County.	First Cultivation Recorded.			Largest Cultivation Recorded.			Cultivation in 1904-5.	
		Year.	Area.	Average Yield Per Acre.	Year.	Area.	Average Yield Per Acre.	Area.	Average Yield Per Acre.
	Acres.		Acres.	Bushels.		Acres.	Bushels.	Acres.	Bushels.
Central District—									
Bourke ..	1,101,440	1855-6	13,676	25 03	1861-2	30,268	17 12	3,184	15 38
Grant ..	1,173,760	1855-6	12,072	25 65	1861-2	35,349	15 86	7,190	15 54
Mornington ..	1,040,000	1855-6	943	29 57	1860-1	3,153	14 03	129	9 34
Evelyn ..	750,080	1855-6	1,124	31 43	1859-60	1,789	15 43	33	21 52
N. Central Dis.—									
Anglesey ..	1,034,080	1855-6	129	28 77	1874-5	4,146	12 96	1,383	14 56
Dalhousie ..	838,400	1855-6	3,113	26 67	1869-70	25,124	21 47	6,720	12 16
Talbot ..	1,037,440	1855-6	445	33 68	1871-2	76,555	13 81	24,082	15 97

The following is a table showing the area under wheat during the last ten years, the gross produce, and the average yield per acre:—

WHEAT: RETURN FOR TEN YEARS.

Year.	Area under Crop.	Gross Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1895-6	1,412,736	5,669,174	4 01
1896-7	1,580,613	7,091,029	4 49
1897-8	1,657,450	10,590,217	6 38
1898-9	2,154,163	19,581,304	9 09
1899-00	2,165,693	15,237,948	7 04
1900-1	2,017,321	17,847,321	8 85
1901-2	1,754,417	12,127,382	6 91
1902-3	1,994,271	2,569,364	1 29
1903-4	1,968,599	28,525,579	14 49
1904-5	2,277,537	21,092,139	9 26

In 1902-3 wheat was grown on about 17,100 holdings, in 1903-4 on 17,400 holdings, and in 1904-5 on 18,045 holdings. The decline in the yield and the average per acre, which is observed during the few years prior to 1903-4, has been due to the severity of the seasons which has been experienced all over the wheat-growing districts of the State. In 1903-4 the yield was the highest ever recorded, although the area under crop was not so large as in the previous year. The yield in 1904-5, 21,092,139 bushels, comes next to that of 1903-4.

On 31st December, 1904, there were equivalent to 2,052,225 bushels of old wheat on railways and in mills and stores, 428,578 bushels on farms, and 162,815 bushels in vessels (not cleared),

making a total of 2,643,618 bushels; but against this quantity, 33,740 bushels of the new season's wheat had been consumed up to that date, leaving a balance of old stocks on hand, exclusive of the recent harvest of 2,609,878 bushels.

The following table shows, for 1898, and each subsequent year, the mean population of Victoria; the stocks of old wheat and flour on hand at the beginning of each year; the quantity of wheat grown; the quantity (after deducting imports) of wheat, flour, and biscuit exported; and the breadstuffs left over and available for home consumption. In addition to the quantity required for food consumption, a stock is required for seed purposes, equal, on an average, to three-quarters of a bushel per acre:—

POPULATION AND WHEAT RETURNS.

Year.	Mean Population.	Stocks of old wheat and flour on hand (1st January)	Wheat harvested for season ended March in each year.	Wheat, Flour, and Biscuit.	
				Exported after deducting Imports.	Available for Home Consumption.
		Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	1,172,950	330,224	10,580,217	1,855,951	9,054,490
1899 ...	1,186,265	1,282,902	19,581,304	10,662,011	10,202,195
1900 ...	1,193,338	2,121,700	15,237,948	7,011,242	10,348,406
1901 ...	1,202,960	1,872,000	17,847,321	10,248,093	9,471,228
1902 ...	1,207,110	1,525,288	12,127,382	3,899,246	9,753,424
1903 ...	1,208,880	903,616	2,569,364	-4,495,403*	7,968,383
1904 ...	1,207,537	173,708	23,525,579	17,820,889	10,878,398
1905 ...	1,210,530 (31st March)	2,609,878	21,692,139	Not	available.

* Net Import.

Disposal of breadstuffs.

The manner in which the breadstuffs available for home consumption have been disposed of in each of the years under review is as follows:—

DISPOSAL OF BREADSTUFFS.

Year.	Wheat and Flour.				
	Quantity available for Home Consumption.	How disposed of—			
		Stocks on hand on 31st December.	Required for Seed.	Used for Food, &c.	
				Total.	Per Head.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	9,054,490	1,282,902	1,770,941	6,000,647	5·12
1899 ...	10,202,195	2,121,700	1,772,602	6,307,893	5·32
1900 ...	10,348,406	1,872,000	1,696,000	6,780,406	5·68
1901 ...	9,471,228	1,525,288	1,529,249	6,416,691	5·33
1902 ...	9,753,424	903,616	1,616,946	7,232,862	5·99
1903 ...	7,968,383	173,708	1,626,954	6,167,721	5·10
1904 ...	10,878,398	2,609,878	1,807,351	6,461,169	5·35

With the exception of 1896 and 1903, the breadstuffs produced in the twenty-eight years ended 1904 have been more than enough to supply home consumption. Wheat has, therefore, been exported each year, with these two exceptions. The maximum export was 17 4-5, million bushels in 1904.

In the following table will be found a return showing the estimated wheat produce of the world for 1903. The information has been extracted partly from the report of the Board of Agriculture and Fisheries for Great Britain for 1903, and partly from the Statistical Year Book of Canada for the same year. The average yield per acre sown in all the countries named (except Australia) varies from 11 to as high as 38 bushels. In Australia, the yield per acre for the five years, 1897-1901, averaged about $7\frac{1}{2}$ bushels; in 1902, it was only about $2\frac{1}{2}$; in 1903, it was about $13\frac{1}{3}$; and in 1904, it was $8\frac{2}{3}$. The average for the last three years, taken together, was slightly more than $8\frac{1}{2}$ bushels per acre—about equal to the average of the preceding five years. It must be remembered, however, that much of our wheat, especially in Victoria and South Australia, is grown on land such as the Mallee, where, according to the experience of many years, there is but a light rainfall, and only light crops can be expected. Further, the practice of manuring these lands has only been adopted by the farmers to any extent during recent years, their attention having been strongly drawn, through the Department of Agriculture, to the important fact that manuring invariably increases the yield. In many cases, in Victoria, through the zeal and energy of the officers of the Department, and the good will of farmers in furnishing land for the purpose, experiments have been carried on, and as great an advantage as 3 bushels to the acre has resulted in favour of manured, as compared with adjoining unmanured lands. With the more extensive use of manures, there can be very little doubt that the Australian yield of wheat can be very largely increased.

WORLD'S ESTIMATED WHEAT CROP, 1903.

Country.	Produce.	Country.	Produce.
	Bushels.		Bushels
Europe—		Asia—	
Austria	44,158,000	Asia Minor	34,000,000
Hungary	165,134,000	India	294,726,000
Belgium	12,000,000	Japan	20,000,000
Bulgaria	36,000,000	Persia	24,000,000
Denmark	4,000,000	Russia—Siberia and	
France	351,990,000	the Steppes	69,646,000
Germany	130,590,000	Syria	24,000,000
Great Britain ..	48,818,000	Africa—	
Greece	6,000,000	Algeria	24,000,000
Holland	6,000,000	Cape Colony	4,000,000
Italy	178,750,000	Egypt	12,000,000
Portugal	6,000,000	Tunis	8,000,000
Carried forward..	989,440,000	Carried forward ..	514,372,000

WORLD'S ESTIMATED WHEAT CROP, 1903—*continued.*

Country.	Produce.	Country.	Produce.
	Bushels.		Bushels.
Brought forward..	989,440,000	Brought forward ..	514,372,000
Europe— <i>continued.</i>		America—	
Roumania ..	71,500,000	Argentine Republic ..	100,587,000
Russia—In Europe	453,178,000	Canada—Manitoba ..	40,112,000
„ Poland	19,196,000	„ North-West	
„ Northern		„ Territories	16,112,000
„ Caucasia	77,698,000	„ Ontario ..	21,893,000
Servia ..	36,000,000	Chili ..	12,000,000
Spain ..	100,000,000	Mexico ..	14,000,000
Sweden ..	5,374,000	United States ..	617,890,000
Switzerland ..	4,000,000	Uruguay ..	8,000,000
Turkey in Europe	40,000,000	Australasia—	
		Australia ..	74,128,000
		New Zealand ..	7,892,000
Total—Europe..	1,796,386,000	Total—Outside Europe	1,426,986,000

GRAND TOTAL 3,223,372,000 bushels.

Oats.

In 1903-4, the land under this crop was 344,019 acres, from which a yield of 6,203,429 bushels was obtained, giving an average of 18·03 bushels to the acre. The following return shows the harvest results for this crop since 1894-5:—

OATS: RETURN FOR TEN YEARS.

Year.	Area under Crop.	Gross Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1895-6	255,503	2,880,045	11·28
1896-7	419,460	6,816,951	16·25
1897-8	294,183	4,809,479	16·35
1898-9	266,159	5,523,419	20·75
1899-00	271,280	6,116,046	22·55
1900-1	362,689	9,582,332	26·42
1901-2	329,150	6,724,900	20·43
1902-3	433,489	4,402,982	10·16
1903-4	433,638	13,434,952	30·98
1904-5	344,019	6,203,429	18·03

Barley.

The area under barley was 46,089 acres in 1904-5, 30,799 acres being under malting barley, and 15,290 acres under other barley. There is a remarkable divergence in the quantity of land sown under barley, owing doubtless to the uncertainty of the seasons, the market

for this product being uniformly good. The following shows the return for ten years :—

BARLEY: RETURN FOR TEN YEARS.

Year.	Area under Crop		Gross Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1895-6	71,789	6,649	624,388	91,204	8.70	13.70	9.12
1896-7	53,421	8,952	641,406	174,199	12.01	19.45	13.08
1897-8	26,118	11,087	592,411	256,043	19.24	23.09	20.39
1898-9	33,584	14,275	776,785	335,782	23.13	23.52	23.25
1899-00	65,970	13,003	1,197,948	268,140	18.16	19.71	18.42
1900-1	49,723	9,130	1,003,477	212,001	20.18	23.22	20.65
1901-2	25,480	6,943	527,564	166,287	20.71	23.95	21.40
1902-3	26,436	11,280	394,577	166,267	14.94	14.74	14.88
1903-4	33,586	14,174	878,721	339,282	26.17	23.80	25.50
1904-5	30,799	15,290	575,505	298,594	18.69	19.53	18.97

The greatest quantity of land planted with potatoes was 57,334 ^{Potatoes.} acres in 1891-2; the next being 56,383 acres in 1894-5; and 55,469 acres in 1899-1900. The highest yield was 204,155 tons in 1890-1, the next 200,523 tons in 1891-2. The area planted in 1904-5 was 46,912 acres, and the produce 92,872 tons, or 1.98 tons per acre. The following table shows the potato return for ten years :—

POTATOES: RETURN FOR TEN YEARS.

Year.	Area under Crop.		Gross Produce.	Average per Acre.
	Acres.	Tons.	Tons.	Tons.
1895-6	43,895	117,238	2.67
1896-7	43,532	146,555	3.37
1897-8	44,197	67,296	1.52
1898-9	41,252	161,142	3.91
1899-00	55,469	173,381	3.13
1900-1	38,477	123,126	3.20
1901-2	40,058	125,474	3.13
1902-3	49,706	168,759	3.40
1903-4	48,930	167,736	3.43
1904-5	46,912	92,872	1.98

Statistics of the hay crop were collected as far back as 1841, ^{Hay.} when 450 acres returned 900 tons. From that date onward there has been a steady increase in the quantity of land cut for hay. The greatest area under hay was in 1903-4, when 733,353 acres were cut; in 1901-2, 659,239 acres; in 1902-3, 580,884 acres; and in 1904-5, 452,372 acres were harvested. The highest yield attained was 1,233,063 tons in 1903-4, the next being 884,369 in 1901-2, 740,049 in 1892-3, and 723,299 in 1898-9. In 1904-5, the quantity

of straw returned was 385,108 tons, a portion of which was stock held over from previous years. The following is a table of the hay crop for the last ten years:—

HAY: RETURN FOR TEN YEARS.

Year.	Area under Crop.		Gross Produce.	Average per Acre.
	Acres.	Tons.	Tons.	Tons.
1895-6	464,482	390,861	·84	
1896-7	416,667	449,056	1·08	
1897-8	580,000	659,635	1·14	
1898-9	565,345	723,299	1·28	
1899-00	450,189	596,193	1·32	
1900-1	502,105	677,757	1·35	
1901-2	659,239	884,369	1·34	
1902-3	580,884	601,272	1·04	
1903-4	733,353	1,233,063	1·68	
1904-5	452,372	514,316	1·14	

The five principal crops.

The area under the five principal crops during the last five years, its proportion to the population, the production of these crops, and its proportion to the population, are exhibited in the following table. The proportion of land under wheat ranges from about $1\frac{1}{2}$ to nearly 2 acres per head; that under oats is very little more than a quarter of an acre; that under barley and potatoes is, for each crop, about 4 acres to 100 people; and hay from a half to nearly three-quarters of an acre per head. The produce in the same period shows great variation; the wheat ranges from 2'12 bushels per head in 1902-3 to 23'60 in 1903-4; oats from 3'63 to 11'11 in the same years; barley from about half a bushel in 1902-3 to $1\frac{1}{4}$ bushels in 1899-1900, falling back to $\frac{3}{4}$ of a bushel in 1904-5; potatoes yielded 2 cwt. per head in 1900-1 and 1901-2, and about 3 cwt. per head in 1899-1900, 1902-3, and 1903-4, and again fell away to under 2 cwt. last year. The hay yield was equal to 1 ton per head in 1903-4, the nearest average to this being three-quarters of a ton in 1901-2. The smallest yield during the past six seasons was obtained last year.

TABLE SHOWING, FOR FIVE PRINCIPAL CROPS, THE AREA AND PRODUCTION PER HEAD OF POPULATION: RETURN FOR SIX YEARS.

Year.	AREA UNDER—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Acres.	Acres.	Acres.	Acres.	Acres.
1899-00 ..	2,165,693	271,280	79,573	55,469	450,189
1900-1 ..	2,017,321	362,689	58,853	38,477	502,105
1901-2 ..	1,754,417	329,150	32,423	40,058	659,239
1902-3 ..	1,994,271	433,489	37,716	49,706	580,884
1903-4 ..	1,968,599	433,638	47,760	48,930	733,353
1904-5 ..	2,277,537	344,019	46,089	46,912	452,372

TABLE SHOWING, FOR FIVE PRINCIPAL CROPS, THE AREA AND PRODUCTION, &C.—continued.

Year.	PRODUCTION.				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1899-00 ..	15,237,948	6,116,046	1,466,088	173,381	596,193
1900-1 ..	17,847,321	9,582,332	1,215,478	123,126	677,757
1901-2 ..	12,127,382	6,724,900	693,851	125,474	884,369
1902-3 ..	2,569,364	4,402,982	561,144	168,759	601,272
1903-4 ..	28,525,579	13,434,952	1,218,003	167,736	1,233,063
1904-5 ..	21,092,139	6,203,429	874,099	92,872	514,316
AREA PER HEAD OF POPULATION.					
	Acres.	Acres.	Acres.	Acres.	Acres.
1899-00 ..	1·82	·23	·07	·05	·38
1900-1 ..	1·69	·30	·05	·03	·42
1901-2 ..	1·45	·27	·03	·03	·54
1902-3 ..	1·65	·36	·03	·04	·48
1903-4 ..	1·62	·36	·04	·04	·61
1904-5 ..	1·88	·28	·04	·04	·37
PRODUCTION PER HEAD OF POPULATION.					
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1899-00 ..	12·81	5·14	1·23	·15	·50
1900-1 ..	14·91	8·00	1·02	·10	·57
1901-2 ..	10·01	5·56	·57	·10	·73
1902-3 ..	2·12	3·63	·46	·14	·50
1903-4 ..	23·60	11·11	1·01	·14	1·02
1904-5 ..	17·47	5·14	·72	·08	·42

The following return shows the yield of the principal crops in the various Australian States and New Zealand for each of the seven years ended March, 1905:—

Yield, Australian States and New Zealand.

YIELD OF PRINCIPAL CROPS IN AUSTRALASIA: RETURN FOR SEVEN YEARS.

Year ended March.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	19,581,304	9,276,216	607,012	8,778,900	870,909	2,303,512	13,073,416
1900 ...	15,237,948	13,604,166	614,414	8,453,135	966,601	1,101,303	8,581,898
1901 ...	17,847,321	16,173,771	1,194,088	11,253,148	774,653	1,110,421	6,527,154
1902 ...	12,127,382	14,808,705	1,692,222	8,012,762	956,886	963,662	4,046,589
1903 ...	2,569,364	1,535,097	6,165	6,354,912	970,571	876,971	7,457,915
1904 ...	28,525,579	27,334,141	2,436,799	13,209,465	1,855,460	767,398	7,891,654
1905 ...	21,092,139	16,464,415	2,149,663	12,023,172	2,005,146	792,956	9,123,673

YIELD OF PRINCIPAL CROPS IN AUSTRALASIA: RETURN FOR SEVEN YEARS—*continued.*

Year ended March.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
OATS.							
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	5,523,419	278,007	4,047	304,002	55,854	2,271,070	16,511,388
1900 ...	6,116,046	627,904	10,712	218,331	73,556	1,148,160	16,325,832
1901 ...	9,582,332	593,548	7,855	366,229	86,433	1,406,913	19,085,837
1902 ...	6,724,900	687,179	42,208	469,254	163,653	1,702,659	15,045,233
1903 ...	4,402,982	351,758	520	620,823	161,714	1,752,745	21,766,708
1904 ...	18,434,952	1,252,156	70,713	902,936	255,300	1,621,950	15,107,237
1905 ...	6,203,429	652,646	15,137	555,696	226,556	1,178,819	14,553,611
BARLEY.							
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	1,112,567	64,094	34,865	234,135	29,295	134,225	1,677,908
1900 ...	1,466,088	132,476	118,443	188,917	56,587	142,721	1,585,145
1901 ...	1,215,478	114,228	127,144	211,102	29,188	116,911	1,027,651
1902 ...	693,851	103,361	277,037	243,362	34,723	167,483	855,993
1903 ...	561,144	18,233	3,595	317,155	45,778	201,133	1,136,232
1904 ...	1,218,903	174,147	510,557	487,920	51,477	212,459	1,160,504
1905 ...	874,099	266,781	331,772	346,718	37,801	163,194	1,128,164
POTATOES.							
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1899 ...	161,142	61,900	16,413	14,445	5,698	88,166	298,561
1900 ...	173,381	81,337	22,675	19,716	8,373	101,670	222,124
1901 ...	123,126	63,253	20,914	14,566	4,835	93,862	169,042
1902 ...	125,474	39,146	22,402	15,059	5,739	114,704	206,815
1903 ...	168,759	30,732	3,257	28,312	6,200	163,518	193,267
1904 ...	167,736	56,743	17,649	31,415	4,315	168,419	208,787
1905 ...	92,872	48,754	33,257	19,521	5,607	110,547	134,608
HAY.							
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1899 ...	723,299	334,297	70,235	258,518	77,297	82,448	151,240
1900 ...	596,193	546,850	103,409	229,800	70,078	51,123	136,468
1901 ...	677,757	526,260	78,758	353,662	103,813	94,198	136,046*
1902 ...	884,369	472,621	122,039	346,467	89,729	88,125	125,968*
1903 ...	601,272	243,289	23,181	308,825	91,593	89,210	†
1904 ...	1,233,063	816,810	136,117	479,723	119,156	115,513	†
1905 ...	514,316	366,293	80,662	294,252	114,033	73,457	†

* Estimated.

† Not available.

Proportion of land under each crop.

The proportion of the land in Victoria under each crop to the total area under tillage during the last seven years, was:—

PROPORTION OF LAND UNDER CROP IN VICTORIA: RETURN FOR SEVEN YEARS.

Year ended March—	Proportionate Area to Total Cultivated Land under— (Exclusive of Area under Artificial Grass.)					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Tillage.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1899	57·78	7·13	1·28	1·11	15·17	17·53
1900	59·05	7·39	2·17	1·51	12·27	17·61
1901	54·28	9·75	1·58	1·03	13·51	19·85
1902	48·09	9·02	·89	1·11	18·07	22·82
1903	53·34	11·59	1·01	1·33	15·54	17·19
1904	48·95	10·78	1·19	1·22	18·24	19·62
1905	54·54	8·24	1·10	1·12	10·84	24·16

This information has been procured direct from the growers in February and March. The following is the average price for each of the last seven years:—

Prices of agricultural produce.

PRICES OF PRODUCE: RETURN FOR SEVEN YEARS.

Year.	Average Price in February and March.						
	Wheat.	Oats.	Barley.		Hay.	Potatoes.	
			Malting.	Other.		Early Crop.	Main Crop (after March.)
	Per bushel.	Per bushel.	Per bushel.	Per bushel.	Per ton.	Per ton.	Per ton.
<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	
1899	2 2	1 7 ³ / ₄	4 2 ¹ / ₂	2 2 ¹ / ₄	34 5	73 0	36 5
1900	2 5	2 1	3 2 ¹ / ₂	2 3 ¹ / ₄	40 9	41 11	26 11
1901	2 5 ³ / ₄	1 6 ¹ / ₂	2 10 ³ / ₄	1 11 ¹ / ₄	39 4	73 11	55 10
1902	2 10 ¹ / ₄	2 4	3 9 ¹ / ₄	2 9 ¹ / ₄	55 5	77 7	84 4
1903	6 0	3 2 ³ / ₄	4 5 ³ / ₄	3 8	100 1	91 3	47 1
1904	2 8	1 1 ¹ / ₂	2 10 ¹ / ₂	1 9 ¹ / ₂	27 2	52 6	26 1
1905	2 11 ¹ / ₂	1 6	3 2 ¹ / ₂	2 1	33 6	110 0	84 0

Dealing with the prices of wheat ruling during the year, Messrs. Goldsbrough, Mort, & Co., report as follows:—"Local prices, as is always the case where a large surplus is available, were wholly dependent on and determined by values in London, the market quickly responding to any sudden fluctuation reported from that centre. This year's fluctuations were governed by a diversity of causes, the war in the Far East and the diminished supply of the United States being chiefly responsible for the advances in prices, whilst the heavy shipments from Russia, Argentina, and India to European countries contributed largely to the decline."

LOCAL WHEAT PRICES, 1904.

	Lowest Price per Bushel.		Highest Price per Bushel.	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
January	2	9	3	0
February	2	9	3	5 ¹ / ₂
March	3	0	3	3
April	2	11	3	2
May	3	0	3	1 ¹ / ₂
June	2	10 ¹ / ₂	3	0 ¹ / ₂
July	2	11	3	2
August	3	1 ¹ / ₂	3	6 ¹ / ₂
September	3	4 ¹ / ₂	3	8 ¹ / ₂
October	3	6	3	10
November (New Wheat)	3	2	3	6
December	3	3	3	5

Other crops. The following table shows the area and production under other crops, 1899-00 to 1904-5:—

OTHER CROPS: RETURN FOR SIX YEARS.

Crop.	1899-00.		1900-1.		1901-2.	
	Area.	Production.	Area.	Production.	Area.	Production.
Maize	Acres. 11,037	Bushels. 624,844	Acres. 9,389	Bushels. 604,180	Acres. 10,020	Bushels. 615,472
Rye	1,050	13,896	823	11,989	828	14,418
Peas and Beans ..	12,243	164,414	7,812	146,357	8,297	169,971
Mangel-wurzel ..	788	Tons. 9,597	636	Tons. 7,670	865	Tons. 9,679
Beet, Carrots, Pars-nips, and Turnips	584	4,710	507	4,514	561	4,140
Onions	4,436	19,905	2,815	12,766	4,151	20,859
Green Forage ..	18,574	..	18,975	..	32,795	..
Grass and Clover Seeds.	2,283	Bushels. 28,022	2,235	Bushels. 35,084	1,877	Bushels. 60,144
Hops	713	Cwt. 2,884	401	Cwt. 2,741	307	Cwt. 2,249
Tobacco	155	1,365	109	311	103	345
Vines—Grapes ..	27,550	298,920	30,634	631,912	28,592	497,269
Flax	185	{85 fibre 604 seed	259	{145 fibre 717 seed	200	{268 fibre 842 seed
Gardens and Or-chards	54,573	..	57,496	..	58,807	..
Other Crops ..	2,937	..	2,596	..	2,991	..
Land in Fallow ..	509,244	..	602,870	..	681,778	..
Artificial Grasses	151,949	..	207,896	..	162,954	..

Crop.	1902-3.		1903-4.		1904-5.	
	Area.	Production.	Area.	Production.	Area.	Production.
Maize	Acres. 10,906	Bushels. 750,524	Acres. 11,810	Bushels. 904,239	Acres. 11,394	Bushels. 623,736
Rye	1,487	21,179	2,021	29,586	2,267	30,578
Peas and Beans ..	8,085	141,888	8,960	213,735	11,523	201,145
Mangel-wurzel ..	1,392	Tons. 17,174	1,564	Tons. 21,305	1,441	Tons. 13,894
Beet, Carrots, Pars-nips, and Turnips	747	5,600	1,014	9,879	823	6,149
Onions	5,565	27,467	4,176	25,218	2,862	12,969
Green Forage ..	31,145	..	33,165	..	29,902	..
Grass and Clover Seeds	1,568	Bushels. 15,836	2,749	Bushels. 35,660	2,249	Bushels. 27,300
Hops	213	Cwt. 1,572	214	Cwt. 2,447	251	Cwt. 1,449
Tobacco	171	781	129	848	106	..
Vines—Grapes ..	28,374	444,966	28,513	654,965	28,016	452,433
Flax	233	{320 fibre 990 seed	259	{61 fibre 1,226 seed	564	{320 fibre 781 seed
Gardens and Or-chards	58,415	..	59,812	..	60,655	..
Other Crops ..	2,201	..	2,403	..	2,716	..
Land in Fallow ..	492,305	..	632,521	..	853,829	..
Artificial Grasses	565,635	..	962,665	..	953,543	..

In the year 1899-1900 there were 11,037 acres sown with maize, Maize. from which a return of 624,844 bushels was obtained. The quantity of land under this crop was fairly constant from that year until 1903-4, when 11,810 acres were sown, and the production was 904,239 bushels. In 1904-5, 11,394 acres were sown, and the produce was 623,736 bushels, Tangil producing 185,160 bushels, Tambo 169,544 bushels, Dargo 102,140 bushels, Croajingalong 98,540 bushels, Buln Buln 18,560 bushels, Bogong 22,516 bushels, Delatite 13,864 bushels. Other countries in the North Eastern and other districts of the State also grow maize, but not to any great extent.

The area under rye has increased by 971 acres during the five Rye. years ended 1903-4, and a further increase of 246 acres is shown for 1904-5. In 1903-4 the area was 2,021 acres and the production 29,586 bushels; in 1904-5 the area was 2,267 acres, and the production 30,578 bushels. Rye is grown all over the State, except in the Mallee counties of Millewa, Weeah, Karkaroc and Tatchera. In Delatite, the quantity grown was 12,188 bushels, in Bogong 2,523 bushels, in Normanby 2,676 bushels. In Bourke, Anglesey, Talbot and Dundas, the produce was between 1,000 and 2,000 bushels. In the other counties of the State it was under 1,000 bushels.

In the area planted with peas and beans there was a falling off Peas and beans. from 12,293 acres in 1899-1900 to 8,960 acres in 1903-4. In 1904-5, however, the area was 11,523 acres. On the other hand, the production in the six years has substantially increased, the yields being 164,414 bushels in the former, and 201,145 bushels last year. The falling off from 1903-4, when the produce was 213,735 bushels, is without doubt largely due to the unpropitious season. Peas and beans are grown in all the counties except those in the Mallee, and Gunbower and Bendigo, the principal crops coming from Bourke 37,575 bushels; Grant, 33,640 bushels; Talbot 21,742 bushels; and Buln Buln, 21,607 bushels.

A very considerable increase was made in the area under mangel Mangel wurzel. wurzel, from 1899-1900 to 1903-4, being in the former year 788 acres, and in the latter, 1,564 acres. During the same period the production has increased from 9,597 tons to 21,305 tons. In 1904-5 both the area and production of this crop were less than in the previous year, the figures being 1,441 acres and 13,894 tons of produce. Mangels are grown principally in the Gippsland counties of Tangil and Buln Buln, and in Bourke, Grant and Villiers. In none of the other counties is the production very large. As the necessity of providing food for the stock during dry seasons becomes more apparent to the farmer, it is hoped that the cultivation of mangel wurzel, as an adjunct to the silo, will be largely extended.

The cultivation of these crops, exclusive of those grown in market Beet, carrots, parsnips, and turnips. gardens, had nearly doubled in the five years ended 1903-4. In 1904-5, however, there was a reduction in the area under these crops. In 1899-1900 the land sown was 584 acres, in 1903-4, 1,014 acres, and in 1904-5, 823 acres. The produce was 4,710 tons, 9,879 tons, and 6,149 tons in the respective years named.

Onions.

Onions are grown in nearly every county south of the Dividing Range. The counties yielding the largest crops are Mornington, Polwarth, Grant, Bourke, Grenville and Villiers. In Mornington the yield was 2,593 tons from 500 acres; in Polwarth it was 3,204 tons from 657 acres; in Grant, 1,826 tons from 523 acres; in Bourke, 824 tons from 397 acres; in Grenville, 1,173 tons from 314 acres; and in Villiers, 1,154 tons from 155 acres. Buln Buln also added substantially to the total yield. The total area under onions in 1904-5 was 2,862 acres, and the yield was 12,969 tons. The following is a return for the last ten years:—

ONION PRODUCE: RETURN FOR TEN YEARS.

Year.	Area.	Produce.	Year.	Area.	Produce.
	Acres.	Tons.		Acres.	Tons.
1895-6 ..	3,780	10,759	1900-1 ..	2,815	12,766
1896-7 ..	3,735	11,256	1901-2 ..	4,151	20,859
1897-8 ..	3,751	11,217	1902-3 ..	5,565	27,467
1898-9 ..	4,472	17,308	1903-4 ..	4,176	25,218
1899-0 ..	4,436	19,905	1904-5 ..	2,862	12,969

Green forage.

This crop shows an increase during the last five years of 10,927 acres in the area sown. In 1900-1 the quantity was 18,975 acres; in 1901-2, 32,795 acres; in 1902-3, 31,145 acres; in 1903-4, 33,165 acres; and in the year now under review, 29,902 acres.

Grass and clover seeds.

The acreage under grass and clover seeds was 2,235 acres in 1900-1; 1,877 in 1901-2; 1,568 in 1902-3; 2,749 in 1903-4; and 2,249 acres in 1904-5; the production being 35,084, 60,144, 15,836, 35,660 and 27,300 bushels in the respective years.

Hops.

The hop-growing industry attained its maximum development in 1883-4, when 1,758 acres were planted, and yielded 15,714 cwt. Delatite and Dargo were the chief counties in which hops were grown, and in Tangil, Polwarth, Evelyn, and Buln Buln smaller yields were recorded. There has, however, been a heavy falling off in the last twenty years. In 1904-5 there were only 48 growers, whose return from 251 acres was 1,449 cwt.

Flax.

In 1895-6 there were 1,969 acres under crop, but in 1898-9 the area had fallen to 72 acres. Since that year the area sown has gradually increased, the returns for 1903-4 showing 19 growers of flax, who cultivated 259 acres, and produced 1,226 cwt. of seed, 61 cwt. of made fibre, and 4,760 cwt. of straw, awaiting treatment; in 1904-5 there was a considerable increase, the number of growers being 30, the area cultivated, 564 acres, the produce 781 cwt. of seed, 320 cwt. of fibre made, and straw awaiting treatment, 3,060 cwt.

Tobacco.

Besides the experimental plot on the Agricultural College area at Edi, there are many plantations in the counties of Delatite along the banks of the King River and in Bogong. The number of growers in

the State, the area of land cultivated, and the produce for the last ten years, were :—

TOBACCO : RETURN FOR TEN YEARS.

Year.	Number of Growers.	Area.	Produce.
			Cwt.
1895-6	303	2,029	15,223 (dry)
1896-7	233	1,264	7,800
1897-8	77	522	3,419
1898-9	31	78	190
1899-0	28	155	1,365
1900-1	16	109	311
1901-2	17	103	345
1902-3	24	171	781
1903-4	25	129	848
1904-5	20	106	..

The maximum quantity of tobacco grown was in 1880-1, when 17,333 cwt. of dry leaf was produced. In the years 1895-6, 1896-7, and 1897-8, the produce was respectively 15,223 cwt., 7,890 cwt., and 3,419 cwt., but since the last year quoted the industry has shrunk very considerably.

The area under vines shows a steady increase from 4,284 acres in 1879-80, to 30,307 acres in 1894-5. In 1900-01 the area was 30,634 acres, but in 1904-5 the area was only 28,016 acres. The vineyards are distributed fairly all over the State. There are, however, districts where the principal industries are connected with vine-growing; the Shire of Rutherglen produced 148,209 cwt. of grapes; Yackandandah, 30,454 cwt.; and North Ovens, 11,506 cwt. In the Goulburn Valley wine-making is a flourishing industry. In the Wimmera district, in the County of Borung, there are many vineyards, particularly in the Stawell Shire, where 15,970 cwt. of grapes were produced. At Mildura, 103,426 cwt. of grapes were grown, the crop being dried principally for raisins and currants. The results of ten years' operations are as follow :—

Vines and wine making.

VINE PRODUCE : RETURN FOR TEN YEARS.

Year.	Number of Growers.	Area.	Produce.			
			Grapes Gathered.	Wine made.	Raisins Made.	Currants Made.
			Cwt.	Galls.	Cwt.	Cwt.
1895-6	2,975	30,275	479,071	2,226,999	11,183	686
1896-7	2,603	27,934	601,053	2,822,263	11,276	762
1897-8	2,364	27,701	457,437	1,919,389	13,234	462
1898-9	2,453	27,568	468,887	1,882,209	17,979	1,033
1899-0	2,382	27,550	298,920	933,282	17,847	3,315
1900-1	2,486	30,634	631,912	2,578,187	29,370	3,715
1901-2	2,469	28,592	497,269	1,981,475	27,533	2,546
1902-3	2,347	28,374	444,966	1,547,188	35,534	3,722
1903-4	2,260	28,513	654,965	2,551,150	53,447	7,490
1904-5	2,253	28,016	452,433	1,832,386	50,295	5,974

Of the total quantity of grapes gathered—452,433 cwt.—261,770 cwt. were used for making wine, 126,945 cwt. for raisins and currants, and 63,718 cwt. for table consumption and export. That destructive insect affecting the vines, the phylloxera vastatrix, has not during recent years shown itself to any marked extent. Attempts are now being made to effectually combat the pest by the distribution of disease-resistant stocks by the Department of Agriculture.

Orchards
growing
fruit for
sale.

During the year 1903-4 the total number of persons in the State growing fruit for sale was 5,254. In 1904-5 the number was 5,341—an increase of 87. The area under orchards in the former year was 46,624 acres, and in the latter 47,205 acres; an increase of 581 acres. The orchards are fairly spread over the whole State. The largest areas are in the Counties of Evelyn, with 10,658 acres; Bourke, 9,884 acres; Mornington, 6,358 acres; Rodney, 2,717 acres; Talbot, 2,316 acres; Bendigo, 2,108 acres; Karkaroc (including Mildura), 1,687 acres; Grant, 1,573 acres; Borung, 1,566 acres; Buln Buln, 1,131 acres, and Moira, 1,033 acres.

In the following table will be found a statement of the number of fruit trees and plants—showing trees bearing and non-bearing—of the various kinds of fruit grown:—

RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS WHERE FRUIT IS GROWN FOR SALE, 1904-5.

Fruit.	Number of Trees, Plants, &c., 1904-5.		
	Not Bearing.	Bearing.	Total.
Apples	831,921	1,026,477	1,858,398
Pears	203,836	188,843	392,679
Quinces	17,900	54,299	72,199
Plums	201,811	237,016	438,827
Cherries	140,657	212,160	352,817
Peaches	115,426	261,295	376,721
Apricots	62,027	226,149	288,176
Nectarines	1,988	5,052	7,040
Oranges	12,773	37,466	50,239
Lemons	22,223	53,870	76,093
Loquats	3,991	3,812	7,803
Medlars	68	191	259
Figs	9,235	35,125	44,360
Passion	4,243	4,525	8,768
Guavas	1,088	397	1,485
Pomegranates	117	144	261
Persimmons	402	771	1,173
Total Large Fruits ..	1,629,706	2,347,592	3,977,298
Raspberries .. .. .	..	..	4,576,767
Strawberries .. .. .	..	..	3,896,109
Gooseberries .. .. .	..	..	455,514
Mulberries .. .. .	..	..	1,986
Olives .. .. .	..	..	4,402
Currants (Red, White, and Black) ..	..	..	107,776
Total Small Fruits ..	..	..	..

NUMBER OF FRUIT TREES, PLANTS, &C.—*continued.*

Fruit.	Number of Trees, Plants, &c., 1904-5.		
	Not Bearing.	Bearing.	Total.
Almonds	12,266	21,114	33,380
Walnuts	5,085	3,570	8,655
Filberts	1,078	1,347	2,425
Chestnuts	552	521	1,073
Total Nuts	18,981	26,552	45,533

The area under orchards growing fruit for sale increased steadily from 5,800 acres in 1872-3, 10,048 in 1882-3, 31,370 in 1892-3, 44,502 in 1902-3, to 47,205 acres in 1904-5, which was the largest area returned up to date. Details of the produce from orchards growing fruit for sale are as follow:—

ORCHARD PRODUCE: RETURN FOR FIVE YEARS.

Year.	Number of Fruit-growers.	Area under Gardens and Orchards.	LARGE FRUITS GATHERED.			
			Apples.	Pears.	Quinces.	Plums.
		Acres.	Cases.	Cases.	Cases.	Cases.
1900-1	5,400	44,688	893,418	251,384	71,357	172,467
1901-2	5,693	45,885	652,525	118,742	64,145	201,291
1902-3	5,301	44,502	903,853	248,030	91,665	154,112
1903-4	5,254	46,642	805,034	158,186	81,516	289,972
1904-5	5,341	47,205	1,019,816	188,849	90,735	121,725

Year.	LARGE FRUITS GATHERED— <i>continued.</i>						
	Cherries.	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Others.
	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
1900-1	105,032	160,968	228,686	37,184	57,866	21,846	9,901
1901-2	111,891	284,312	234,101	60,150	64,954	18,135	9,363
1902-3	102,512	173,414	168,348	23,210	48,083	19,214	8,187
1903-4	124,423	260,589	336,899	27,670	61,429	26,405	8,863
1904-5	82,504	230,130	186,360	34,088	81,716	23,500	7,335

Year.	SMALL FRUITS GATHERED.					NUTS GATHERED.			
	Rasp-berries.	Straw-berries.	Goose-berries.	Currants (Red, Black, & White).	Others.	Almonds.	Walnuts.	Filberts.	Chest-nuts.
	cwt.	cwt.	cwt.	cwt.	cwt.	lbs.	lbs.	lbs.	lbs.
1900-1	20,396	4,246	12,431	1,794	882	66,837	25,294	6,818	6,469
1901-2	13,610	4,435	10,436	1,383	968	72,528	18,435	3,469	6,990
1902-3	20,185	3,101	11,573	1,456	1,011	41,551	19,378	3,437	8,262
1903-4	22,377	3,122	14,199	2,312	1,327	113,791	13,276	2,223	6,677
1904-5	12,480	5,456	13,558	1,805	1,320	80,758	28,306	1,756	4,396

The following return shows the average produce per tree for all trees for the years 1898-9 and 1901-2, and for all trees, and for bearing trees only, for the year 1904-5:—

PRODUCE OF FRUIT TREES.

Fruit Trees.	AVERAGE PER TREE.			
	1898-9.	1901-2.	1904-5.	
			All Trees.	Bearing Trees.
	Cases.	Cases.	Cases.	Cases.
Apples	·40	·77	·55	·99
Pears	·59	1·00	·48	1·00
Quinces	1·48	1·43	1·26	1·67
Plums	·46	·54	·28	·51
Cherries	·37	·40	·23	·39
Peaches	·56	·52	·61	·88
Apricots	·69	·83	·65	·82
Nectarines	·32	·92	·57	·79
Oranges	·51	·88	·68	·91
Lemons	·65	·87	1·07	1·52
Loquats	·97	·49	·07	·14
Medlars	·40	1·53	·27	·37
Figs	·60	·69	·53	·67
Passion Fruit	·20	·43	·20	·39
Guavas	·14	·09	·15	·57
Pomegranates	·13	1·13	1·38	2·50
Persimmons	2·70	·63	·32	·49
Total Large Fruits only	·64	·72	·52	·88
	lbs.	lbs.	lbs.	lbs.
Almonds	2·22	2·78	2·42	3·82
Walnuts	2·99	1·52	3·27	7·93
Filberts	1·34	1·73	·72	1·30
Chestnuts	6·89	6·40	4·16	8·44

This table shows, between 1898-9 and 1901-2, a fair increase in the average production of large fruits, but a serious falling off in 1904-5, *i.e.*, when taking all trees into consideration; and this is probably due to the large planting of young trees during recent years, as well as to a bad season in 1904-5. In this year returns for bearing trees alone have been obtained for the first time.

In addition, large quantities of melons, rhubarb, and tomatoes were produced in these orchards, the following being the quantities returned for 1904-5:—Melons, 15,138 cwt.; rhubarb, 42,813 dozen bundles; and tomatoes, 30,700 cwt. There were also 5,546 acres laid down in private fruit gardens, the value of the produce being estimated at about £10,000.

Heretofore the value of the fruit produce of the State has been estimated at the rate of £25 per acre; but serious doubt has been entertained as to the accuracy of this estimate, and during the year extensive inquiries have been instituted, the most prominent growers, the various fruit associations, and others interested in the trade having been consulted, with the result that it has now been decided to only estimate the value of such fruit as reaches the market. Upon this basis, and according to the prices received by the growers, the estimated value of the fruit sold was £341,585. This, of course, will not represent the actual value of all the fruit grown, large quantities being privately consumed in various ways, but no very reliable estimate of the value of such fruit can be prepared. It may, however, be set down at about £35,000 from orchards growing fruit for sale, and from private gardens.

The area under market gardens for the year 1904-5 was 7,904 ^{Market} acres. In view of the fact that these gardens are generally situated near large centres of population, and the producers are consequently able to dispose of the bulk of their goods with a minimum of loss from waste, &c., an average return of £25 per acre is regarded as a fair estimate. On this basis, the total value of the produce may be stated as close upon £200,000. This does not include crops of one acre and over of potatoes, onions, mangel wurzel, beet, carrots, parsnips, and turnips, grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

The quantity of dried (weight after drying) was for the first time ^{Dried fruit.} collected in 1895-6, when 179,460 lbs. were returned, and it increased to 305,857 lbs. in 1897-8. The details for the last five seasons are:—

DRIED FRUIT: RETURN FOR FIVE YEARS.

Season.	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1900-1	28,944	35,931	97,254	411,526	62,639	636,294
1901-2	42,218	33,789	90,328	328,599	66,472	561,406
1902-3	27,113	28,996	70,759	110,666	69,069	306,603
1903-4	25,137	58,293	114,096	184,900	17,599	400,085
1904-5	28,021	33,030	134,019	179,520	41,137	415,777

Of the total quantity dried, 86 per cent. in 1900-1, 77 in 1901-2, 87 in 1902-3, 69 in 1903-4, and 83 per cent. in 1904-5, was dried at Mildura.

The following is a return of the minor crops harvested during ^{Minor crops.} the year ended 31st March, 1905. The items do not in all cases

represent the whole of the respective crops grown, but only such as were taken cognizance of by the collectors:—

MINOR CROPS, 1904-5.

Crop.	Area Sown.	Produce.
	Acres.	
Artichokes	8	910 cwt.
Chicory	287	198 tons (dry)
Flowers	144	..
Millet—Broom	287	{599 cwt. fibre 596 cwt. seed
Mustard	1	5 cwt.
Nursery	88	..
Opium poppies	4	60 lbs.
Pumpkins	1,836	16,595 tons
Rape for seed	41	*
Seeds—Agricultural and garden..	15	..
Sunflowers	5	50 bushels
Total	2,716	

* Failure.

Land in fallow.

Land commenced to be fallowed in 1858-9, when 6,000 acres were treated in this way. With annual variations in acreage, but a general increase, the area in fallow reached 853,829 acres in 1904-5. The Victorian farmer, therefore, evidently recognises the enormous advantages obtainable from this mode of treating his land; and from the experiments made by the Chemist for Agriculture on manured land, it would appear that, when fallowed in alternate years, there is a gain in grain crops of from 3 to 5 bushels per acre, and on unmanured land the gain is nearly 3 bushels per acre.

Manure.

The quantity of manure used for fertilization has, in the last six years, considerably increased. In 1898, 7,318 farmers used 143,586 tons of natural and 16,052 tons of artificial manure on 225,830 acres of land; in 1901, 11,439 farmers used 153,611 tons of natural and 23,535 tons of artificial manure, on 556,777 acres; whilst in 1902 the increase was still greater, 18,537 farmers using 206,676 tons of natural and 36,630 tons of artificial manure, on 1,099,686 acres. The year 1903 shows a still more extensive use of manure. In this year 19,921 farmers are returned as having used 207,817 tons of natural and 41,639 tons of artificial manure, on 1,205,443 acres of ground. In 1904, 20,167 farmers used 190,903 tons of natural and 45,940 tons of artificial manure on 1,521,946 acres of ground.

In order to ascertain the enormous value of judicious manuring, extensive information has been collected with respect to the results during the past year. For the purposes of the comparison, cases of areas manured and areas not manured in the same localities have been taken, so that the comparison would be made between areas of the same class of land. The results were spread over portions of eleven of the principal wheat-growing counties of the State, and

show that on 214,798 acres manured, the produce was 3,021,553 bushels, or an average of 14'07 bushels per acre; whilst of the unmanured portions the area sown was 165,939 acres, and the produce 1,856,332 bushels, or an average of 11'19 bushels per acre. Full particulars are given in the following table:—

RESULTS OF WHEAT MANURING, 1904-5.

Counties in Wheat Growing Districts.	Manured.			Not Manured.		
	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.
	acres.	bushels.	bushels.	acres.	bushels.	bushels.
Lowan ..	14,585	166,269	11'40	16,336	147,160	9'01
Borong ..	34,600	410,760	11'87	29,900	253,680	8'48
Kara Kara ..	19,146	241,958	12'64	10,618	101,737	9'58
Weeah ..	2,080	16,657	8'01	2,380	16,607	6'98
Karkaroc ..	27,772	138,222	4'98	28,494	87,448	3'07
Tatchera ..	12,414	96,995	7'81	32,107	75,586	2'35
Gunbower ..	3,560	36,242	10'18	3,124	23,978	7'68
Gladstone ..	21,554	272,651	12'65	4,977	46,271	9'30
Bendigo ..	30,121	418,290	13'89	12,905	137,797	10'68
Rodney ..	30,582	421,558	13'78	19,351	208,223	10'76
Moirá ..	48,714	591,234	12'14	64,914	594,846	9'16
Total ..	245,128	2,810,836	11'47	225,106	1,693,333	7'52

The quantity of manure imported during the year was 712,647 cwt., valued at £117,578. The quantity exported was 230,295 cwt., valued at £55,450.

The average yield of milk per cow steadily increased from 236 Dairy farms. gallons in 1895 to 335 gallons in 1900, but it fell to 322'3 gallons in 1901, and to 273'9 gallons in 1902—a result in all probability due to droughts. In 1903-4 it was 336'2, and in 1904-5, 329'3.

The following are the particulars respecting dairy farms in each of the last six years. In 1903-4 and 1904-5 the pastoral holdings are included:—

DAIRY FARMS: RETURN FOR SIX YEARS.

Year.	Number of Cow-keepers.	Number of Dairy Cows (wet and dry).	Milk Yield.		Number of Cream Separators in use.
			Average per Cow (wet and dry).	Total Quantity (000's omitted).	
			gallons.	gallons.	
1899 ..	31,132	465,469	316'6	147,367,	3,446
1900 ..	30,787	472,940	335'5	158,677,	4,131
1901 ..	33,070	483,650	322'3	155,880,	5,626
1902 ..	36,000	510,546	273'9	139,838,	7,308
1903 ..	41,824	515,179	336'2	173,224,	8,986
1904 ..	42,931	632,493	329'3	175,348,	13,408

Included in the 632,493 dairy cows, it is estimated that there were 478,918 milking, 53,575 dry, and 100,000 heifers, at the time of the collectors' visits.

Live stock. The numbers of horses, cattle, sheep, and pigs in the various Australian States and New Zealand, according to the latest returns, are:—

LIVE STOCK RETURN FOR AUSTRALASIA, 1904.

(Final figures for Victoria, New South Wales, Queensland, Tasmania, and New Zealand.)

State.	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
Victoria	372,397	632,493	1,062,483	10,167,691	286,070
New South Wales	482,663	556,531	1,610,598	34,526,894	330,666
Queensland	413,165	2,722,340		10,843,470	185,141
South Australia	183,481	88,156	184,303	5,820,301	111,497
" N. Territory	15,763	902	291,068	51,538	1,085
Western Australia	90,102	27,721	533,193	2,856,200	69,960
Tasmania	36,565	50,230	151,976	1,556,460	77,943
New Zealand	314,322	498,241	1,238,609	18,280,806	255,320

Live stock-- The differences, for the most part increases, in the numbers of Census returns, horses, cattle, sheep, and pigs, in each census year since 1861, are shown in the following table; together with the number per head of the population at each period. The progress of the industries dependent on the breeding of stock are thus indicated:—

LIVE STOCK PER HEAD OF POPULATION: RETURN FOR FIVE CENSUS YEARS.

Stock.	1861.		1871.		1881.		1891.		1901.	
	Population 540,322.		Population 731,528.		Population 862,346.		Population 1,140,405.		Population 1,201,341.	
	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.
Horses (including foals) ..	76,535	·14	209,025	·29	275,516	·32	436,469	·38	392,237	·33
Cattle—										
Milch Cows	197,332	·37	212,193	·29	329,198	·38	395,192	·35	521,612	·43
Other ..	525,007	·97	564,534	·77	957,069	1·11	1,387,689	1·22	1,080,772	·90
Sheep ..	5,789,896	10·70	10,477,976	14·32	10,360,285	12·01	12,692,843	11·13	10,841,790	·903
Pigs ..	61,259	·11	180,109	·25	241,936	·28	282,457	·25	350,370	·29

The animals are here averaged to the number of inhabitants of Victoria, a continually changing quantity. In the next table they are averaged to a constant quantity—the number of square miles in the State. The actual percentage increases are thus shown:—

LIVE STOCK PER SQUARE MILE: RETURN FOR FIVE CENSUS YEARS.

Year.	Average per Square Mile (Area of Victoria, 87,884 Square Miles).				
	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
1861	·87	2·25	5·97	65·78	·70
1871	2·38	2·41	6·42	119·22	2·05
1881	3·14	3·75	10·89	117·88	2·75
1891	4·97	4·50	15·79	144·43	3·21
1901	4·46	5·94	12·30	123·36	4·00

The increase in each class was constant up to 1891, with the exception of a slight fall in the number of sheep between 1871 and 1881. Between the census of 1891 and 1901, however, there has been a reduction in the numbers of horses, cattle generally, and sheep, probably due to the many dry seasons in the intercensal period. There was also an exceptional export of horses to South Africa for some time prior to the 1901 census. The number of milch cows increased considerably in the decade, indicating the growth of the dairying industry, and explaining in part the largely augmented output of butter. The number of pigs has steadily and satisfactorily increased throughout all the intercensal periods. As the development of Victoria proceeds on agricultural and dairying lines, reductions may be expected in the number of cattle, other than milch cows, and in the number of sheep depastured in the State.

It has not been the practice in Victoria to collect the numbers of the live stock, except in those years in which the census was taken. Arrangements were, however, made to collect the information for 1904, and the results placed side by side with the census figures of 1901, are as follow:—

Live stock,
1901 and
1904.

LIVE STOCK: 1901 AND 1904.

Live Stock.	Census, 1901.	1904.	Increase.	Decrease.
	No.	No.	No.	No.
Horses (including foals) ..	392,237	372,397	..	19,840
Cattle—				
Dairy, Milking and Dry ..	521,612	632,493	110,881	..
Others	1,080,772	1,062,483	..	18,289
Sheep	10,841,790	10,167,691	..	674,099
Pigs	350,370	286,070	..	64,300

The decrease in the horses is probably attributable to drought. A portion of the increase in dairy cattle is, perhaps, more apparent than real, forasmuch as the collection in the past year has been made under two headings, viz., "Milking dairy cattle" and "Dry dairy cattle," whereas at the census the collection was only made under one heading, "Milch cows," when many of the dry dairy stock were probably included among other cattle. The decrease in other cattle is, therefore, partly accounted for by the present better collection of dairy stock, and to some extent by the drought. The decrease in the number of sheep may be entirely attributed to drought; and the decrease in the number of pigs to losses sustained through an epidemic, which has been more or less prevalent during the past few years. Reference to this epidemic is made by Dr. A. A. Brown in his paper on "Diseases Prevailing in the Live Stock of Victoria," page 464, *supra*.

Prices of
stock.

In the following table will be found a statement of the average and range of prices obtaining in Melbourne during the year 1904. The information has been extracted from the Melbourne "Stock and Station Journal," and may be regarded as approximately correct:—

PRICES IN MELBOURNE OF LIVE STOCK FOR THE YEAR 1904.

Live Stock.	Prices in 1904.					
	Average.			Range.		
	£	s.	d.	£	s.	d.
<i>Horses—</i>						
Extra heavy Draught	41	1	0	37	10	0 to 46 0 0
Medium	27	2	0	20	10	0 to 32 10 0
Light Cart (order cart)	12	17	0	10	0	0 to 19 10 0
Indian Remounts	27	12	0	23	0	0 to 35 0 0
Artillery	32	14	0	27	10	0 to 38 10 0
Saddle and Harness	9	3	0	6	15	0 to 11 10 0
Carriage, per pair	156	3	0	115	10	0 to 173 5 0
Ponies (phaeton), per pair	40	14	8	30	0	0 to 55 0 0
<i>Fat Cattle—</i>						
<i>Bullocks—</i>						
Extra Prime	13	11	6	11	15	0 to 14 15 0
Prime	12	1	6	10	15	0 to 13 0 0
Good	10	4	0	8	15	0 to 11 10 0
Good Light and Handy Weights	8	17	4	6	17	6 to 10 2 6
Second	7	0	9	5	10	0 to 8 5 0
<i>Cows—</i>						
Best	8	13	6	6	15	0 to 10 12 6
Others	6	7	4	5	0	0 to 7 15 0
<i>Calves—</i>						
Prime Steers and Heifers	4	17	2	3	12	6 to 5 17 6
Prime Calves	3	0	4	2	2	6 to 3 15 0
Other Good	2	2	3	1	8	0 to 2 15 0

PRICES IN MELBOURNE OF LIVE STOCK FOR THE YEAR 1904—continued.

Live Stock.	Prices in 1904.					
	Average.			Range.		
	£	s.	d.	£	s.	d.
<i>Dairy Cattle</i> —						
Best Milkers	10	4	10	7 17 6 to	12 15 0	
Good	8	0	10	6 5 0 to	10 5 0	
Medium	6	6	3	4 10 0 to	8 5 0	
Inferior	4	18	6	4 0 0 to	6 0 0	
Springers, best.. .. .	8	12	5	7 7 6 to	10 0 0	
Heifers, best Springers	6	17	2	3 2 6 to	8 2 6	
Dry Cows	4	9	7	3 12 6 to	5 14 0	
Stores	3	11	4	3 0 0 to	4 2 6	
<i>Fat Sheep</i> —						
Extra Prime Cross Wethers	1	3	8	0 17 4 to	1 7 4	
Prime	1	0	8	0 14 6 to	1 3 4	
Good	0	18	3	0 14 0 to	0 19 6	
Extra Prime Cross Ewes	1	1	0	0 15 9 to	1 7 4	
Prime	0	18	3	0 13 9 to	1 1 6	
Good	0	15	11	0 12 9 to	0 18 0	
Prime Merino Wethers	0	19	7	0 14 9 to	1 3 0	
Good	0	16	10	0 13 0 to	0 19 6	
Merino Ewes	0	14	6	0 10 6 to	0 18 6	
<i>Fat Lambs</i> —						
Extra Prime	0	17	5	0 15 0 to	1 3 0	
Prime	0	14	11	0 12 6 to	0 17 3	
Good	0	12	8	0 11 0 to	0 14 9	
Second	0	10	6	0 8 9 to	0 12 6	
<i>Pigs</i> —						
<i>Back Fatters</i> —						
Extra Heavy Prime	4	5	1	2 17 0 to	5 5 0	
Extra Prime and Weighty	3	0	1	2 10 0 to	3 12 6	
<i>Baconers</i> —						
Extra Prime	2	16	1	2 7 0 to	3 4 0	
Prime	2	10	9	2 0 0 to	3 1 6	
Porkers	1	15	0	1 5 0 to	2 4 9	
Stores	1	7	4	0 18 0 to	1 19 0	
Slips	0	17	8	0 12 0 to	1 7 0	
Suckers	0	12	8	0 8 0 to	0 19 6	

The following return shows the proportion of live stock per square mile in the various States of the Commonwealth and New Zealand in 1901:—

Live stock per square mile, Australasia.

State.	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
Victoria	4.46	5.94	12.30	123.36	4.00
New South Wales	1.57	1.34	5.25	134.72	.86
Queensland .. .. .	.69		5.64	15.00	.18
South Australia—Proper .. .. .	.43	.20	.39	13.19	.23
„ Northern Territory .. .. .	.02	.002	.48	.09	.002
Western Australia .. .. .	.08		.40	2.61	.06
Tasmania	1.24	1.56	4.87	68.38	2.24
New Zealand	2.68	3.65	.938	193.67	2.14

Stock
slaughtered.

The return of the stock slaughtered for 1904 was partly furnished by the municipal authorities, and partly collected by the police. The number includes those slaughtered on farms and stations, as well as those in municipal abattoirs. Previous to 1903, the returns were furnished solely by the municipal authorities, an estimate being made of the stock slaughtered privately:—

STOCK SLAUGHTERED: RETURN FOR FIVE YEARS.

Year.	Numbers Slaughtered.		
	Sheep and Lambs.	Cattle and Calves.	Pigs.
1900	2,371,415	248,797	231,752
1901	2,469,797	251,477	261,479
1902	2,827,938	233,206	224,431
1903	2,652,569	235,284	164,745
1904	2,305,729	243,937	191,311

The purposes for which the carcasses of the slaughtered animals were used were:—

Year.	For Butcher and Private Use.			For Freezing.			For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1900	1,921,284	244,571	119,137	437,332	3,808	..	9,181	115	112,604	3,618	303	11
1901	2,106,863	249,079	134,276	431,740	980	..	10,087	937	127,145	11,107	481	58
1902	2,337,262	229,728	106,390	378,029	2,293	..	13,211	485	117,984	99,436	709	57
1903	2,337,958	231,682	52,681	294,906	1,630	4,200	11,409	1,473	107,754	8,305	499	110
1904	1,843,894	242,276	67,302	459,963	720	3,200	1,095	699	120,758	777	242	51

Wool pro-
duction—
Victoria.

The total production of wool, being the quantity made up in manufacturing in the State, and that returned by the Customs Department as having been exported, is given for the years 1899-1904. The quantity and value of wool imported and exported, and the quantity and value of that used for home consumption, are also shown:—

WOOL: RETURN FOR SIX YEARS.

Year	Wool Imported.		Wool Exported.		Wool Used in Manufac- tures in the State.			Wool Production— Greasy and Scoured.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Rate per lb.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	s. d	£	lbs.	£
1899	63,067,135	2,351,059	121,877,604	5,701,410	2,867,884	1 0	143,394	61,678,353	3,493,745
1900	62,527,987	1,927,677	102,205,965	4,217,018	3,045,292	0 6	76,132	42,723,270	2,365,163
1901	61,796,450	1,840,066	131,623,062	4,350,285	3,408,526	0 6	85,213	73,235,138	2,595,432
1902	38,008,765	1,141,715	100,516,094	3,473,372	3,473,835	0 8	115,794	65,981,164	2,447,451
1903	38,726,396	1,381,647	84,560,603	3,186,054	3,772,390	0 9	141,164	51,606,597	1,945,871
1904	51,449,037	2,076,958	123,208,133	5,452,973	4,027,080	0 10	167,795	75,786,176	3,543,810

The quantity and value of wool produced in 1903 in the various Australian States and New Zealand, estimated on the same principle, were: —

	Quantity. (Greasy, Washed, and Scoured.) lbs.	Value. £
Victoria	51,606,597	1,945,872
New South Wales	187,967,787	8,547,749
Queensland	34,978,584	1,877,027
South Australia	35,766,993	1,239,744
Western Australia	12,907,065	443,743
Tasmania	5,797,655	208,847
New Zealand	159,568,919	4,210,138

The 1903 figures have been inserted, as the information for some of the other States for 1904 is not at present procurable.

The following information as to the average rates of wool per lb. obtaining for the last season has been extracted from Messrs. Goldsbrough, Mort, and Co.'s annual review for 1903-4:—

GREASY MERINO.

Extra Super (Western District)	up to 17½d.
Superior	13½d. to 15d.
Good	10½d. to 12d.
Average	9½d. to 10½d.
Wasty and Inferior	6½d. to 8½d.
Extra Super Lambs	up to 17½d.
Super Lambs	11½d. to 13½d.
Good Lambs	10d. to 11d.
Average Lambs	8½d. to 9½d.
Inferior Lambs	4½d. to 6d.

GREASY CROSSBRED.

Extra Super Comebacks	up to 15½d.
Super Comebacks	12d. to 13d.
Fine Crossbred	10½d. to 11½d.
Medium Crossbred	9d. to 10½d.
Coarse Crossbred and Lincoln	9d. to 10d.
Superior Fine Crossbred and Lambs	11d. to 13d.
Good Crossbred Lambs	9d. to 10½d.
Coarse and Lincoln and Lambs	7½d. to 8½d.

SCOUREDS.

Extra Super Fleece	up to 23½d.
Super Fleece	21d. to 22d.
Good Fleece	19d. to 20d.
Average Fleece	18d. to 19d.

RECORD PRICES FOR THE SEASON.

Greasy Merino Fleece	17½d.
" Comeback Fleece	15½d.
" Merino Lambs	17½d.
" Comeback Lambs	13d.
Scoured Fleece	23½d.

Dealing with the character of the clip, the following remarks are made:—"There can be no doubt that the clip now going into consumption, taken all round, was a better one than has been seen for several seasons past, whether judged from its style, growth, or yield. This was naturally to be expected, as the conditions under which it was grown were exactly the reverse to those existing during the long protracted period of drought. The Western District of Victoria produced

The 1904 clip.

a clip which for general excellence, style, condition, quality, length, and density, has had few equals, certainly no superior, and although wools from this favoured locality invariably show good results as regards yields, it is admitted on all sides that this year's production was much above the average in this respect."

Hands employed on farms, &c.

Of the total number of hands, 142,329, engaged in farming, dairying, and pastoral pursuits during 1904, 90,396 were males and 51,933 were females. 53,933 males and 27,166 females were engaged in farming principally; 21,509 males and 18,623 females in dairying principally; and 14,954 males and 6,144 females in pastoral pursuits principally. The number of hands ordinarily employed on any holding includes the occupier or manager, and those members of his family who actually work on it; but persons absent from their farms for the greater portion of the year, following other occupations, as well as temporary hands engaged harvesting, &c., are not included, neither are domestic servants and cooks.

In the following return will be found particulars showing the rates of wages paid (with rations) upon farms and pastoral holdings during 1904. The information has been furnished by the occupiers of holdings:—

WAGES, AGRICULTURAL AND PASTORAL, 1904.

Occupations.	Range.	Prevailing Rate.
Ploughmen	10s. to 30s. per week ..	20s. per week
Farm labourers	12s. to 30s. " ..	15s. "
Threshing machine hands	6d. to 9d. per hour ..	6d. per hour
Harvest hands	3s. 4d. to 7s. per day ..	5s. and 6s. per day
Milkers	10s. to 25s. per week ..	15s. per week
Maize pickers (without rations)	4d. to 6d. per bag ..	4d. per bag
Hop pickers " "	4d. to 5d. per bushel ..	4d. per bushel
Married couples	15s. to 35s. per week ..	27s. 6d. per week
Female servants	8s. to 16s. " ..	10s. "
Men cooks	12s. to 30s. " ..	20s. "
Stockmen	£40 to £52 per annum ..	£52 per annum
Boundary riders	£25 to £52 " ..	£40 "
Shepherds	£25 to £52 " ..	£35 "
Hut keepers	£26 to £52 " ..	£35 "
Generally useful men	12s. 6d. to 30s. per week ..	17s. 6d. per week
Sheep washers	15s. to 25s. " ..	17s. 6d. "
Shearers, hand*	14s. to 20s. per 100 sheep ..	15s. per 100 sheep
" machine*	14s. to 20s. " ..	15s. "
Bush carpenters	20s. to 48s. per week ..	30s. per week
Gardeners, market	15s. to 30s. " ..	22s. 6d. "
" orchard	15s. to 30s.* " ..	20s. "
Vineyard hands	10s. to 20s. " ..	15s. "

* It is believed that in cases of some of the highest rates rations are not found.

Ensilage.

The importance of the preservation of forage in a green state is so great that public attention to the question is highly desirable. Not only will stock eat anything of a vegetable nature that will make useful ensilage, but ensilage-fed animals at all times present an appearance of health and vigour. It cannot be affirmed that the uncertainty

of the result of the system need militate against the trial. The silo is no longer in an experimental stage. Ancient nations are known to have practised the preservation of forage and fruits in a green state in large subterranean vaults; and during the last twenty years experiments on a large scale have been carried on, particularly in America, where the almost universal testimony of farmers is to its economy in feeding cattle, and the consequent increased stock-carrying capacity of the land. As a result of these experiments, many farmers have introduced silos upon their holdings, but it is a matter of surprise that so little has been done in Australia. Dr. Cherry, in a paper on "The Modern Silo," published as Bulletin No. 8 of the Department of Agriculture of Victoria, points out particularly that "animals which chew the cud differ from all other classes in requiring their food comparatively juicy and bulky. Their digestive apparatus is formed to suit this kind of food. Hence the cow or bullock cannot thrive on exclusively dry food so well as a horse." In Victoria, where every season the rapid drying up of the grass under the excessive heat of the summer sun causes large areas of pasture land to be parched and grassless, and green food usually disappears from December till autumn — an artificial method of preserving fodder should be of the utmost possible benefit, and the advantage of the luxuriance of trefoil, grasses, and self-sown crops in the spring would not then be lost. The juicy state in which the silo preserves ensilage fulfils another of the requirements of ruminant animals, that their food should be presented in a succulent condition. A supply of such nutriment in the winter, judiciously mixed with drier protein-bearing food, or with grain, bran, oil cake, &c., means to the farmer and stock-raiser an economizing of green stuffs when their luxuriance would otherwise tend to wastefulness, a steady and assured food supply for the summer, and a consequent augmentation, not only of the quantity, but also of the quality, of the milk yielded. Even in districts where fresh green fodder is available throughout the greater part of the year, the advantage of being able to secure the crop when it is in its best condition seems so evident, that the silo should soon become an indispensable adjunct on every farm.

Notwithstanding the importance of this means of preserving food for stock for use in dry seasons, the following figures for Victoria will show how little has been done in this direction up to the present:—

In 1898-9, ensilage was returned as having been made on 224 farms, using 8,764 tons of material; in 1899-1900, on 139 farms, using 9,116 tons; in 1900-1, on 131 farms using 5,834 tons; in 1901-2, on 125 farms, using 5,065 tons; and in 1902-3, on 111 farms, using 4,703 tons. An improvement is shown for 1903-4, when ensilage was made on 290 farms, and the material used was 10,931 tons; and a further improvement for the past year, the return showing that 12,779 tons were made on 300 farms.

The returns for 1904-5 show that there were 6,494 bee-keepers, owning 24,003 frame and 25,117 box hives, and producing 1,510,014 and 396,174 lbs. of honey respectively, and 28,653 lbs. of beeswax.

Bee-keeping.

The number of bee hives has increased from 21,412 in 1900-1, to 49,120 in 1904-5.

In 1891-2, the quantity of honey returned was 1,128,283 lbs. After a decline in the next two years, the quantity gathered in 1894-5 was 1,323,982 lbs. A further falling off is recorded from that year to 195,163 lbs. in 1897-8. A recovery has since been made, the return for 1904-5 indicating that the industry is now making rapid progress.

BEE-KEEPERS : RETURN FOR FIVE YEARS.

Season.			Number.	Bee Hives.	Honey.	Beeswax.
					lbs.	lbs.
1900-1	..	..	2,293	21,412	957,020	15,269
1901-2	..	..	3,776	22,083	572,477	13,530
1902-3	..	..	4,402	32,126	1,199,331	23,061
1903-4	..	..	5,609	40,759	833,968	18,979
1904-5	..	..	6,494	49,120	1,906,188	28,653

Annual
value of
poultry
production.

Poultry production hitherto has not been considered of sufficient importance to warrant its inclusion amongst the prominent industries of the State, but the annual value of that production has in reality attained dimensions that must be taken into consideration.

An attempt has been made in this office, guided by the opinions of experts and others practically engaged in the business, to obtain an approximation of the value of such annual production.

The numbers of the various kinds of poultry in the State at the date of the last census—31st March, 1901—as ascertained from the schedules, were as follow:—

Fowls	...	...	3,619,938
Ducks	...	...	257,204
Geese	...	...	76,853
Turkeys	...	...	209,823

Adequate allowances having been made for male birds and non-layers, and accepting evidence with regard to the average number of eggs laid by the birds—such estimates being 80 per annum per laying fowl and duck, ten hatched and reared birds to each goose, and eight to each turkey hen kept for breeding purposes—the gross annual value of poultry production has been estimated to be as follows:—

Fowls—Eggs	...	...	£665,000	
Birds for consumption	...	...	456,150	
				£1,121,150
Ducks—Eggs	...	...	£68,600	
Birds for consumption	...	...	51,400	
				120,000
Geese—For consumption	...	...		61,400
Turkeys—For consumption	...	...		189,000
Total	...	...	...	£1,491,550

The following table shows the number of poultry and poultry-owners as ascertained at the censuses of 1881, 1891, and 1901:—

Poultry and poultry-owners at census, 1881, 1891, and 1901.

POULTRY: RETURN FOR THREE CENSUS YEARS.

Census.	Poultry-owners.	Fowls.	Ducks.	Geese.	Turkeys.
1881	97,152	2,332,529	181,698	92,654	153,078
1891	142,797	3,487,989	503,520	89,145	216,440
1901	132,419	3,619,938	257,204	76,853	209,823

It thus appears that there has been a falling off in the number of poultry-owners since 1891, and although fowls show a slight increase, there has been a diminution in the other kinds of poultry. In view of the present interest taken in the results of laying competitions, and of the profits which proper attention and knowledge secure from both fowls and ducks, large increases may be expected in the numbers of owners and of poultry stock in the immediate future.

Active operations for the destruction of rabbits on Crown lands were first undertaken by the Government in 1880, and from that date to the middle of 1903 sums amounting to £430,181 had been expended with that object. The following are the amounts spent in each year:—

State expenditure on rabbit destruction.

	£		£
1879-80	1,280	1892-3	30,595
1880-1	2,600	1893-4	12,514
1881-2	12,890	1894-5	8,909
1882-3	9,883	1895-6	11,831
1883-4	10,063	1896-7	13,425
1884-5	22,177	1897-8	14,393
1885-6	24,833	1898-9	14,753
1886-7	21,065	1899-00	14,480
1887-8	20,551	1900-1	15,300
1888-9	17,621	1901-2	16,800
1889-90	24,860	1902-3	16,000
1890-1	37,913	1903-4	16,000
1891-2	39,535		

The whole of the State, with the exception of portions of Gippsland, is more or less infested with rabbits and other vermin. In addition to the expenditure of £430,181, referred to above, a loan of £150,000 was allocated to shires in 1890 for the purchase of wire netting to advance to land-holders, repayable in ten years, and in 1896 a loan of £50,000 was advanced on similar terms, except that 3 per cent. interest was added. The expenditure for 1903-4 was £16,000, portion of which represents the salaries and allowances paid to 31

rabbit inspectors, 11 police inspectors who were partially employed, and from 30 to 40 men, who were wholly employed on Crown lands. The fines and costs amounted to £338 18s. 11d. in 1902, to £280 11s. in 1903, and £253 in 1904.

Rabbits and wildfowl sent to market in Melbourne.

The number of couples of rabbits and brace of wildfowl received at the Melbourne Fish Market, the number sold, and the number condemned, during the last five years, were as follow:—

RABBIT AND WILD-FOWL: RETURN FOR FIVE YEARS.

Year.	Number of Couples of Rabbits.			Brace of Teal and Duck.		
	Sold.	Condemned.	Total.	Sold.	Condemned.	Total.
1900 ..	480,519	5,727	486,246	35,610	728	36,338
1901 ..	596,610	2,717	599,327	59,156	90	60,086
1902 ..	471,964	4,472	476,436	32,756	232	32,988
1903 ..	316,462	3,810	320,272	13,130	80	13,210
1904 ..	402,944	3,952	406,896	49,556	178	49,734

In 1903 there were also received at the Melbourne Market 1,499 brace of hares—of which 33 brace were condemned, and the others sold. In addition, the following passed through the Melbourne Council's refrigerating works during the twelve months ended 31st December, 1904, for export only:—1,639,236 pairs of rabbits, 1,648 brace of hares, and 11,317 brace of game.

For some years past, no statistical information as to the value of the Victorian fishing industry has been included in the statistics published by this office. As the industry is regarded as one of growing importance, effort has been made, during the past year, to obtain reliable information as to its extent, and the results are contained in the statements which follow. The first shows the various fishing districts round the coast, the number of men and boats engaged, and the value of the general fishing plant in use. The second shows the approximate weight of fish caught in the various waters, and sent to the Metropolitan, Ballarat, and other markets of the State during the year. It thus appears that in 1904, 1,089 men were engaged in fishing; the number of boats in use was 654; and their estimated value, £23,428. The value of the nets and other plant amounted to £11,182. The approximate weight of the fish sold (excluding condemned fish) was 12,728,764 lbs. There were also 20,560 dozen

The fishing industry.

crayfish sold, and the estimated value of both was £75,023. In addition, there were 1,339,660 lbs. of fish, 35,874 bushels of oysters, and 807 dozens of crayfish, of £32,457 value, imported from other States, sold in the Victorian markets. A statement of such imports is added:—

FISHERIES.

Return for the years 1903 and 1904, showing fishing districts, the number of men and boats employed, and the value of boats, nets, and other plant in use.

District.	1903.				1904.			
	Number of Men.	Boats.		Value of Nets and other Plant.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.			Number.	Value.	
Apollo Bay	5	2	£ 22	£ 40	2	1	£ 20	10
Anderson's Inlet	11	6	114	160	7	6	64	107
Barwon Heads and Ocean Grove	22	12	443	55	21	8	340	78
Brighton	6	5	68	114	7	7	292	77
Corner Inlet, Welshpool, and Toora	63	39	3,570	1,711	63	39	3,570	1,711
Dromana	10	9	146	66	16	15	313	110
Echuca	6	6	14	18	8	8	16	24
Frankston	12	11	129	39	6	6	77	48
Geelong	74	36	976	675	76	41	1,168	802
Gippsland Lakes	272	183	4,198	2,441	274	185	4,243	2,532
Lorne	7	4	87	95	5	4	96	55
Mentone	11	7	44	53	13	9	70	52
Mordialloc	10	10	211	99	12	11	294	142
Mornington	24	14	389	345	24	14	371	370
Portarlington and St. Leonards	64	35	1,140	470	64	35	1,140	490
Portland	60	34	2,105	916	67	36	1,985	843
Port Albert	41	26	601	382	54	29	804	456
Port Fairy	65	33	1,512	373	74	36	2,106	593
Port Melbourne	29	15	379	270	24	13	415	270
Queenscliff	93	48	3,127	521	89	46	3,504	545
Sandringham	19	10	183	96	14	11	163	53
Sorrento, Portsea, and Rye	34	47	1,020	425	27	20	652	144
St. Kilda	10	4	35	115	6	3	44	50
Warrnambool	10	5	172	77	10	8	163	210
Western Port: Cowes, Hastings, Flinders, San Remo, and Tooradin	103	56	1,570	912	94	47	1,200	1,190
Williamstown	23	14	288	152	32	16	318	220
Total	1,084	651	22,543	10,620	1,089	654	23,428	11,182

Return of fish caught in Victorian waters and sold in the Melbourne and Ballarat Fish-markets and elsewhere during the years 1903 and 1904.

Market.	1903.				1904.			
	Quantity of—		Value of—		Quantity of—		Value of—	
	Fish.	Cray-fish.	Fish.	Cray-fish.	Fish.	Cray-fish.	Fish.	Cray-fish.
	lbs.	doz.	£	£	lbs.	doz.	£	£
Melbourne ..	11,413,340	16,919	63,407	5,640	11,618,040	18,734	62,240	7,467
Ballarat ..	1,161,440	663	5,510	298	681,280	807	3,649	282
Elsewhere ..	501,266	1,241	1,335	320	429,444	1,019	1,120	265
Total ..	13,076,046	18,822	70,252	6,258	12,728,764	20,560	67,009	8,014

Return for 1903 and 1904, showing the quantity and value of fresh fish and oysters imported into Victoria.

Market.	1903.						1904.					
	Quantity of—			Value of—			Quantity of—			Value of—		
	Fish.	Crayfish.	Oysters.	Fish.	Crayfish.	Oysters.	Fish.	Crayfish.	Oysters.	Fish.	Crayfish.	Oysters.
	lbs.	doz.	bush.	£	£	£	lbs.	doz.	bush.	£	£	£
Melbourne	1,897,930	..	34,755	23,724	..	14,481	1,155,180	..	35,874	14,439	..	14,944
Ballarat ..	247,094	435	..	3,089	163	..	184,480	540	..	2,792	189	..
Total	2,145,024	435	34,755	26,813	163	14,481	1,339,660	540	35,874	17,231	189	14,944

Farm implements.

For the first time for many years the number of engines, horse-works, and machinery, and other implements on agricultural, dairying, and pastoral holdings was ascertained at the time of the collectors' visits in 1905. The number of each kind is shown in the following table:—

MACHINERY AND IMPLEMENTS ON FARMS AND PASTORAL HOLDINGS IN EACH DISTRICT, 1905.

Districts.	Number of Engines.		Number of—											
	Steam.	Oil.	Number of Horse-works.	Threshing Machines.	Winnowing Machines.	Harvesters.	Reapers and Binders.	Strippers.	Ploughs.	Harrows.	Cultivators.	Grain Drills.	Chaffcutters.	Cream Separators.
Central ..	390	71	1,542	75	275	..	2,335	..	13,014	9,453	4,007	1,225	4,657	3,274
North-Central ..	215	19	1,054	45	355	75	1,973	63	5,225	3,687	934	909	2,018	1,209
Western ..	191	109	1,333	65	232	263	2,036	81	6,958	5,307	1,327	786	2,488	1,159
Wimmera ..	89	48	2,716	62	2,690	965	2,721	4,193	8,215	6,435	2,433	2,807	3,230	876
Mallee ..	85	11	600	17	1,544	207	648	2,672	3,251	1,518	1,459	828	753	436
Northern ..	589	44	2,041	158	3,551	2,493	5,102	4,017	12,493	8,888	3,990	3,485	3,140	2,581
North-Eastern ..	199	18	773	54	393	134	1,143	414	4,393	2,826	677	460	1,407	640
Gippsland ..	320	28	578	66	136	..	609	..	5,957	4,856	1,669	326	1,570	3,233
Total ..	2,078	348	10,637	542	9,176	4,137	16,567	11,440	50,506	43,270	16,495	10,324	19,263	13,408

MINING.

In addition to the sums annually voted in aid of the mining industry of the State, the sum of £272,996 was authorized to be raised by way of loan, of which £271,030 was apportioned. Of this latter sum, £270,387 was expended up to 30th June, 1904, leaving £643 of the apportioned money unexpended.

Loan expenditure in aid of mining industry.

Provision was made by the *Mining Development Act* No. 1461, of 14th December, 1896, and by Acts amending the same, as follows:—

1. To subsidize mining companies to enable them to further develop gold-mining, and for other purposes. Under this Act a company could apply for a loan for the purposes of carrying on pioneer mining, procuring machinery, working plant, or appliances, for carrying on such pioneer mining, and for erecting, fitting up, or connecting the same, and for providing all works necessary for the proper carrying on of such pioneer mining. After fully examining each claim, and being satisfied as to the representations made, the Government may advance, by way of loan, to any one company, a sum or sums not exceeding on the whole the amount of £10,000. The aggregate of such advances is not to exceed £139,000, or £39,000 in any one financial year. The loans shall be payable in instalments to be specified in an agreement, and a company borrowing shall pay interest to the Treasurer at the rate of $3\frac{1}{2}$ per cent. by half-yearly payments. The Treasurer will hold a first mortgage over all the property of the company, and the payments to the Treasurer provided by the agreement shall form a first charge upon all profits and assets, excepting uncalled capital. In case of default on the part of a company, the Treasurer is empowered to enforce all or any of the remedies set forth in the Act, or in the agreement.

2. For the construction of roads and tracks for mining, where, in the opinion of the Departmental officers, advantage and benefit would thereby accrue to a satisfactory number of miners and people of the district engaged in other occupations, a sum of £90,000 (but not more than £15,000 in any one year) may be spent. The roads, when made, are to be kept open for public use, and free from obstruction by the shire councils.

3. The expenditure of £13,000 (but not more than £3,500 in any one year) is authorized for the purchase and erection of machinery, plant, and appliances for testing the value of metalliferous material. Charges for testing, as prescribed by regulations under the Act, may be made.

4. The expenditure of £19,000 (but not more than £4,000 in any one year) is authorized for the construction, subject to existing rights, of races and dams for working alluvial deposits for gold, and to divert water for such uses, where, in the opinion of the Departmental officers, mining operations can be profitably carried on.

5. The expenditure of £35,000 (but not more than £10,000 in any one year) may be advanced to miners for prospecting. Any two or more persons applying to the Minister may have advanced to them, by way of loan for assisting them to prospect for gold or other minerals or metals, a sum not exceeding £250. The Minister must be satisfied that the men are working miners, that there is security for the repayment of the sum advanced, and that the applicants will spend pound for pound of the sum advanced.

6. The sum of £8,000 is authorized for disseminating information and instruction in Great Britain and other countries, as to the State's mining resources and capabilities, and for holding public exhibitions of mining machinery and appliances.

The manner in which the total sum of £270,387, spent up to 30th June, 1904, was allocated, is shown in the following statement:—

RETURN SHOWING ALLOCATION OF LOAN MONEY EXPENDED ON
MINING ENTERPRISE, TO 30TH JUNE, 1904.

Loan Act.	Allocated under Act.	Purpose for which Allocation was made.	Amount.
			£
1451	1461	Advances to companies for development of mining ..	58,523
"	"	Construction of roads and tracks for mining ..	42,390
"	"	Plant for testing metalliferous material ..	11,922
"	"	Construction of races and dams for water for sluicing for gold	5,709
"	"	Advances for miners for prospecting ..	17,011
"	"	Disseminating information; exhibition expenses ..	3,368
"	1806	Removal and re-erection of testing plants ..	436
1564	1566	Advances for draining metalliferous areas ..	18,008
"	"	Reservoir, Creswick Back Creek ..	249
"	"	Advances to miners for prospecting ..	3,152
"	"	Disseminating information; equipment of School of Mines and purchase of Cyanide process patent rights	23,043
"	1882	Advance to mining company for pioneer operations ..	230
1623	1566	Draining metalliferous areas, advance to company, and expenses	3,862
"	"	Construction of roads and tracks ..	20
"	"	Construction of races and dams ..	704
"	"	Advances for prospecting ..	1,562
"	"	Disseminating mining information and equipping School of Mines	2,860
"	1882	Advances to miners, companies, draining and track-cutting, and disseminating information	1,054
1659-1713	1566	Advances to companies: draining ..	18,768
"	"	Construction of roads and tracks ..	9,247
"	"	Construction of races and dams ..	810
"	"	Advances for prospectors ..	4,381
"	"	Disseminating information: School of Mines equipment	5,998

RETURN SHOWING ALLOCATION OF LOAN MONEY EXPENDED ON MINING ENTERPRISE, TO 30TH JUNE, 1904—continued.

Loan Act.	Allocated under Act.	Purpose for which Allocation was made.	Amount.
1713	1767	Purchase and equipment of building for metallurgical work	£ 40
1753	1566	Advances to companies: draining	4,650
"	"	Construction of roads and tracks	1,634
"	"	Construction of races and dams	682
"	"	Advances for prospectors	55
"	"	Disseminating information: School of Mines equipment	540
"	1767	Purchase and equipment of building for metallurgical work	630
1800	"	Purchase and equipment of building for metallurgical work	1,777
"	1806	Advances to companies	20,032
"	"	Construction of roads and tracks	4,245
"	"	Construction of races and dams	107
"	"	Advances to prospectors	1,670
"	"	Disseminating information: School of Mines equipment	1,018
Total			270,387

The amount of loan money spent during 1903-4 was £7,518.

Ordinary mining revenue and expenditure.

The following are the ordinary receipts from, and expenditure on, mining during the financial year 1903-4:—

MINING REVENUE AND EXPENDITURE, 1903-4.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Leases of auriferous and mineral land	12,440	Mining Department—	
Miners' rights	4,023	Salaries	17,956
Fees	1,551	Contingencies	5,746
Hire of drill boring plant and crushing batteries	837	Mining boards	3,500
Royalties—Cyanide Patents Purchase Act	3,481	Purchase and working of diamond drills	4,993
Value of diamonds lost while boring	129	Testing plants	2,358
Mining Development Act—		Victorian coal—Allowance to Railway Department for carriage and use of	5,099
Repayment of loans	4,029	Geological and underground surveys of mines	5,450
Payment of interest on loans	1,365	Miscellaneous	873
Total	27,855	Total	45,975

The following table gives particulars of the expenditure in aid of the mining industry during each of the five financial years ended with 1903-4:—

EXPENDITURE ON MINING: RETURN FOR FIVE YEARS.

	1899-00.	1900-1.	1901-2.	1902-3.	1903-4.
	£	£	£	£	£
Mining Department	34,827	36,208	36,305	35,815	23,702
Mining boards	3,500	3,500	3,500	3,500	3,500
Victorian coal—Allowance to Railway Department on carriage of	15,000	13,146	9,946	5,568	5,099
Diamond drills for prospecting Testing plants	2,210	2,294	2,546	2,798	4,993 2,358
Purchase of miners' rights and railway passes for unem- ployed miners	1,856	1,822	...	...	...
Ventilation of mines—Testing schemes for	833	332	...	...	...
Cyanide Patent—Cost of oppos- ing amendment ... ..	...	3,806	...	...	...
Geological and underground surveys of mines	5,722	5,789	5,809	5,245	5,450
Miscellaneous	941	1,056	1,396	1,035	873
Total	64,889	67,953	59,502	53,961	45,975

The expenditure under the heading Mining Department prior to 1903-4 included also the Water Supply Department. In 1904, however, the departments were separated, and the figures for 1903-4 in the above statement refer solely to the cost of the Mines Department. The allowance to Mining Boards remains the same as in previous years. A very considerable reduction (£4,378) was made in 1902-3 in the allowance to the Railway Department for the carriage of Victorian coal and a further slight reduction has taken place in 1903-4. The money expended on diamond drills for prospecting and testing plants has been materially increased from £2,798 in 1902-3 to £7,351 in 1903-4.

The following information has been extracted from the census returns, and shows the manner of occupation of all persons connected with mining industries throughout the State:—

Persons engaged in mining, 1901.

RETURN OF PERSONS ENGAGED IN MINING PURSUITS, 1901.

Persons following Mining Pursuits.	Employers of Labour.		In business on their own Account.		Receiving Salary or Wages.		Relative assisting.		Not at work for more than a week prior to Census.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Mines Department officer (not Geologist) .. .. .	..	..	..	..	76	3	..	1	..	..
Mining engineer, inspector, surveyor, (not Government) ..	15	..	32	..	90	..	..	..	11	..
Mine, gold (quartz), proprietor, manager, worker ..	216	2	1,567	..	7,747	..	65	..	925	..
„ gold (alluvial), proprietor, manager, worker ..	87	..	4,141	..	4,285	..	107	..	448	..
„ gold (undefined), proprietor, manager, worker ..	35	1	682	..	1,142	..	20	..	213	..
„ (undefined), proprietor, manager, worker ..	79	1	1,165	..	4,264	..	30	..	624	..
„ tin (lode), worker ..	..	..	1	..	..	..	..	..	1	..
„ tin (alluvial), proprietor, manager, worker ..	..	..	9	..	9	..	..	..	1	..
„ silver, proprietor, manager, worker ..	..	..	..	..	2	..	..	..	3	..
„ coal, proprietor, manager, worker ..	10	..	8	..	844	..	..	..	32	..
„ copper, manager, worker ..	..	..	1	..	9	..	..	..	2	..
„ precious stones, manager, worker ..	1	..	3	..	..	..	..	..	1	..
„ expert, amalgamator, diamond drill worker ..	5	..	12	..	56	..	..	..	3	..
„ director, agent, legal manager, clerk, secretary ..	65	..	97	1	334	8	1	1	..	..
Quartz crusher	17	..	14	..	573	..	1	..	30	..
Pyrites worker, ore roaster ..	2	..	2	..	61	..	..	..	2	..
Cyanide worker, &c. ..	32	..	7	..	170	..	..	..	1	..
Smelter, gold .. .. .	..	..	1	..	3	..	..	..	..	..
„ other .. .. .	..	..	..	..	17	..	..	..	4	..
Quarry proprietor, manager, clerk	41	1	51	..	1	..	7	..	..	..
„ man, worker .. .. .	..	..	..	..	734	..	..	..	62	..
Others .. .. .	..	..	1	..	..	..	..	..	1	..
Total	605	5	7,794	1	20,417	11	231	2	2,364	..

Total Males 31,411

Total Females 19

GRAND TOTAL 31,430

Mineral
produce.

The following table shows the quantity and value of the metals and minerals produced in Victoria up to the end of 1904:—

MINERAL PRODUCE.

Mineral.	Recorded prior to 1904.		Recorded during 1904.		Total Recorded to end of 1904.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold	ozs. 66,736,336	£ 266,810,711	ozs. 821,017	£ 3,252,045	ozs. 67,557,353	£ 270,062,756
Silver	27,184 1,146,284*	7,446 180,597*	.. 39,908*	.. 4,990*	27,184 1,186,192*	7,446 185,587*
Coal, black ..	tons. 2,237,258	1,239,026	tons. 121,741	70,208	tons. 2,358,999	1,309,234
" brown ..	48,366	19,557	..	..	48,366	19,557
Lignite	12,923	3,086	..	..	12,923	3,086
Ore—copper ..	17,470	206,895	..	..	17,470	206,895
" tin	15,021	718,163	71	5,190	15,092	723,353
" antimony ..	22,927	177,224	20	160	22,947	177,384
" silverlead ..	793	5,760	..	..	793	5,760
" iron	5,434	12,540	..	..	5,434	12,540
Diamonds ..	..	108	..	..	..	108
Sapphires, &c. ..	..	630	..	..	..	630
Gypsum	6,915	5,024	3,620	1,905	10,535	6,929
Magnesite ..	6	12	..	..	6	12
Kaolin	1,933	7,504	..	..	1,933	7,504
Infusorial earth ..	1,560	7,110	..	..	1,560	7,110
Building stones, |* various .. ..	..	3,129,163	..	44,943	..	3,174,106†
Limestone ..	..	148,892	..	38,642	..	187,534†
Salt (crude) ..	..	21,723	..	2,053	..	23,776†
Total .. ..	..	272,701,171	..	3,420,136	..	276,121,307

* Extracted from gold at the Melbourne Mint.—† From 1866 only.—‡ Record from 1900.

GOLD AND SILVER PRODUCTION, COIN AND PAPER MONEY OF THE WORLD.

The information contained in the first three of the following tables has been extracted principally from the annual report, issued in November, 1903, by the Director of the United States Mint. Since 1872, the figures are those of the Bureau of the Mint, and have been compiled from information furnished by foreign Governments, and revised from the latest data.

The information contained in the fourth table has been taken from the report of the Director of the British Mint.

TABLE SHOWING THE WORLD'S PRODUCTION OF GOLD AND SILVER SINCE 1860.

Year.	Gold.		Silver.	
	Ounces— Fine.	Value.	Ounces— Fine.	Value— Commercial.
		£		£
1860 to 1869	61,314,500	264,059,200	387,311,600	105,151,400
1870 to 1879	52,764,400	227,236,800	628,717,300	161,850,700
1880 to 1889	51,405,100	221,383,000	921,103,100	200,523,200
1890 to 1899	95,081,700	409,481,900	1,568,876,900	238,928,600
1900	12,315,100	53,036,700	173,591,400	22,422,200
1901	12,698,100	54,686,000	173,011,300	21,626,200
1902	14,313,700	61,416,600	175,102,302	19,354,840
Total	299,892,600	1,291,300,200	4,018,713,902	769,857,140

TABLE SHOWING THE WORLD'S PRODUCTION OF GOLD AND SILVER FOR THE YEAR ENDED 31ST DECEMBER, 1902.

Country.	Gold.		Silver.	
	Ounces— Fine.	Value.	Ounces— Fine.	Value— Commercial.
		£		£
United States	3,870,000	16,666,700	55,506,000	6,128,100
Canada	1,003,400	4,321,100	4,303,800	475,200
Australasia	3,946,400	16,768,500	16,172,702	1,806,340
Russia	1,090,100	4,694,500	158,700	17,500
Germany	3,000	13,000	5,722,600	631,900
Spain	500	2,100	3,700,200	408,600
Bolivia	200	1,000	12,992,600	1,434,600
Chili	27,800	119,800	3,566,800	393,800
Peru	112,500	484,600	4,264,500	470,900
China	422,400	1,819,100	...	...
British India	463,800	1,997,500	...	...
Other Countries	3,373,600	14,528,700	68,720,400	7,587,900
Total	14,313,700	61,416,600	175,102,302	19,354,840

TABLE SHOWING THE APPROXIMATE STOCKS OF MONEY IN THE AGGREGATE IN THE PRINCIPAL COUNTRIES OF THE WORLD AT THE CLOSE OF 1902.

Country.	Value of—		
	Gold.	Silver.	Uncovered Paper.
	£	£	£
United States	260,000,000	140,271,000	95,021,000
Austria-Hungary	58,957,000	16,896,000	9,708,000
British Empire—			
Australasia	26,792,000	1,271,000	...
Canada	7,042,000	1,396,000	11,854,000
Cape Colony	7,813,000	208,000	...
Great Britain	114,187,000	24,333,000	24,562,000
India	13,167,000	107,458,000	6,750,000
France	197,437,000	87,458,000	32,959,000
Germany	159,063,000	43,229,000	38,354,000
Italy	22,438,000	7,854,000	35,687,000
Japan	13,042,000	6,333,000	12,771,000
Netherlands	4,438,000	11,792,000	4,333,000
Russia	155,458,000	21,792,000	...
China ... ..	...	156,250,000	...
Siam	208,000	40,208,000	542,000
Other Countries	81,333,000	96,625,000	338,604,000
Total	1,121,375,000	763,374,000	611,145,000

TABLE SHOWING THE WORLD'S COINAGE OF GOLD AND SILVER DURING THE YEAR 1902.

Country.	Gold,	Silver,
	£	£
United Kingdom	7,126,200	1,101,100
Australasia	11,411,300	...
India (a) ... ..	...	3,423,200
British Colonies and Dependencies (b) ... ..	...	6,452,400
Austria-Hungary	1,173,900	1,350,800
France	1,955,000	475,600
Germany	4,388,000	2,205,300
Japan	1,510,400	104,200
United States (a)	12,912,600	6,274,200
Other Countries	953,900	1,833,900
Total	41,431,300	23,250,700

(a) Financial Year, 1901-2.

(b) Inclusive of coins struck at Calcutta and Bombay (during the Financial Year, 1901-2) and at the "Mint," Birmingham.

Gold production,
coinage, &c.

From 1860 to the end of 1902 the gold production of the world amounted to 299,892,600 ounces, and it has been valued at £1,291,300,200. In 1902, the production was 14,313,700 ounces, valued at £61,416,600—the maximum quantity, 3,946,400 ounces, valued at £16,768,500, being the produce of Australasian mines—the United States of America coming next with 3,870,000 ounces, valued at £16,666,700. Approximately, the world's stock of money in gold at the end of 1902 was valued at £1,121,375,000, of which £260,000,000 was in the United States, £114,187,000 in Great Britain, £26,792,000 in Australasia, £7,042,000 in Canada, £13,167,000 in India. Germany held £159,063,000; France, £197,437,000; Russia, £155,458,000; and Japan, £13,042,000. During the year 1902, the total issue of gold coins has been estimated at £41,431,300, of which the United States contributed £12,912,600; Australasia, £11,411,300; the United Kingdom, £7,126,200; Germany, £4,388,000; and France, £1,955,000.

Silver production,
coinage, &c.

The world's production of silver, from 1860 to 1902, amounted to 4,018,713,902 fine ounces, its commercial value being £769,857,140. In 1902, the production was 175,102,302 fine ounces, worth £19,354,840. The United States occupies first place, with a produce of 55½ million ounces, valued at £6,128,100. The produce from Australasia was 16,172,702 ounces, valued at £1,806,340; and Bolivia comes next with 12,992,600 ounces, valued at £1,434,600.

The total stock of money in silver in the world at the end of 1902 was valued at £763,374,000. The largest stock was held in China, and was valued at £156,250,000. The United States possessed £140,271,000; India, £107,458,000; France, £87,458,000; Germany, £43,229,000; Siam, £40,208,000; Great Britain, £24,333,000; and Australasia, £1,271,000. During 1902 the issue of silver coins was valued at £23,250,700. In the

British colonies and dependencies, other than Australasia and India, £6,452,400 was the value of the coins issued; in the United States it was £6,274,200; in India, £3,423,200; in Germany, £2,205,300; in Austria-Hungary, £1,380,800; and in Great Britain, £1,101,100. Australasia issued no silver coins. The right to coin this metal has not yet been extended to these States.

The amount of uncovered paper in use throughout the various countries of the world is valued at £611,145,000. The United States holds £95,021,000; Germany, £38,354,000; Italy, £35,687,000; France, £32,959,000; Great Britain, £24,562,000; and Canada, £11,854,000. Australasia holds no paper money uncovered by coin of legal tender or bullion.

AUSTRALASIAN GOLD.

Since the first discovery, in 1851, of gold in Australasia, nearly 133½ million ozs. have been raised in the various States, over one-half of which was got in Victoria. Prior to 1898, Victoria was almost invariably the leading gold-producing State of the group, but in 1904 its yield was about 60,400 ozs. less than in Queensland, and 1,552,000 ozs. less than in Western Australia, which has in recent years increased its production by leaps and bounds from 110,000 ozs. in 1893 to more than two and a third million ounces in 1904. The following is a statement of the quantity recorded as having been raised in the respective States at different periods:—

GOLD RAISED IN AUSTRALASIA, 1851 TO 1904.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
1851-55	10,281,303	1,920,200	..	..	..	..	..
1856-60	13,052,960	1,360,763	4,127	..	..	..	35,845
1861-65	8,694,194	2,233,001	52,580	..	..	..	2,288,088
1866-70	7,582,372	1,309,911	512,803	..	..	3,504	3,218,916
1871-75	6,036,776	1,613,049	1,319,952	24,685	..	25,296	2,412,446
1876-80	4,119,521	640,210	1,668,819	59,910	..	154,883	1,596,899
1881-85	3,992,077	626,931	1,327,366	88,366	..	235,973	1,237,456
1886-90	3,111,371	546,954	2,598,254	130,218	46,967	169,017	1,028,571
1891 ..	576,399	153,583	576,439	35,533	30,311	48,769	251,996
1892 ..	654,456	158,502	615,558	30,218	59,548	45,110	238,079
1893 ..	671,126	179,288	616,940	42,905	110,891	37,230	226,811
1894 ..	716,954	324,787	679,511	42,795	207,131	58,059	221,615
1895 ..	740,086	360,165	631,682	37,054	231,513	54,964	293,491
1896 ..	805,087	296,072	640,385	31,504	281,265	62,591	263,694
1897 ..	812,766	296,416	807,928	33,900	674,994	71,131	251,645
1898 ..	837,237	328,840	920,048	31,961	1,050,184	74,233	280,175
1899 ..	854,500	459,800	946,894	23,122	1,643,877	83,992	389,558
1900 ..	807,407	309,884	963,189	24,087	1,580,950	81,175	373,616
1901 ..	789,562	213,689	835,553	36,958	1,879,390	74,935	455,561
1902 ..	777,738	190,316	860,453	28,199	2,177,442	70,996	508,045
1903 ..	822,424	295,778	921,363	27,829	2,436,311	59,891	533,314
1904 ..	821,017	324,996	881,436	34,079	2,373,021	65,921	520,320

Gold produce of Australasia, 1851 to 1904.

According to the foregoing table, the total quantity of gold raised in each State, from 1851 to 1904, has been as follows:—

SUMMARY OF GOLD RAISED IN AUSTRALASIA, 1851 TO 1904.

	ozs.
Victoria	67,557,353
Queensland	18,381,280
New Zealand	16,626,141
Western Australia	14,783,795
New South Wales	14,143,135
Tasmania	1,477,570
South Australia	793,323
Total	133,732,597

VICTORIAN GOLD.

Yields, alluvial and quartz, Victoria.

In the following return will be found the yield of gold from alluvial workings, and from quartz reefs during 1904, in the more important mining districts of the State, as estimated by mining registrars:—

GOLD DERIVED FROM ALLUVIAL WORKINGS AND QUARTZ REEFS.

Mining District.	Alluvial.	Quartz.	Total.
	oz.	oz.	oz.
Ararat and Stawell	13,085	11,458	24,544
Ballarat	44,713	104,260	148,973
Beechworth	85,083	37,502	122,585
Bendigo	12,746	230,135	242,880
Castlemaine	26,860	50,310	77,170
Gippsland	6,820	59,901	66,721
Maryborough	41,786	43,363	85,149
Total	231,093	536,929	768,022

Import and export of bullion and specie.

The following table shows the import and export of bullion and specie during 1904:—

IMPORT AND EXPORT OF BULLION AND SPECIE, 1904.

	Imports.	Exports.
GOLD—	£	£
Bullion	896,528	486,593
Coin	79,100	2,949,450
SILVER—		
Bullion	1,356	1,108
Coin	5,427	58
BRONZE—		
Coin	1,005	...
Total	983,416	3,437,209

At Bendigo eleven mine shafts were over 3,000 feet in depth on 31st December, 1904, namely, the Victoria Quartz, 3,740 feet; the Lazarus New Chum, 3,777 feet; the New Chum Railway, 3,896 feet; the Shenandoah, 3,276 feet; the New Chum and Victoria, 3,175 feet; Lansell's 180, 3,354 feet; New Chum Consolidated, 3,099 feet; North Johnson's, 3,500 feet; Great Extended Hustlers, 3,081 feet; the Eureka Extended, 3,060 feet; and Princess Dagmar, 3,040 feet. There are winzes in the New Chum Railway and Victoria Quartz down 4,056 feet and 4,040 feet respectively.

Mining—
deep
shafts.

The following is a return showing the value of machinery used in alluvial and quartz mining during the five years ended 1904:—

Value of
machinery
on gold-
fields.

VALUE OF MACHINERY ON GOLD-FIELDS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of Machinery Employed in—		
	Alluvial Mining.	Quartz Mining.	Total.
	£	£	£
1900	562,690	1,375,350	1,938,040
1901	534,420	1,446,140	1,980,560
1902	523,320	1,435,240	1,958,560
1903	566,445	1,474,245	2,040,690
1904	628,520	1,551,990	2,180,510

The following return shows the amount paid in dividends in each mining district of the State for the last five years:—

Dividends
paid, 1900
to 1904.

DIVIDENDS PAID BY GOLD MINING COMPANIES IN EACH MINING DISTRICT: RETURN FOR FIVE YEARS.

Mining District.	Amount Distributed.				
	1900.	1901.	1902.	1903.	1904.
	£	£	£	£	£
Ararat and Stawell ...	7,352	13,353	13,900	15,105	10,167
Ballarat	112,375	101,650	114,408	123,000	77,315
Beechworth	19,600	10,263	18,100	47,346	57,511
Bendigo	168,042	184,771	213,438	319,370	382,321
Castlemaine	74,900	42,250	28,050	15,700	17,240
Gippsland	41,814	25,360	46,840	34,700	41,844
Maryborough	29,250	50,350	37,400	44,780	37,000
Total	453,333	427,997	472,136	600,801	623,398

Yields and dividends for the whole State are shown below:—

YIELDS AND DIVIDENDS.

Year.	Value of Gold Produced.	Dividends Paid.
	£	£
1900	3,190,940	453,333
1901	3,102,753	427,997
1902	3,062,028	472,136
1903	3,259,483	600,801
1904	3,252,045	623,398

In 1900, the dividends paid amounted to 14 per cent. of the total yield, and in 1904 to 19 per cent.

Gold miners,
1900 to
1904.

The number of miners actually at work on the gold-fields is estimated annually by the Mining Department, and the figures for the five years ended with 1904 are subjoined:—

NUMBER OF MEN EMPLOYED IN GOLD MINING, 1900 TO 1904.

Year.	Alluvial Miners.	Quartz Miners.	Total.
1900	12,836	16,199	29,035
1901	12,886	14,891	27,777
1902	11,963	14,140	26,103
1903	11,158	14,694	25,852
1904	10,750	13,920	24,670

The total quantity of gold obtained from the Victorian mines in 1904 was 821,017 ozs. The total value of the gold produced during the year was £3,252,045. This value was based on the average value of the gold received at the Melbourne Mint, viz., £3 19s. 3d. per oz. During the eight months ended August, 1905, the yield amounted to 508,518 ozs., showing a decrease of 31,044 ozs., compared with the corresponding period of 1904.

Gold raised,
1871 to
1891.

From 1871 to 1891 the quantity of gold raised gradually diminished, with little intermission, from over 1,300,000 ozs., to only 576,000 ozs., but since then there has been a steady annual increase, until 854,500 ozs. was raised in 1899, which was the largest production since 1882. However, since 1899, the production has decreased each year to 777,388 ozs., in 1902; but substantial increases have taken place in 1903 and 1904, when the yields were 822,424 ozs. and 821,017 ozs. respectively.

AUSTRALASIAN SILVER.

Silver raised
in Austral-
asia.

We have no record of silver production in Victoria earlier than 1863, and the returns from all the other States are of later date. Since 12th June, 1872, the date of the opening of the Melbourne branch of the Royal Mint, nearly all the silver produced in Victoria

has been extracted from crude gold. Up to the end of 1904, only 27,184 ozs. have been obtained from silver mining. The total quantity extracted from gold is 1,186,192 ozs.

The Government Statist of New South Wales reports that up to the year 1882 the quantity of silver raised in that State was very small, but in that and the following years extensive discoveries of the metal, associated principally with lead and copper ore, were made in various parts of the State, notably at Boorook, in the New England district, and later on at Sunny Corner, near Bathurst, and at Silvertown and Broken Hill, on the Barrier Ranges, in the western district. The latter is the most extensive and valuable silver mine field in the State, the aggregate output of silver-lead ore from the fields was valued at 32 million pounds at the end of 1903.

Silver has been found in Queensland during many years past, the total production to date being nearly 6½ million ounces. There are no silver mines in Western Australia, the quantity returned having been extracted from gold at the Mint. Tasmania is the only State, except New South Wales, where silver mining, to any great extent, has been carried out. The earliest recorded returns are in 1886, and up to date nearly 20 million ounces have been produced. The following return contains full particulars up to the end of 1903 of silver production in the various States of the Commonwealth, and in New Zealand:—

SILVER RAISED IN AUSTRALIAN STATES AND NEW ZEALAND,
1863 TO 1903.

Year or Period.	Victoria.	New South Wales.	Queensland.	Western Australia.	Tasmania.	New Zealand.	
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	
1863 to 1865	10,165	...	...	...	...	...
1866 to 1870	8,187	14,621	} 2,771,733*	} ...	...	48,186
1871 to 1875	56,106	318,432			223,174
1876 to 1880	116,042	335,734			110,244
1881 to 1885	119,442	1,060,771			82,943
1886 to 1890	136,321	35,311,788			...	168,500	90,062
1891 to 1895	208,393	80,328,601	930,116†	...	5,369,770	252,353	
1896 to 1900	350,351	77,633,471	875,685	...	9,072,458	1,247,775	
1901 ...	54,362	14,835,704	571,561	356	1,657,824	571,134	
1902 ...	47,683	12,801,591	701,312	2,462	1,945,458	674,196	
1903 ...	40,533	13,342,101	642,125	399,190	1,711,040	911,914	
Total ...	1,147,585	235,982,814	6,492,532	402,008	19,925,050	4,211,981	

* Includes that raised in 1891.

† For the four years 1892 to 1895.

COAL PRODUCTION OF THE WORLD.

Exclusive of brown coal and lignite, the total known production of coal in the world, according to the latest available figures, is about 790 million tons (of 2,240 lbs.) per annum, of which the United Kingdom produces 230,334,000 tons; British India, 7,424,000 tons; Canada, 7,140,000 tons; Australia, 7,177,000 tons; New Zealand, 1,420,000 tons; Cape of Good Hope, 166,000 tons; Natal, 714,000 tons; Transvaal, 2,016,000 tons. The number of persons employed in connexion with the coal industry was, approximately, 3,664,500. The United Kingdom employed 1,482,400 hands; British India, 98,312; Canada, 14,753; Australia, 16,588; New Zealand, 4,967; Cape of Good Hope, 3,875; Natal, 6,940; Transvaal, 7,364.

The principal countries exporting coal are the United Kingdom, where the excess of exports over imports amounted to 60,397,000 tons; Germany, 12,111,000 tons; United States, 3,583,000 tons; New South Wales, 3,715,670 tons; Belgium, 3,078,000 tons; Japan, 2,866,000 tons; and Natal, British India, New Zealand, and the Transvaal, about 798,000 tons. The principal countries receiving coal are—Russia, 3,259,000 tons; Sweden, 2,911,000 tons; France, 12,624,000 tons; Spain, 2,299,000 tons; Italy, 5,373,000 tons; Austria-Hungary, 5,387,000 tons; Canada, 3,010,000 tons; States of Australia (other than New South Wales), 1,364,352 tons; Cape of Good Hope, 446,000 tons.

The trade of New South Wales in coal is principally to the other States of Australia and New Zealand, the Straits Settlements, Hong Kong, India, Java, Chili, United States, and the Phillipine and Hawaiian Islands.

The following return shows the production of coal in the five principal coal-producing countries of the world, and in Australia and New Zealand:—

COAL PRODUCED AND CONSUMED IN VARIOUS COUNTRIES.

Country.	Production.	Value per ton at Collieries.	Production per head of Population.	Consumption per head of Population.	Number of Men Employed under and over ground.
United Kingdom ...	230,334,000	8 2 $\frac{3}{4}$	5.44	3.93	1,482,400
Germany ...	116,638,000	8 10 $\frac{1}{4}$	1.98	1.75	794,532
France ...	34,318,000	11 8 $\frac{3}{4}$	.88	1.19	277,060
Belgium ...	23,912,000	10 6 $\frac{3}{4}$	3.42	3.07	233,489
United States ...	320,983,000	5 8 $\frac{1}{4}$	3.99	3.93	518,197
New South Wales ...	6,354,846	7 4	4.48	1.86	14,117
Queensland ...	507,801	6 6	.99	1.01	1,329
Western Australia ...	140,884	12 3	.68	1.21	392
Tasmania ...	51,805	8 1	.29	.55	161
Victoria ...	121,741	11 6 $\frac{1}{4}$	.10	.71	640
New Zealand ...	1,420,229	10 9	1.73	1.74	4,967

NOTE.—Some of the figures are provisional. Those for Australia relate to the year 1903, except in Victoria and Western Australia, which are for the years 1904 and 1902 respectively. In Germany, France, and Belgium the quantities are given in metric tons of 2,204 lbs.

AUSTRALASIAN COAL.

At the present time, with the exception of South Australia, coal is raised in all the States in the Commonwealth, and in the colony of New Zealand. The following are the quantities returned as brought to the surface in each of those States and colony of New Zealand:—

COAL PRODUCED IN AUSTRALASIA.

Year.	Tons of Coal raised in—					
	New South Wales.	Queensland.	Western Australia.	Tasmania.	Victoria.	New Zealand.
Prior to 1876	14,774,680	395,681	..	76,606	5,831	709,931
1876	1,319,918	50,627	..	6,100	1,095	
1877	1,444,271	60,918	..	9,470	2,420	162,218
1878	1,575,497	52,580	..	12,311	Nil	
1879	1,583,381	55,012	..	9,514	Nil	231,218
1880	1,466,180	58,052	..	12,219	3	299,923
1881	1,769,597	65,612	..	11,163	Nil	337,262
1882	2,109,282	74,436	..	8,803	10	378,272
1883	2,521,457	104,269	..	8,872	428	421,764
1884	2,749,109	129,980	..	7,194	3,280	480,831
1885	2,878,863	209,698	..	5,334	800	511,063
1886	2,830,175	228,656	..	10,391	86	534,353
1887	2,922,497	238,813	..	27,763	3,357	558,620
1888	3,203,444	311,412	..	41,577	8,573	613,895
1889	3,655,632	265,507	..	40,300	14,596	586,445
1890	3,060,876	338,344	..	53,812	14,601	637,397
1891	4,037,922	271,603	..	45,524	22,834	668,794
1892	3,780,968	257,803	..	35,669	23,363	673,315
1893	3,278,328	264,403	..	34,042	91,726	691,548
1894	3,672,076	270,705	..	30,922	171,660	719,546
1895	3,738,589	323,068	..	33,349	194,227	740,827
1896	3,909,517	371,390	..	43,548	226,562	792,851
1897	4,383,591	358,407	..	42,530	236,277	840,713
1898	4,706,251	407,934	3,250	49,116	242,860	907,033
1899	4,597,028	494,009	54,336	43,113	262,380	975,234
1900	5,507,497	497,132	118,410	50,811	211,596	1,093,990
1901	5,968,426	539,472	117,836	49,176	209,329	1,227,638
1902	5,942,011	501,531	140,884	49,898	225,164	1,362,702
1903	6,354,846	507,801	133,000	51,805	64,200	1,420,193
1904	6,019,809	512,015	138,550	61,114	121,741	1,537,838

VICTORIAN COAL.

Coal
returns,
Victoria.

The following return shows the total quantity of black coal raised in Victoria:—

BLACK COAL RAISED TO 31ST DECEMBER, 1904.

Year.	Tons.
Prior to 1876	5,831
From 1876 to 31st December, 1890	49,249
1891	22,834
1892	23,303
1893	91,726
1894	171,660
1895	194,227
1896	226,562
1897	236,277
1898	242,860
1899	262,380
1900	211,596
1901	209,329
1902	225,164
1903	64,200
1904	121,741

Total 2,358,999

Brown coal raised to date, 48,366 tons.

Many attempts were made to develop the coal industry of the State prior to 1889, but a great impetus was given in that year by the constitution of a Royal Commission, which was appointed to inquire into and report upon the best means of developing the industry. Several true coal seams, situated in various localities, chiefly in Gippsland, have been discovered, and were brought under the notice of the Commission. In 1890, five diamond drills were employed, and seams were worked at Boolarra and Korumburra, and, in 1891, at Jumbunna. Coal mining at the two latter places was immediately begun, and has been actively carried on ever since. The principal companies concerned in the industry are the Outtrim-Howitt Company, the Jumbunna Company, and the Coal Creek Proprietary Company.

The number of collieries working at the end of 1904 was five, using engines of 1,817 horse-power, employing 640 hands under and over ground, and owning plant, land, and buildings of £46,983 value. The particulars of the output of these companies for 1904 are as follow:—

OUTPUT OF COAL COMPANIES, 1904.

Company	Tons.
Black Coal—	
Outtrim-Howitt	57,327
Jumbunna	39,364
Coal Creek Proprietary	22,547
Silkstone	2,014
New Extended Co-operative	429
Strezlecki	60
Total	121,741

No dividends were paid during 1904.

Output of
coal com-
panies,
1904.

There was an increase in the number of miners employed in coal mines in 1904, as compared with the preceding year. This will be seen by the following figures:—

NUMBER OF COAL MINERS EMPLOYED: RETURN FOR FIVE YEARS.

Year.	Number of Miners at Work.
1900	807
1901	877
1902	1,303
1903	377
1904	589

Coal miners, 1900 to 1904.

From January, 1903, up to the end of the year, the coal miners of Korumburra, Outtrim, and Jumbunna were on strike. The small number employed in 1903 was owing to the difficulty of obtaining men in place of the strikers, and to the interruption of trade caused by the strike. The strike was responsible for the reduction in output from 225,164 tons in 1902 to 64,200 tons in 1903. The industry appears to be gradually recovering since the termination of the labour trouble, but the production of 121,741 tons in 1904 is only half the annual quantity raised in the seven years ended 1902.

The following statement shows the progress of the industry since 1900, also, for comparison, the quantity and value of coal imported in the five years:—

COAL PRODUCED AND IMPORTED: RETURN FOR FIVE YEARS.

Year.	Raised in State.		Imported.		
	Quantity.	Value.	Quantity.	Value.	
				Official.*	Actual.†
	tons.	£	tons.	£	£
1900	211,596	101,599	690,567	403,723	578,350
1901	209,329	147,191	710,918	446,058	595,394
1902	225,164	155,850	656,656	428,804	533,533
1903	64,200	40,818	796,407	450,781	623,852
1904	121,741	70,208	743,470	412,765	539,016

* Value according to Customs Return found by adding 10 per cent. to value in New South Wales as given by importers.

† Estimated value found by adding to cost at Newcastle the actual freight, insurance, primage, &c.

During recent years, Victoria has been singularly immune from serious mining disasters. In the last twenty years, the average number of men employed in gold mining was 27,167, and the average yearly number of accidents, 106; thirty-five persons per annum being killed, and eighty-one injured, or 1.27 and 2.96 respectively per thousand employed. In coal mining, during the sixteen years, 1889-1904, there were 25 persons killed and 78 injured.

Minin accidents.

CLASSIFICATION ACCORDING TO INDUSTRY, 1904.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>Class I.—Treating Raw Material, the Product of Pastoral Pursuits, or Vegetable Products, not otherwise Classed.</i>													£	£	£
<i>1. Animal Products.</i>															
Boiling down, tallow rendering	16	16	..	..	..	152	7	69	..	..	8.6	5,605	10,068	12,061
Bone milling	20	18	1	..	1	467	12	87	..	..	9.3	6,204	25,179	18,635
Catgut, sausage skins	4	..	..	..	..	..	4	84	..	..	10.8	5,405	191	2,399
Tanning, fellmongering, woolwashing ..	86	54	1	2	3	963	88	1,349	..	2	10.8	113,869	109,095	145,984	
<i>2. Vegetable Products.</i>															
Bark milling	3	3	..	..	..	28	2	22	..	..	7.1	1,435	1,597	3,595
Chaff cutting, corn crushing	188	99	46	8	35	1,398	196	733	4	5	6.6	36,438	58,791	129,328	
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>															
Oil, grease, glue	4	3	..	..	..	15	1	38	..	1	12.0	2,606	4,450	7,530
Soap, candle	19	13	1	..	..	217	17	464	..	11	11.4	39,366	101,486	101,256

QUANTITY AND VALUE OF MINERALS PRODUCED IN THE TRANSVAAL
COLONY, 1900 TO 1904.

	1900.	1901.	1902.	1903.	1904.
Quantity, in fine ozs., of gold produced ..	348,761	258,307	1,718,921	2,972,897	3,773,517
Value ..	£1,479,328	£1,095,652	£7,291,090	£12,610,038	£16,006,001
Quantity, in fine ozs., of silver produced	No record	No record	122,573	350,070	416,262
Value ..	No record	No record	£13,025	£36,745	£45,319
Total quantity of coal expressed in tons of 2,000 lbs. produced from the collieries ..	506,074	797,144	1,590,333	2,253,677	2,409,033
Value at the pit's mouth ..	£197,127	£329,113	£637,640	£877,976	£883,891
Total quantity ex- pressed in carats of the diamonds won	Nil	Nil	1,065	174,976	884,331
Value ..	Nil	Nil	£2,402	£239,752	£1,150,873
Total value of all minerals, precious stones, &c. ..	£1,676,455	£1,439,108	£8,067,273	£14,048,377	£18,405,328
Average number of persons employed in each class of mining:—					
Gold ..	(Not known, War period)	15,952	37,380	73,833	96,973
Silver ..	..	..	..	..	..
Coal ..	(Not known, War period)	3,946	5,439	8,576	9,291
Diamonds ..	(Not known, War period)	Nil	25	1,097	2,782
Other minerals	Nil	133	973	2,424	3,114

MANUFACTORIES.

In order to secure uniformity throughout the States of Australia and New Zealand, in tabulating and promulgating statistics relating to manufactories, the Australian Statisticians have agreed to regard as factories all establishments employing, on the average, four hands or upwards, also those with less than four hands, where machinery is worked by power other than manual, making or repairing for the trade, or for export. Where two or more industries are carried on by one proprietor in one building, each industry is, when possible, treated as a separate establishment.

Definition
of a factory.

The following table shows the number of factories in each class of industry prepared on this basis, the power used, the number of persons employed, the salaries and wages paid to such persons (excluding working proprietors), and the value of the machinery, plant, land, buildings, and improvements for the year 1904:—

Classifica-
tion of
factories,
1904.

CLASSIFICATION ACCORDING TO INDUSTRY, 1904.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>Class I.—Treating Raw Material, the Product of Pastoral Pursuits, or Vegetable Products, not otherwise Classed.</i>													£	£	£
<i>1. Animal Products.</i>															
Boiling down, tallow rendering	16	16	..	..	..	152	7	69	..	..	8.6	5,605	10,068	12,061
Bone milling	20	18	1	..	1	467	12	87	..	..	9.3	6,204	25,179	18,635
Catgut, sausage skins	4	..	..	..	..	..	4	84	..	..	10.8	5,405	191	2,399
Tanning, fellmongering, woolwashing ..	86	54	1	2	3	963	88	1,349	..	2	10.8	113,869	109,095	145,984	
<i>2. Vegetable Products.</i>															
Bark milling	3	3	..	..	..	28	2	22	..	..	7.1	1,435	1,597	3,595
Chaff cutting, corn crushing	188	99	46	8	35	1,398	196	733	4	5	6.6	36,438	58,791	129,328	
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>															
Oil, grease, glue	4	3	..	..	..	15	1	38	..	1	12.0	2,606	4,450	7,530
Soap, candle	19	13	1	..	..	217	17	464	..	11	11.4	39,366	101,486	101,256

*Class III.—Process relating to Stone, Clay,
Glass, &c.*

Brick, pottery, earthenware	111	31	1	..	4	73	1,144	122	1,280	1	29	9.6	102,980	96,669	154,436
Cement, including cement pipes	4	2	..	..	1	..	243	1	152	..	1	10.0	10,638	26,871	7,900
Lime	10	3	..	..	3	3	36	10	87	..	1	9.9	6,713	4,180	8,415
Asbestos	1	1	2	..	..	..	64	12	652	2	1	3.2	35,833	23,815	28,685
Glass (including bottles)	10	..	..	..	..	..	..	..	..	..	..	7.5	..	..	..
Glass bevelling	17	5	3	3	..	..	56	17	152	1	1	11.4	12,514	4,289	21,236
Marble, stone dressing	34	6	4	4	1	..	102	42	273	1	1	11.6	27,835	10,488	32,397
Filter, stone	2	1	1	..	..	..	4	8	59	..	..	12.0	5,361	1,265	5,700
Modelling in plaster, cement, &c. ..	4	..	..	..	..	..	..	..	..	..	..	12.0	..	..	..

Class IV.—Working in Wood.

Cooperage	12	3	2	..	..	..	17	18	66	..	..	11.2	6,387	1,965	13,997
Cork-cutting	2	..	..	..	..	..	..	..	..	..	..	11.9	..	..	..
Dairy, domestic implements	4	3	..	3	..	..	53	4	95	..	..	11.2	9,004	4,846	6,762
Bellows	2	..	..	..	..	..	..	..	..	..	..	12.0	..	..	..
Saw-milling, forest	128	124	..	..	..	4	1,836	161	1,537	..	..	7.6	103,071	89,760	14,267
Saw-milling—moulding, joinery, &c. ..	87	39	32	6	2	..	1,873	92	1,485	..	..	9.0	137,790	85,979	162,733
Mantelpiece	4	1	..	..	..	..	14	3	117	..	..	12.0	10,799	885	3,300
Woodcarving, turnery	29	8	17	2	2	..	101	37	120	..	..	11.3	7,504	5,728	18,628

Class V.—Metal Works, Machinery, &c.

Agricultural implement	50	36	3	..	5	..	531	55	1,434	1	6	11.5	129,559	62,163	70,938
Engineering, boilermaking, iron foundry	232	116	83	12	11	1	2,408	284	4,371	2	19	11.7	391,421	439,500	333,699
Railway workshop	15	8	3	..	..	..	489	..	1,737	..	5	12.0	211,278	158,311	253,662
Cutlery, tool	13	1	8	2	1	..	60	12	56	..	..	11.7	3,807	7,127	10,320
Nail	6	4	2	..	..	..	185	7	154	1	3	11.5	10,033	32,999	7,700
Iron safe, door	4	1	..	..	..	..	8	4	28	..	..	11.7	2,165	970	5,150
Sheet iron, tin (including japanning) ..	53	4	15	2	..	1	103	46	828	..	3	12.0	52,534	38,983	74,911
Oven, range	11	..	5	2	..	..	35	11	166	..	..	11.4	12,764	3,755	20,804
Pattern	5	..	4	1	..	..	11	6	14	..	..	11.2	773	745	2,548

Production.

2. Vegetable Food, including Products not Foods, but usually associated with the Manufacture of Foods.

Biscuit	4	4	..	..	..	..	116	6	606	..	219	11.5	51,361	39,750	47,100
Confectionery	19	10	4	2	..	..	117	21	485	..	489	10.8	57,409	30,353	49,102
Flour	67	66	1	..	..	..	3,415	41	683	..	9	10.3	74,771	235,508	199,779
Jam, pickle, sauce, vinegar	27	18	1	1	..	..	252	23	792	1	520	9.9	71,032	35,524	83,096
Oatmeal, maizena, arrowroot, starch	14	3	5	1	..	1	679	13	215	..	126	11.4	21,634	67,064	118,750
Macaroni	3	..	2	1	..	..	11	4	18	1	1	11.6	453	1,075	2,646
Sugar, treacle, refining	2	2	..	..	..	..	506	2	318	..	23	12.0	31,175	83,500	86,500

3. Drinks and Stimulants.

Aerated water, cordial, &c.	138	74	43	3	10	5	351	116	851	11	8	10.4	62,407	82,761	136,773
Malt	19	3	12	..	2	1	103	13	144	..	..	10.4	13,856	15,920	105,725
Brewing	45	44	..	..	1	..	844	40	960	1	1	11.5	119,189	231,687	521,145
Distilling	5	4	..	..	..	..	23	2	22	..	..	6.7	1,059	6,870	12,495
Coffee, chicory, cocoa, chocolate, mustard, spice, &c.	11	6	5	..	..	..	427	9	168	..	98	10.7	15,646	24,294	61,086
Ice	13	12	..	..	1	..	274	8	70	..	..	8.2	5,208	24,319	24,354
Salt	4	2	..	..	..	..	50	3	51	..	..	6.6	3,310	4,675	27,313

4. Narcotics.

Tobacco, cigars, snuff	9	2	1	2	113	13	601	..	710	11.4	82,386	63,765	106,013
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Class VII.—Clothing, and Textile Fabrics, and Fibrous Material.

1. Textile.															
Woollen mill	10	9	1	1,719	7	645	..	579	11.6	62,940	212,286	94,603
2. Dress.															
Clothing, tailoring	320	2	18	17	..	..	121	269	{1,420 152}	22	{5,113 1317}	11.4	339,291	29,434	344,764
Corset	4	..	..	..	..	..	..	..	2	4	35	12.0	1,807	93	5,100

Production.

CLASSIFICATION ACCORDING TO INDUSTRY, 1904—continued.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>2. Dress—continued.</i>													£	£	£
Dressmaking, millinery	464	..	7	15	..	..	63	28	{ 91	405	7,147	10.9	202,779	22,641	292,990
Underclothing, shirt	110	4	12	21	..	..	190	28	{ 136	75	2,878	11.0	108,141	26,779	107,052
Hat, cap	29	7	4	7	..	..	193	21	{ 425	5	(714	10.8	59,371	20,045	48,234
Hosiery	16	1	3	1	..	..	21	10	{ 23	6	309	10.6	10,102	9,375	15,370
Oilskin, waterproof clothing	5	..	2	2	..	..	10	6	{ 37	1	(135	11.2	6,759	1,940	17,700
Boot, shoe	131	4	53	12	1	..	508	170	{ 3,662	4	1,792	11.0	332,749	94,334	147,008
Fur	6	..	1	..	..	..	1	7	{ 21	13	6	9.4	2,266	255	3,700
Umbrella	8	..	2	3	..	..	7	3	{ 65	1	147	11.6	9,514	1,020	15,180
Dyeing	2	2	..	..	..	..	14	2	{ 47	..	100	12.0	6,688	4,300	8,600
Feather Dressing	1	..	..	..	..	..	..	..	{ ..	..	(11.8	..	..	..	..
<i>3. Fibrous Materials and Textiles, n.e.i.</i>															
Rope, twine, mat, bag, and sack	10	4	2	..	..	..	527	17	321	..	195	10.3	23,433	43,478	45,300
Tent, sail, tarpaulin	10	..	2	2	..	..	6	10	41	..	15	11.8	3,895	653	10,189

*Class VIII.—Books, Paper, Printing,
Engraving, &c.*

Printing (including newspapers, paper-bag, lithographic, electrotyping, stereotyping)	252	9	164	39	9	2	1,391	295	3,910	7	638	11.9	451,100	500,992	543,315
Photo lithography	3	..	1	1	..	..	5	4	41	..	2	12.0	5,292	4,550	3,590
Account-book, stationery, including rubber stamp	22	..	1	6	3	1	..	200	19	556	..	664	11.6	62,486	112,598
Ink, printing ink	6	..	3	..	..	..	23	5	36	..	1	11.9	2,267	1,558	6,784
Paper, strawboard, millboard	3	3	..	..	..	..	575	2	147	..	23	9.4	12,970	65,000	40,000
Fancy box, &c.	15	2	4	5	..	..	51	9	131	2	346	11.7	16,656	9,516	28,254
Die-sinking, engraving, medals, &c. ..	10	..	5	3	1	..	29	13	95	..	2	11.7	8,247	6,790	17,906

Class XI.—Musical Instruments.

Organ	2	..	1	1	9	3	29	12.0	2,109	1,225	3,340
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Class X.—Arms and Explosives.

Ammunition	1	}	2	72	..	72	..	175	}	11.9	12.0	11,863	37,105	21,700
Blasting powder, dynamite, lithofracteur, &c.	1																
Fireworks	1																
Fuse	2	1	1	..	25	2	14	..	20	12.0	2,402	7,242	5,100		

*Class XI.—Vehicles and Fittings, Saddlery,
Harness, &c.*

Coach carriage, waggon	245	}	23	15	2	5	1	231	305	2,004	2	7	}	11.7	12.0	136,758	42,575	199,672
Carriage lamp	1																	
Cycle	44	1	19	11	..	..	60	37	327	1	2	11.8	22,337	9,727	54,998	
Perambulator	4	..	..	..	..	..	..	4	34	..	1	11.0	2,671	380	3,400
Saddle, harness	45	..	..	2	..	..	2	41	302	..	23	11.7	24,251	2,775	62,213
Saddle-tree, saddlers' ironmongery, &c. ..	3	}	2	11	9	22	..	1	}	10.9	12.0	1,701	950	3,050	
Whip	1																	

Production.

CLASSIFICATION ACCORDING TO INDUSTRY, 1904—continued.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engine used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>Class XII.—Shipbuilding, Fittings, &c.</i>													£	£	£
Ship, boat	3	1	..	..	..	3	5	15	..	..	12·0	1,429	100	1,770
Docks, slips	7	7	..	..	..	1,154	5	96	..	..	10·4	9,183	54,780	381,380
<i>Class XIII.—Furniture, Bedding, &c.</i>															
Upholstery, bedding, flock	30	4	4	..	..	159	18	279	1	118	11·5	30,107	14,740	49,413
Bedstead	1	..	..	..	..	..	..	..	..	..	12·0	..	..	..
Curled hair	3	..	3	..	..	14	4	27	..	..	12·0	1,747	1,140	2,650
Cabinet, including billiard table ..	116	8	15	8	2	244	155	1,019	1	24	11·4	88,907	18,309	151,617	
Picture frame	17	..	3	8	..	18	18	101	1	18	11·9	6,656	1,693	21,312	
Venetian blind	7	3	1	1	..	19	10	45	..	..	11·2	2,093	1,575	7,530
<i>Class XIV.—Drugs, Chemicals, and By-products.</i>															
Blacking, blue, washing powder, &c. ..	10	4	3	1	1	71	13	147	..	87	12·0	13,326	8,451	27,000	
Chemical	31	14	5	2	..	579	22	436	..	93	11·5	41,353	81,581	112,954	
Essential oil	14	10	..	..	..	17	12	105	1	3	8·6	5,682	3,200	6,836
Paint, varnish, white-lead	5	4	1	..	..	62	2	48	..	..	10·0	3,956	5,450	15,525

<i>Class XV.—Surgical and Scientific Appliances.</i>															
Philosophical instrument	5	..	1	3	..	..	3	3	17	..	2	12·0	1,065	711	4,983
Surgical instrument	3	..	2	1	..	..	3	..	11	..	2	12·0	1,289	330	1,880
<i>Class XVI.—Timepieces, Jewellery, and Platedware.</i>															
Goldsmithing, jewellery, gold-beating, electroplating	51	1	14	13	1	1	89	56	539	..	34	11·8	51,905	15,049	78,694
<i>Class XVII.—Heat, Light, and Energy.</i>															
Electric apparatus	6	..	2	3	..	..	22	5	49	..	..	11·8	4,227	3,486	7,512
Electric light	7	7	..	..	..	..	5,226	1	221	..	..	12·0	22,422	374,850	110,894
Gas, coke	48	7	2	..	..	..	568	2	870	..	..	12·0	104,383	1,246,058	484,973
Match	1	..	..	..	..	..	..	..	..	..	..	12·0	..	..	..
Fire kindlers	1	2	..	..	..	..	60	2	25	..	101	11·8	3,636	1,862	3,157
Ironfounders' charcoal dust	1	..	..	..	..	..	..	..	..	..	..	12·0	..	..	..
Hydraulic power	2	2	..	..	..	..	600	..	15	..	..	12·0	2,115	42,456	30,589
<i>Class XVIII.—Leatherware (except Saddlery and Harness).</i>															
Fancy leather	11	4	2	..	..	..	39	14	130	..	56	12·0	10,320	2,825	8,288
Leather belting	3	..	2	1	..	..	14	6	38	..	1	12·0	3,224	2,750	7,500
Portmanteau, trunk	6	..	..	1	..	..	2	6	53	1	10	11·7	3,645	820	6,345
<i>Class XIX.—Wares, not elsewhere included.</i>															
Basket, wicker	5	..	1	..	..	..	2	4	32	..	..	12·0	2,144	174	5,310
Bellows (see Class IV.).	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brush, broom	16	..	5	4	..	..	19	15	148	..	46	11·7	13,467	4,312	16,544
Cork-cutting (see Class IV.).	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Rubber goods (including tires) ..	4	3	1	..	..	..	595	2	499	..	199	12·0	42,139	44,583	24,719
Total	4,208	1,304	734	261	130	118	40,859	3,612	46,863	576	24,245	..	4,794,365	6,027,134	7,641,051
									‡79	..	‡912	..			

NOTE.—Where the number of factories is braced the information has been combined in order to conceal the contents of individual schedules.

* The figures in this column refer to purchased land only. One hundred and eighty-three establishments (including seventeen creameries and fifty-three cyanide works) were carried on upon Crown lands; in these cases, no valuation of the land has been given.

† Creameries are not counted as separate establishments, but are regarded merely as branches of butter factories. The number of hands employed was 324 males.

‡ Factory workers, working at their own homes.

§ Including one Pintsch gas-works.

Hands
employed,
male and
female.

Of the total hands employed (76,287), 50,554 were males and 25,733 females. Of these, 3,612 were male and 576 female, working proprietors; 2,213 male and 342 female, managers and overseers; 2,085 male and 273 female accountants and clerks; 1,470 engine-drivers (male); 37,567 male and 23,553 female workers in factories; 79 males and 912 females are described as factory workers, working in their own homes; 2,657 are carters and messengers (male); all others number 871 males and 77 females. The increase in the total on the previous year was 3,058—1,120 males and 1,938 females.

Classifica-
tion
according
to hands
employed.

The classification of factories according to the number of hands employed was:—

Under 4 hands	...	...	615 factories	1,772 hands
4 hands	...	...	499 "	1,996 "
5 to 10 hands	...	...	1,613 "	11,156 "
11 to 20 hands	...	...	745 "	10,816 "
21 to 50 hands	...	...	455 "	13,754 "
51 to 100 hands	...	...	163 "	11,073 "
101 and upwards	...	...	118 "	25,720 "
Total	...	...	4,208 "	76,287 "

Of those employed in factories with under 4 hands, 324 were employed in connexion with creameries. Of the 4,208 establishments, 2,548 used steam or other power, and employed 58,334 hands; and 1,660 used manual labour only, and employed 17,953 hands.

Factories,
metro-
politan and
country.

In the following return will be found particulars for the years 1903 and 1904, of all factories in operation in the metropolitan and country districts. In the latter year the manufactories of the State were returned as 4,208 in number—an increase of 57 over the year 1903. Of these, 2,305 were established in the metropolitan, and 1,903 in the country districts—an increase of 12 in the metropolitan, and 45 in the country districts. The additional factories established in the metropolitan district were principally those connected with metal works, machinery, &c. (9); food and drink (4); clothing and textile fabrics (8); books, paper, &c. (10). In the country there were increases in factories working in wood (4), metal works, machinery, &c. (14); food and drink (13); clothing and textile fabrics (10); books, paper, &c. (4); vehicles, saddlery, harness, &c. (2). In certain other industries the number of factories has been slightly reduced.

NUMBER OF FACTORIES AND HANDS EMPLOYED, 1903 AND 1904.

Nature of Industry.	1903.			1904.		
	No. of Manu- factories.	Average Num- ber of Persons Employed.		No. of Manu- factories.	Average Num- ber of Persons Employed.	
		Males.	Females		Males.	Females
<i>Metropolitan Area.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	97	1,570	6	88	1,344	3
2. Oils and fats, animal and vegetable ..	12	439	8	11	438	12
3. Processes relating to stone, clay, glass, &c.	79	2,214	14	82	2,153	10
4. Working in wood	107	1,929	6	103	1,786	10
5. Metal works, machinery, &c. ..	304	7,365	37	313	7,651	40
6. Connected with food and drink, &c. ..	160	5,392	1,928	164	5,073	2,054
7. Clothing and textile fabrics, &c. ..	827	5,918	16,154	835	6,236	17,592
8. Books, paper, printing, engraving, &c.	193	4,019	1,406	203	4,167	1,594
9. Musical instruments	2	25	..	2	32	..
10. Arms and explosives	2	54	183	2	50	164
11. Vehicles, &c., saddlery, harness ..	164	1,557	30	171	1,606	31
12. Shipbuilding, fittings, &c.	6	87	..	8	108	..
13. Furniture, bedding, &c.	169	1,662	221	158	1,589	162
14. Drugs, chemicals, and by-products ..	45	645	214	44	632	181
15. Surgical and scientific appliances ..	9	30	5	8	31	4
16. Timepieces, jewellery, and plated ware	47	554	25	45	582	33
17. Heat, light, and energy	25	749	48	23	973	101
18. Leatherware, except saddlery and harness	20	221	56	20	247	68
19. Wares (not elsewhere included) ..	25	635	220	25	700	246
Total	2,293	35,065	20,654	2,305	35,398	22,305
<i>Country Districts.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	227	1,387	13	220	1,309	8
2. Oils and fats, animal and vegetable ..	12	81	..	12	82	..
3. Processes relating to stone, clay, glass, &c.	112	816	32	111	714	29
4. Working in wood	161	1,773	5	165	1,949	2
5. Metal works, machinery, &c.	241	2,936	12	255	3,322	14
6. Connected with food and drink, &c. ..	461	3,137	145	474	3,338	195
7. Clothing and textile fabrics, &c. ..	281	1,350	2,879	291	1,346	3,045
8. Books, paper, printing, engraving, &c.	104	1,013	87	108	1,096	91
9. Musical instruments .. .. .	..	..	..	..	..	..
10. Arms and explosives	3	62	42	3	38	31
11. Vehicles, &c., saddlery, harness ..	170	1,378	8	172	1,479	6
12. Shipbuilding, fittings, &c.	2	11	..	2	15	..
13. Furniture, bedding, &c.	18	91	4	16	87	2
14. Drugs, chemicals, and by-products ..	17	125	5	16	153	4
15. Surgical and scientific appliances ..	..	..	..	..	..	..
16. Timepieces, jewellery, and plated ware	5	15	..	6	13	1
17. Heat, light, and energy	43	191	..	43	217	..
18. Leatherware, except saddlery and harness	1	3	..	..	..	..
19. Wares (not elsewhere included) ..	..	..	..	..	..	..
Total	1,858	14,369	3,231	1,903	15,156	3,428

NUMBER OF FACTORIES AND HANDS EMPLOYED—*continued.*

Nature of Industry.	1903.			1904.		
	No. of Manu- factories.	Average Number of Persons Employed.		No. of Manu- factories.	Average Number of Persons Employed.	
		Males.	Females		Males.	Females
<i>State.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	324	2,957	19	317	2,653	11
2. Oils and fats, animal and vegetable ..	24	520	8	23	520	12
3. Processes relating to stone, clay, glass, &c.	191	3,030	46	193	2,867	39
4. Working in wood	268	3,702	11	268	3,735	12
5. Metal works, machinery, &c. ..	545	10,301	49	568	10,973	54
6. Connected with food and drink, &c. ..	621	8,529	2,073	638	8,411	2,249
7. Clothing and textile fabrics, &c. ..	1,108	7,268	19,033	1,126	7,582	20,637
8. Books, paper, printing, engraving, &c.	297	5,032	1,493	311	5,263	1,685
9. Musical instruments	2	25	..	2	32	..
10. Arms and explosives	5	116	226	5	88	195
11. Vehicles, &c., saddlery, harness ..	334	2,935	38	343	3,085	37
12. Shipbuilding, fittings, &c.	8	98	..	10	121	..
13. Furniture, bedding, &c.	187	1,753	225	174	1,676	164
14. Drugs, chemicals, and by-products ..	62	770	217	60	785	185
15. Surgical and scientific appliances ..	9	30	5	8	31	4
16. Timepieces, jewellery, and plated ware	52	569	25	51	595	34
17. Heat, light, and energy	68	940	48	66	1,190	101
18. Leatherware, except saddlery and harness	21	224	59	20	247	68
19. Wares (not elsewhere included) ..	25	635	220	25	700	246
Total	4,151	49,434	23,795	4,208	50,554	25,733

Return of
factories
and works
for three
years.

The following is a summary, showing the power used, of the manufactories and works, as returned for each of the years, 1902 to 1904:—

SUMMARY OF MANUFACTORIES AND WORKS: RETURN FOR THREE YEARS.

Year.	Number of Factories.	Power Employed.				Actual Horse-Power of Engines Used.
		Steam.	Gas.	Electric, Oil, Water, Wind, or Horse.	Manual.	
1902	4,003	1,328	755	330	1,590	43,821
1903	4,151	1,316	724	437	1,674	42,750
1904	4,208	1,304	734	509	1,661	40,859

Year.	Hands Employed.			Approximate Value of—		
	Males.	Females.	Total.	Machinery and Plant.	Land.	Buildings and Improvements.
1902	49,658	23,405	73,063	£ 5,082,023	£ 3,045,291	£ 5,125,969
1903	49,434	23,795	73,229	5,010,896	2,855,174	5,112,771
1904	50,554	25,733	76,287	6,027,134	2,721,076	4,919,975

The total value of machinery, plant, land, buildings, and improvements for 1904 shows an increase of £689,344, when compared with the previous year, chiefly caused by the inclusion of the value of the machinery and plant used in the distribution of gas and electricity.

In 1904, the manufacturers were asked to furnish full particulars of the wages paid, the value of the fuel and materials used, and of the output, or work done, for each class of industry. The information collected appears in the following statement:—

Wages paid, value of fuel and materials used, and output or work done for each class of industry, for the year ended the 31st December, 1904:—

Class of Industry.	Value of—			
	Wages paid, exclusive of amount drawn by Working Proprietor.	Fuel and Light used.	Materials used.	Articles produced or Work done.
	£	£	£	£
1. Treating raw materials, the product of pastoral pursuits	168,956	18,595	1,232,233	1,608,233
2. Oils and fats, animal and vegetable ..	41,972	10,543	240,710	348,776
3. Processes relating to stone, clay, glass, &c	201,874	54,298	103,007	488,201
4. Working in wood ..	274,555	6,756	366,577	780,178
5. Metal works, machinery, railway workshops, &c.	927,784	64,304	1,199,152	2,760,424
6. Foods, drinks, and narcotics ..	775,959	113,846	6,154,815	8,609,819
7. Clothing, textile fabrics, boots, &c. ..	1,169,735	31,608	2,281,561	4,086,038
8. Books, paper, printing, newspapers, engraving, &c.	561,127	24,910	511,800	1,619,188
9. Musical instruments				
10. Arms and explosives	14,265	1,000	48,367	88,541
11. Vehicles, &c., saddlery, harness ..	187,718	7,113	232,366	542,307
12. Shipbuilding, fittings, docks, &c. ..	10,612	704	5,460	26,667
13. Furniture, bedding, &c. ..	129,510	2,735	178,522	404,362
14. Drugs, chemicals, and by-products ..	64,317	6,271	319,356	557,759
15. Surgical and scientific appliances ..	2,354	75	720	5,263
16. Timepieces, jewellery, plated ware ..	51,905	1,530	90,882	188,556
17. Heat, light, and energy	136,783	25,822	162,274	645,007
18. Leatherware (except saddlery and harness)	17,189	564	69,580	102,780
19. Wares (not elsewhere included) ..	57,750	4,540	158,721	264,081
Total	4,794,365	375,214	13,356,103	23,126,180

The total amount of wages paid during the year was £4,794,365, which represents an average per head for all employes of £66 10s. This average is very much below the general rate of wages, as shown in the table which follows, and this is due, in many instances, to the fact that the hands were not continuously employed, and this sum simply represents the average wages received by the hands during the twelve months. Further, all the factories were not in operation during the whole of the year. One factory was open only for a period of from 3 to 4 months; 197 from 6 to 7 months; 141 from 7 to 8 months; 174 from 8 to 9 months; 177 from 9 to 10 months; 971 from 10 to 11 months; 2,307 from 11 to 12 months; and only 240 were working for the whole twelve months.

In the following return will be found a statement of the rates of wages obtaining in the various industries of the State during 1904:—

WAGES IN MELBOURNE, 1904.

A.—Rates of Wages ruling for Adult Workers in classified manufacturing industries in Melbourne during 1904.

* * * This Statement has been compiled from information collected direct from Employers.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class I.—Treating Raw Material the product of pastoral pursuits or vegetable products not otherwise classed.</i>			
<i>Order 1.—Animal products.</i>			
Boiling down	Foremen	7s. to 8s. per day	7s. 6d. day
Bone Mill	Tallowmen	7s. to 7s. 6d. "	7s. "
	Labourers	6s. to 7s. "	6s. 6d. "
	Carters	7s. to 8s. "	7s. "
Sausage casing	Sausage skin cleaners		40s. per week
Tanning, fellmongery, wool-washing, scouring	Curriers	40s. to 60s. per week	48s. "
	Tanners	34s. to 45s. "	40s. "
	Beamsmen	40s. to 50s. "	45s. "
	Shedsmen	34s. to 45s. "	36s. "
	Fellmongers	30s. to 45s. "	36s. "
	Woolsourers	36s. to 42s. "	36s. "
<i>Order 2.—Vegetable products.</i>			
Bark mill	Labourers	36s. to 42s. per week	36s. per week
Chaff-cutting	"	36s. to 39s. "	36s. "
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>			
Oil, grease, glue	Labourers	7s. to 7s. 6d. per day	7s. per day
Soap, candle	"	Not procurable ..	Not procurable
<i>Class III.—Processes relating to Stone, Clay, Glass, &c.</i>			
Asbestos	Machinists	36s. to 42s. per week	40s. per week
Asphalt	Asphalters and tarpavers	7s. to 9s. per day ..	8s. per day
Brick, pottery, earthenware	Clayhole men		10½d. per hour
	Setters—Brick		11½ "
	Burners	10½d. to 1s. per hour	" "
	Drawers		1s. 1d. "
	Pipe-burners	56s. to 62s. per week	" "
	Pipe setters and pressers		45s. per week
	Tile moulders and pressers	42s. to 45s. per week	" "
Glass (including bottles)	Hollow-ware pressers	45s. to 50s. "	" "
	Stone-ware throwers	45s. to 50s. "	" "
	Mould makers	45s. to 50s. "	" "
	Placers and others ..	40s. to 45s. "	" "
	Bottlemakers	50s. to 80s. "	70s. per week
	Lampware blowers ..	50s. to 55s. "	52s. "
	" finishers	50s. to 60s. "	60s. "
Glass bevelling, &c.	Bevellers	42s. to 60s. "	45s. "
	Silverers	42s. to 48s. "	45s. "
	Cutters	42s. to 54s. "	45s. "
Lime, cement, cement pipes	Labourers	6s. to 7s. per day ..	" "
Marble, stone-dressing	Building Carvers		1s. 10½ per hr.
	Carvers and letter cutters		1s. 4½d. "
	Granite cutters		1s. 3d. "
	Bluestone, marble cutters		1s. 2d. "
	Polishers		10½d., 11d. "
	Labourers		10d. "
	Modellers		" "
Modelling	Modellers	12s. to 14s. per day	" "
	Shophands	10s. to 11s. "	" "
	Pressers		42s. per week
Stonefilter	Filtermakers		35s. "

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class IV.—Working in Wood.</i>			
Cooperage	Coopers	56s. to 62s. per week	56s. per week
Dairy implement (churn, &c.)	Box and case makers .. ..	.. ..	45s. ..
	Carpenters .. ..	.. ..	54s. ..
Mantelpiece	Mantelpiece makers	52s. to 60s. per week	52s. ..
	Polishers, enamellers	50s. to 55s. ..	50s. ..
Saw-milling, moulding, joinery, sash, door, box, &c.	Sawyers	45s. to 57s. ..	48s. ..
	Carpenters and joiners	48s. to 60s. ..	54s. ..
	Machinists	45s. to 64s. ..	52s. ..
	Woodturners .. ..	.. ..	54s. ..
	Boxmakers .. ..	.. ..	45s. ..
	Painters and glaziers .. ..	.. ..	50s. ..
	Polishers .. ..	.. ..	50s. ..
	Engine-drivers	45s. to 60s. per week	54s. ..
	Draymen and labourers	39s. to 45s. ..	42s. ..
Wood-carving, turning	Carvers	48s. to 54s. ..	48s. ..
	Turners	48s. to 54s. ..	48s. ..
<i>Class V.—Metal Works, Machinery, &c.</i>			
Agricultural implement	Blacksmiths	54s. to 60s. per week	60s. per week
	Fitters and turners	54s. to 60s. ..	54s. ..
	Carpenters	48s. to 60s. ..	54s. ..
	Painters	42s. to 48s. ..	42s. ..
	Labourers	36s. to 42s. ..	36s. ..
Brass, copper smithing	Brass moulders, finishers	48s. to 60s. ..	48s. ..
	Brasspolishers .. ..	.. ..	42s. ..
	Coppersmiths	45s. to 60s. ..	54s. ..
Cutlery	Cutlers	60s. to 80s. ..	60s. ..
	Knifsmiths	50s. to 55s. ..	50s. ..
	Sawmakers	40s. to 60s. ..	50s. ..
	Saw and tool grinders	30s. to 55s. ..	45s. ..
Engineering, boilermaking, iron foundry	Blacksmiths	54s. to 72s. ..	60s. ..
	Strikers	39s. to 45s. ..	42s. ..
	Fitters and turners	54s. to 66s. ..	60s. ..
	Boilermakers and platers	60s. to 72s. ..	60s. ..
	Riveters	60s. to 72s. ..	60s. ..
	Moulders—Heavy	54s. to 72s. ..	60s. ..
	.. .. Light	48s. to 60s. ..	48s. ..
	Pipe moulders	45s. to 57s. ..	.. ..
	Planers and slotters .. ..	.. ..	52s. ..
	Drillers	38s. to 45s. ..	42s. ..
	Coremakers	48s. to 66s. ..	60s. ..
	Patternmakers .. ..	.. ..	66s. ..
	Iron Dressers	39s. to 42s. ..	39s. ..
	Carpenters .. ..	.. ..	60s. ..
	Labourers	38s. to 44s. ..	40s. ..
	Furnacemen, engine-drivers	45s. to 60s. ..	45s. ..
Bedstead, fender	Blacksmiths	42s. to 45s. ..	48s. ..
	Fitters	45s. to 54s. ..	48s. ..
	Chill fitters	48s. to 60s. ..	54s. ..
	Chippers	36s. to 42s. ..	36s. ..
	Modellers	56s. to 70s. ..	60s. ..
	Moulders	42s. to 60s. ..	48s. ..
	Grinders and polishers	42s. to 56s. ..	50s. ..
	Japanners	36s. to 60s. ..	40s. ..
	Electroplaters	56s. to 70s. ..	56s. ..
Iron safe, door	Fireproof, safe, &c., makers .. ..	.. ..	48s. ..
Lead, shot, pewter, zinc	Labourers in lead and shot factories	36s. to 42s. ..	36s. ..
	Zincworkers	48s. to 72s. ..	60s. ..
Meter	Instrument fitters	48s. to 60s. ..	54s. ..

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class V.—continued.</i>			
Nail, barbed wire	Nail makers ..	40s. to 80s. per week	65s. per week
	Machine feeders (under 21)	20s. to 35s. "	30s. "
	Labourers ..	30s. to 35s. "	30s. "
	Barbed wire workers	32s. 6d. to 37s. 6d. per week	35s. "
Pattern making	Pattern makers ..		66s. "
Smelting, chlorination, cyanide, pyrites	Metallurgists and assayers	£4 to £5 per week ..	£4 "
	Cyaniders	36s. to 40s. per week	..
	Chlorinators	40s. to 55s. "	..
	Smelters	45s. to 70s. "	..
	Roasters	36s. to 42s. "	..
	Furnacemen	42s. to 60s. "	..
Spring	Spring fitters	45s. to 60s. "	48s. per week
	Springsmiths .. ..	..	48s. "
Stove, range, oven	Stove fitters	48s. to 60s. "	48s. "
	Oven fitters .. ..	..	42s. "
Tinsmithing, galvanized iron, sheet iron, japanning,	Tinsmiths	30s. to 50s. "	40s. "
	Sheet iron workers ..	..	45s. "
	Galvanizers	42s. to 50s. "	42s. "
	Japanners	40s. to 60s. "	50s. "
Wire working	Wire workers	35s. to 48s. "	35s. "
Wire mattress	Weavers, framemakers	..	48s. "
	Varnishers .. ..	..	45s. "
<i>Class VI.—Connected with Food and Drink, or the preparation thereof.</i>			
<i>Order 1.—Animal Food.</i>			
Bacon-curing	Slaughtermen, cutters up, &c.	40s. to 55s. per week	48s. per week
Butter, cheese, concentrated milk	Factory managers ..	50s. to 90s. "	70s. "
	Butter makers, and churners	36s. to 45s. "	40s. "
	Cheese makers	45s. to 70s. "	50s. "
	Labourers, packers ..	30s. to 36s. "	30s. "
Butterine, margarine ..	Labourers	30s. to 42s. "	36s. "
Condensed milk	Condensers	50s. to 80s. "	60s. "
Meat, fish preserving, freezing	Slaughtermen .. ..	..	20s. per 100 sheep
	Kitchen hands, tallowmen	30s. to 42s. "	36s. per week
	Boners	42s. to 48s. "	..
	Preservers	36s. to 65s. "	50s. per week
	Tinsmiths	50s. to 70s. "	..
	Labourers, packers ..	(piece-work)	..
	Chambermen, &c. ..	30s. to 48s. "	36s. per week
		42s. to 48s. "	..
<i>Order 2.—Vegetable Food, including products not foods but usually associated with the manufacture of foods.</i>			
Biscuits	Factory foremen ..	38s. to 80s. per week	50s. per week
	Forewomen	20s. to 32s. 6d. "	20s. "
	Biscuit makers	35s. to 37s. 6d. "	35s. "
	Cake makers	40s. to 54s. "	40s. "
	Machine hands	30s. to 40s. "	35s. "
	Packers—male	32s. to 37s. 6d. "	32s. "
	.. female .. ..	..	14s. "
Confectionery	Confectioners	50s. to 100s. "	50s. "
	Storemen	45s. to 60s. "	45s. "
	Labourers	40s. to 50s. "	40s. "
	Chocolate dippers—female	17s. to 27s. 6d. "	20s. "

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VI.—Order 2—continued.</i>			
Flour mill	Foremen	40s. to 44s. per week	60s. per week
	Smuttermen .. ..	.. ..	40s. "
Jam, fruit-preserving, pickle, sauce, vinegar	Wheat shooters .. ..	.. ..	40s. "
	Flour and bran packers	30s. to 38s. per week	36s. "
	Engine-drivers, firemen	50s. to 70s. "	60s. "
	Foremen	35s. to 60s. "	50s. "
	Tinsmiths	56s. to 60s. "	55s. "
	Coopers	(piece work)	(piece-work)
	Engine-drivers	56s. to 60s. per week	56s. per week
Oatmeal, cornflour, starch, arrowroot, macaroni	General hands—male	48s. to 54s. "	50s. "
	.. .. female	30s. to 35s. "	30s. "
	.. ..	14s. to 21s. "	14s. "
Sugar, treacle refining .. ..	.. ..	Not procurable	Not procurable
	Vacuum hands and others	33s. to 115s. per week	.. ..
<i>Order 3.—Drinks and Stimulants.</i>			
Aerated waters, cordials	Cordial makers .. ..	.. ..	60s. per week
	Bottlers	38s. to 40s. per week	40s. "
Brewing	Writers .. ..	.. ..	33s. "
	Washers	30s. to 33s. per week	30s. "
	Brewers	£10 to £12 .. ..	.. ..
	Topmen	44s. to 50s. "	44s. per week
	Cellarmen	44s. to 60s. "	44s. "
	Cask washers	44s. to 48s. "	44s. "
	Storemen	44s. to 50s. "	44s. "
	Coopers	56s. to 62s. "	56s. "
	Farriers	44s. to 72s. "	44s. "
	Carters, stablemen	44s. to 47s. 6d. "	47s. 6d. "
Condiments, coffee, chicory, cocoa, chocolate, spice, &c.	Rackers, corkers. &c. .. ..	.. ..	35s. "
Ice, refrigerating .. ..	.. ..	Not procurable	Not procurable
Malt	Storemen	40s. to 60s. per week	40s. per week
	Chambermen	40s. to 45s. "	40s. "
	Ice pullers	36s. to 42s. "	39s. "
	Engine-drivers, firemen	42s. to 60s. "	48s. "
	Carters	42s. to 52s. "	45s. "
	Maltsters	45s. to 70s. "	45s. "

<i>Order 4.—Narcotics.</i>			
Tobacco, cigar, cigarette	Tobacco (plug) makers	30s. to 80s. per week	50s. per week
	" " wrappers	20s. to 30s. "	25s. "
	"-female .. ..	.. ..	.. ..
	Cigar makers	35s. to 60s. "	45s. "
	Cigarette makers (machine)—female	17s. 6d. to 22s. 6d. per week	20s. "
	Cigarette makers (hand)—female	20s. to 40s. per week	25s. "
<i>Class VII.—Clothing and Textile Fabrics and Fibrous Materials.</i>			
<i>Order 1.—Textile.</i>			
Woolen cloth, blanket, rug	Foremen	50s. to 60s. per week	60s. per week
	Pattern weavers, tuners .. ..	.. ..	40s. "
	Power-loom weavers .. ..	.. ..	22s. 6d. "
	Fettlers, yarnmen, spinners .. ..	.. ..	36s. "
	Wool scourers	30s. to 40s. per week	35s. "

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.		
		Range.	General Rate.	
<i>Class VII.—Order 1—continued.</i>				
Woollen cloth, blanket, rug ..	Dye house labourers ..	30s. to 40s. per week	36s. per week	
	Wool dryers, warpers ..	.. ..	30s. "
	Wiley house labourers ..	.. ..	36s. "
	Warpers—female ..	.. ..	25s. "
	Mule minders ..	20s. to 30s. per week	30s. "	
<i>Order 2.—Dress.</i>				
Boot, shoe	Makers, finishers, clickers, stuff-cutters, &c.	45s. to 60s. per week	45s. per week	
	Machine operators ..	50s. to 60s. "	50s. "	
Clothing, tailoring	Assistant stuff-cutters, lining cutters, and all others	40s. to 50s. "	40s. "	
	Machinists—female ..	20s. to 30s. "	20s. "	
	Cutters—order ..	60s. to 140s. "	80s. "	
	.. stock ..	50s. to 80s. "	60s. "	
	Tailors ..	45s. to 60s. "	45s. "	
	Tailoresses ..	20s. to 35s. "	20s. "	
	Pressers ..	45s. to 55s. "	50s. "	
	.. —female ..	.. ..	30s. "
	Machinists—female ..	20s. to 30s. "	25s. "	
	Corset	Corset makers—female	17s. 6d. to 25s. "	17s. 6d. "
Dressmaking, millinery	Dressmakers—female	40s. to 120s. "	60s. "	
	Dressmakers' assistants—female	15s. to 35s. "	18s. "	
	Mantlemakers—female	40s. to 80s. "	40s. "	
	Mantlemakers' assistants—female	15s. to 35s. "	18s. "	
	Milliners—female ..	40s. to 80s. "	40s. "	
	Milliners' assistants—female	15s. to 35s. "	18s. "	
	Pressers—female ..	16s. to 30s. "	20s. "	
	Machinists—female ..	16s. to 25s. "	20s. "	
	Laundry ironers, &c.—female	15s. to 20s. "	16s. 6d. "	
	Dye works	Dyers	50s. to 100s. "	50s. "
		Pressers	45s. to 50s. "	45s. "
		Pressers—female ..	16s. to 30s. "	20s. "
		Cleaners	40s. to 50s. "	40s. "
	Furrier	Cutters	40s. to 80s. "	50s. "
		Machinists, &c.—female	16s. to 25s. "	18s. "
	Hat, cap	Body makers, silk hats	50s. to 70s. "	60s. "
		Finishers	60s. to 80s. "	70s. "
Shapers		80s. to 100s. "	80s. "	
Crown sewers, silk hats—female		25s. to 30s. "	25s. "	
Trimmers, silk hats—female		25s. to 30s. "	25s. "	
Bodymakers, felt hats		.. ..	65s. per week
Blockers		60s. to 65s. "	65s. "	
Finishers		60s. to 65s. "	65s. "	
Shapers .. ..		.. ..	65s. "
Binders, felt hats—female		15s. to 30s. "	20s. "	
Trimmers, felt hats—female		15s. to 30s. "	20s. "	
Machinists, straw hats—female		16s. to 30s. "	25s. "	
Trimmers, straw hats—female		16s. to 20s. "	16s. "	
Blockers, pressers, women's hats		.. ..	40s. "
Machinists, women's hats—female		25s. to 35s. "	25s. "	
Machinists, caps—female		15s. to 25s. "	18s. "	

per week at
piece-work
rates

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VII.—Order 2—continued.</i>			
Hosiery	Machinists, knitting—female	12s. to 25s. per week	20s. per week
	Machinists, sewing—female	15s. to 25s. "	20s. "
	Linkers—female ..	18s. to 24s. "	21s. "
	Pressers	48s. to 52s. "	50s. "
	Winders, menders, &c.—female	12s. to 18s. "	16s. "
Oilskin, waterproof clothing	Oilskin workers ..	45s. to 65s. "	45s. "
	Machinists, female ..	20s. to 30s. "	25s. "
	Waterproof cutters ..	50s. to 60s. "	50s. "
Ostrich feather	Machinists, &c.—female	20s. to 30s. "	25s. "
	Feather dyers	50s. to 63s. "	50s. "
Shirtmaking, underclothing ..	" " female	" " "	35s. "
	" curlers	15s. to 35s. "	25s. "
	Shirt makers,	16s. to 30s. "	16s. "
Umbrella, parasol	Underclothing makers—female	16s. to 25s. "	16s. "
	Frame makers	40s. to 50s. "	40s. "
	Cutters	40s. to 55s. "	40s. "
	Machinists—female ..	15s. to 25s. "	20s. "
	Tipplers	15s. to 20s. "	16s. "
<i>Order 3.—Fibrous Materials and Textiles not elsewhere included.</i>			
Bag, sack (including calico bag)	.. .. .	Not procurable ..	Not procurable
Flax milling	.. .. .	" " "	" "
Mat, matting .. .. .	.. .. .	" " "	" "
Rope, twine .. .. .	.. .. .	" " "	" "
Tarpaulin, tent, sail	Undefined	30s. to 60s. per week	36s. per week
	Tarpaulin, tent, sail makers	.. .. .	48s. "
<i>Class VIII.—Books, Paper, Printing, Engraving.</i>			
Die sinking, engraving	Die sinkers	52s. to 60s. per week	55s. per week
Ink, printing ink	Engravers, general ..	50s. to 80s. "	55s. "
	Process engravers ..	50s. to 90s. "	55s. "
Paper bag, box, &c.	Ink makers	50s. to 70s. "	60s. "
	Box cutters	35s. to 52s. "	40s. "
Paper, millboard, strawboard	Makers-up—female ..	15s. to 20s. "	17s. 6d. "
	Paper, &c., makers ..	.. .. .	60s. "
	Beatermen .. .. .	.. .. .	60s. "
	Breakermen .. .. .	.. .. .	42s. "
	General hands .. .. .	.. .. .	36s. "
	Engine drivers	36s. to 42s. per week	36s. "
	Printers—Compositors ..	.. .. .	54s. "
	" "	52s. to 80s. "	52s. "
Printing (including lithographic printing, electrotyping, stereotyping)	" "	52s. to 60s. "	52s. "
	" "	70s. to 80s. "	80s. "
	Lithographers	52s. to 60s. "	52s. "
	Stereotypers—casters ..	.. .. .	40s. "
	" " .. .. .	.. .. .	60s. "
	" " .. .. .	.. .. .	55s. "
Bookbinding, account book making, stationery, &c.	Bookbinders	52s. to 80s. per week	52s. "
	Pagers—female	16s. to 17s. 6d. "	16s. "
	Sewers and folders—female	20s. to 30s. "	20s. "
	Paper rulers	52s. to 70s. "	52s. "
<i>Class IX.—Musical Instruments.</i>			
Organ, pianoforte	Organ builders, expert ..	.. .. .	84s. per week
	" " ordinary	60s. to 72s. per week	60s. "
	Tuners and voicers .. ..	.. .. .	78s. "
	Case makers .. .. .	.. .. .	60s. "
	Nickel pipe makers .. ..	.. .. .	60s. "

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class X.—Arms and Explosives.</i>			
Ammunition	Cartridge operators— female	12s. to 20s. per week	16s. per week
	Mechanics (fitters, &c.)	55s. to 66s. "	..
	Labourers	36s. to 42s. "	..
Explosive	Nitro-glycerine workers	42s. to 55s. "	48s. per week
	Acid workers .. ..	.. ..	45s. "
	Labourers and carters	36s. to 42s. "	36s. "
Firework, Fuse	Fireworks makers ..	33s. to 45s. "	..
<i>Class XI.—Vehicles, Fittings, Saddlery, Harness, &c.</i>			
Carriage lamp	Lamp makers	40s. to 60s. per week	50s. per week
Coach, waggon, tramcar, spoke and felloe, wheelwright	Body makers	40s. to 60s. "	45s. "
	Wheelers	40s. to 50s. "	45s. "
	Smiths	40s. to 60s. "	48s. "
	Trimmers	40s. to 60s. "	45s. "
	Painters	40s. to 54s. "	48s. "
	Vicemen	35s. to 45s. "	40s. "
Cycle	Cycle builders	35s. to 48s. "	40s. "
	Motor builders .. ..	.. ..	50s. "
	Turners	42s. to 60s. "	..
	Filers	40s. to 48s. "	40s. "
	Platers	45s. to 50s. "	45s. "
	Polishers .. ..	.. ..	42s. "
	Smiths .. ..	.. ..	48s. "
Perambulator	Wickerworkers .. ..	.. ..	48s. "
	Fitters up	30s. to 50s. per week	30s. "
Saddlery, harness	Saddle makers	48s. to 55s. "	48s. "
	Collar makers	48s. to 55s. "	48s. "
	Harness makers	48s. to 55s. "	48s. "
Saddle-tree, saddlers' iron-mon- gery, &c.	Saddle-tree makers ..	35s. to 50s. "	40s. "
Whip	Thong makers	40s. to 50s. "	40s. "
Horse shoeing, &c	Farriers	35s. to 45s. "	40s. "
<i>Class XII.—Ship Building, Fittings, &c.</i>			
Dock, ship	Shipwrights .. ..	.. ..	12s. per day
	Foundry and shipsmiths	.. ..	11s. "
	Labourers and painters	.. ..	8s. "
	Stevedores—men and lumpers	.. ..	1s. 3d. per hr.
Boat building	Wharf labourers .. ..	.. ..	1s. "
	Boat builders	48s. to 60s. per week	48s. per week
<i>Class XIII.—Furniture, Bedding, &c.</i>			
Bedding, flock, upholstery ..	Bedding and mattress makers	46s. to 50s. per week	46s. per week
	Machinists—female ..	20s. to 22s. 6d. "	20s. "
	Machine feeders .. ..	.. ..	25s. "
	Sorters, &c.—female ..	.. ..	15s. "
	Upholsterers	48s. to 70s. per week	48s. "
Curled hair	Curled hair, horsehair workers	35s. to 50s. "	40s. "
Furniture, cabinet making, chair, billiard table	Cabinet makers	48s. to 70s. "	48s. "
	Carvers	48s. to 54s. "	48s. "
	Turners	48s. to 54s. "	48s. "
	Polishers	48s. to 54s. "	48s. "
	Billiard table makers	54s. to 60s. "	54s. "
	Cushion makers, ma- chinists	.. ..	60s. "
	Slate rubbers .. ..	.. ..	42s. "

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XIII.—continued.</i>			
Picture frame	Frame makers ..	50s. to 55s. per week	50s. per week
	Mount cutters ..	35s. to 50s. "	40s. "
	Fitters-up—female ..	20s. to 27s. 6d. "	20s. "
	Venetian blind makers	36s. to 48s. "	36s. "
<i>Class XIV.—Drugs, Chemicals, By-products.</i>			
Baking powder .. ..	.. .. .	Not procurable ..	Not procurable
Blacking, blue, washing powder, soda	Skilled, undefined ..	40s. to 100s. per week	..
	Unskilled	25s. to 37s. 6d. "	..
	Wrappers—female ..	12s. 6d. to 20s. "	..
Chemical, drug, horse and cattle medicine	Makers of pharmaceutical preparations	50s. to 75s. per week	60s. per week
	Others working in drugs, &c.	35s. to 45s. "	40s. "
	Disinfectant makers	35s. to 45s. "	40s. "
Essential oil	Essence blending ..	35s. to 55s. "	40s. "
Fertilizer	Chemical manure workers	36s. to 40s. "	36s. "
Paint, varnish, white-lead ..	Paint makers ..	..	55s. "
<i>Class XV.—Surgical and Scientific Appliances.</i>			
Optical, philosophical, instrument, &c.	Opticians, &c. ..	35s. to 60s. per week	45s. per week
Surgical appliance, instrument	Surgical instrument makers	40s. to 80s. "	50s. "
<i>Class XVI.—Timepiece, Jewellery, Platedware.</i>			
Electroplating	Electroplaters and silversmiths	40s. to 80s. per week	65s. per week
	Metal polishers ..	35s. to 48s. "	35s. "
	Lacquerers—female ..	15s. to 30s. "	20s. "
Goldsmithing, jewellery, gold-beating	Goldsmiths, jewellers	50s. to 90s. "	55s. "
	Setters	80s. to 150s. "	100s. "
Watchmaking, &c.	Watchmakers ..	45s. to 70s. "	55s. "
<i>Class XVII.—Heat, Light, and Energy.</i>			
Electric apparatus	Engine-drivers ..	..	60s. per week
	Dynamo attendants	..	54s. "
Electric light	Winders	48s. to 60s. per week	54s. "
	Engine-drivers ..	..	10s. 6d. per day
	Firemen	8s. 6d. to 10s. per day	8s. 6d. per day
	Electrical fitters ..	9s. to 10s. "	9s. "
	Switchboard attendants	..	9s. "
	Linemen	7s. to 8s. "	7s. "
	Carboners .. ..	..	7s. "
	Patrolmen .. ..	..	7s. "
	Wirers	8s. to 9s. per day	8s. "
	Greasers .. ..	..	7s. "
	Stokers .. ..	..	7s. 9d. "
	Enginemmen .. ..	..	7s. 10d. "
	Purifiers	6s. 4d. to 7s. 9d. per day	..
Sulphate workers ..	..	7s. 10d. "	

WAGES IN MELBOURNE, 1904—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XVII.—continued.</i>			
Gas and coke	Stove repairers and fitters	8s. to 10s. per day	..
	Service layers ..	7s. 10d. to 8s. 2d. per day	..
	Main layers ..	8s. 6d. to 9s. 6d. per day	..
	Inspectors	8s. 9d. to 11s. 6d. per day	..
	Labourers	6s. 6d. to 6s. 10d. per day	..
Hydraulic power	Enginemmen .. ..	..	8s. per day
	Firemen .. ..	..	7s. 6d. "
	Fitters .. ..	..	9s. "
	Main layers .. ..	..	9s. "
	Special labourers ..	..	8s. "
	Ordinary labourers ..	..	7s. "
Ironfounders' dust, charcoal dust	Labourers	39s. to 45s. per week	39s. per week
Match	Vesta makers—female	12s. 6d. to 24s. "	16s. "
	Box makers—female	12s. to 21s. "	14s. "
<i>Class XVIII.—Leatherware (excluding Saddlery and Harness.)</i>			
Leather Belting	Belt makers	48s. to 60s. per week	48s. per week
Portmanteau, gladstone bag	Machinists, putters-up,	..	48s. "
	Leather bag makers	45s. to 60s. "	45s. "
	Portmanteau makers	35s. to 45s. "	35s. "
<i>Class XIX.—Wares not elsewhere included.</i>			
Basket, wickerware ..	Wicker workers (piece work)	40s. to 50s. per week	40s. per week
	Pith cane, bamboo workers (piece-work)	30s. to 50s. "	40s. "
Bellows	Bellows makers ..	30s. to 45s. "	40s. "
Broom, brushware ..	Millet broom makers	35s. to 50s. "	40s. "
	Hair broom, brush makers	40s. to 55s. "	45s. "
Cork cutting	Cork cutters	30s. to 40s. "	35s. "
Rubber goods (including cycle tires)	Rubber workers, expert	60s. to 90s. "	60s. "
	" ordinary	35s. to 50s. "	37s. 6d. "
	Trimmers, finishers, and small rubber goods makers—female	15s. to 25s. "	20s. "
Quarry	Quarrymen	36s. to 54s. "	45s. "
	Stonebreakers ..	2s. to 2s. 6d. per c. yd. (2½ in.)	..
	Labourers	36s. to 42s. per week	42s. per week

WAGES IN MELBOURNE, 1904.

B.—Rates of Wages ruling in Melbourne during 1904 for Servants and Adult Workers in Unclassified Trades and Industries.

** NOTE.—This statement has been compiled from information collected direct from employers or their agents.

Industry and Service.	Occupations.	Wages.		
		Range.	General Rate.	
Educational*	Governesses	£20 to £40 per annum	..	
	.. .. advanced	£40 to £60	..
Clerical	Teachers in private schools	£40 to £60	..	
	Bookkeepers	50s. to 60s. per week	..	
	Shorthand clerks and typists	40s. to 50s.	..	
Domestic servants*—males ..	Shorthand clerks and typists (female)	25s. to 40s.	..	
	Coachmen, footmen, grooms, gardeners	15s. to 30s.	20s. per week	
	Butlers	20s. to 40s.	25s. ..	
	Cooks	15s. to 30s.	20s. ..	
	Laundresses	14s. to 20s.	15s. ..	
	Housemaids	10s. to 15s.	14s. ..	
	Nursemaids	8s. to 20s.	15s. ..	
	General servants ..	10s. to 15s.	12s. ..	
	Girls	5s. to 8s.	7s. ..	
	Hotel servants*—males ..	Barmen	20s. to 30s.	25s. ..
Waiters		20s. to 30s.	25s. ..	
Boots		12s. 6d. to 25s.	15s. ..	
Ostlers		12s. 6d. to 25s.	18s. ..	
Cooks		20s. to 65s.	25s. ..	
Barmails		15s. to 25s.	20s. ..	
Waitresses		10s. to 15s.	12s. 6d. ..	
Housemaids		10s. to 15s.	12s. 6d. ..	
Cooks		15s. to 30s.	20s. ..	
Building, &c.		Bricklayers	10s. to 11s. per day	11s. per day
	Carpenters and joiners	9s. to 10s.	10s. ..	
	Labourers	7s. to 8s.	8s. ..	
	Masons .. ..	.. ..	10s. ..
	Painters and glaziers	8s. to 9s.	9s. ..	
	Paperhangers .. ..	.. ..	9s. ..
	Plasterers .. ..	.. ..	10s. ..
	Plumbers .. ..	.. ..	10s. ..
	Plumbers, *licensed sanitary	11s. to 12s.	11s. ..	
	Signwriters and Decorators	.. ..	10s. ..
	Slaters .. ..	.. ..	10s. ..
	Bakehouse	Bakers, bread	48s. to 52s. per week	50s. per week
	 (foremen)	54s. to 80s.
	 pastry (1st class)	52s. to 70s.	52s. ..
	 (2nd class)	43s. 4d. to 50s.	43s. 4d. ..
Butchering	Slaughtermen	50s. to 70s.	50s. ..	
	Shopmen	55s. to 80s.	55s. ..	
	General butchers ..	.. ..	45s. ..
	Small goods men ..	55s. to 80s.	55s. ..	
	Drivers	35s. to 45s.	35s. ..	
Laundry	Laundresses—female	20s. to 24s.	20s. ..	
	Photography	Photographers	60s. to 120s.	
Photography	Printers	30s. to 60s.	50s. ..	
	Retouchers—female ..	20s. to 35s.	20s. ..	
	Finishers	15s. to 30s.	20s. ..	
	Makers of photographic materials	36s. to 80s.	45s. ..	
	Finishers, packers—female	17s. 6d. to 25s.	17s. 6d. ..	

* With board and lodging.

The sums expended in connexion with the whole of the factories of the State during 1904 were—for wages, £4,794,365; on fuel and light, £375,214; and for materials, £13,356,103. The total value of the articles produced was £23,126,180 which gives £4,600,498, to cover profits, rent, interest, and some minor unclassified expenses. The following statement contains full particulars:—

	Value 1904.	Proportion per cent.
	£	
Wages	4,794,365	20·7
Fuel	375,214	1·6
Materials... ..	13,356,103	57·8
Articles produced	18,525,682 23,126,180	80·1 100·0
Margin for profit and miscellaneous expenses	4,600,498	19·9

The percentage statement of this table is somewhat similar to that which has been obtained for New South Wales and New Zealand, published in the *Statistical Account of Australia and New Zealand* for 1903-4, p. 971, viz. :—

Wages	21·4
Fuel and materials	57·4
Margin for profit and miscellaneous expenses	21·2
	100·0

The larger expenditure on wages here shown for New South Wales and New Zealand, as compared with Victoria, arises mainly from the fact that there is in Victoria a larger number of females, and a lesser number of males employed.

In 1904, the numbers for New South Wales and Victoria were as follow :—

	Males.	Females.
Victoria	50,554	25,733
New South Wales	53,480	14,494

In addition to the factories thus dealt with, there are a number of small establishments where goods are made up, but respecting which no statistics have been collected. It has been found impossible, from want of data, to frame a reliable estimate of the value of the work done in these establishments.

The following particulars are furnished respecting the more important industries of the State :—

The number of tanneries, &c., decreased by eight during 1904, when 86 were in operation. The hands employed also decreased from 1,640 to 1,439. The wages paid last year to the hands (excluding working proprietors) amounted to £113,869. The approximate values of the machinery, plant, land, buildings, and improvements during the same period were :—

Tanneries, fell-mongeries, and wool-washing establishments.

VALUE OF TANNERIES : RETURN FOR FIVE YEARS.

Year.	Approximate Value of—		
	Machinery and Plant in Use.	Land.	Buildings and Improvements.
	£	£	£
1900 ...	91,530	51,250	117,960
1901 ...	99,710	47,750	98,950
1902 ...	103,329	54,179	104,114
1903 ...	110,796	48,341	112,407
1904 ...	109,095	41,979	104,005

Tannery operations during the past year were carried on in 2,833 pits, where 8,983 tons of bark were used. The output was :—

OUTPUT OF TANNERIES : RETURN FOR FIVE YEARS.

Year.	Number Tanned of—			Sheep Skins Stripped.	Wool Washed (weight after washing).
	Hides.	Calf Skins.	Sheep and other Skins.		
	No.	No.	No.	No.	lbs.
1900 ...	500,549	165,802	1,395,600	1,431,811	6,866,383
1901 ...	406,260	181,522	676,936	615,614	8,511,171
1902 ...	424,786	189,886	313,166	453,660	5,279,916
1903 ...	397,367	179,425	629,465	925,263	6,197,723
1904 ...	381,473	134,003	674,105	643,532	5,166,200

The columns "Hides" and "Calf Skins" include the number of skins dealt with in small tanneries; but these are not included in the regular lists. The work done in these small tanneries was the tanning of 2,903 hides, 3,977 calf skins, and 9,806 sheep and other skins.

The value of the leather imported into Victoria in 1904 was £234,433, of that exported, £286,171. The export of Victorian leather was valued at £232,398.

There were 19 soap and candle works in operation in 1904—one less than in the previous year. The hands employed numbered 492 (of whom 11 were females), including 17 working proprietors and 13 managers. The value of the machinery, plant, land, and buildings

Soap and candle works.

and improvements was £210,053 in 1903, and £202,742 in 1904—a decrease of £7,311. The return for the last five years are:—

SOAP AND CANDLE WORKS—VALUE AND PRODUCTS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Products Made.	
	Machinery and Plant in Use.	Land.	Buildings and Improvements.	Soap. (Including that made in small Factories.)	Candles.
	£	£	£	cwt.	cwt.
1900 ...	95,114	42,675	58,049	133,678	46,624
1901 ...	97,260	42,870	60,940	143,140	47,313
1902 ...	91,325	39,967	56,852	165,188	49,406
1903 ...	103,411	42,288	64,354	151,414	45,052
1904 ...	101,486	38,295	62,961	170,028	41,521

The amount of wages paid to the hands employed was £39,366.

The quantity of soap, perfumed and other, imported during 1904 was 1,388,852 lbs., valued at £17,740; the quantity exported was 3,997,321 lbs., of which 3,625,039 lbs. was Victorian made. The former was valued at £36,095, and the latter at £31,885. The quantity of candles imported was 1,350,455 lbs., valued at £27,667; and the exports 1,006,914 lbs., valued at £21,446, including 738,053 lbs. of Victorian-made candles, valued at £15,625. The quantity of tallow used in the manufacture of soap and candles was 141,439 cwt.

Brickyards,
potteries,
earthen-
ware, &c.

The brickyards during the year increased from 110 to 111, but the number of hands decreased from 1,581 to 1,432. The latter number (of whom 30 were females) included 123 working proprietors (of whom 1 was a female) and 33 managers and overseers. The sum of £102,980 was paid to the employes; and the value of land, plant, buildings, &c., was £251,105. The estimated value of the bricks made was £129,138.

The number of bricks made, and the value of pottery and of pipes and tiles manufactured during the last five years, were returned as follow:—

POTTERY, PIPES AND TILES: RETURN FOR FIVE YEARS.

Year.	Number of Bricks Made.	Value of -	
		Pipes and Tiles.	Pottery.
		£	£
1900	85,387,275	55,751	19,870
1901	86,769,000	73,060	23,695
1902	92,503,080	71,074	27,289
1903	79,105,831	81,732	34,572
1904	80,711,511	53,454	31,438

NOTE.—The number of bricks includes those made in small brickyards.

The following is a statement of the limestone raised for making Lime works. lime during the last five years:—

LIMESTONE RAISED: RETURN FOR FIVE YEARS.

Year.				Cubic Yards.	Estimated Value.
					£
1900	...	...	...	75,064	35,186
1901	...	...	...	81,098	38,014
1902	...	...	...	79,328	37,185
1903	...	...	...	82,148	38,507
1904	...	...	...	82,438	38,642

Forest saw-mills were established for the purpose of cutting native timber at or near the place where it is grown. The number of these mills during the last year was 128, or three more than in 1903. The number of hands employed in 1904 was 1,698, of whom 161 were working proprietors, and 46 were managers and overseers. The wages paid amounted to £103,071. The approximate value of machinery, plant, land, buildings, improvements, together with the quantity and value of timber sawn during the last five years appears in the following statement:—

Year.	Approximate Value of—			Timber Sawn.	
	Machinery and Plant in use.	Land.	Buildings and Improvements.	Quantity.	Value.
	£	£	£	Super ft.	£
1900	104,500	7,520	27,350	44,782,330	125,121
1901	91,810	6,170	13,500	46,495,885	134,310
1902	81,898	6,380	11,854	40,494,660	128,430
1903	80,039	1,495*	10,797	38,841,322	116,845
1904	89,760	1,966*	12,301	49,250,000	147,750

The other factories working in wood number 140, comprising—cooperage and cork-cutting works (12), employing 84 males, and paying £6,387 in wages; dairy and domestic implements and bellows (6), employing 99 males and paying £9,004 in wages; saw-milling, moulding, and joinery works (87), employing 1,577 males and 9 females, and paying £137,790 in wages; mantelpiece (4), employing 120 males and 1 female, and paying £10,799 in wages; and wood carving and turnery (29), employing 157 males and 2 females, and paying £7,504 in wages. The total amount paid in wages to workers in wood, other than those employed in forest saw-mills, was £171,484; and the approximate value of land, buildings, machinery, &c., in use in the works, was £304,823.

* Value of land occupied by saw-mills only.

Forest
production.

As the result of an investigation, it has been estimated that the average consumption of firewood in each household is about 3 tons per annum, and that the total consumption of the State is therefore about 750,000 tons, of the approximate value of £380,000.

In addition, there are supplies of railway sleepers, piles, posts and rails, shingles, and timber for mines, obtained from the forests, but it has been found impossible to procure reliable information as to their value.

The revenue derived from forest royalties and licences is as under:—

No	—	Revenue.	Total.
	Saw-mill Industry—	£ s. d.	£ s. d.
118	Mill site Licences ...	1,130 11 8	
175	Fellers' and Haulers' Licences ...	393 5 6	
144	Royalty Permits ...	3,133 1 4	4,656 18 6
	Other Timber Operations—		
4340	Royalty Permits ...	8,534 19 2	
1900	Priced Splitters' Licences ...	499 7 7	9,034 6 9
206	Wattle Stripping Permits ...	...	1,909 10 8
			15,600 15 11

Bacon and
ham curing.

The establishments connected with this industry increased from 24 in 1903 to 25 in 1904. The number of hands employed also increased from 256 to 288. The approximate value of machinery and plant in use last year was £27,822; of land, £5,641; and of buildings and improvements, £25,730; and the wages paid to employes amounted to £24,071.

The following gives details of the industry for the five years ended 1904:—

BACON CURING: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Pigs Slaughtered for Curing.	Weight of Bacon and Hams Cured.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	No.	lbs.
1900 ...	23,210	7,680	25,200	109,619	10,267,778
1901 ...	27,900	8,690	27,670	112,428	11,696,710
1902 ...	29,611	9,231	30,625	114,539	11,702,322
1903 ...	26,810	5,721	23,415	90,979	9,814,951
1904 ...	27,822	5,641	25,730	106,728	11,423,870

NOTE.—The columns, "Pigs Slaughtered" and "Weight of Bacon and Ham Cured," included the number and quantity dealt with in small factories. These are not included in the regular list.

In addition, the following quantities of bacon and hams were returned as having been cured on farms, viz. :—2,936,769 lbs. in 1900, 3,314,906 lbs. in 1901, 2,736,048 lbs. in 1902, 2,689,900 lbs. in 1903, and 3,428,074 lbs. in 1904. The total for the State in 1904 was thus 14,851,944 lbs.

The import of bacon and hams in 1904 was 450,466 lbs., valued at £13,541, and 3,410,312 lbs., valued at £121,412, were exported, including 3,057,453 lbs., valued at £108,750, cured in Victoria. Import and export of bacon and hams.

The number of butter and cheese factories (including 1 butterine factory) exclusive of creameries, was 214 in 1904. The great majority of these employed steam power. There was an increase of 7 from the previous year. Of the factories in operation in 1904, 167 made butter, 9 made butter and cheese, 5 made butter and concentrated milk, 32 made cheese only, and 1 made butterine. In 1904 there were 266 creameries, the maximum number being 399 in 1900. In 1904 the horse power of the engines used in factories and creameries was 2,954. The number of hands employed in 1904 was 1,400, an increase of 81 over the previous year. The approximate value of machinery, plant, land, buildings, and improvements in 1904 was £522,411, or £2,037 less than in 1903. The quantity of milk received at the factories and creameries increased from 77,520,000 gallons in 1895—the first year in which a record was kept—to 129,640,181 gallons in 1904. Butter and cheese factories.

The output from butter and cheese factories during the last five years was:—

BUTTER AND CHEESE FACTORIES: RETURN FOR FIVE YEARS.

Year.	Butter.	Cream Sold.	Cheese.	Concentrated Milk Made.
	lbs.	gallons.	lbs.	gallons.
1900	48,839,996	38,274	2,508,843	263,138
1901	40,824,928	50,092	2,073,940	266,083
1902	32,927,546	23,739	2,128,835	243,904
1903	40,707,377	17,882	3,602,988	236,581
1904	55,058,391	7,242	2,599,443	226,810

In addition to the quantity of butter and cheese made in the factories, the following quantities were returned as having been made on farms, viz. :—Butter, 6,764,122 lbs. in 1900, 6,032,644 lbs. in 1901, 6,300,208 lbs. in 1902, 5,978,350 lbs. in 1903, and 5,944,450 lbs. in 1904; cheese, 1,775,327 lbs. in 1900, 1,900,728 lbs. in 1901, 1,720,726 lbs. in 1902, 2,078,527 lbs. in 1903, and 2,148,408 lbs. in 1904. Butter and cheese made on farms.

Taking the returns of butter from all sources, the largest quantity, 61,002,841 lbs., was made in 1904. The largest quantity of cheese returned was 5,681,515 lbs. in 1903. Previously, the largest return was 5,052,782 lbs. in 1895. Butter and cheese made in factories and on farms.

The import of butter was 1,294,119 lbs., valued at £45,948; and the export 41,861,116 lbs., valued at £1,606,018; 40,792,958 lbs. of the latter, valued at £1,563,517 being Victorian butter. Import and export of butter.

Import and export of cheese.

The total quantity of cheese made in factories and on farms was 4,747,851 lbs.; 288,993 lbs., valued at £7,094, was imported from abroad; and 1,569,894 lbs., valued at £32,949, was exported, including 1,426,661 lbs. of Victorian cheese, valued at £29,860.

Meat freezing and preserving works.

The number of works for freezing and preserving meat increased from 6 in 1895 to 19 in 1904, the horse power from 529 to 1,240, and the number of hands from 238 to 456. The approximate value of machinery, plant, land, buildings, and improvements in 1904 was £263,464. The output was:—

MEAT FREEZING AND PRESERVING: RETURN FOR FIVE YEARS.

Year.		Frozen.			
		Sheep.	Cattle.	Rabbits.	Poultry.
		No.	Qrs.	No.	No.
1900	...	437,242	16,096	4,840,128	44,050
1901	...	417,721	6,395	3,990,460	71,490
1902	...	375,178	1,338	6,218,422	34,228
1903	...	294,906	1,424	5,861,741	41,460
1904	...	459,963	3,394	7,128,175	22,635
Year.		Preserved.			
		Beef.	Mutton.	Rabbits.	Fish.
		Cwt.	Cwt.	Cwt.	Cwt.
1900	...	5,593	2,198	24,874	831
1901	...	3,304	2,417	26,303	1,140
1902	...	7,705	14,913	16,537	2,134
1903	...	8,796	2,653	17,380	4,492
1904	...	4,248	491	14,977	535

Imports and exports of frozen and preserved meats.

The following is a statement showing the imports and exports of frozen and preserved meats during 1904:—

	Imports (including transfers from other States).		Exports.	
	Quantity.	Value.	Quantity.	Value.
Frozen—		£		£
Mutton	...	...	15,431,119 lbs.	238,047
Beef	24,914 lbs.	288	1,767,499 "	26,838
Pork	56,250 "	720	202,250 "	3,363
Rabbits and Hares	13,291 "	61	...	126,587
Poultry	63,798 "	1,182	...	4,566
Game	2,013 "	136	14,129 "	564
Other meats	141,286 "	1,838	133,350 "	1,320
Meats—Fresh and smoked	1,203,676 "	4,606	26,606 "	338
„ Potted and concentrated	...	7,656	...	734
„ Preserved in tins	485,483 "	15,733	2,700,501 "	49,879
„ Not elsewhere included	1,451 cwt	2,454	1,219 cwt.	2,249
Total value	...	34 674	..	454,485

These mills decreased in number by 6 and the hands by 34 since Flour mills. 1900, whilst an increase of 135 took place in the horse-power of the engines. The approximate values of machinery, plant, land, buildings, and improvements, the wheat operated on for flour, and the quantity of flour made during the last five years, were as follow:—

FLOUR MILLS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Wheat Operated on for Flour.	Flour Made.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	bushels.	tons.
1900	297,880	74,442	184,470	8,387,323	169,739
1901	280,130	70,530	175,520	9,482,175	190,845
1902	256,980	76,121	171,125	8,491,224	170,696
1903	261,530	68,917	166,869	5,762,849	115,368
1904	235,508	52,220	147,559	10,012,476	202,314

During the year 1,600,579 lbs. of Victorian biscuits, valued at £28,209, and 97,018,000 lbs. of Victorian flour, valued at £364,705, were exported; as well as 132,021 lbs. of biscuits, valued at £3,093, and 2,022,000 lbs. of flour, valued at £8,237, received from outside the State. The imports were 311,400 lbs. of biscuits, valued at £9,117, and 1,406,000, lbs. of flour, valued at £5,318. Import and export of bread-stuffs.

The two sugar refineries working in 1904 employed engines of 506 horse-power and 343 hands, treated 1,123,381 cwt. of raw (cane) sugar, and produced 1,071,995 cwt. of refined sugar, and 36,803 cwt. of refined treacle. Full particulars will be found in the following table:— Sugar refineries.

SUGAR REFINERIES: RETURN FOR FIVE YEARS.

Year.	Sugar Refineries.				Approximate Value of—			Cane Sugar Treated (Raw).	Refined Sugar Made.	Refined Treacle Made.
	Total Number.	Using Steam Engines.	Actual Horse-power of Engines Used.	Average Number of Hands Employed.	Machinery and Plant.	Land.	Buildings.			
					£	£	£	cwt.	cwt.	cwt.
1900	2	2	424	301	74,500	7,000	56,000	1,004,913	944,049	34,080
1901	2	2	424	324	74,500	7,000	56,000	1,129,586	1,052,742	40,320
1902	2	2	424	346	82,000	10,000	76,500	952,801	879,521	51,052
1903	2	2	474	344	83,500	10,000	76,500	1,087,005	1,025,583	51,109
1904	2	2	506	343	83,500	10,000	76,500	1,123,381	1,071,995	36,803

Breweries.

The number of breweries in 1904, 45, was five less than in 1900, and the number of hands employed decreased from 1,096 to 1,002. The approximate value of the machinery, plant, land, buildings, and improvements, the quantities of materials used, and the beer made during the last five years, were:—

BREWERIES: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Materials Used—			Beer Made.
	Machinery and Plant.	Land.	Buildings and Improvements.	Sugar.	Malt.	Hops.	
	£	£	£	cwt.	bushels.	lbs.	gallons.
1900 ...	204,840	230,530	269,410	111,863	598,094	648,648	16,162,550
1901 ...	212,280	236,310	271,600	113,686	608,445	650,214	16,563,068
1902 ...	211,036	228,990	273,325	115,258	625,441	677,262	17,162,680
1903 ...	209,492	229,965	277,383	102,651	552,042	569,981	15,423,149
1904 ...	231,687	229,965	291,180	100,430	530,771	544,524	14,927,873

NOTE.—The columns under "Materials Used" and "Beer Made" include those of small breweries, not included in the regular list.

Distilleries.

The distilleries decreased from 9 in 1900 to 5 in 1904, the hands from 143 to 24, the estimated value of machinery, plant, land, buildings, and improvements from £146,450 to £19,365, and the horse-power of the engine from 58 to 23.

The materials used in the manufacture, and the quantity of spirits distilled, were:—

DISTILLERIES: RETURN FOR FIVE YEARS.

Year.	Materials Used.							Spirits Distilled.
	Wine.	Malt.	Wheat.	Maize.	Other Grain.	Sugar and Molasses.	Beer.	
	Gal.	Bush.	Bush.	Bush.	Bush.	lbs.	Gal.	Proof gal.
1900	160,301	91,223	2,353	3,692	26	4,652,480	...	439,117
1901	148,584	123,394	1,541	16,000	2,464	2,853,760	2,265	490,550
1902	128,272	16,744	87	11,880	2,507	1,780,016	...	190,644
1903	207,621	...	...	...	...	...	1,187	41,083
1904	293,836	...	...	...	...	...	...	58,745

Spirits made by vine-growers for fortifying wine are not included in the previous table. The following quantities were distilled during the last five years in vineyards for that purpose:—30,554 gallons in 1900, 38,058 gallons in 1901, 49,867 gallons in 1902, 56,851 gallons

in 1903, and 73,210 gallons in 1904. The following are the quantities of Victorian spirits consumed (*i.e.* duty paid) in the years named:—194,345 gallons in 1900, 297,486 gallons in 1901, 234,986 gallons in 1902, 189,068 gallons in 1903, and 253,555 gallons in 1904.

In some of the leading distilleries no spirit has been distilled since the imposition of the new duties. To the reduction of the differential duty, from 4s. to 1s. per gallon, the distillers have ascribed the great falling-off in this industry.

The number of jam, pickle, and sauce factories increased from 21 in 1899, to 27 in 1904; the horse-power of engines used from 214 to 252; the hands employed from 1,316 to 1,503. The value of the machinery, plant, lands, and buildings, also increased during the same period from £87,330 to £120,299. Jam, pickle and sauce works.

The following statement shows the quantity of materials used, and the output of jam, pickle, and sauce factories during the year:—Fruit used, 199,306 cwt.; sugar used, 97,057 cwt.; jams and jellies made, 190,151 cwt.; fruit preserved, 22,408 cwt.; fruit pulped 115,295 cwt.; sauce made, 10,048,615 pints; pickles made, 444,963 pints.

The value of the imports of pickles and sauces was £14,546; that of the exports of these goods £18,983. The value of the jam imported was £10,119; of that exported £11,738.

The number of factories decreased from 5 in 1900 to 4 in 1904; the hands employed from 76 to 54; the approximate value of machinery, plant, lands, and buildings increased from £24,300 to £31,988. Salt works.

The following table contains full particulars for the past five years:—

SALT WORKS: RETURN FOR FIVE YEARS.

Year.	Number of Manufactories.	Number using Machinery.	Hands Employed.	Approximate Value of—			Crude Salt Raised	
				Machinery and Plant in use.	Land.	Buildings and Improvements.	Quantity.	Value.
1900	5	2	76	£ 2,650	£ 700	£ 20,950	Tons. 5,326	£ 3,995
1901	5	2	72	4,550	700	24,080	7,118	5,339
1902	4	1	59	4,150	410	24,660	7,147	5,360
1903	3	1	63	4,300	400	26,025	9,374	7,030
1904	4	2	54	4,675	690	26,623	2,739	2,053

These decreased from 14 in 1900 to 9 in 1904, but there was an increase in the number of hands employed from 1,176 to 1,324, while during the same period there was a decrease in the horse-power of the engines used of from 131 to 113, and in the value of machinery, plant, land, buildings, and improvements from £175,080 to £169,778. Tobacco, &c. manufactories.

The quantity of material used and the output from 1900 to 1904 were:—

TOBACCO FACTORIES: RETURN FOR FIVE YEARS.

Year.	Unmanufactured Leaf.			Quantity Manufactured of—			
	Imported Duty Paid.	Operated on.		Tobacco.	Snuff.	Cigars.	Cigarettes.
		Imported.	Colonial.				
	lbs.	lbs.	lbs.	lbs.	lbs.	No.	No.
1900	1,743,280	1,661,632	276,407	1,722,236	794	11,584,442	111,010,705
1901	2,742,653	2,542,580	230,113	2,365,831	1,133	13,025,840	125,693,600
1902	969,602	1,379,905	205,434	1,630,510	550	11,936,455	100,817,104
1903	1,910,558	2,052,100	304,049	2,390,976	813	9,336,975	58,928,535
1904	2,597,035	2,768,873	266,053	3,166,767	1,122	12,419,426	73,304,100

NOTE.—The figures in the above table include the imported leaf operated upon. The quantity manufactured in small factories (£5 licences) is also included, but does not appear in the regular list.

The total consumption of tobacco in 1894, 1899 and 1904, was—

Year.	Total Consumption.	
	Quantity.	Average per Head.
	lbs.	lbs.
1894	2,266,000	1.93
1899	2,492,879	2.10
1904	2,771,332	2.29

Woollen
mills.

These mills increased from 9 in 1900 to 10 in 1904; the horse-power of the engines from 1,305 to 1,719, the number of hands from 1,013 to 1,231, and the approximate value of the machinery, plant, land, buildings, and improvements from £263,310 to £306,889, during the same period. The quantities of wool and cotton used, and of goods manufactured, were:—

WOOLLEN MILLS: RETURN FOR FIVE YEARS.

Year.	Quantity of Scoured Wool Used.	Quantity of Cotton Used.	Goods Manufactured—			
			Tweed and Cloth.	Flannel.	Blankets.	Shawls and Rugs.
	lbs.	lbs.	yards	yards.	No. of Pairs.	No.
1900	1,831,000	178,332	971,267	1,596,120	56,340	3,500
1901	2,023,509	250,184	818,975	2,229,617	49,302	4,600
1902	2,149,897	273,335	708,749	2,612,343	67,609	5,718
1903	2,130,100	368,749	662,381	3,201,275	77,601	6,565
1904	2,368,871	211,256	697,726	3,301,004	86,253	8,431

These factories increased from 108 in 1900 to 131 in 1904, the horse-power of the engines from 316 to 508, the number of hands from 4,812 to 5,655, and the approximate value of machinery, plant, land, buildings, and improvements from £204,080 to £241,342. The following are the quantities of goods manufactured each year from 1900 to 1904:—

BOOT FACTORIES: RETURN FOR FIVE YEARS.

Year.	Goods Manufactured—*		
	Boots and Shoes.	Boot and Shoe Uppers for other than Factory use.	Slippers.
	No. of pairs.	No. of pairs.	No. of pairs.
1900	3,446,809	18,639	66,740
1901	3,125,799	66,057	92,174
1902	3,613,487	72,391	216,483
1903	3,574,761	99,222	150,012
1904	4,099,881	64,216	189,108

* Including output of small factories not included in regular list.

NOTE.—The number of slippers returned for 1902, 1903, and 1904 includes canvas shoes and house-boots, which were not returned previous to the these years.

The value of boots and shoes imported into the State during 1904 was £93,123; the value of the exports was £327,787, including £280,895 worth of Victorian manufacture, the main portion of which was to the adjoining States.

The number of electric light works decreased from 10 in 1900 to 7 in 1904 (due to amalgamation of works in the city of Melbourne); the horse-power of the engines increased from 4,235 to 5,226, and the number of hands employed from 176 to 222. The approximate value of machinery, plant, land, buildings, and improvements, also the quantity of electricity supplied, are set forth in the following table for the period under review:—

ELECTRIC LIGHT WORKS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Electricity Supplied.
	Machinery and Plant.	Land.	Buildings and Improvements.	
	£	£	£	British Units.
1900	145,580	16,060	37,700	6,100,519
1901	220,690	15,240	86,730	6,680,214
1902	204,022	10,000	67,661	6,450,560
1903	198,751	9,750	76,733	5,626,568
1904	374,850	12,085	98,809	6,644,343

Gasworks.

Forty-eight gasworks were in operation in 1904, and 46 in 1900. An increase from 345 to 568 took place in the horse-power of engines in use, and from 632 to 872 in the number of hands employed. In the value of machinery, plant, and buildings and improvements, an increase from £1,198,280 to £1,731,031 is reported for the same period.

The quantities of coal used, of gas made, and of coke produced, during the period under review, are shown hereunder:—

GAS WORKS: RETURN FOR FIVE YEARS.

Year.	Coal Used.	Gas Made.	Coke Produced.
	- tons.	cubic feet.	tons.
1900 ...	153,455	1,516,531,100	77,255
1901 ...	159,374	1,567,649,380	84,546
1902 ...	169,356	1,642,652,799	92,308
1903 ...	166,018	1,628,889,400	94,947
1904 ...	166,307	1,649,396,000	97,357

In addition to the coal used, 108,531 gallons of oil in 1902, 105,651 in 1903, and 117,114 in 1904, were also consumed.

The increases which appear for 1904 in relation to electric light and gasworks, are principally due to the fact that the hands employed in the distribution of the product, and the value of the distributing plant, which have been for some years excluded, are now again included.

Total production.

In the year 1903, it was only practicable to publish a partial return, showing the value of the various industries of the State. For 1904, however, effort has been made to procure as full particulars as possible in this direction, and the result appears in the following table:—

ESTIMATED VALUE OF VICTORIAN PRODUCTS, 1904.

		Produce.	Value.
<i>Cultivation.</i>			£
Wheat ...	... bushels	21,092,139	3,119,878
Oats ...	... "	6,203,429	465,257
Barley, Malting ...	... "	575,505	92,320
Barley, Other ...	... "	298,594	31,103
Maize ...	... "	623,736	79,967
Other Cereals ...	... "	231,723	34,758
Grass and Clover Seed ...	... "	27,300	6,825
Potatoes ...	... tons	92,872	417,150
Onions ...	... "	12,969	116,721
Other Root Crops ...	... "	20,043	35,075
Hay ...	... "	514,316	861,479
Straw ...	... "	385,108	96,277
Green Forage ...	... acres	29,902	74,755
Tobacco ...	... "	106	1,219
Grapes, not made into wine, &c. ...	... cwt.	63,718	28,678
Raisins ...	... lbs.	3,393,117	49,526

ESTIMATED VALUE OF VICTORIAN PRODUCTS, 1904—continued.

	Produce.	Value.
<i>Cultivation—continued.</i>		
Currants	lbs. 669,108	£ 9,757
Wine	gallons 1,832,386	83,984
Hops	cwt. 1,449	9,419
Other Crops	acres 3,280	27,880
Orchards and Gardens growing Fruit for sale	" 47,205	365,493
Orchards and Gardens, Private	" 5,546	11,092
Market Gardens	" 7,904	197,600
Total ... ..	...	6,216,213
<i>Dairying and Pastoral.</i>		
Milk Consumed in Natural State	gallons 28,309,218	648,752
Butter made	lbs. 61,002,841	2,414,695
Cheese made	" 4,747,851	89,022
Cream made (not for butter)	gallons 34,117	8,529
Concentrated Milk	" 226,810	39,691
Horses produced	No. 16,538	198,456
Cattle "	" 250,079	1,740,767
Sheep "	" 1,989,636	1,429,970
Pigs "	" 189,833	380,616
Wool, Exported (net). Customs Value	lbs. 71,759,096	3,376,015
Wool, used by Manufacturers in State	" 4,027,080	167,795
Total ... ..	...	10,494,308
<i>Mining.</i>		
Gold	ozs. 821,017	3,252,045
Coal	tons 121,741	70,208
Stone from Quarries ... ..	...	44,943
Limestone ... ..	...	38,642
Salt (crude) ... ..	...	2,053
Other Metals and Minerals ... ..	...	12,245
Total ... ..	...	3,420,136
<i>Forest Produce.</i>		
Timber (Forest Saw-mills only) ... ..	...	£ 147,750
Firewood (estimated) ... ..	...	380,000
Bark for Tanning ... ..	...	82,817
Total ... ..	...	610,567
<i>Miscellaneous.</i>		
Honey and Beeswax ... ..	...	21,408
Poultry production ... ..	...	1,491,550
Rabbits, Hares, and Game ... ..	...	137,590
Fish ... ..	...	75,023
Total ... ..	...	1,725,571
Total Value of Primary Products ... ..	...	22,466,795
Manufacturing. Value added during process...	...	9,185,238*
Grand Total ... ..	...	31,652,033

* Exclusive of butter and cheese factories and forest saw-mills.

Production
per head of
population.

The mean population of the State for the year 1904 was 1,207,537, and the figures of this table show the value of production per head to be as under:—

		Per Head of Population.		
		£	s.	d.
Cultivation	... ..	5	2	11 $\frac{1}{2}$
Dairying and pastoral	... ..	8	13	9 $\frac{3}{4}$
Mining	... ..	2	16	7 $\frac{3}{4}$
Forest produce	... ..	0	10	1 $\frac{1}{4}$
Honey and beeswax	}	...	1	8
Poultry				
Rabbits, hares, and game				
Fish				7
Primary products	... ..	18	12	1 $\frac{1}{4}$
Manufacturing	... ..	7	12	1 $\frac{1}{2}$
Total	... ..	26	4	2 $\frac{3}{4}$

INTERCHANGE.

By the Commonwealth Constitution the collection of Customs and Excise duties was transferred to the Federal Government on the 1st January, 1901, and the departments of Posts and Telegraphs and Defence were transferred by proclamation on 1st March following. The Commonwealth Government collects the revenue of these departments, and after deducting the expenditure of the transferred departments incurred in the State, and the State's proportion of new expenditure on a population basis, returns the balance to the State.

Customs
and Excise
transferred
to Com-
monwealth.

A limit to the amount which the Commonwealth may expend is fixed by Section 87 of the Constitution, which provides that not more than one-fourth of the net revenue from Customs and Excise shall be applied to the expenses of the Commonwealth. Ten years after the introduction of uniform duties, the Commonwealth Parliament may repeal or alter this provision. After 8th October, 1906, the Commonwealth Parliament may alter the basis of the distribution of Customs and Excise revenue amongst the States, and may provide for distribution on a population or any other basis. A provisional tariff was introduced by resolution of the House of Representatives on the 8th October, 1901; and the tariff, in its present form, was finally passed on 16th September, 1902, with various modifications of the duties as first proposed.

Up to this year each State published statistical information regarding its trade, showing countries from and to which articles were imported and exported. Under this arrangement there occurred material differences in the classification of the goods, making it practically impossible to institute accurate comparisons. Arrangements were accordingly made by the Federal Government for uniform tabulation of trade returns in each State, and the information so tabulated was issued for the first time by the Government Statistician of New South Wales in 1903.

Imports and
exports.

It is, however, very much to be regretted that this information is incomplete in regard to matters of first importance to each State. The State returns prepared for 1903 were ample for all purposes; but, inasmuch as they were not fully published by the Federal Government this work was carried out by the States. The returns for 1904 relating to exports furnished by the Customs Department to the Federal Government are defective, inasmuch as they do not show the destination of home produce exported, and those being prepared for 1905 will be similarly defective.

There is reason to believe that the Inter-State export trade, so far as Victoria is concerned, has increased very extensively since the establishment of Federation, and as it is desirable to know exactly what has been taking place in this particular direction for all the States, arrangements are now being made for the preparation of the 1906 "Interchange" Statistics, in such manner as will show for each State the destination of its produce.

The total value of Victoria's imports and exports and their value per head of the population for each of the five years, 1900 to 1904, are shown in the following table:—

VALUE OF IMPORTS AND EXPORTS: RETURN FOR FIVE YEARS.

Year.	Value of—			
	Imports.		Exports.	
	Total.	Per Head of Population.	Total.	Per Head of Population.
	£	£ s. d.	£	£ s. d.
1900 ...	18,301,811	15 6 9	17,422,552	14 12 0
1901 ...	18,927,340	15 14 8	18,646,097	15 10 0
1902 ...	18,270,245	15 2 8	18,210,523	15 1 8
1903 ...	17,859,171	14 15 6	19,707,068	16 6 0
1904 ...	20,091,951	16 12 9	24,404,917	20 4 3

The trade of 1904 is considerably greater than that of all previous years. The imports exceeded those of any year since 1891, and the exports those of all other years, the latter being over four and a half millions, or 24 per cent. more than those of 1903, the next year in importance. Compared with 1903, the increase in imports is equivalent to £1 17s. 3d. per head of the population, and in exports to £3 18s. 3d. per head. Imports per head of population exceeded exports in 1900 by 14s. 9d., in 1901 by 4s. 8d., and in 1902 by 1s. only, but in 1903 and 1904 exports exceeded imports by £1 10s. 6d., and £3 11s. 6d. per head respectively.

Imports and exports to principal countries.

Trade with the other Australian States, New Zealand, the United Kingdom, other British possessions, and all foreign countries in each of the last five years was as follows:—

IMPORTS FROM AND EXPORTS TO PRINCIPAL COUNTRIES.

Countries.	1900.	1901.	1902.	1903.	1904
	Imports.				
From—	£	£	£	£	£
Other Australian States	6,364,167	6,240,460	5,412,520	5,519,556	7,353,067
New Zealand ...	404,356	619,894	1,151,179	1,043,509	873,304
United Kingdom ...	7,055,028	7,221,801	6,935,040	5,977,947	7,266,239
India and Ceylon ...	638,759	687,383	546,839	680,894	605,565
South Africa ...	2,820	2,920	2,459	2,239	2,206
Other British Possessions	293,557	350,039	579,736	423,590	376,880
Belgium ...	198,631	197,275	162,212	150,672	214,908
France ...	207,783	141,107	114,918	108,906	113,863
Germany ...	778,056	822,685	903,189	796,897	952,322
United States of America	1,461,880	1,537,598	1,494,486	1,976,015	1,538,623
Other Foreign Countries	896,774	1,106,178	967,667	1,178,937	794,974
Total ...	18,301,811	18,927,340	18,270,245	17,859,171	20,091,951

IMPORTS FROM AND EXPORTS TO PRINCIPAL COUNTRIES—*continued.*

Countries.	1900.	1901.	1902.	1903.	1904.
	Exports.				
To—	£	£	£	£	£
Other Australian States	5,257,188	5,570,838	7,841,188	8,522,056	8,232,223
New Zealand ...	437,322	465,704	638,735	524,898	508,227
United Kingdom ...	6,363,685	5,425,772	3,433,310	3,280,134	7,953,077
India and Ceylon	1,256,100	814,046	1,321,633	3,549,910	2,847,755
South Africa ...	1,926,433	3,891,057	2,823,677	1,226,981	993,883
Other British Possessions	121,175	144,364	117,200	133,770	204,289
Belgium ...	203,245	265,281	397,356	431,979	627,674
France ...	730,765	636,277	817,280	967,770	1,301,371
Germany ...	328,763	546,567	464,144	568,985	857,113
United States of America	120,138	249,598	128,896	312,297	454,911
Other Foreign Countries	677,738	636,593	227,104	188,288	424,594
Total ...	17,422,552	18,646,097	18,210,523	19,707,068	24,404,917

The proportion of imports coming from Australian States formed 35 per cent. of the total in 1900, 33 in 1901, 30 in 1902, 31 in 1903, and 36½ in 1904, the proportion coming from the United Kingdom being 39 per cent. in 1900, 38 in 1901 and 1902, 33 in 1903, and 36 in 1904. The average contributions for the five years to Victorian imports by other countries were—New Zealand 4 per cent., India and Ceylon 3½, Belgium and France each 1 per cent., Germany 4½, the United States of America 8½, and all others 7½ per cent. Of the total exports the proportion sent to Australian States was 30 per cent. in 1900 and 1901, 43 in 1902 and 1903, and 34 in 1904, the proportion sent to the United Kingdom being 36½ per cent. in 1900, 29 in 1901, 19 in 1902, 17 in 1903, and 33 per cent. in 1904; India and Ceylon took 7 per cent. in 1900, 4½ in 1901, 7 in 1902, 18 in 1903, and 11½ per cent. in 1904; whilst South Africa took 11 per cent. in 1900, 21 in 1901, 15½ in 1902, 6 in 1903, and 4 per cent. in 1904. On the average for the five years New Zealand took about 2½ per cent. of our exports, Belgium, 2, France, 4½, Germany 3, the United States of America 1½, and all other countries 2½ per cent. British countries contributed 81 per cent. of our total imports in 1900, 80 in 1901 and 1902, 76 in 1903, and 81½ per cent. in 1904, and took 88 per cent. of our total exports in 1900, 87½ in 1901, 89 in 1902, 87½ in 1903, and 85 per cent. in 1904.

On the whole, during the five years under review, Victorian trade with the United Kingdom shows an increase from £13,418,713 to £15,219,316; but as compared with our total trade, a decline is shown from 38 to 34 per cent. The proportion of imports declined from 39 to 36 per cent., and of exports, from 36½ to 33 per cent.

Trade with
United
Kingdom.

Trade with
United
States.

Leaving out of consideration other British countries, our largest trade is with the United States, amounting in 1904 to nearly two millions, of which over one and a half millions represent imports. As compared with the year 1900, however, this trade has only increased by £411,516, and its proportion to the total trade has remained the same, at about 4½ per cent.

Trade with
Germany.

Germany next claims attention, with which country the total trade in 1900 was £1,106,819, and in 1904, £1,809,435, or 3 per cent. of the whole in the former, and 4 per cent. of the whole in the latter year. Here the imports and exports for the last year are fairly equal, and the increase which has taken place in the trade is mainly due to an increase of Victorian exports to that country.

Trade with
France.

With France, contrary to our experience with the United States, our principal trade is in exports, which in 1904 amounted to £1,301,371, as against imports £113,863; the increase in the total trade in the five years is £476,686, viz., exports £570,606, less a decline in imports of £93,920. The proportion in 1900 was 2½, and in 1904 slightly over 3 per cent.

Imports and
exports to
Australian
States.

Trade with each of the other States of the Commonwealth in each of the last five years was as follows:—

IMPORTS FROM AND EXPORTS TO OTHER STATES: RETURN FOR FIVE YEARS.

State.	1900.	1901.	1902.	1903.	1904.
	Imports.				
From—	£	£	£	£	£
New South Wales...	4,136,297	4,597,861	3,669,446	3,297,545	4,352,895
Queensland ...	588,413	517,696	499,595	400,766	875,415
South Australia ...	513,049	492,654	524,952	904,962	693,600
Western Australia	780,291	276,832	291,004	221,989	166,759
Tasmania ...	346,117	355,417	427,523	694,294	1,264,398
Total Inter-State	6,364,167	6,240,460	5,412,520	5,519,556	7,353,067
	Exports.				
To—	£	£	£	£	£
New South Wales...	2,953,510	2,992,342	3,747,504	4,430,742	3,973,818
Queensland ...	312,498	366,783	1,024,894	738,498	592,529
South Australia ...	492,966	523,978	703,157	857,498	1,111,964
Western Australia	852,167	988,481	1,122,500	1,243,833	1,250,355
Tasmania ...	676,047	699,254	1,244,133	1,251,485	1,303,557
Total Inter-State	5,257,188	5,570,838	7,841,188	8,522,056	8,232,223

This statement, which includes for 1904, under the head of exports, £2,753,225 worth of goods other than those of Victorian origin, serves to illustrate the growing importance of Melbourne as a distri-

buting and manufacturing centre for the neighbouring States. Further, it shows that after the abolition of Inter-State duties towards the end of 1901 imports from other States declined, and that exports to those States increased considerably notwithstanding that in 1904, as compared with 1903, imports rose to the extent of £1,833,511, and exports declined by £289,833. For the combined years 1900 and 1901, imports exceeded exports by £2,788,306 from New South Wales, by £426,828 from Queensland, and by £18,759 from South Australia; but exports exceeded imports by £783,525 to Western Australia, and by £673,767 to Tasmania. Under Inter-State free-trade, for the combined years 1902, 1903, and 1904, exports exceeded imports by £832,178 to New South Wales, by £580,145 to Queensland, by £548,105 to South Australia, by £2,936,936 to Western Australia, and by £1,412,960 to Tasmania. The total Inter-State trade for 1900 and 1901 shows an excess of imports amounting to £1,776,601, whilst for 1902, 1903, and 1904, it shows an excess of exports amounting to £6,310,324. In 1904, as compared with 1900, imports from New South Wales increased by £216,598, from Queensland by £287,002, from South Australia by £180,551, and from Tasmania by £918,281—the latter being an increase of no less than 265 per cent.; but imports from Western Australia decreased by £613,532, which is accounted for by the decline in imports of gold since the establishment of the Perth mint. Comparing the same years, viz.:—1904 with 1900, exports to New South Wales increased by £1,020,308, or 34 per cent.; to Queensland by £280,031, or 90 per cent.; to South Australia by £648,998, or 140 per cent.; to Western Australia by £398,188, or 47 per cent.; and to Tasmania by £627,510, or 93 per cent.

In 1900 the total trade of Victoria with the other States was valued at £11,621,355, of which the imports formed 55 per cent., and the exports 45 per cent. In 1904 this trade had increased to £15,585,290, the imports representing 47 per cent., and the exports 53 per cent.

No record of Victorian produce exported to other States during 1904 has been kept by the Customs Department; but information has been supplied by which a reliable estimate can be made. The years 1903 and 1904 show a considerable increase in the value of Victorian produce exported, the increase per head of population over 1902 being 18s. 8d. in 1903, and £2 19s. 2d. in 1904. The proportion to the total exports was 80 per cent. in 1900, 76 per cent. in each of the next three years, and 71 per cent. in 1904. The principal articles of domestic produce exported are wool, wheat, and butter and cheese, all of which in 1904 show a substantial increase in value over any of the four preceding years.

Victorian
produce
exported.

The values of the *principal* articles of export entered at the Customs by exporters as being the produce or manufactures of Victoria during each of the last five years were as follow:—

PRINCIPAL ARTICLES OF VICTORIAN PRODUCE EXPORTED: RETURN FOR FIVE YEARS.

Principal Articles.	1900.	1901.	1902.	1903.	1904.
	£	£	£	£	£
Animals—Cattle ...	104,597	131,535	66,733	315,399	167,141
Horses ...	250,385	258,310	214,354	182,996	228,209
Sheep ...	100,263	125,025	163,206	704,622	340,199
Butter and Cheese	1,509,333	1,246,739	796,789	1,303,422	1,593,377
Fruit—Dried ...	15,271	20,058	44,249	56,768	70,492
Fresh ...	31,483	65,162	50,621	81,692	54,740
Jams and Jellies ...	49,994	46,178	111,178	82,755	71,941
Grain—Oats ...	257,899	250,308	149,535	45,818	163,121
Wheat ...	700,814	1,064,649	500,436	33,052	2,581,276
Other ...	28,412	23,571	102,768	53,961	49,073
Grain prepared— Flour ...	196,899	199,506	179,293	74,479	364,705
Hay and Chaff ...	516,352	407,433	1,242,186	339,660	65,420
Fodder ...	62,351	85,540	90,142	69,306	121,375
Meat—Bacon and Ham ...	66,406	91,870	129,817	137,971	103,750
Frozen Beef	4,293	6,680	10,135	24,724	25,555
" Mutton " Rabbits " & Hares	107,747	124,849	185,539	191,647	233,154
Skins and Hides ...	145,178	104,959	160,445	167,914	126,432
Wool ...	165,604	252,682	365,659	323,245	590,141
Other Articles ...	3,422,704	2,762,801	1,602,177	1,848,925	3,443,153
Total Merchandise	2,260,460	2,567,555	3,352,980	4,548,497	3,703,568
Gold (Bullion and Specie) ...	9,796,495	9,835,410	9,518,242	10,586,853	13,901,822
Total ...	4,122,061	4,298,618	4,305,697	4,353,171	3,467,787
Per head of Popula- tion ...	£ s. d. 11 13 3	£ s. d. 11 15 0	£ s. d. 11 8 6	£ s. d. 12 7 2	£ s. d. 14 7 8
Percentage of Total Exports ...	79.888	75.801	75.912	75.810	71.173

Distribution
of Victorian
produce.

The following table shows the destination of this produce under four principal heads for the past five years:—

EXPORTS OF VICTORIAN PRODUCE: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
	£	£	£	£	£
Australian States ...	3,433,347	3,649,138	6,120,850	6,093,933	5,478,995
United Kingdom ...	5,559,689	4,124,991	2,137,768	2,298,484	6,178,666
Other British Pos- sessions	3,430,186	4,953,443	4,512,570	5,154,382	3,530,530
Foreign Countries ...	1,495,354	1,406,456	1,052,751	1,393,225	2,181,418
Total ...	13,918,554	14,134,028	13,823,939	14,940,024	17,369,609

Of the Victorian produce exported, $24\frac{1}{2}$ per cent. was sent to the sister States in 1900, 26 in 1901, $44\frac{1}{2}$ in 1902, 41 in 1903, and $31\frac{1}{2}$ per cent. in 1904. Forty per cent. was sent to the United Kingdom in 1900, 29 in 1901, $15\frac{1}{2}$ in 1902 and 1903, and $35\frac{1}{2}$ per cent. in 1904. Twenty-four and a half per cent. was sent to other British possessions in 1900, 35 in 1901, $32\frac{1}{2}$ in 1902, $34\frac{1}{2}$ in 1903, and $20\frac{1}{2}$ per cent. in 1904. Eleven per cent. was sent to foreign countries in 1900 10 in 1901, $7\frac{1}{2}$ in 1902, 9 in 1903, and $12\frac{1}{2}$ per cent. in 1904. Compared with 1903, the total value of produce exported in 1904 shows an increase of £2,429,585, or 16 per cent.

Victoria imports a considerable quantity of timber, including large quantities of American oregon and Baltic deal. The following is a statement of the imports and exports during the five years 1899 to 1903:—

VALUE OF TIMBER IMPORTED AND EXPORTED, 1899 TO 1903.

	1899.	1900.	1901.	1902.	1903.
	£	£	£	£	£
Total Imports	441,277	569,101	600,304	640,392	380,158
Imports from Australian States and New Zealand ..	100,376	136,841	150,539	144,699	114,943
Imports of Australasian Timber	88,946	116,337	147,700	141,214	111,675
Total Exports	21,892	35,392	35,785	42,800	57,441
Exports to Australian States and New Zealand	21,332	34,621	35,269	41,712	55,908
Exports of Victorian Timber	9,057	10,230	9,724	14,597	11,632
Victorian Timber exported to Australian States and New Zealand	8,691	10,221	9,583	14,398	11,058

By deducting from the total imports the value of timber which had been imported and then exported, the value of foreign timber (*i.e.*, timber produced outside Victoria) required for use within the State is obtained. Such net imports were valued at £428,442 in 1899, £543,989 in 1900, £574,243 in 1901, £612,189 in 1902, and £334,399 in 1903.

After great development in the import of timber from 1899 to 1902, a decline took place in 1903, in which year the imports were £260,000 less in value than in 1902.

Of the Australasian timber (*i.e.*, timber produced or treated in Australasia) imported into Victoria in 1903, New Zealand contributed £72,486 worth. The Australasian timber imported in that year was valued at £111,675, whilst the Victorian timber exported to Australasia was only worth £11,058. All the export trade in Victorian timber has been done with the adjoining States, very little reaching foreign markets.

Net revenue
of Customs
Depart-
ment.

The following are the net amounts of Customs and Excise duty collected in each of the last three years, the principal items being separately distinguished:—

REVENUE OF CUSTOMS DEPARTMENT: RETURN FOR THREE YEARS.

Heads of Revenue.	1901-2.	1902-3.	1903-4.
Import Duty—	£	£	£
Alcoholic Liquors	469,438	489,195	515,584
Narcotics	205,553	204,457	234,026
Sugar	231,129	283,991	269,890
All Other Articles	1,059,604	1,103,822	1,008,312
Total Import Duties ...	1,965,724	2,081,465	2,027,812
Excise Duty—			
Spirits	79,825	75,578	83,019
Beer	183,738	174,618	168,155
Tobacco	92,004	131,003	140,979
Sugar	40,189	10,715	Dr. 2,307
Starch	741	8,036	7,935
Total Excise Duties ...	396,507	399,950	400,781
Miscellaneous	14,294	17,599	14,912
Grand Total ...	2,376,525	2,499,014	2,443,505

The net revenue collected by the Department of Trade and Customs in Victoria from all sources, after deduction of drawbacks and repayments, and making Inter-State adjustments, amounted to £2,443,505 in 1903-4, being £55,509 below the previous year, but £66,980 in excess of 1901-2. The revenue from Customs duties in 1903-4 was £53,653 less than in 1902-3, but £62,088 more than in 1901-2. Excise duties yielded £831 more than in 1902-3, and £4,274 more than in 1901-2.

Drawbacks.

Imported goods, other than stimulants and narcotics, on which duty has been paid are allowed drawback, which is equivalent to a refund of the duty paid, if subsequently exported. Drawback is allowed not only on goods exported in the same condition as when imported, but also upon imported goods which have been subjected to some process of manufacture in Victoria. Drawbacks are included in the general exports. The following are the figures for the last five years:—

EXPORTS FOR DRAWBACK: RETURN FOR FIVE YEARS.

Year.	Value of Goods Exported for Drawback.	Amount Paid as Drawback.
1900	£ 568,456	£ 92,404
1901	577,928	115,283
1902 ... ..	...	45,022
1903 ... ..	...	34,096
1904 ... ..	...	18,840

From 1872, when the system of allowing drawbacks was first introduced, to the end of 1904, the total amount of duty repaid as drawback was £2,903,634. The withdrawals were heavy in 1901, but very light in 1904, the difference in the amount paid as drawback being £96,443.

Victorian shipping has grown considerably in volume during the last five years; the number of vessels (excluding those engaged in the Victorian coastal trade) entered and cleared, their gross tonnage, and the number of men forming their crews, were as follow:—

Vessels entered and cleared.

SHIPPING INWARD AND OUTWARD: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
Vessels Entered—					
Number	2,101	2,418	2,278	2,204	2,495
Tons	2,929,389	3,392,226	3,366,485	3,409,288	3,928,849
Men	97,770	107,120	110,134	112,064	120,710
Vessels Cleared—					
Number	2,134	2,347	2,286	2,263	2,503
Tons	2,944,192	3,323,265	3,372,555	3,418,566	3,906,692
Men	97,885	105,798	110,293	113,576	120,331
Total Vessels Entered and Cleared—					
Number	4,235	4,765	4,564	4,467	4,998
Tons	5,873,581	6,715,491	6,739,040	6,857,854	7,835,541

The number of vessels entered and cleared during 1904 shows an increase of 12 per cent. over 1903, and 18 per cent. over 1900, their tonnage an increase of 14 per cent. and 33 per cent., and their crews an increase of 7 per cent. and 23 per cent. over the same years.

The nationality of vessels entered and cleared at Victorian ports in each of the years 1900 to 1904 was as shown hereunder:—

Nationality of vessels.

NATIONALITY OF VESSELS ENTERED AND CLEARED: RETURN FOR FIVE YEARS.

Year.	Total.	British.	Australasian.	Foreign.
	Entered.			
1900	2,101	748	1,189	164
1901	2,418	580	1,640	198
1902	2,278	497	1,613	168
1903	2,204	466	1,579	159
1904	2,495	657	1,636*	202
	Cleared.			
1900	2,134	807	1,159	168
1901	2,347	561	1,598	188
1902	2,286	517	1,602	167
1903	2,263	460	1,644	159
1904	2,503	663	1,641*	199

* Australian only.

Australasian vessels formed 55 per cent. of the total shipping inward and outward in 1900, 68 in 1901, 71 in 1902, and 72 in 1903; and 66 per cent. in 1904. British vessels constituted 37 per cent. in 1900, 24 in 1901, 22 in 1902, 21 in 1903, and 26 per cent. in 1904. Foreign vessels made up 8 per cent. of the total in 1900 and 1901, 7 in 1902 and 1903, and 8 per cent. in 1904.

Vessels on
Victorian
register.

The vessels on the Victorian register were as follow on the 31st December, 1904, the ports of their registration and their net tonnage being distinguished:—

VESSELS ON THE REGISTER, 1904.

Port.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number	Tons.	Number.	Tons.
Melbourne	162	130,099	212	33,836	374	163,935
Geelong ... ..	...	...	4	358	4	358
Total	162	130,099	216	34,194	378	164,293

Vessels on
Austral-
asian
registers.

The following is a statement, compiled from figures supplied by the Marine Underwriters' Association of Victoria, of the number and net tonnage of vessels on the registers of all the Australian States and New Zealand on the 30th June, 1904. It will be seen that the tonnage on the Victorian and on the New South Wales registers exceeded 100,000 tons:—

VESSELS OWNED IN AUSTRALIAN STATES AND NEW ZEALAND, 1904.

State.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number	Tons.
Victoria	151	78,178	223	36,234	374	114,412
New South Wales	522	71,125	573	55,102	1,095	126,227
Queensland	98	14,729	199	9,109	297	23,838
South Australia	108	38,187	252	18,427	360	56,614
Western Australia	34	12,711	320	9,708	354	22,419
Tasmania	56	10,004	155	9,341	211	19,345
Total Australia	969	224,934	1,722	137,921	2,691	362,855
New Zealand	227	64,748	355	44,270	582	109,018
Total	1,196	289,682	2,077	182,191	3,273	471,873

LIGHTS AND LIGHTHOUSES, 1904.

Where situated.	Description.	Nature.	Power in Lighthouse. (Units of 1,000 Candles.)			Colour.	Distance Visible.	No. of Hands.	Ordinary	Capital
			White.	Red.	Green.				Expenditure during the Financial Year 1903-4.	Cost.
Cape Nelson	Dioptric	Fixed	4½	3½	..	White*	19	} 3	£	£
Auxiliary	..	..	..	..	..	Red	3		491	16,178
Portland	Dioptric	..	..	..	..	Green	12		312	2,573
Port Fairy	..	Fixed and Flashing	..	{ 1½ f. }	..	Red	9	2	304	3,857
Warnambool (upper light)	..	Fixed	½	..	..	White	14	} 2	310	7,917
(lower light)	Red	5	
Cape Otway	..	Triple Flashing	24	..	..	White	24	} 3	494	10,367
Auxiliary	..	Fixed	Red	4 to 8	
Split Point	Dioptric	..	7½	5½	..	Red†	18	} 3	513	11,838
Auxiliary	White	3	
Port Phillip—	..	..	..	..	..	..	..	..	..	..
Point Lonsdale	Dioptric	Occulting	22	13	..	White and Red	17	3	498	4,113
Queenscliff (high)	Catadioptric	Fixed	2½	..	..	White	17	} 8	1,263	19,071
(low)	Dioptric	..	2	1	..	Red and White	10 & 14	
West Channel Pile Light	..	..	2½	2½	..	..	13	} 4	599	9,456
South Channel (Eastern Light)	2	10	
(pile)	..	..	½	1½	..	..	10	..	14	..
Schnapper Point	..	..	..	..	..	White	10	2	458	5,005
Gellibrand's Point (lightship)	..	..	..	..	..	Red	10	..	..	..
Geelong (Hopetoun Channel N.S.)	..	..	..	..	..	White	6	..	..	..
(Hopetoun Channel S.S.)	..	..	..	..	..	Red	4	..	..	..
Cape Schanck	Catadioptric	Fixed and Flashing	{ 4½ f. }	..	..	White	23	} 3	515	19,278
Auxiliary	..	Fixed	{ 48½ f. }	3	
Wilson's Promontory	Catoptric	..	2½	..	..	Red	24	3	718	24,433
Cliff Island	Dioptric	Flashing	4½	..	..	White	15	3	517	13,225
Cape Everard	Holophotal	Double Flashing	30	12	..	White*	21	} 3	539	21,785
Auxiliary	..	Fixed	Red	2	
Gabo Island	Catadioptric	..	4½	..	..	White	20	} 3	878	22,631
Auxiliary	Red	3	
Total									8,423	191,727

* Red sectors between the limits of white light and shore at either side.
 † White sectors between the limits of red light and shore at either side.

The following return contains particulars of the lights and light-houses on the Victorian coast:—

Interchange.

Dredges.

In 1904 the Melbourne Harbor Trust possessed five dredges, having an aggregate maximum lifting capacity of 3,859 tons per hour, but varying according to the character of the material dredged, whether silt, sand, clay, rotten rock, &c. Of the above dredges, two are end-cutting, two are central-ladder, and one is side-cutting ladder.

Silt raised.

The total quantity of dredgings by the Harbor Trust actually raised in 1904 amounted to 1,009,275 cubic yards, viz., 413,825 cubic yards from Hobson's Bay, and 595,450 cubic yards from the River Yarra and Victoria Dock. Since the establishment of the Trust, the river dredgings have amounted to 20,839,121 cubic yards, and the bay dredgings to 12,333,685 cubic yards, making a total of 33,172,806 cubic yards. Of the dredgings, 23,444,738 cubic yards were deposited at sea, and 9,728,068 cubic yards were landed for roads and reclamation work. The average cost of dredging in 1904 was 2.86d. per cubic yard.

Postal returns.

The following table shows the number of post-offices and the letters, &c., handled each year since 1899:—

POSTAL RETURNS FOR FIVE YEARS.

—	1900.	1901.	1902.	1903.	1904.
Number of Post Offices	1,615	1,637	1,645	1,646	1,652
Posted and Received— Letters and Post Cards	74,291,204	83,973,499	98,342,507	105,922,527	110,445,804
Newspapers	25,466,342	27,125,251	33,638,532	41,101,050	} 58,995,233
Packets	11,904,221	13,172,858	16,966,644	13,653,569	
Parcels	298,52	309,118	365,898	429,084	
Total	111,960,119	124,580,726	149,313,581	161,106,230	169,865,544

The volume of business done by the Post Office has grown considerably in the five years under review, that for 1904 being 52 per cent. more than that for 1900. The number of letters and post-cards for 1904 is 49 per cent. higher than the number for 1900.

Money orders and postal notes.

Money order offices are established at 479 places in connexion with the Post Office, and orders are issued for payment throughout the Commonwealth and all the principal British and foreign countries. Orders for payment within the Commonwealth are limited to a maximum of £20, and for the majority of other British and foreign countries the maximum is £10. The charges range from 1 1-5d. in the £1 on orders issued for payment within Victoria to 6d. in the £1 for orders payable beyond Australia, New Zealand, and Fiji. Postal notes, ranging from 1s. to £1 in value, are issued and paid throughout the Commonwealth, the commission ranging

from ½d. to 3d. The following is a comparative statement of the business done since 1899:—

MONEY ORDERS AND POSTAL NOTES: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904
Money Orders Issued—					
Number	223,566	228,931	217,634	215,694	221,578
Amount	£675,982	£700,618	£706,791	£721,017	£747,875
Money Orders Paid—					
Number	287,219	298,860	306,510	318,766	319,886
Amount	£961,270	£1,004,725	£1,053,313	£1,121,807	£1,125,557
Postal Notes—					
Victorian—Paid in Victoria	£474,947	£504,039	£498,174	£514,464	£559,324
Victorian—Paid in Other States ...	£18,270	£19,171	£30,207	£44,512	£58,061
Of Other States— Paid in Victoria ...	£27,583	£28,205	£46,805	£77,341	£96,532

The value of money orders issued and paid has increased year by year during the five years; those issued in 1904 amounting to £71,893 more than in 1900, and those paid to £164,287 more.

The business in postal notes has increased considerably, the amount of Victorian notes paid within the State being £84,417 more in 1904 than in 1900. The business with the other States shows great improvement during the three latter years, attributable to the removal of Inter-State charges existing prior to the federation of the States.

Telegraphic communication exists between 881 stations within the State. Victorian lines are connected with those of New South Wales, and by means of them with Queensland and the submarine cable to New Zealand, also with the lines in South Australia, and through them with those of Western Australia, the Eastern Archipelago, Asia, Europe, Africa, and America; also with the submarine cable to Tasmania; the length of lines and wire open, and the number of telegrams sent from Victorian stations in the last five years were as follow:—

TELEGRAPHS AND TELEGRAMS: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
Number of Stations ...	824	843	875	878	881
Miles open—					
Line (poles)	6,445	6,468	6,589	6,596	6,494
Wire	15,198	15,356	15,611	15,883	16,240
Number of Telegrams sent—					
Paid—Inland	1,522,642	1,513,217	1,524,236	1,706,497	1,644,522
Inter-State	360,789	410,970	434,807	476,881	501,088
International	23,075	22,725	41,822	50,320	55,750
Unpaid—O.H.M.S. ...	86,503	110,768	93,892	...	...
Total	1,993,009	2,057,680	2,094,757	2,233,698	2,201,310

In 1904 there were 57 telegraph stations, and 1,042 miles of telegraph wire more than in 1900. Compared with 1903 the total telegrams despatched in 1904 shows a decrease of 32,388, inland telegrams having fallen off to the extent of 61,975, whilst Inter-State and international increased by 24,157 and 5,430 respectively. Compared with 1900 the telegrams of 1904 show an increase of 208,301. Unpaid telegrams O.H.M.S. were discontinued in 1902. New Zealand telegrams for 1900 and 1901 are included with Inter-State, but for the three latter years with international.

Telephones.

The telephone exchanges were worked by a private company until September, 1887, in which month the business, buildings, and plant were purchased by the Government. The annual rental for business telephones in Melbourne and suburbs is £9, in country towns, £7. For private residence telephones in Melbourne, suburbs, and country the rental is £5. The following statement shows for the past five years the length of lines and wire open, the number of exchanges, subscribers, bureaux, and private lines:—

TELEPHONES: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
Miles Open—					
Lines (Poles and under-ground					
Cables)	1,109	1,224	1,275	1,310	1,370
Wire	16,748	17,763	21,308	22,995	25,501
Exchanges—					
Number	17	20	20	20	22
Subscribers	5,136	6,049	6,847	7,610	8,429
Bureaux	64	70	74	90	126
Private Lines	311	383	388	392	395

The length of wire has increased 52 per cent., and the number of subscribers 64 per cent. since 1900.

Railways,
length and
cost.

The whole of the railways in Victoria are the property of the State. During the year 1903-4 the mileage of all railways and tracks was re-measured by the Railway Department, and is now correctly given. The gauge is 5ft. 3in. for all double lines, and for 3,034.72 miles of the single lines, the balance—78.37 miles of single lines being 2ft. 6in. gauge. The following table shows the length of

double and single lines, the cost of construction, and average cost per mile for the last five years :—

RAILWAYS, LENGTH AND COST OF CONSTRUCTION : RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
Length of Lines on 30th June—					
Double Lines (miles)	294	294	297	297	315·46
Single Lines (miles)	2,924	2,944	3,006	3,104	3,113·09
Total ...	3,218	3,238	3,303	3,401	3,428·55
Cost of Construction	£ 31,044,239	£ 31,232,023	£ 31,716,408	£ 32,052,954	£ 32,156,868
Average Cost per mile	9,645	9,645	9,602	9,425	9,379

During the year 1903-4, 32.27 miles were opened for traffic, and on the 30th June, 1904, one line was in progress of construction, viz., that from Moe to Walhalla.

The mileage and the traffic of the railways from 1900 to 1904 are given in the following table. Railway traffic.

RAILWAYS—MILEAGE AND TRAFFIC : RETURN FOR FIVE YEARS.

	Year ended 30th June.				
	1900.	1901.	1902.	1903.	1904.
Miles Constructed ...	3,218	3,238	3,303	3,401	3,428·55
,, Dismantled ...	16	16	16	16	16·08
,, Closed to Traffic	9	9	9	9	31·77
,, Open for Traffic	3,193	3,213	3,278	3,376	3,380·70
Train Mileage ...	10,107,549	11,066,016	11,284,944	10,286,272	9,172,644
Passengers carried ...	49,332,899	54,704,062	57,465,077	54,798,073	54,282,003
Goods and Live Stock Carried (Tons) ...	2,998,303	3,381,860	3,433,627	3,093,997	3,439,203

During the past two years the number of train miles run has been reduced to the extent of 2,112,300 miles, the passenger traffic falling off by 3,183,074 passengers, although the goods traffic shows a slight improvement. Comparing 1903-4 with 1899-1900 the train mileage has decreased 9 per cent., but the number of passengers carried has increased by 10 per cent., and the tonnage of goods and live stock by 15 per cent.

Railway receipts and expenditure.

The receipts and working expenses of the railways during the financial years 1899-1900 to 1903-4 were as follow:—

RAILWAY RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

	Year ended June.				
	1900.	1901.	1902.	1903.	1904.
Receipts -	£	£	£	£	£
Passenger Fares ...	1,214,348	1,368,311	1,378,746	1,325,565	1,360,484
Freight on Goods and Live Stock	1,555,252	1,711,894	1,719,462	1,454,770	1,792,978
Sundries ...	255,562	257,592	269,635	266,523	284,679
Total ...	3,025,162	3,337,797	3,367,843	3,046,858	3,438,141
Working Expenses—					
Maintenance ...	498,459	518,488	501,938	528,253	545,013
Rolling-stock ...	679,979	793,345	855,464	774,933	743,032
Traffic Charges ...	564,908	609,000	640,442	582,167	577,799
Compensation ...	6,862	7,945	31,145	10,729	8,216
General Charges...	152,332	146,461	137,129	136,005	148,343
Total ...	1,902,540	2,075,239	2,166,118	2,032,087	2,022,403
Net Receipts ...	1,122,622	1,262,558	1,201,725	1,014,771	1,415,738
Percentage of Ex- penses to Receipts	62·89	62·17	64·32	66·69	58·82

The receipts for 1903-4 are the best for the five years tabulated, being £391,283 in excess of the receipts for 1902-3, and £412,979 in excess of those for 1899-1900—passengers fares are nearly 3 per cent., freights 23 per cent., and other receipts 7 per cent. above those of 1902-3. Working expenses, which include, under the head of general charges, pensions and gratuities, have been reduced during the past two years, being somewhat less than the expenses of 1902-3, and 7 per cent. below 1901-2, but 6 per cent. above the expenses of 1899-1900. The net receipts of 1903-4 are £400,967 in excess of the previous year, and the highest for the five years. The proportion of expenses to receipts for 1903-4 is considerably lower than for the other years, being nearly 12 per cent. less than for 1902-3.

The earnings, expenses, and net profits per mile of railway open for the years ended 30th June, 1900, to 1904, were as follow:—

Railway earnings and expenses per mile.

RAILWAY RECEIPTS AND EXPENDITURE PER TRAIN MILE: RETURN FOR FIVE YEARS.

	1900.	1901.	1902.	1903.	1904.
Average Number of Miles Open ...	3,187½	3,229½	3,266½	3,328	3,371
Gross Earnings per Mile ...	£ 949	£ 1,033	£ 1,031	£ 916	£ 1,020
Expenses per Mile ..	597	642	663	611	600
Net Profits per Mile	352	391	368	305	420

The receipts per mile of open railway for 1903-4 are £104 per mile better than for the preceding year, which, however, were very low, but £13 less than the receipts for the best of the five years, viz., 1900-1. The expenses per mile were only £3 above those for 1899-1900 the lowest year, and £11 under 1902-3. Net profits per mile were £29 above those of the next best year, and £115 above 1902-3.

This table excludes all consideration of interest payable on railway loans and expenses of paying the same, which amounted to £1,515,755 in 1903-4—equal to a charge of £450 per mile of railway open for traffic.

Victorian coal has been largely used by the Railway Department for steaming purposes. In 1900, 76,233 tons were consumed; in 1901, 95,273 tons; in 1902, 120,854 tons; in 1903, 23,694 tons; and in 1904 51,572 tons. The quantity carried for use by the general public was 140,740 tons in 1900, 109,801 tons in 1901, 98,781 tons in 1902, 46,599 tons in 1903; and 70,341 tons in 1904; the rate of the carriage being ¾d. per ton per mile, of which ¼d. per ton per mile was paid by the Government.

Victorian coal used

MELBOURNE TRAMWAYS TRUST.

By the "Melbourne Tramway and Omnibus Company's Act 1883" (47 Vict. No. 765), passed on the 12th October, 1883, the company was authorized to construct tramways in the streets of Melbourne and suburbs, unless the twelve municipalities interested, viz., the cities of Melbourne, Prahran, Richmond, Fitzroy, Collingwood, South Melbourne, Hawthorn, and St. Kilda; the towns of North Melbourne, Brunswick, and Port Melbourne; and the borough of Kew; who had the prior right, elected to do so. All the municipalities, however, decided to exercise the powers conferred upon them, and, the necessary notice to the company having been given, a Tramways Trust was formed, as provided by the Act. This body, which consists of seven delegates from the Melbourne City Council, and one from

Tramways.

each of the other eleven municipalities, received full power to construct tramways, and to borrow money for that purpose, secured on the municipal properties and revenues and on the tramways themselves. The Trust was required by the above-mentioned Act, as modified by the amending Acts (51 Vict. No. 952 and 56 Vict. No. 1278), to complete the tramways by the 31st December, 1893, and to grant a 32 years' lease of the tramways to the company, dating from the 1st July, 1884 (when the liability for interest commenced), and expiring on the 1st July, 1916. The company, on its part, is required to find all the rolling-stock, to keep the tramways and adjoining road, a total width of 17 feet, in complete repair; to hand back the lines in good working condition to the Trust at the expiration of the lease, and to pay to the Trust the annual interest on the moneys borrowed; also to contribute annually a certain varying percentage on the sums borrowed, so as to form a sinking fund towards the ultimate extinction of the loans. The expenses of the Trust to the 31st December, 1893, were defrayed out of the loan; after that period by the company to an amount not exceeding £1,000 per annum, and the remainder by the municipalities; and the liability on account of loans is by Act 48 Vict. No. 788 made a joint and several charge on the properties and revenues of the several municipalities. The total amount the Trust is empowered to borrow is £1,650,000, which has been raised in London by means of debentures bearing interest at 4½ per cent. The premiums received amounted to £55,794, making a total of £1,705,794. The whole of this was expended by the 31st December, 1893, when all outlay from loan moneys ceased in accordance with Act No. 1278. The sinking fund on the 2nd January, 1905, amounted to £768,400. The following particulars have been furnished by the secretary to the Tramways Trust:—

“The total length of tramways authorized and constructed amounts to 47 miles 4 furlongs, of which 43 miles 6 furlongs are worked by cables and stationary steam-engines, and the remaining 3 miles 6 furlongs by horses.

The cable lines form one of the largest systems of this description of tramway in the world, and the method of construction adopted combined all the best features and latest improvements of lines constructed both in America and Europe.

A uniform fare of 3d. is authorized to be charged on the tramway lines, except on the section between the Spencer-street and Prince's-bridge Railway Stations, *via* Flinders-street, on which the fare is 1d. But the company is required to run, upon all lines open for traffic, every morning between the hours of 6 and 7, and every evening between the hours of 5.30 and 6.30 (Sundays and public holidays excepted), two or more carriages for workmen at a fare of 1½d. per journey. All fares will be, by Act No. 765, section 26, subject to revision by Parliament after the lapse of ten years from the date of the first 20 miles of tramway being opened for traffic, *viz.*, on the 31st December, 1897.

The lengths of the several lines and the dates on which they were opened for traffic were given in previous issues of this work."

The succeeding table has been compiled from information furnished by the secretary of the Melbourne Tramway and Omnibus Company:— Melbourne tramways.

MELBOURNE TRAMWAYS: RETURN FOR FIVE YEARS.

Year ended 30th June.	Length of Lines Open.	Tram Mileage.	Passengers Carried.	Traffic Receipts.
				£
1900	48	8,411,159	41,661,580	415,023
1901	48	8,964,734	47,195,647	465,427
1902	48	9,226,883	47,261,572	454,683
1903	48	9,044,282	46,832,910	432,505
1904	48	8,968,928	49,183,742	444,495

The traffic of the Melbourne tramways for 1903-4 is the heaviest recorded, exceeding that of 1890-1 (the next in volume) by 1,138,916 passengers, although the number of tram miles run was 200,984 less than in the earlier year. The passengers carried in 1903-4 exceeded those of the previous year by 2,350,832, whilst the tram mileage was 75,354 less and compared with 1899-1900 the passengers of 1903-4 show an increase of 7,522,162, and the tram miles run an increase of 557,769.

Besides the lines of the Melbourne Tramway and Omnibus Company, there is a cable tramway, $2\frac{1}{4}$ miles in length, between Clifton Hill and Preston; a horse tramway, 7 miles in length, between Sandringham and Cheltenham (Beaumaris); and a horse tramway, $1\frac{1}{2}$ miles in length, between Brunswick and Coburg. There are also tramways at Ballarat and Bendigo. The cost of the Beaumaris tramway to 30th June, 1901, was £21,813. The following were the traffic receipts, &c., on this line during the last five years:—

Other sub-urban and country tramways.

BEAUMARIS TRAMWAY: RETURN FOR FIVE YEARS.

Year.	Miles run.	Receipts.	Working Expenses.
		£	£
1899-00	37,327	1,241	1,339
1900-01	38,723	1,323	1,281
1901-02	39,500	1,528	1,622
1902-03	39,150	1,410	1,644
1903-04	39,700	1,489	1,312

The number of vehicles licensed for the conveyance of passengers in Melbourne, and for a distance of 8 miles beyond the corporate limits in 1904 was 861, of which 607 were cabs; whilst the number

Licensed vehicles in Melbourne.

of drivers licensed for the conveyance of goods was 1,138. The following are the particulars for the last five years:—

LICENSED VEHICLES IN MELBOURNE: RETURN FOR FIVE YEARS.

	Number in—				
	1900.	1901.	1902.	1903.	1904.
<i>For Passenger Traffic.</i>					
Cabs (4 wheels)	663	657	637	613	607
Hansoms	208	199	210	200	210
Omnibuses	19	22	57	37	29
Tram Cars	376	372	372	11	10
" dummies	340	359	344	5	5
Total	1,606	1,609	1,620	866	861
<i>For Conveyance of Goods.</i>					
Drivers licensed	1,388	1,265	1,339	1,299	1,138

The reason for the small number of tram cars and dummies licensed in 1903 and 1904 is that their liability to be licensed was under dispute. The matter has now been settled—the decision being that trams must be licensed.

Victorian Year-Book, 1904.

PART XI.

AUSTRALASIAN STATISTICS, 1904;

WITH

SUMMARIES FOR PREVIOUS YEARS.

*Compiled from Official Information in the Office of the
Government Statist of Victoria.*

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AUSTRALASIAN STATISTICS.

I.—AUSTRALIA—SUMMARIES.

AUSTRALIA.

POPULATION, MARRIAGES, BIRTHS, AND DEATHS.

Period.	Population at end of Year.		Marriages.*		Births.*		Deaths.*	
	Total.	Per Square Mile.	Number.	Rate per 1,000.	Number.	Rate per 1,000.	Number.	Rate per 1,000.
1830	62,190	·02	643	10·34	1,395	22·43	998	16·05
1840	180,626	·06	2,778	15·38	6,649	36·82	3,548	19·64
1850	405,660	·14	5,099	10·58	16,532	34·31	6,823	14·16
1860	1,141,563	·39	9,949	8·71	49,335	43·20	21,453	18·79
1870	1,650,172	·55	11,711	7·10	63,270	38·35	23,307	14·12
1880	2,245,448	·75	17,331	7·72	79,460	35·24	34,263	15·26
1890	3,165,066	1·06	23,209	7·27	109,619	34·26	44,705	14·01
1900	3,769,707	1·27	27,590	7·32	102,648	27·23	46,155	12·24
1901	3,826,287	1·29	27,753	7·29	102,945	27·05	46,330	12·17
1902	3,883,039	1·31	27,926	7·24	102,776	26·66	48,078	12·47
1903	3,926,990	1·32	25,977	6·65	98,443	25·21	47,293	12·11
1904	3,984,376	1·34	27,684	7·00	104,113	26·33	43,572	11·02

* Annual average of three years at each period, from 1830 to 1900 inclusive.

INCREASE OF POPULATION.—BY DECADES.

Period. (Census to Census).	Total Increase.		Natural Increase.	Net Immigration.	Assisted Immigration.
	Number.	Rate per cent. per Annum.			
1831-41 ...	118,436	11·25	8,116	110,320	*
1841-51 ...	225,034	8·43	68,063	156,971	*
1851-61 ...	744,988	10·94	168,660	576,328	225,153
1861-71 ...	512,237	3·75	335,357	176,880	82,005
1871-81 ...	587,232	3·13	391,987	195,245	107,520
1881-91 ...	923,983	3·50	537,083	386,900	151,802
1891-1901	594,569	1·73	589,089	5,480	8,402

* No record.

AUSTRALIA.

STATE REVENUES AND FUNDED DEBTS.

Financial Year ended in—	Aggregate State Revenues.	State Revenues Derived from—				Funded State Debts at end of Financial Year.
		Taxation.	Customs and Excise Duties.*	Land.	Posts and Telegraphs.	
<i>Total Amount</i>						
	£	£	£	£	£	£
1850	966,393	530,500	410,894	379,432	32,541	...
1860	5,342,239	3,041,207	2,387,404	1,354,425	230,828	9,820,180
1870	7,133,474	3,202,437	2,906,301	1,451,599	366,900	28,328,480
1880	13,787,997	4,639,401	4,015,638	3,633,970	790,390	61,327,018
1890	25,008,273	9,300,149	7,324,960	3,833,711	1,661,030	143,662,094
1900	28,789,803	10,189,880	7,708,661	3,521,397	2,274,105	192,659,283
1902	28,272,613	2,790,760	...	3,412,740	...	208,211,198
1903	29,031,789	3,281,382	...	3,260,480	...	216,474,676
1904	28,707,973†	3,285,917†	...	3,322,816†	...	221,456,965
<i>Per Head of Population.</i>						
	£	£	£	£	£	£
1850	2·45	1·34	1·04	1·96	·08	...
1860	4·72	2·69	2·11	1·20	·20	8·61
1870	4·39	1·97	1·79	·89	·23	17·17
1880	6·18	2·07	1·80	1·46	·35	27·31
1890	8·06	3·00	2·37	1·23	·53	45·34
1900	7·75	2·74	2·07	·95	·61	51·13
1902	7·38	·73	...	·89	...	53·94
1903	7·48	·85	...	·84	...	55·40
1904	7·31	·84	...	·85	...	56·01

* Included under the head of taxation.

† The figures included for Tasmania relate to the half-year ended 30th June, 1904.

IMPORTS, EXPORTS, AND SHIPPING.

Year.	Aggregate.		Inter-State.		Extra Australian.		Shipping Inwards and Outwards.†
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	
<i>Total Amount (000's omitted).</i>							
	£	£	£	£	£	£	Tons.
1860	26,469,	22,633,	*	*	*	*	2,686,
1870	25,353,	26,303,	7,172,	8,256,	18,181,	18,047,	3,702,
1880	38,899,	42,513,	15,958,	15,246,	22,941,	27,268,	7,733,
1890	61,785,	55,008,	26,433,	23,679,	35,352,	31,329,	14,083,
1900	69,257,	72,823,	27,869,	26,865,	41,388,	45,958,	23,704,
1902	67,439,	71,112,	26,761,	27,196,	40,678,	43,916,	26,791,
1903	67,468,	77,618,	29,657,	29,452,	37,811,	48,166,	27,153,
1904	70,112,	90,309,	33,099,	32,820,	37,013,	57,489,	29,151,
<i>Per Head of Population.</i>							
	£	£	£	£	£	£	...
1860	23·19	19·83	...	...	...	...	...
1870	15·37	15·94	4·35	5·00	11·02	10·94	...
1880	17·32	18·94	7·10	6·79	10·22	12·15	...
1890	19·84	17·66	8·49	7·60	11·35	10·06	...
1900	18·51	19·46	7·45	7·18	11·06	12·28	...
1902	17·47	18·42	6·93	7·05	10·54	11·38	...
1903	17·27	19·87	7·59	7·54	9·68	12·33	...
1904	17·73	22·84	8·37	8·30	9·36	14·54	...

* No record. — † Includes Inter-State shipping.

LAND IN CULTIVATION.

Year.	Total Area under Cultivation.	Wheat.	Oats.	Barley.	Maize.	Potatoes.	Hay.	Vines.
<i>Acres.</i>								
1860-61	1,355,367	643,983	125,961	26,982	54,769	*	*	4,621
1870-71	2,731,991	1,123,839	197,248	55,416	124,232	*	493,605	16,516
1880-81	5,832,986	3,052,020	177,656	105,754	171,589	87,537	715,865	15,516
1890-91	7,679,525	3,235,631	270,710	117,442	300,900	109,487	1,093,114	41,299
1900-1	11,416,030	5,666,614	470,308	98,211	343,505	110,435	1,517,963	64,577
1902-3	10,637,261	5,156,049	592,247	76,422	303,375	118,368	1,590,488	63,943
1903-4	11,621,830	5,566,340	620,856	121,088	371,906	116,112	1,853,804	65,463
1904-5	11,900,476	6,269,778	493,317	113,207	324,265	116,707	1,867,321	65,873

Produce.

	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Gallons of Wine.
1860-61 ..	*	*	*	*	*	*	*
1870-71 ..	*	*	*	*	*	*	*
1880-81 ..	23,429,543	3,235,223	1,696,459	5,942,811	247,742	818,803	1,672,445
1890-91 ..	27,115,895	5,858,268	2,028,893	8,662,114	384,532	1,219,570	3,997,605
1900-1 ..	48,353,402	12,043,310	1,814,051	9,354,971	319,657	1,834,448	5,121,090
1902-3 ..	12,378,068	7,296,710	1,147,515	4,835,232	408,231	1,359,874	4,758,558
1903-4 ..	74,149,634	17,541,210	2,656,313	9,667,089	449,383	2,903,160	6,160,169
1904-5 ..	54,535,582	8,832,045	2,019,896	8,118,530	296,539	1,442,774	5,631,479

* Figures not available.

LIVE STOCK, WOOL, AND GOLD PRODUCTION, RAILWAYS AND TELEGRAPHS.

Year.	Number of Live Stock.			Production of--				Miles open of--	
	Horses.	Cattle.	Sheep.	Wool. (000's omitted).		Gold. (000's omitted.)		Railways.	Telegraph (Poles).
				Quantity.	Value.	Quantity.	Value.		
1860	431,521	3,957,915	19,852,743	lbs.	£	oz.	£	361	*
1870	716,772	4,276,326	41,593,608	*	*	*	*	953	†12,889
1880	1,061,078	7,523,000	62,162,923	241,031,	15,115,	1,323,	5,292,	3,623	23,932
1890	1,521,598	10,299,816	97,881,221	399,951,	16,387,	1,402,	5,230,	9,543	37,781
1900	1,609,654	8,640,225	70,802,595	344,458,	13,837,	3,191,†	13,539,	13,305	47,073
1901	1,625,880	8,470,530	72,208,736	459,858,	15,584,	3,303,†	14,010,	13,617	47,565
1902	1,534,520	7,021,765	54,012,259	340,917,	12,954,	3,493,†	14,817,	13,595	44,962
1903	1,562,934	7,184,814	57,438,279	329,025,	14,263,	3,837,†	16,297,	14,506	44,619
1904	1,595,256	7,768,520	66,322,918	400,366,	17,345,	3,753,†	15,941,	11,771	44,849

* Information not available.

† Miles of wire.

‡ Fine ounces.

STATES OF
AUSTRALIA.

II.—STATES OF AUSTRALIA—SUMMARIES.

POPULATION AND IMMIGRATION.

Period.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.
POPULATION (ON 31ST DECEMBER).						
1850	76,162	189,341	*	63,700	5,886	70,571
1860	537,847	348,546	28,056	124,112	15,227	87,775
1870	726,599	498,659	115,567	183,797	24,785	100,765
1880	860,067	747,950	226,077	267,573	29,019	114,762
1890	1,133,266	1,121,860	399,215	319,145	46,290	145,290
1900	1,197,206	1,364,590	494,375	361,451	179,708	172,377
1901	1,210,882	1,375,242	505,944	365,733	194,109	174,377
1902	1,211,450	1,403,334	510,853	366,660	213,327	177,465
1903	1,208,854	1,427,342	515,530	368,823	226,954	179,487
1904	1,210,304	1,457,246	521,655	372,682	242,289	180,200
POPULATION PER SQUARE MILE.						
1850	·86	·61	...	·07	·01	2·68
1860	6·12	1·13	·04	·14	·02	3·33
1870	8·27	1·61	·17	·20	·03	3·81
1880	9·79	2·42	·34	·30	·03	4·35
1890	12·89	3·63	·60	·35	·05	5·50
1900	13·62	4·39	·74	·40	·18	6·57
1901	13·78	4·43	·76	·40	·20	6·65
1902	13·79	4·52	·76	·41	·22	6·77
1903	13·76	4·59	·77	·41	·23	6·85
1904	13·77	4·69	·78	·41	·25	6·87
INCREASE OF POPULATION (BY DECADES).†						
1851-61	462,977	189,820	*	63,130	9,214	19,847
1861-71	191,206	153,121	87,901	58,796	10,170	11,043
1871-81	130,818	247,487	95,565	94,239	4,438	14,685
1881-91	278,059	374,129	180,193	40,566	20,074	30,962
1891-1901	60,936	226,899	104,411	42,173	134,342	25,808
ANNUAL RATE OF INCREASE PER CENT. (BY DECADES).						
1851-61	21·06	7·14	...	6·89	9·88	2·52
1861-71	3·07	3·69	14·66	3·88	5·28	1·14
1871-81	1·65	4·07	6·11	4·19	1·63	1·37
1881-91	2·83	4·25	6·31	1·36	5·30	2·40
1891-1901	0·52	1·84	2·38	1·24	13·97	1·63

POPULATION AND IMMIGRATION—*continued.*STATES OF
AUSTRALIA.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
NATURAL INCREASE OF POPULATION (BY DECADES.)†						
1851-61 ...	62,932	63,506	*	27,380	2,704	12,138
1861-71 ...	149,417	104,874	19,320	41,736	3,784	16,226
1871-81 ...	146,140	139,951	36,661	49,207	4,573	15,455
1881-91 ...	161,109	209,705	65,358	68,841	7,101	24,969
1891-1901 ...	172,513	226,676	87,718	58,294	15,901	27,987
NET INCREASE BY IMMIGRATION.—BY DECADES.†						
1851-61 ...	400,045	126,314	*	35,750	6,510	7,709
1861-71 ...	41,789	48,247	68,581	17,060	6,386	-5,183
1871-81 ...	-15,322	107,536	58,904	45,032	-135	-770
1881-91 ...	116,950	164,424	114,835	-28,275	12,973	5,993
1891-1901 ...	-111,577	223	16,693	-16,121	118,441	-2,179

* Included with New South Wales.

† These figures relate to intercensal periods.

STATE-ASSISTED IMMIGRATION.

Period.	Victoria.	New South Wales.*	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
1851-60 ...	87,963	71,649	...	48,905	...	16,636	225,153
1861-70 ...	46,594	18,212	1,617	13,730	...	1,852	82,005
1871-80 ...	5,545	24,412	50,782	25,415	889	477	107,520
1881-90 ...	2	34,079	103,140	7,295	4,552	2,734	151,802
1891-1900 ...	...	659	6,177	...	1,566	...	8,402
1901 ...	...	...	831	...	125	...	956
1902 ...	...	...	487	...	160	...	647
1903 ...	...	...	335	...	196	...	531
1904 ...	...	...	216	...	207	...	423
Total ...	140,104	149,011	163,585	95,345	7,695	21,699	577,429

* New South Wales, prior to the period embraced in the table, received 62,961 assisted immigrants between 1832 and 1850.

STATES OF
AUSTRALIA.

BIRTHS, DEATHS, AND MARRIAGES.

Period (Yearly Average).	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.
BIRTHS AND BIRTH RATES.												
1850-52	3,159	40·84	8,526	45·55	..	..	2,553	40·08	221	33·47	2,073	29·37
1860-62	23,571	43·62	14,782	42·14	1,453	48·33	5,731	46·02	600	38·48	3,198	36·43
1870-72	27,298	37·32	20,013	39·71	5,125	41·33	7,069	38·46	734	29·61	3,040	30·17
1880-82	26,680	31·02	28,952	38·52	8,314	38·94	10,605	37·90	1,009	33·96	3,900	33·71
1890-92	37,971	33·30	39,486	34·82	15,008	38·09	10,507	32·83	1,731	34·73	4,916	33·53
1900-02	30,749	25·60	37,619	27·77	14,440	28·99	9,078	25·00	5,802	31·51	4,960	28·76
1903 ..	29,569	24·46	35,966	25·35	12,621	24·62	8,508	23·21	6,699	30·27	5,080	28·61
1904 ..	29,763	24·65	38,667	26·81	14,082	27·12	9,133	24·70	7,176	30·34	5,292	29·59
DEATHS AND DEATH RATES.												
1850-52	1,350	17·45	3,194	17·06	..	..	1,019	16·00	52	7·87	1,208	17·11
1860-62	10,887	20·15	6,143	17·51	591	19·66	2,072	16·69	231	14·81	1,529	17·42
1870-72	10,389	14·20	6,811	13·52	1,788	14·42	2,606	14·18	323	13·03	1,390	13·79
1880-82	12,529	14·57	11,861	15·78	3,537	16·57	4,105	14·67	408	13·73	1,823	15·76
1890-92	17,498	15·35	14,971	13·20	5,358	13·60	3,958	12·37	780	15·65	2,140	14·59
1900-02	15,765	13·18	15,928	11·76	5,986	12·02	4,072	11·21	2,527	13·72	1,877	10·88
1903 ..	15,595	12·90	16,497	11·63	6,346	12·38	3,951	10·78	2,788	12·60	2,116	11·92
1904 ..	14,393	11·92	15,360	10·65	5,250	10·11	3,778	10·22	2,817	11·91	1,974	11·04
MARRIAGES AND MARRIAGE RATES.												
1850-52	1,316	17·01	2,305	12·31	..	..	382	6·00	53	8·02	1,043	14·78
1860-62	4,486	8·25	3,164	9·02	389	12·94	1,126	9·07	154	9·88	680	7·74
1870-72	4,738	6·47	3,908	7·75	991	7·99	1,290	7·02	151	6·01	633	6·28
1880-82	5,890	6·78	6,268	8·38	1,761	8·24	2,376	8·49	208	7·00	888	7·67
1890-92	8,563	7·51	8,118	7·16	2,958	7·51	2,224	6·97	367	7·36	979	6·67
1900-02	8,397	6·99	10,340	7·63	3,318	6·66	2,335	6·43	1,874	10·18	1,326	7·69
1903 ..	7,605	6·29	9,759	6·88	2,933	5·72	2,272	6·20	2,064	9·33	1,344	7·57
1904 ..	8,210	6·80	10,424	7·23	3,078	5·93	2,534	6·85	2,038	8·83	1,350	7·55

STATE REVENUES.

Financial Year ended in—	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.
	£	£	£	£	£	£	£	£	£	£	£	£
TOTAL STATE REVENUE.												
1850	259,433	3'64	374,670	2'03	..	..	238,983	3'75	19,138	3'44	74,560	1'06
1860	3,082,461	5'77	1,308,925	3'82	178,589	6'37	438,827	3'54	69,863	4'65	263,574	3'02
1870	3,261,883	4'49	2,102,697	4'26	743,058	6'59	657,576	3'58	98,132	3'96	270,128	2'72
1880	4,621,282	5'50	4,904,230	6'80	1,612,314	7'40	2,027,963	7'65	180,050	6'24	442,158	3'59
1890	8,519,159	7'72	9,498,620	8'62	3,260,308	7'45	2,557,772	8'21	414,314	8'64	758,100	5'27
1900	7,460,855	6'27	9,957,036	7'41	4,588,207	9'45	2,853,329	8'00	2,875,396	17'05	1,054,980	6'14
1902	6,997,792	5'79	11,178,214	8'10	3,535,062	6'92	2,477,432	6'79	3,349,450	17'19	734,663	4'22
1903	6,954,019	5'74	11,532,231	8'22	3,526,465	6'90	2,530,568	6'90	3,630,238	17'01	857,668	4'33
1904	7,319,949	6'05	11,248,328	7'88	3,595,440	6'97	2,568,101	6'96	3,550,016	15'64	1,426,139	2'38

STATE REVENUE RAISED BY TAXATION.*

1880	1,690,923	2'00	1,417,294	1'97	600,236	2'75	529,450	2'00	101,257	3'51	300,241	2'64
1890	3,630,814	3'29	2,748,339	2'49	1,471,983	3'82	790,177	2'50	204,405	4'26	454,431	3'16
1900	2,984,592	2'51	2,618,066	1'95	1,984,713	4'09	902,362	2'53	1,055,637	6'26	644,510	3'75
1902	818,274	'72	1,148,942	'83	276,771	'54	267,790	'73	173,582	'89	105,401	'59
1903	950,183	'78	1,145,232	'82	415,688	'81	398,941	1'09	221,247	1'04	150,091	'85
1904	1,012,119	'84	1,100,193	'77	475,184	'92	353,433	'96	235,114	1'04	1109,874	'61

LAND REVENUE.

1850	138,261	1'91	122,265	'66	..	..	90,886	1'42	2,076	'37	28,444	'40
1860	663,238	1'24	312,869	'91	101,573	3'62	180,616	1'45	17,343	1'15	78,786	'90
1870	463,821	'65	478,070	'97	293,692	2'60	152,862	'84	20,103	'81	43,051	'43
1880	844,064	1'00	1,649,436	2'37	449,561	2'03	604,744	2'30	35,752	1'24	53,413	'47
1890	579,776	'52	2,243,039	2'04	576,868	1'50	246,427	'77	107,636	2'24	79,965	'56
1900	383,255	'32	2,116,076	1'57	618,743	1'27	157,116	'44	171,982	1'01	70,124	'41
1902	367,145	'30	2,053,126	1'49	575,297	1'14	156,913	'43	188,489	'97	71,770	'41
1903	356,262	'29	1,870,691	1'33	610,280	1'19	159,850	'44	190,900	'90	72,497	'41
1904	406,739	'34	1,860,570	1'30	637,081	1'24	181,608	'49	205,854	'91	130,964	'17

* Exclusive of Customs and Excise in the last three years.
 † Half-year ended 30th June, 1904.

STATE FUNDED DEBTS.

At end of Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
<i>Total Amounts.</i>						
	£	£	£	£	£	£
1860	5,118,100	3,830,230	..	870,100	1,750	..
1870	11,924,800	9,681,130	3,509,250	1,944,600	Nil	1,268,700
1880	22,060,749	14,903,919	12,192,150	9,865,500	361,000	1,943,700
1890	41,443,216	46,051,450	28,105,684	20,401,500	1,367,444	6,292,800
1899-1900	48,774,885	63,299,859	34,348,414	26,131,780	11,674,640	8,429,705
1901-2	50,408,957	69,109,208	38,318,627	26,423,045	14,942,310	9,009,051
1902-3	51,097,900	75,465,361	38,318,627	26,754,420	15,627,298	9,211,070
1903-4	51,519,962	78,055,955	39,069,227	27,504,695	16,090,288	9,216,838
<i>Per Head of Population.</i>						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1860	9 10 4	10 19 9	..	7 0 2	0 2 4	..
1870	16 8 3	19 8 1	30 7 4	10 11 7	..	12 11 10
1880	25 13 0	20 3 2	53 18 7	36 17 5	12 8 9	16 18 9
1890	36 11 5	41 0 11	71 17 4	63 19 0	27 15 10	43 6 3
1899-1900	40 17 4	46 14 9	70 2 2	72 15 3	67 6 9	48 19 2
1901-2	41 15 5	49 10 5	74 13 4	72 14 3	71 14 6	52 4 1
1902-3	42 5 11	53 6 1	74 14 7	73 5 11	70 7 11	51 6 5
1903-4	42 13 5	54 2 5	75 5 0	74 8 0	68 0 7	51 10 10

STATES OF
AUSTRALIA.

GROSS IMPORTS, VALUE.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
<i>Total.</i>						
	£	£	£	£	£	£
1850 ...	744,925	1,333,413	...	845,572	52,351	658,540
1860 ...	15,093,730	7,755,859	742,023	1,639,591	169,075	1,068,411
1870 ...	12,455,758	8,284,378	1,577,339	2,029,794	213,259	792,916
1880 ...	14,556,894	13,950,075	3,087,296	5,581,497	353,669	1,369,223
1890 ...	22,954,015	22,615,004	5,066,700	8,376,808	874,447	1,897,512
1900 ...	18,301,811	27,561,071	7,184,112	8,174,218	5,962,178	2,073,657
1902 ...	18,270,245	25,974,210	7,352,538	6,181,000	7,218,352	2,442,745
1903 ...	17,859,171	26,770,169	6,731,207	6,743,872	6,769,922	2,593,810
1904 ...	20,096,442	27,285,958	6,052,164	7,450,716	6,672,480	2,554,454
<i>Per Head of Population.</i>						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1850 ...	10 9 3	7 4 4	...	13 5 6	9 7 11	9 7 8
1860 ...	28 5 3	22 5 2	26 9 0	13 4 2	11 4 10	12 5 0
1870 ...	17 9 3	16 15 3	13 19 10	11 2 6	8 12 1	7 19 8
1880 ...	17 2 4	19 6 10	13 18 2	21 3 7	12 5 3	12 1 0
1890 ...	20 10 5	20 10 6	13 2 8	26 9 6	18 4 9	13 4 0
1900 ...	15 6 8	20 7 0	14 13 3	22 15 2	34 7 9	12 0 10
1902 ...	15 2 8	18 13 0	14 6 4	16 19 10	34 16 11	13 18 2
1903 ...	14 15 6	18 17 5	13 2 7	18 7 11	30 11 11	14 12 2
1904 ...	16 12 10	18 18 5	11 13 2	20 3 1	28 4 3	14 5 8

GROSS EXPORTS, VALUE.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
<i>Total.</i>						
	£	£	£	£	£	£
1850 ...	1,041,796	1,357,784	...	570,817	22,135	613,850
1860 ...	12,962,704	6,311,351	523,477	1,783,716	89,247	962,170
1870 ...	12,470,014	8,030,378	2,533,732	2,419,488	200,985	648,709
1880 ...	15,954,559	15,525,138	3,448,160	5,574,505	499,183	1,511,931
1890 ...	13,266,222	22,045,937	8,554,512	8,982,386	671,813	1,486,992
1900 ...	17,422,552	28,164,516	9,581,562	8,191,376	6,852,054	2,610,617
1902 ...	18,210,523	23,544,051	9,171,023	7,890,072	9,051,358	3,244,508
1903 ...	19,707,068	26,738,111	9,514,974	8,490,359	10,324,732	2,843,108
1904 ...	24,404,917	33,007,835	11,153,383	8,482,205	10,271,511	2,989,600
<i>Per Head of Population.</i>						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1850 ...	14 12 8	7 7 0	...	8 19 3	3 19 5	8 15 0
1860 ...	24 5 5	18 8 7	18 13 2	14 7 5	5 18 9	11 0 8
1870 ...	17 9 8	16 5 1	22 9 6	13 5 2	8 2 2	6 10 8
1880 ...	18 15 3	21 10 6	15 10 8	21 3 1	17 6 1	13 6 2
1890 ...	11 17 3	20 0 2	22 3 6	28 7 9	14 0 3	10 6 11
1900 ...	14 12 0	20 15 11	19 11 1	22 16 2	39 10 5	15 3 3
1902 ...	15 1 9	16 18 2	17 17 1	21 13 10	43 13 11	18 9 4
1903 ...	16 6 0	18 17 0	18 11 2	23 3 2	46 13 2	16 0 3
1904 ...	20 4 2	22 17 9	21 9 7	22 18 10	43 8 7	16 14 4

INTER-STATE IMPORTS AND EXPORTS—VALUE.

STATES OF
AUSTRALIA.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
	£	£	£	£	£	£
<i>Imports.</i>						
1860	2,371,425	1,842,682	684,711	526,365	...	225,017
1870	1,847,491	3,045,808	1,140,053	626,031	68,911	444,358
1880	5,522,358	5,259,065	2,061,342	1,936,199	179,127	1,000,031
1890	7,860,240	10,049,648	2,231,933	4,826,725	363,255	1,100,921
1900	6,364,167	10,164,080	3,067,278	4,225,870	2,675,156	1,372,552
1902	5,412,520	10,949,675	3,618,326	3,023,500	2,046,701	1,710,129
1903	5,519,556	12,792,252	3,481,817	3,520,463	2,541,368	1,802,105
1904	7,354,018	14,152,101	3,022,393	4,161,038	2,650,527	1,758,895
<i>Exports.</i>						
1860	957,429	3,441,317	523,166	910,744	...	190,490
1870	1,233,714	3,618,381	1,865,710	1,158,436	11,637	368,324
1880	3,802,761	6,698,334	2,527,434	1,362,760	126,161	728,327
1890	3,728,091	10,990,627	4,123,650	3,631,050	114,743	1,091,006
1900	5,257,188	9,979,214	5,412,881	4,018,678	1,125,031	1,071,829
1902	7,841,188	7,568,922	5,062,754	4,123,866	798,750	1,800,833
1903	8,522,056	7,876,898	5,787,999	4,851,988	866,607	1,546,438
1904	8,232,335	9,918,050	8,179,573	3,772,760	359,079	2,358,550

EXTRA-AUSTRALIAN IMPORTS AND EXPORTS—VALUE.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
	£	£	£	£	£	£
<i>Imports.</i>						
1860	12,722,305	5,913,177	57,312	1,113,226	...	843,394
1870	10,608,267	5,238,570	437,286	1,403,763	144,348	348,558
1880	9,034,536	8,691,010	1,025,954	3,645,298	174,542	369,192
1890	15,093,775	12,565,356	2,834,767	3,550,083	511,192	796,591
1900	11,937,644	17,396,991	4,116,834	3,948,348	3,287,022	701,105
1902	12,857,725	15,024,535	3,734,212	3,157,500	5,171,651	732,616
1903	12,339,615	13,977,917	3,249,390	3,223,409	4,228,554	791,705
1904	12,742,424	13,133,857	3,029,771	3,289,678	4,021,953	795,559
<i>Exports.</i>						
1860	12,005,275	2,870,034	311	872,972	...	771,680
1870	11,236,300	4,412,197	668,022	1,261,052	189,348	280,385
1880	12,151,798	8,826,804	920,726	4,211,745	373,022	783,604
1890	9,538,131	11,055,310	4,430,862	5,351,336	557,070	395,986
1900	12,165,364	18,185,302	4,168,681	4,172,698	5,727,023	1,538,788
1902	10,369,335	15,975,129	4,103,269	3,766,206	8,252,608	1,443,675
1903	11,185,012	18,861,213	3,726,975	3,638,371	9,458,125	1,296,670
1904	16,172,582	23,089,785	2,973,810	4,709,445	9,912,432	631,050

PRODUCE OF PRINCIPAL CROPS.

STATES OF
AUSTRALIA.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia	Tasmania.
<i>Wheat (bushels).</i>						
1860-61	3,459,914	1,581,598	*	3,576,593	*	1,415,896
1870-71	2,870,409	999,595	15,524	6,961,164	*	896,881
1880-81	9,727,369	3,708,737	223,243	8,606,510	413,644	750,040
1890-91	12,751,295	3,649,216	207,990	9,399,389	465,025	642,980
1900-01	17,847,321	16,173,771	1,194,088	11,253,148	774,653	1,110,421
1903-4	28,525,579	27,334,141	2,436,799	13,209,465	1,876,252	767,398
1904-5	21,092,139	16,464,415	2,149,663	12,023,172	2,013,237	792,956
<i>Oats (bushels).</i>						
1860-61	2,633,693	98,814	*	52,989	*	926,418
1870-71	2,237,010	119,365	*	*	*	691,250
1880-81	2,362,425	356,121	2,081	50,070	25,080	439,446
1890-91	4,919,325	256,659	8,967	116,229	37,693	519,395
1900-01	9,582,332	593,548	7,855	366,229	86,433	1,406,913
1903-4	13,434,952	1,252,156	70,713	902,936	258,503	1,621,950
1904-5	6,203,429	652,646	15,137	555,696	226,318	1,178,819
<i>Barley (bushels).</i>						
1860-61	83,854	39,802	*	189,163	*	126,605
1870-71	240,825	47,701	*	337,792	*	161,729
1880-81	1,068,830	160,602	31,433	151,886	114,552	169,156
1890-91	1,571,599	81,383	12,673	175,583	87,813	99,842
1900-01	1,215,478	114,228	127,144	211,102	29,188	116,911
1903-4	1,218,003	174,147	510,557	487,920	53,227	212,459
1904-5	874,099	266,781	331,772	346,718	37,332	163,194
<i>Maize (bushels).</i>						
1860-61	25,045	1,484,468	*	241	*	...
1870-71	20,028	2,340,654	*	...	...	...
1880-81	49,299	4,483,457	1,409,607	...	448	...
1890-91	574,083	5,713,205	2,373,803	...	1,023	...
1900-01	604,180	6,292,745	2,456,647	...	1,399	...
1903-4	904,239	6,836,740	1,923,623	...	2,487	...
1904-5	623,736	4,951,132	2,542,766	...	896	...
<i>Potatoes (tons).</i>						
1860-61	77,258	28,128	*	7,112	*	33,589
1870-71	127,579	34,118	*	9,563	*	34,211
1880-81	129,262	51,936	16,177	16,170	1,649	32,548
1890-91	204,155	52,791	28,810	23,963	1,655	73,158
1900-01	123,126	63,253	20,014	14,566	4,836	93,862
1903-4	167,736	56,743	17,649	31,415	4,542	171,298
1904-5	92,872	48,754	19,231	19,521	5,614	110,547
<i>Hay (tons).</i>						
1860-61	144,211	50,927	*	71,241	*	62,318
1870-71	183,708	69,582	140,316	197,419	*	42,706
1880-81	300,581	173,074	23,440	261,371	24,454	35,883
1890-91	567,779	213,034	50,116	310,125	26,495	52,021
1900-01	677,757	526,260	78,758	353,662	103,813	94,198
1903-4	1,233,063	816,810	136,117	479,723	121,934	115,513
1904-5	514,316	366,293	80,662	294,252	113,794	73,457
<i>Wine (gallons).</i>						
1860-61	12,129	6,420	...	182,087	...	...
1870-71	629,219	342,674	...	801,694	...	...
1880-81	484,028	602,007	85,455	500,955	*	...
1890-91	2,008,493	842,181	189,274	762,776	194,881	...
1900-01	2,578,187	891,190	132,489	1,388,847	130,377	...
1903-4	2,551,150	1,086,820	38,558	2,345,270	138,371	...
1904-5	1,832,386	928,160	60,433	2,625,430	185,070	...

* No record.

STATES OF
AUSTRALIA.

SHIPPING.

Year.	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
INWARDS.*												
1850	555	108,030	976	234,215	..	..	284	86,588	64	15,988	674	104,017
1860	1,814	581,642	1,424	427,835	210	45,736	324	100,681	100	54,564	806	116,172
1870	2,093	663,764	1,858	689,820	476	133,292	445	140,081	127	65,716	613	105,647
1880	2,076	1,078,885	2,108	1,242,458	1,225	633,673	1,045	590,085	165	123,985	654	205,217
1890	2,474	2,178,551	2,889	2,413,247	616	468,607	1,041	1,075,133	251	484,534	746	475,618
1900	2,101	2,929,389	3,626	4,094,088	713	335,355	1,065	1,851,803	769	1,625,696	816	706,044
1901	2,418	3,392,226	3,452	4,196,408	684	353,515	1,128	2,049,240	884	1,842,236	741	618,963
1902	2,278	3,366,485	3,164	4,390,086	780	1,035,492	1,060	2,031,082	763	1,671,169	964	887,485
1903	2,204	3,409,288	3,379	4,501,731	727	902,670	1,112	2,157,961	708	1,673,154	928	933,371
1904	2,495	3,928,349	2,718	4,419,179	766	949,601	1,228	2,426,562	651	1,773,632	957	1,043,425
OUTWARDS.*												
1850	508	87,087	1,014	263,849	..	..	275	87,872	67	14,748	702	108,848
1860	1,841	599,137	1,438	431,484	183	39,503	338	108,355	126	62,615	818	118,243
1870	2,187	681,098	2,066	771,942	456	127,992	471	147,903	181	67,730	611	107,263
1880	2,115	1,101,014	2,043	1,190,321	1,221	621,903	1,111	610,819	168	126,444	655	208,086
1890	2,459	2,184,790	2,777	2,348,625	606	442,172	1,081	1,115,309	267	420,327	763	475,629
1900	2,134	2,944,192	3,406	3,920,801	716	319,662	1,057	1,843,968	747	1,606,332	743	613,955
1901	2,347	3,323,265	3,375	4,324,826	675	332,305	1,139	2,030,126	901	1,872,027	820	726,681
1902	2,286	3,372,555	3,002	4,338,058	769	1,032,119	1,103	2,100,194	765	1,686,905	944	879,730
1903	2,263	3,448,566	3,396	4,503,670	726	895,785	1,085	2,122,929	703	1,662,741	927	935,802
1904	2,503	3,906,692	2,767	4,460,014	761	958,792	1,246	2,456,848	655	1,777,186	944	1,050,182

* Includes Inter-State Shipping.

WOOL PRODUCTION.—(000's omitted).

Year.	Victoria.		New South Wales		Queensland		South Australia.		Western Australia.		Tasmania.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	£	lbs.	£	lbs.	£	lbs.	£
1880	51,763,	3,440,	151,540,	7,918,	24,361,	1,387,	..	1,557,	4,342,	271,	9,025,	542,
1890	55,559,	2,862,	236,686,	9,002,	55,714,	2,534,	..	1,298,	6,970,	261,	9,152,	430,
1900	42,723,	2,404,	204,748,	7,687,	49,284,	2,202,	31,359,	993,	9,095,	271,	7,249,	280,
1901	73,235,	2,638,	273,993,	9,080,	52,506,	2,188,	36,966,	1,086,	13,579,	378,	9,579,	303,
1902	65,981,	2,447,	188,268,	7,353,	29,860,	1,313,	34,932,	1,100,	12,937,	458,	8,944,	283,
1903	51,607,	1,946,	187,968,	8,548,	34,978,	1,877,	35,767,	1,240,	12,002,	443,	5,798,	209,
1904	75,786,	3,544,	220,503,	9,356,	46,151,	2,285,	34,299,	1,306,	12,214,	419,	11,413,	435,

GOLD PRODUCTION.—(000's omitted.)

STATES OF
AUSTRALIA.

Year.	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	oz.	£	oz.	£	oz.	£	oz.	£	oz.	£	oz.	£
1880	829,	3,316,	117,	435,	270,*	1,080,	17,	68,	..	..	47,	201,
1890	588,	2,354,	127,	458,	610,	2,137,	30,	106,	..	..	23,	87
1900†	752,	3,190,	262,	1,071,	677,	2,872,	19,	82,	1,416,	6,008,	75,	316,
1901†	732,	3,107,	174,	737,	599,	2,542,	22,	93,	1,706,	7,236,	70,	295,
1902†	723,	3,067,	182,	685,	641,	2,721,	22,	95,	1,874,	7,943,	71,	301,
1903†	767,	3,262,	255,	1,080,	670,	2,840,	21,	90,	2,065,	8,771,	60,	254,
1904†	766,	3,252,	270,	1,146,	639,	2,715,	29,	124,	1,983,	8,424,	66,	280,

* Figures for 1881.

† Quantities for these years given in fine ounces.

LIVE STOCK.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
<i>Horses.</i>						
1860-61 ...	76,536	251,497	23,500	49,399	9,555	21,034
1870-71 ...	167,220	337,597	83,358	83,744	22,174	22,679
1880-81 ...	275,516	395,984	179,152	150,591	34,568	25,267
1890-91 ...	436,469	444,163	365,812	199,605	44,384	31,165
1900-01 ...	392,237	481,417	456,788	179,352	68,253	31,607
1902-3 ...	392,237	450,125	399,122	179,413	80,158	33,465
1903-4 ...	392,237	458,014	401,984	192,411	82,747	35,541
1904-5 ...	372,397	482,663	413,165	200,241	90,225	36,565
<i>Cattle.</i>						
1860-61 ...	722,332	2,408,586	432,890	278,265	32,476	83,366
1870-71 ...	721,096	2,195,096	1,076,630	136,832	45,213	101,459
1880-81 ...	1,286,267	2,580,040	3,162,752	303,035	63,719	127,187
1890-91 ...	1,782,881	2,091,229	5,558,264	574,032	130,970	162,440
1900-01 ...	1,602,384	1,983,116	4,078,191	472,428	338,590	165,516
1902-3 ...	1,602,384	1,741,226	2,543,471	519,163	437,136	178,385
1903-4 ...	1,602,384	1,880,578	2,481,717	536,580	497,617	185,938
1904-5 ...	1,694,976	2,167,129	2,722,340	520,379	461,490	202,206
<i>Sheep.</i>						
1860-61 ...	5,780,896	6,119,163	3,166,802	2,824,811	260,136	1,700,935
1870-71 ...	10,761,887	16,308,585	8,163,818	4,400,655	608,892	1,349,771
1880-81 ...	10,360,285	35,398,121	6,935,967	6,453,222	1,231,717	1,783,611
1890-91 ...	12,692,843	55,986,431	18,007,234	7,050,544	2,524,913	1,619,256
1900-01 ...	10,841,790	40,020,506	10,339,185	5,283,247	2,434,311	1,683,956
1902-3 ...	10,841,790	26,649,424	7,213,985	4,922,662	2,704,880	1,679,518
1903-4 ...	10,841,790	28,656,501	8,392,044	5,350,255	2,600,633	1,597,053
1904-5 ...	10,167,691	34,526,894	10,843,470	5,874,979	2,853,424	1,556,460

STATES OF
AUSTRALIA.

RAILWAYS.—MILES OPEN.

Year ended in -	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
1860 ...	214	70	21*	56	...	...
1870 ...	274	340	206	133	...	...
1880 ...	1,199	850	633	667	102	172
1890 ...	2,471	2,263	2,112	1,774	524	399
1900 ...	3,202	2,895	2,801	1,902	1,978	587
1902 ...	3,303	3,107	2,974	1,902	1,989	620
1903 ...	3,376	3,220	3,263	1,882	2,145	620
1904 ...	3,381	3,362	3,360	1,882	2,168	618

* In 1865.

TELEGRAPH LINES.—MILES OPEN, 31ST DECEMBER.—POLES.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
1860 ...	*	1,616	169	*	...	...
1870 ...	3,371†	5,579†	2,221†	1,718†	...	...
1880 ...	3,155	7,955	5,768	4,754	1,555	745
1890 ...	6,628	11,231	9,830	5,526	2,921	1,645
1900 ...	6,445	16,756	10,221	5,508	6,052	2,091
1902 ...	6,589	14,526	10,247	5,301	6,112	2,187
1903 ...	6,596	14,395	10,180	5,517	6,079	1,852
1904 ...	6,494	14,491	10,154	5,550	6,199	1,961

* Not available.

† Miles of wire.

NEW
ZEALAND.

III.—NEW ZEALAND—SUMMARIES.

POPULATION, MARRIAGES, BIRTHS, AND DEATHS.

Year.	Population (exclusive of Maoris) at end of Year.		Marriages.*		Births.*		Deaths.*	
	Total.	Per Square Mile.	Number.	Rate per 1,000.	Number.	Rate per 1,000.	Number.	Rate per 1,000.
1860	79,711	·76	886	11·12	3,530	44·54	1,144	14·35
1870	248,400	2·38	1,862	7·50	10,555	41·15	2,845	11·45
1880	484,864	4·64	3,354	6·92	19,027	39·24	5,543	11·43
1890	625,508	5·99	3,868	6·18	18,142	29·00	6,323	10·11
1900	769,321	7·36	5,805	7·53	19,624	25·46	7,505	9·74
1902	807,929	7·73	6,388	8·01	20,655	25·89	8,375	10·50
1903	832,505	7·95	6,748	8·23	21,829	26·61	8,528	10·40
1904	857,539	8·19	6,983	8·26	22,766	26·94	8,087	9·57

* Annual average of three years at each period, from 1860 to 1900 inclusive.

INCREASE OF POPULATION—BY DECADES.

Period.*	Total Increase.		Natural Increase.	Net Immigration.	Assisted Immigration.
	Number.	Rate per Cent.			
1861-71 ...	173,274	11·80	50,052	123,222	(?)
1871-81 ...	232,123	6·63	103,490	128,633	100,920
1881-91 ...	136,725	2·49	131,733	4,992	14,614
1891-1901 ...	146,061	2·12	117,867	28,194	44

* The periods referred to are from Census to Census.

REVENUE AND FUNDED DEBT.

Year ended 31st March.	Revenue.		Revenue derived from—								Funded Debt.						
			Taxation.		Customs and Excise Duty*.		Land.		Posts and Telegraphs.								
	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.					
													£	s.	£	s.	£
1850	..	..	..	..	43,612	1-98	8,559	3-39	..	..	..	..	..	..	..	..	..
1860	464,739	5-88	..	..	189,168	2-37	215,760	2-35	..	..	1886,000	7	8	1	..	..	..
1870	1,384,639	5-57	..	..	765,930	3-08	327,589	1-35	83,202	3-5	7,841,891	32	5	10	..	..	..
1880	3,288,396	7-08	1,535,700	3-31	1,258,114	2-71	389,914	3-4	249,540	5-4	28,583,231	61	12	10	..	..	..
1890	4,208,029	6-88	2,173,985	3-53	1,541,395	2-50	364,166	5-9	340,564	5-5	38,832,350	63	0	10	..	..	..
1900	5,699,618	7-55	2,891,126	3-83	2,137,859	2-90	262,229	3-5	488,246	6-5	47,873,732	62	19	1	..	..	..
1902	6,152,839	7-81	3,113,079	3-95	2,291,349	2-91	249,619	3-2	488,573	6-2	52,966,447	67	5	0	..	..	..
1903	6,447,435	7-98	3,277,964	4-06	2,426,043	3-00	252,278	3-1	525,099	6-5	55,899,019	68	5	4	..	..	..
1904	7,130,116	8-56	3,649,601	4-38	2,698,046	3-24	247,842	3-0	580,771	7-0	57,522,225	68	11	5	..	..	..

* Included under the head of Taxation.

† Figures for 1862.

IMPORTS, EXPORTS, AND SHIPPING.

Year.	Imports.		Exports.		Shipping— Inwards and Outwards.
	Amount.	Per Head.	Amount.	Per Head.	
	£	£ s. d.	£	£ s. d.	tons.
1860	1,548,333	20 9 3	588,953	7 15 8	280,569
1870	4,639,015	19 2 1	4,822,756	19 17 3	538,558
1880	6,162,011	12 19 10	6,352,692	13 7 10	819,716
1890	6,260,525	10 1 8	9,811,720	15 6 1	1,312,474
1900	10,646,096	13 19 4	13,246,161	17 7 6	1,679,907
1902	11,326,723	14 3 11	13,644,977	17 2 1	2,137,949
1903	12,788,675	15 11 10	15,010,378	18 6 0	2,215,229
1904	13,291,694	15 14 7	14,748,348	17 9 0	2,299,333

LAND IN CULTIVATION—AREA AND PRODUCE.

Year.	Total Area.	Wheat.	Oats.	Barley.	Maize.	Potatoes.	Hay.	Vines.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1880-81	1,029,764	324,933	215,007	46,877	2,321	22,530	54,028	..
1890-91	1,636,179	301,460	346,224	32,740	5,759	32,691	44,045	..
1900-01	1,710,619	206,465	449,534	30,831	14,232	28,524	68,023	522
1902-3	1,773,203	194,355	483,659	27,921	12,038	31,408	69,342	705
1903-4	1,786,095	230,346	391,640	34,681	11,156	31,778	77,167	749
1904-5	1,805,724	258,015	342,189	29,484	10,084	26,331	78,816	571

Produce.

	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	
1880-81	8,147,705	6,891,251	1,221,241	..	111,329	68,710	..
1890-91	5,723,610	9,947,036	758,833	238,864	178,121	62,901	..
1900-01	6,527,154	19,085,837	1,027,651	502,697	169,042	136,046*	..
1902-3	7,457,915	21,766,708	1,136,232	607,609	193,267	138,684*	..
1903-4	7,891,654	15,107,237	1,160,504	530,291	208,787	154,334*	..
1904-5	9,123,673	14,553,611	1,128,164	490,405	134,608	157,632*	..

* Estimated.

NEW
ZEALAND.

LIVE STOCK, WOOL, AND GOLD PRODUCTION, RAILWAYS AND TELEGRAPHS.

Year.	Number of Live Stock.			Production of—				Miles Open.	
	Horses.	Cattle.	Sheep.	Wool. (000's omitted.)		Gold. (000's omitted.)		Rail- ways.	Tele- graphs. (Poles.)
				Lbs.	Value.	Ozs.	Value.		
1860 ...	28,275	193,285	2,761,383	6,666,*	£ 444,	4,*	£ 17,	...	...
1870 ...	81,028	436,592	9,700,629	37,040,*	1,704,	545,*	2,158,	...	1,887
1880 ...	161,736	698,637	12,985,085	66,860,*	3,169,	303,*	1,212,	1,258	3,706
1890 ...	211,040	831,831	18,128,186	105,762,	4,348,	193,	773,	1,956	5,060
1900 ...	266,245	1,256,680	20,186,784	144,977,	4,909,	339,†	1,440,	2,300	7,249
1901 ...	279,672	1,361,784	20,233,099	150,299,	3,843,	413,†	1,754,	2,323	7,469
1902 ...	286,955	1,460,663	20,342,727	163,578,	3,513,	460,†	1,951,	2,404	7,749
1903 ...	298,714	1,593,547	18,954,553	159,569,	4,210,	480,†	2,038,	2,441	7,779
1904 ...	314,322	1,736,850	18,280,806	149,693,	4,837,	468,†	1,987,	2,487	7,944

* Quantity exported.

† Fine ounces.

IV.—GENERAL TABLES.

I.—AREA AND POPULATION, 1904.

GENERAL
TABLES.

State.	Area in Square Miles.	Estimated Population on 31st December, 1904.			Number of—		Estimated Mean Population, 1904.
		Males.	Females.	Total.	Females to 100 Males.	Persons to the Square Mile.	
Victoria	87,884	605,035	605,269	1,210,304	100·0	13·77	1,207,587
New South Wales	310,700	770,783	686,463	1,457,246	89·1	4·69	1,442,153
Queensland	668,497	287,799	233,856	521,655	81·3	·78	519,178
South Australia—Proper	380,070	187,906	180,746	368,652	96·2	·97	365,586
N. Territory	523,620	3,452	578	4,030	16·7	·01	4,110
Western Australia	975,920	144,256	98,033	242,289	68·0	·25	236,516
Tasmania	26,215	93,158	87,042	180,200	93·4	6·87	178,826
Australia	2,972,906	2,092,389	1,891,987	3,984,376	90·4	1·34	3,953,906
New Zealand	104,751	453,992	403,547	857,539	88·9	8·19	845,022

2.—MIGRATION BY SEA, 1904.

GENERAL TABLES.

State.	Arrivals. (As recorded.)			Departures. (As recorded.)		
	Males.	Females.	Total.	Males.	Females.	Total.
Victoria	34,339	20,710	55,049	40,318	25,513	65,831
New South Wales ..	48,685	24,263	72,948	36,217	22,122	58,339
Queensland.. ..	10,105	4,783	14,888	11,100	5,522	16,622
South Australia —						
Proper	9,174	4,667	13,841	8,091	5,146	13,237
Northern Territory	456	73	529	516	60	576
Western Australia ..	19,509	12,008	31,517	12,435	7,128	19,563
Tasmania	15,498	9,934	25,432	15,164	9,758	24,922
Australia	137,766	76,438	214,204	123,841	75,249	199,090
New Zealand	21,980	10,652	32,632	14,671	7,606	22,277

3.—MIGRATION BY LAND, 1904.

State.	Arrivals. (As recorded.)			Departures. (As recorded.)		
	Males.	Females.	Total.	Males.	Females.	Total.
Victoria	11,500	6,869	18,369	9,717	6,118	15,835
New South Wales ..	49,995	25,715	75,710	51,567	26,653	78,220
Queensland.. ..	17,988	6,997	24,985	17,323	7,035	24,358
South Australia— Proper	19,957	10,224	30,181	18,903	12,275	31,178

GENERAL
TABLES.

4.—BIRTHS, DEATHS, AND MARRIAGES, 1904.

State.	Births.		Deaths.	Marriages.	Per 1,000 of Mean Population.		
	Total.	Illegitimate.			Births.	Deaths.	Marriages.
Victoria	29,763	1,707	14,393	8,210	24·65	11·92	6·80
New South Wales	38,667	2,755	15,360	10,424	26·81	10·65	7·23
Queensland	14,082	971	6,250	3,078	27·12	10·11	5·93
South Australia—							
Proper	9,100	365	3,719	2,526	24·89	10·17	6·91
Northern Territory	33	2	59	8	8·03	14·36	1·95
Western Australia	7,176	313	2,817	2,088	30·34	11·91	8·83
Tasmania	5,292	308	1,974	1,350	29·59	11·04	7·55
Australia	104,113	6,421	43,572	27,684	26·33	11·02	7·00
New Zealand	22,766	1,029	8,087	6,983	26·94	9·57	8·26

State.	Excess of Births over Deaths.		Males to 100 Females.		Deaths of Infants under One Year.		Percentage of Illegitimate to Total Births.
	Number.	Per cent.	Born.	Died.	Total.	Per 100 Births.	
Victoria	15,370	106·79	105·97	124·86	2,319	7·79	5·74
New South Wales	23,307	151·74	105·57	131·78	3,187	8·24	7·12
Queensland	8,832	168·23	102·68	163·69	1,072	7·61	6·89
South Australia—							
Proper	5,381	144·69	105·19	118·76	637	7·00	4·01
Northern Territory	— 26	— 44·07	175·00	742·86	7	21·21	6·06
Western Australia	4,359	154·74	104·44	183·40	811	11·30	4·36
Tasmania	3,318	168·09	104·32	115·97	480	9·07	5·82
Australia	60,541	138·94	105·13	133·83	8,513	8·18	6·17
New Zealand	14,679	181·51	106·89	142·56	1,616	7·10	4·52

5.—DEATHS IN AGE GROUPS, 1904.

GENERAL TABLES.

State.	Age Groups.					Total.
	Under 1 Year.	1 to 5 Years.	5 to 65 Years.	65 Years and Over.	Unspecified.	
MALES.						
Victoria	1,299	382	3,289	3,022	..	7,992
New South Wales ..	1,774	588	3,918	2,444	9	8,733
Queensland.. ..	593	213	1,842	611	..	3,259
South Australia— Proper	350	1,669			..	2,019
Northern Territory	3	49			..	52
Western Australia ..	452	114	1,014	231	12	1,823
Tasmania	242	817			1	1,060
Australia	4,713	20,203			22	24,938
New Zealand	933	194	2,183	1,443	..	4,753
FEMALES.						
Victoria	1,020	353	2,902	2,126	..	6,401
New South Wales ..	1,413	594	3,037	1,580	3	6,627
Queensland.. ..	479	197	1,003	312	..	1,991
South Australia— Proper	287	1,413			..	1,700
Northern Territory	4	3			..	7
Western Australia ..	359	126	422	87	..	994
Tasmania	238	675			1	914
Australia	3,800	14,830			4	18,634
New Zealand	683	164	1,638	849	..	3,334

GENERAL
TABLES.

6.—DEATHS IN CAPITAL CITIES, 1904.

Capital City.	Age Groups.					
	Under 1 Year.	1 to 5 Years.	5 to 65 Years.	65 Years and Over.	Unspeci- fied.	Total.
MALES.						
Melbourne	608	147	1,565	1,119	...	3,439
Sydney	702	217	1,398	634	...	2,951
Brisbane	208	50	391	119	...	768
Adelaide	178	884			...	1,062
Perth	123	42	235	90	3	493
Hobart	56	219			...	275
Wellington	85	17	157	55	...	314
FEMALES.						
Melbourne	494	150	1,521	954	...	3,119
Sydney	598	205	1,264	657	...	2,724
Brisbane	164	58	333	105	...	665
Adelaide	147	813			...	960
Perth	116	30	150	34	...	330
Hobart	71	209			...	280
Wellington	56	14	144	52	...	266

7.—METEOROLOGY IN CAPITAL CITIES, 1904.

Capital City.	Mean Barometric Pressure.	Temperature in Shade.			Rainfall.	
		Maximum.	Minimum.	Mean.	Number of Days.	Amount.
	Inches.	°	°	°		Inches.
Melbourne ...	29·94	102·0	31·5	56·7	128	29·72
Sydney ...	30·07	107·5	39·5	62·9	155	45·93
Brisbane ...	30·00	104·0	38·7	68·9	124	33·23
Adelaide ...	30·07	114·0	36·9	62·5	117	20·31
Perth ...	30·05	107·9	37·9	64·3	125	34·35
Hobart (1902)	29·85	97·0	28·8	55·1	151	21·85
Wellington ...	29·93	88·0	30·0	55·2	170	51·02

8.—COMMONWEALTH REVENUE AND EXPENDITURE, 1903-4.

Heads of Revenue and Expenditure.	Transactions on Account of each State.						Total Commonwealth.
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	
REVENUE—	£	£	£	£	£	£	£
Customs and Excise	2,443,505	3,229,786	1,131,761	699,792	1,258,725	342,189	9,105,758
Posts and Telegraphs.. ...	650,583	941,530	324,013	258,461	230,858	104,759	2,510,204
Defence	1,680	1,401	430	285	61	28	3,885
Miscellaneous	1,475	1,820	1,877	260	473	147	6,052
New Revenue (proportion of) ...	1,570	1,854	670	479	294	233	5,100
Total	3,098,813	4,176,391	1,458,751	959,277	1,490,411	447,356	11,630,999
EXPENDITURE—							
Customs and Excise	66,731	69,188	57,187	25,087	36,495	9,930	264,618
Posts and Telegraphs... ..	631,313	950,108	434,104	259,691	305,904	111,185	2,692,305
Defence	258,471	298,756	104,467	76,636	55,538	42,128	835,996
New Expenditure	141,470	167,043	60,331	43,163	26,559	21,005	459,571
Balance paid to State	2,002,804	2,683,417	810,855	556,949	1,065,244	263,191	7,382,460
Miscellaneous	30	...	...	...	...	...	30
Total	3,100,819	4,168,512	1,466,944	961,526	1,489,740	447,439	11,634,980
Per Head of Population —	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Revenue	2 11 3	2 18 6	2 16 7	2 12 0	6 11 4	2 9 10	2 19 3
Expenditure (excluding Refunds to State)	0 18 2	1 0 10	1 5 5	1 1 11	1 17 5	1 0 6	1 1 8

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GENERAL TABLES. 9.—NET REVENUE COLLECTED BY CUSTOMS DEPARTMENT, 1904.

State.	From Import Duties.	From Excise Duties.	From Other Sources.	Total.
	£	£	£	£
Victoria	1,988,197	519,952	10,917	2,519,066
New South Wales	2,465,738	628,870	12,683	3,107,291
Queensland	844,800	242,631	5,485	1,092,416
South Australia	583,700	122,958	2,893	709,551
Western Australia	1,090,965	127,799	6,509	1,225,273
Tasmania	282,618	54,771	1,575	338,964
Australia	7,255,518	1,696,981	40,062	8,992,561
New Zealand	2,655,166	97,331	146,403	2,898,900

10.—STATE REVENUE UNDER LEADING HEADS, 1903-4.

Heads of Revenue.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. 1904-5.	Australia.	New Zealand
	£	£	£	£	£	£	£	£
Federal Government	2,002,804	2,683,417	810,855	556,949	1,065,244	259,099	7,378,368	...
Taxation	1,012,119	1,100,193	475,184	353,433	235,114	216,953	3,392,996	3,649,601
Crown Lands	406,739	1,860,570	637,081	181,608	205,854	63,088	3,354,940	247,842
Railways and Tramways	3,400,243	4,263,744	1,296,961	1,178,396	1,612,608	245,049	11,997,001	2,167,992
Other Sources	498,044	1,340,404	375,359	297,715	431,196	68,492	3,011,210	1,064,681
Total	7,319,949	11,248,328	3,595,440	2,568,101	3,550,016	852,681	29,134,515	7,130,116
Per Head of Population	£ s. d. 6 1 1	£ s. d. 7 17 7	£ s. d. 6 19 6	£ s. d. 6 19 3	£ s. d. 15 12 10	£ s. d. 4 14 8	£ s. d. 7 8 4	£ s. d. 8 11 3
PROPORTIONS PER CENT.								
Federal Government... ..	27·36	23·85	22·55	21·69	30·00	30·39	25·32	...
Taxation	13·83	9·78	13·22	13·76	6·62	25·44	11·65	51·18
Crown Lands	5·56	16·54	17·72	7·07	5·80	7·40	11·51	3·48
Railways and Tramways	46·45	37·91	36·07	45·89	45·43	28·74	41·18	30·41
Other Sources	6·80	11·92	10·44	11·59	12·15	8·03	10·34	14·93

NOTE.—The figures for New Zealand relate to the year ended 31st March ; and for all the other States to the year ended 30th June.

11.—SOURCES OF STATE REVENUE, 1903-4.

Sources of Revenue.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania, 1904-5.	Australia.
	£	£	£	£	£	£	£
From Taxation*—							
Probate and succession duties	308,531	225,115	186,989	72,926	21,759	16,658	1,427,320
Other stamp duties	194,172	237,455					
Land tax	106,445	322,246	...	77,370	...	54,151	560,212
Income tax	311,147	193,240	222,343	121,469	125,071	59,487	1,032,757
Other taxation	91,824	122,137	65,852	19,769	32,516	40,609	372,707
From Services†—							
Railways and Tramways	3,400,243	4,263,744	1,296,961	1,178,396	1,612,608	245,049	11,997,001
Water Supply	41,292	286,576	...	108,665	78,259	...	514,792
Sewerage ... ..	...	157,522	...	...	...	...	157,522
Other	4,375	...	...	...	...	45,584	49,959
From Land—							
Sales (including interest)	286,408	1,116,061	314,298	51,079	25,077	39,704	1,832,627
Occupation	120,331	744,509	322,783	130,529	180,777	23,384	1,522,313
Miscellaneous	452,377	896,306	375,359	189,050	352,937	22,908	2,288,937
Federal refunds	2,002,804	2,683,417	810,855	556,949	1,065,244	259,099	7,378,368
Total	7,319,949	11,248,328	3,595,440	2,568,101	3,550,016	852,681	29,134,515

* Exclusive of Customs and Excise Revenue now collected by the Commonwealth Government.

† " Posts and Telegraphs Revenue

12.—STATE EXPENDITURE (EXCLUSIVE OF LOAN) UNDER LEADING HEADS, 1903-4.

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. 1904-5.	Australia.	New Zealand
	£	£	£	£	£	£	£	£
Railways and Tramways	1,891,430	2,922,126	810,251	693,600	1,228,235	171,619	7,717,261	1,451,954
Education	651,092	905,975	314,399	154,220	134,337	67,403	2,227,426	588,860
Interest on Public Debt	1,948,376	2,745,348	1,547,331	1,029,941	537,965	349,090	8,158,051	1,957,963
All other Services	2,848,710	4,746,438	935,883	829,492	1,797,775	252,073	11,410,371	2,785,504
Total	7,339,608	11,319,887	3,607,864	2,707,253	3,698,312	840,185	29,513,109	6,784,281
Per Head of Population	£ s. d. 6 1 5	£ s. d. 7 18 7	£ s. d. 7 0 0	£ s. d. 7 6 10	£ s. d. 16 5 11	£ s. d. 4 13 3	£ s. d. 7 10 3	£ s. d. 8 3 0
PROPORTIONS PER CENT ¹								
Railways and Tramways	25·77	25·82	22·46	25·62	33·21	20·43	26·15	21·40
Education	8·87	8·00	8·71	5·69	3·63	8·02	7·55	8·68
Interest on Public Debt	26·55	24·25	42·89	38·05	14·55	41·55	27·64	28·86
All Other Services	38·81	41·93	25·94	30·64	48·61	30·00	38·66	41·06

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13.—STATE EXPENDITURE—EXCLUSIVE OF LOAN—1903-4.

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia	Tasmania. 1904-5.	Australia.
	£	£	£	£	£	£	£
Interest on Public Debt	1,948,376	2,745,348	1,547,331	1,029,941	537,965	349,090	8,158,051
Railways and Tramways	1,891,430	2,922,126	810,251	693,600	1,228,235	171,619	7,717,261
Public Works... ..	666,555	691,581	28,488	98,165	518,109	11,877	2,014,775
Mines	45,975	64,873	26,480	19,163	189,280	5,121	350,892
Police	269,647	430,996	161,510	85,090	126,997	35,786	1,110,026
Harbors, &c.	39,949	187,512	45,269	22,137	20,781	...	315,648
Water Supply and Sewerage	32,734	141,550	1,829	33,202	*	...	209,315
Education	651,092	905,975	314,399	154,220	134,337	67,403	2,227,426
Charitable Institutions	312,457	468,645	139,546	104,593	123,355	44,879	1,193,475
All other Expenditure... ..	1,481,393	2,761,281	532,761	467,142	819,253	154,410	6,216,240
Total	7,339,608	11,319,887	3,607,864	2,707,253	3,698,312	840,185	29,513,109

* Included under "Public Works."

14.—STATE BALANCES AT THE END OF 1903-4.

GENERAL TABLES.

State.	Surplus.	Accumulated Deficiency.		
		Covered by—		Total.
		Treasury Bills.	Cash Overdraft.	
	£	£	£	£
Victoria ... ..	...	75,000	2,106,119	2,181,119
New South Wales ... ..	...	1,977,626	524,064	2,501,690
Queensland ... ..	...	1,130,000	35,705	1,165,705
South Australia ... ..	...	1,088,950	364,189	1,453,139
Western Australia	83,364	..	...	...
Tasmania ... ..	...	220,000	9,443	229,443
Australia	83,364	4,491,576	3,039,520	7,531,096
New Zealand	649,741	...	...	...

15.—STATE AND FEDERAL REVENUE AND EXPENDITURE, 1903-4.

State.	Amount of—			Average per head.		
	Revenue.		Expenditure.	Revenue.		Expenditure.
	Total.	Raised by Taxation.		Total.	Raised by Taxation.	
	£	£	£	£ s. d.	£ s. d.	£ s. d.
Victoria	8,415,958	3,455,624	8,437,623	6 19 3	2 17 2	6 19 7
New South Wales... ..	12,741,302	4,329,979	12,804,982	8 18 6	3 0 8	8 19 5
Queensland	4,243,336	1,606,945	4,263,953	8 4 7	3 2 4	8 5 5
South Australia	2,970,429	1,053,225	3,111,830	8 1 1	2 17 1	8 8 9
Western Australia... ..	3,975,183	1,493,839	4,122,808	17 10 4	6 11 7	18 3 4
Tasmania*	1,040,938	559,142	1,028,525	5 15 6	3 2 1	5 14 2
Australia	33,387,146	12,498,754	33,769,721	8 10 0	3 3 8	8 11 11

* State items relate to the year 1904-5.

16.—STATE EXPENDITURE FROM LOANS, 1903-4.

Victorian Year-Book, 1904.

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania (31.12.03.)	Australia.
	£	£	£	£	£	£	£
Railways and Tramways	236,944	805,520	388,254	132,376	443,319	37,450	2,043,863
Roads and Bridges ... ..	...	47,812	*	78	...	39,037	86,927
Harbors, Rivers, and Lighthouses ... ..	...	879,213	25,933	50,387	84,165	31,614	1,071,312
Public Buildings ... ..	...	163,565	41,617	8,490	...	25,698	239,370
Water Supply	118,392	222,489	*	133,361	} 130,442	...	716,265
Sewerage ... ..	...	94,271	...	17,310			
Immigration ... ..	...	...	7,654	...	...	...	7,654
Other Public Works or Purposes ..	70,474	81,103	140,347	73,725	52,703	33,324	451,676
Total	425,810	2,293,973	603,805	415,727	710,629	167,123	4,617,067

* Included under "Other Public Works or Purposes."

17.—AGGREGATE STATE EXPENDITURE FROM LOANS TO END OF YEAR 1903-4.
(Approximate only.)

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia	Western Australia.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Railways and Tramways	38,490,150	47,903,758	23,518,744	13,725,204	9,050,687	4,102,933	136,791,476
Telegraphs and Telephones... ..	...	1,294,887	1,064,975	991,812	269,308	142,410	3,763,392
Roads and Bridges... ..	106,259	1,654,411	†	1,464,736	142,538	2,242,601	5,610,545
2 N Harbors, Rivers, and Lighthouses ...	611,059.	10,195,735	2,623,318	1,422,139	2,057,798	486,547	17,396,596
Public Buildings	752,218	4,362,254	1,460,551	848,259	63,876	839,024	8,326,182
Water Supply	8,803,827	6,507,403	†	4,431,342	} 2,873,241	...	27,986,673
Sewerage... ..	...	4,738,076	...	632,784			
Defence Works	149,324	1,421,976	386,505	293,840	...	128,179	2,379,824
Immigration ... ..	...	194,430	2,951,617	...	28,085	235,000	3,409,132
Other Public Works or Purposes ...	2,439,775*	1,010,607	5,951,230	2,865,963	1,322,952	907,328	14,497,855
Total	51,352,612	79,283,537	37,956,940	26,676,079	15,808,485	9,084,022	220,161,675

* Including £1,141,710 expenditure on School Buildings.

† Included under "Other public works or purposes."

GENERAL
TABLES.18.—SOURCES OF MUNICIPAL REVENUE, 1903-4.
EXCLUSIVE OF LOANS.

State.	From Government.	Raised by Local Taxation.	From Other Sources.	Total.
	£	£	£	£
Victoria	80,681	981,412	248,297	1,310,390
New South Wales	64,274	602,277	169,224	835,775
Queensland	3,174	376,891	83,598	463,663
South Australia	29,018	167,520	85,300	281,838
Western Australia	80,938	104,760	73,872	259,570
Tasmania	2,493	91,265	50,314	144,072
Australia	260,578	2,324,125	710,605	3,295,308
New Zealand	176,519	1,050,936	928,765	2,156,220

19.—STATE FUNDED DEBTS, 30TH JUNE, 1904.

State.	Loans Repayable in—								Total Funded Debt.		Treasury Bills in aid of Revenue.	Accumulated Sinking Fund.
	London.				Australasia.				Amount.	Per Head of Population.		
	Debentures.	Inscribed Stock.	Treasury Bills in aid of Public Works.	Total.	Debentures.	Inscribed Stock.	Treasury Bills in aid of Public Works.	Total.				
£	£	£	£	£	£	£	£	£	£	£	£	
Victoria ...	1,114,700	41,501,675	2,183,800	44,800,175	2,599,295	3,120,492	1,000,000	6,719,787	51,519,962	42·67	300,000	£20,957
New South Wales ...	7,132,850	51,512,500	5,004,000	63,649,350	233,300	11,048,005	3,125,300	14,406,605	78,055,955	54·12	1,977,626	894,621
Queensland ...	9,821,100	25,588,247	...	35,409,347	3,659,880	...	...	3,659,880	39,069,227	75·25	1,130,000	...
South Australia ...	9,146,800	13,764,020	...	22,910,820	63,400	3,349,925	1,180,550	4,593,875	27,504,695	74·40	1,088,950	114,476
Western Australia ...	216,000	13,349,553	...	13,565,553	220,350	2,304,885	...	2,524,735	16,090,288	68·03	...	864,772
Tasmania ...	2,923,750	4,906,500	...	7,830,250	109,600	1,276,988	...	1,386,588	9,216,838	51·54	220,000	200,385
Australia ...	30,355,200	150,622,495	7,187,800	188,165,495	6,885,825	21,099,795	5,305,850	33,291,470	221,456,965	56·01	4,716,576	2,395,191
New Zealand (31.3.04)	3,220,276	44,828,566	...	48,048,842	8,999,097	474,276	...	9,473,373	57,522,215	68·57	...	2,457,887

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TABLES.

20.—DUE DATES OF STATE LOANS ON 30TH JUNE, 1904.

When Repayable.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand. (31.3.04.)
	£	£	£	£	£	£	£
Overdue	1,900	7,550	..	..	..	..	..
1904 ..	..	58,000	..	361,500	..	11,570	1,548,950
1905 ..	..	2,903,800	..	128,725	17,600	179,986	1,950,700
1906 ..	2,183,800	1,224,900	..	187,125	460,280 [°]	236,511	2,124,766
1907 ..	5,000,000	5,276,218	..	1,240,875	..	177,628	1,866,800
1908 ..	2,000,000	3,090,800	..	2,160,575	..	469,467	1,113,688
1909 ..	..	384,000	..	3,323,050	..	130,474	1,455,150
1910 ..	..	2,863,700	..	60,300	1,068,825	67,701	499,276
1911 ..	2,107,000 [15]	..	..	68,300	1,876,000 [20]	1,024,661	843
1912 ..	63,000 [16]	9,366,227	..	85,000	..	2,195	53,476
1913 ..	4,746,795 *	..	1,466,500	46,300	605,325 [17]	547,650	496,300
1914 ..	..	..	..	35,000	354,590 [18]	800,000	331,800
1915 ..	..	..	11,728,800	85,000	4,535,715 †	..	3,000
1916 ..	..	..	..	9,486,045 ‡	1,100,000 [20]	100	12,700
1917 ..	3,120,492 ∞	..	..	3,546,200 §	..	..	..
1918 ..	..	12,826,200	..	1,474,400	..	100	..
1919 ..	4,000,000	415,050	..	26,000	..	..	..
1920 ..	6,000,000	..	..	336,300	2,380,000 [15]	300,000	..
1921 ..	1,000,000 [°]	..	..	..	..	300,000	500,000
1922 ..	5,000,000 [°]	..	..	..	..	..	..
1923 ..	7,331,500 †	..	..	..	..	8,252	..
1924 ..	..	16,698,065	12,973,834	1,651,300	..	..	299,300
1925 ..	..	222,255	..	..	..	5,050	..
1926 ..	..	..	..	..	..	67,600	..
1927 ..	..	..	..	..	2,500,000	..	..
1929 ..	8,509,375 [20]	..	..	200,000	..	..	29,150,302
1930 ..	..	..	3,704,800	..	..	..	..
1933 ..	..	9,686,300	..	..	..	..	..
1934 ..	457,000	..	..	..	993,553	..	..
1935 ..	..	12,500,000	..	..	..	..	..
1936 ..	..	..	..	332,900	..	..	..
1939 ..	..	..	..	2,719,800	..	..	..
1940 ..	..	..	..	..	..	4,906,500	6,161,167
1945 ..	..	..	2,750,000	..	..	..	9,572,997
1947 ..	..	..	4,498,693	..	..	..	..
1950 ..	..	..	946,600	..	..	..	..
1951 ..	..	..	1,000,000	..	..	..	..
Annual Drawings	..	..	..	..	198,400	..	189,500
Interminable	..	532,890	..	..	..	..	..
Short dated Debentures.	..	..	..	..	..	..	200,000
Total Debt	51,519,962	78,055,955	39,069,227	27,504,695	16,000,288	9,216,838	57,522,215 *

NOTE.—The earliest date of repayment is given in all cases. ∞ When it is optional to continue the loan for a further term of years, such period is shown in brackets after the amount. When the term is indefinite the sign ∞ appears.

* Including £746,795 [15]

† Including £31,500 [17]

‡ Including £1,560,400 [18] 829,500 [20] and £5,122,845 ∞.

§ Including £2,182,400 [19]

∞ Including £4,500,000 [20]

21.—RATES OF INTEREST ON OUTSTANDING STATE LOANS, 30TH JUNE, 1904.

State.	Nominal Amount of Loans Bearing Interest at—							Total.
	6 per cent.	5 per cent.	4½ per cent.	4 per cent.	3½ per cent.	3 per cent.	Other Rates.	
	£	£	£	£	£	£	£	£
Victoria ... ..	...	...	...	25,037,595	16,013,294	10,468,073	1,000*	51,519,962
New South Wales ...	2,300	60,700	...	26,241,958	32,576,375	17,342,072	1,825,000(3¾) 7,550*	78,055,955
Queensland	21,384,300	12,286,234	5,398,693		...	39,069,227
South Australia ...	431,400	265,000	...	16,719,800	4,126,150	5,962,345	...	27,504,695
Western Australia ...	...	17,600	69,100	3,958,768	4,694,820	7,350,000	...	16,090,288
Tasmania ... ..	...	100	...	4,032,550	4,219,374	934,115	30,699(3¼)	9,216,838
Australia	433,700	343,400	69,100	97,374,971	73,916,247	47,455,298	1,864,249	221,456,965
New Zealand (31.3.04) ...	55,200	501,500	52,900	35,599,652	10,772,490	10,191,473	349,000(3¾)	57,522,215

* Overdue, not bearing interest.

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22.—HIGHEST OFFICIAL PRICES OF CERTAIN STOCKS RECORDED IN LONDON
DURING THE YEAR 1904.

State.	Nominal Interest.	Due Date of Loan.	Highest Prices quoted.		Interest per cent. yielded to Investor.
			Gross.	Less accrued Interest.	
			£	£	£ s. d.
Victoria ...	4	1920	107	105	3 11 10
	3½	1921-6	98½	97	3 14 0
	3	1929-49	88½	87	3 11 9
	4	1933	109½	107½	3 11 8
New South Wales	3½	1924	100	98½	3 12 6
	3½	1918	100½	98½	3 13 0
	3	1935	88½	86½	3 15 0
	4	1915	104½	102½	3 15 1
Queensland	4	1924	106½	104½	3 14 0
	3½	1930	97½	96½	3 14 8
	3	1922-47	87½	86	3 13 2
	4	1916-17-36	102½	100½	3 18 6
South Australia	3½	1939	100½	98½	3 11 3
	3	1916-26*	87½	85½	3 10 1
	4	1934	108½	106½	3 12 11
	3½	1915-35	97	95½	3 15 2
Western Australia	3½	1920-35	97	95½	3 15 2
	3	1927	89½	88	3 16 2
	4	1920-40	106½	104½	3 12 3
	3½	1920-40	100½	98½	3 11 6
Tasmania	3	1920-40	88½	87	3 13 2

* Or at any time thereafter at option of Government—practically interminable.

23.—TOTAL INDEBTEDNESS ON THE 30TH JUNE, 1904.

State.	State Debts.		Municipal and Corporation Debts (exclusive of Loans from Government).	Grand Total.	
	Funded.	Unfunded.		Amount.	Per Head of Population.
	£	£	£	£	£ s. d.
Victoria	51,519,962	2,703,302	13,182,377	67,405,641	55 16 5
New South Wales	78,055,955	4,484,335	2,941,939	85,482,229	59 5 6
Queensland	39,069,227	1,165,705	667,403	40,902,335	78 15 8
South Australia	27,504,695	1,453,139	112,496	29,070,330	78 12 8
Western Australia	16,090,288	...	447,300	16,537,588	69 18 5
Tasmania	9,216,838	229,443	697,133	10,143,414	56 14 5
Australia	221,456,965	10,035,924	18,048,648	249,541,537	63 2 3

24.—NET BURDEN OF STATE FUNDED DEBTS, 30TH JUNE, 1904.

State.	Total State Funded Debts.		Debts covered by—		Net Burden	
	Amount.	Per Head of Population.	Earnings of Reproductive Works (1903-4).	Accumulated Sinking Funds.	Amount.	Per Head of Population.
	£	£ s. d.	£	£	£	£ s. d.
Victoria	51,519,962	42 13 4	42,121,940	320,957	9,077,065	7 10 4
New South Wales	78,055,955	54 2 4	50,552,694	894,621	26,608,640	18 9 0
Queensland	39,069,227	75 5 0	14,957,005	..	24,112,222	46 8 10
South Australia	27,504,695	74 8 0	17,751,612	114,476	9,638,607	26 1 5
Western Australia	16,090,288	68 0 7	13,426,215	864,752	1,799,321	7 12 2
Tasmania	9,216,838	51 10 10	2,567,662	200,385	6,448,791	36 1 3
Australia	221,456,965	56 0 2	141,377,128	2,395,191	77,684,646	19 12 11
New Zealand (31.3.04)	57,522,215	68 11 7	30,944,012	2,457,887	24,120,316	28 10 10

NOTE.—The Unfunded Debt, which is not taken into account in this table—being wholly of an unproductive character—would, if added, show a corresponding increase in the net burden.

25.—POSTAL RETURNS, 1904.

State.	Number of Post-offices on 31st December	Letters and Post Cards Despatched and Received.					Newspapers and Parcels Despatched and Received.				
		Inland.	Inter-State.	Inter-national.	Total.	Per Head of Population.	Inland.	Inter-State.	Inter-national.	Total.	Per Head of Population.
		(000's omitted.)					(000's omitted.)				
Victoria	1,652	94,733,	11,289,	4,424,	110,446,	91	39,567,	13,160,	6,693,	59,420,	49
New South Wales ...	1,726	80,232,	12,116,	5,921,	98,269,	68	42,794,	12,165,	4,911,	59,870,	41
Queensland	1,371	19,231,	6,074,		25,305,	49	16,093,	7,213,		23,306,	45
South Australia Proper	693	19,401,	4,465,	778,	24,644,	67	4,779,	3,185,	1,050,	9,014,	25
" " Northern Territory	18	83,	30,	11,	124,	30	23,	20,	8,	51,	12
Western Australia ...	243	10,479,	6,320,*	1,789,	18,588,	79	4,484,	5,900,*	1,901,	12,285,	52
Tasmania	371	6,460,	3,664,	628,	10,752,	60	6,357,	3,187,	678,	10,222,	57
Australia	6,074	230,619,	57,509,		288,128,	73	114,097,	60,071,		174,168,	44
New Zealand	1,887	60,537,	3,381,	4,894,	68,812,	81	31,197,	3,248,	7,521,	41,966,	50

* Including New Zealand letters, &c.

26.—TELEGRAPHS AND TELEPHONES, 1904.

State.	TELEGRAPHS.								TELEPHONES.		
	Number of Stations at end of Year.	Line (Miles).	Wire (Miles).	Cables (Miles).	Number of Telegrams.				Number of Public Exchanges.	Wire (Miles).	Number of Connexions at end of Year.
					Inland (counted once).	Inter-State Received and Despatched.	Cablegrams Received and Despatched.	Total.			
Victoria	881	6,494	16,240	...	1,644,522	1,028,030	109,635	2,782,187	22	25,501	8,429
New South Wales	1,005	14,491	67,058	...	2,192,757	1,055,044	144,936	3,392,737	61	20,850	17,323
Queensland	498	10,154	20,764	60	1,490,647		12,741	1,503,388	19	6,310	3,936
South Australia (including Northern Territory)	300	5,550	15,041	37	686,330	491,134	29,373	1,206,837	11	4,972	2,108
Western Australia	183	6,199	9,414	20	1,003,335	525,258	25,873	1,554,466	13	6,016	4,597
Tasmania	322	1,961	3,214	432	277,831	164,159	18,679	460,669	16	1,236	1,329
Australia	3,189	44,849	131,731	549	10,559,047		341,237	10,900,284	142	64,885	37,722
New Zealand (31.3.05)	1,200	7,944	23,704	326	5,159,745	...	169,865	5,329,610	85	11,028	13,423

Australasian Statistics.

GENERAL
TABLES.27.—REVENUE AND EXPENDITURE OF POST AND TELEGRAPH
DEPARTMENT, 1904.

State.	Revenue.				Expendi- ture.
	Postal Branch.	Telegraph Branch.	Telephone Branch.	Total.	
	£	£	£	£	£
Victoria	470,886	111,287	88,633	670,806	624,841
New South Wales	705,393	151,036	116,328	972,757	920,390
Queensland ... ..	...	...	...	531,375	419,144
South Australia—Proper	150,446	79,185	26,269	255,900	229,844
,, N. Territory	1,983	1,931	82	3,996	24,854
Western Australia	135,053	69,641	30,970	235,664	300,727
Tasmania	84,605	16,487	10,155	111,247	106,571
Australia ... ..	...	...	..	2,581,745	2,626,371
New Zealand (31/3/05) ...	383,243	171,002	79,061	633,306	559,921

28.—MONEY ORDERS AND POSTAL NOTES, 1904.

State.	Money Orders.				Postal Notes.			
	Number.		Amount.		Number.		Amount.	
	Issued.	Paid	Issued.	Paid.	Issued.	Paid.	Issued.	Paid.
			£	£			£	£
Victoria	221,578	319,886	747,875	1,125,557	1,635,435	1,724,486	617,386	655,857
N. S. Wales	559,908	564,685	1,834,934	1,922,787	1,756,996	1,733,142	655,471	646,682
Queensland	141,965	119,444	525,869	440,409	398,366	331,737	151,770	127,332
South Australia Proper	71,394	83,192	251,578	304,309	342,762	348,568	120,497	129,114
N. Territory	2,275	389	5,456	2,730	2,069	471	824	151
Westn. Australia	198,675	107,401	860,810	481,348	231,846	*	115,416	119,763
Tasmania	93,410	71,178	270,688	193,192	158,037	212,418	56,820	80,118
Australia	1,289,205	1,266,175	4,497,210	4,470,332	4,525,511	...	1,718,184	1,759,017
New Zealand	407,783	313,267	1,476,887	1,267,351	785,347	775,417	250,123	247,321

* Not available.

29.—EDUCATION, 1904.

State.	At the end of 1904.			Number of Scholars.				
	Number of Schools.	Number of Teachers.			Net Enrolment.			Average Attendance.
		Males.	Females.	Total.	Males.	Females.	Total.	
STATE PRIMARY SCHOOLS.								
Victoria	1,928	1,911	2,886	4,797	110,418	104,404	214,822	145,500
New South Wales	2,870	3,133	2,448	5,581	127,515	113,116	240,631	153,333
Queensland.. .. .	1,049	1,139	1,247	2,386	46,466	42,784	89,250	68,661
South Australia	717	410	924	1,334	..	..	60,962	42,272
Western Australia	290	300	509	809	13,822	12,450	26,272	22,111
Tasmania*	346	249	442	691	13,003	11,592	24,595	13,866
Australia	7,200	7,142	8,456	15,598	..	..	656,532	445,743
New Zealand	1,785	1,406	2,302	3,708	71,144	65,138	136,282	113,047*
PRIVATE SCHOOLS, ETC.								
Victoria	787	418	1,942	2,360	19,816	22,398	42,214	..
New South Wales	868	611	2,878	3,489	26,353	32,782	59,135	47,814
Queensland	184	140	622	762	6,597	9,016	15,613†	12,895
South Australia	230	202	529	731	4,801	5,454	10,255	..
Western Australia	93	38	315	353	3,050	4,129	7,179	5,824
Tasmania*	177	..	..	..	4,804	4,039	8,843†	..
Australia	2,339	..	..	..	65,421	77,818	143,239	66,533
New Zealand	322	..	..	1,047	8,670*	10,661*	19,331*	18,005

* Figures for 1903, later information not being available. † Gross enrolment.

Australian Statistics.

GENERAL
TABLES.18.—SOURCES OF MUNICIPAL REVENUE, 1903-4.
EXCLUSIVE OF LOANS.

State.	From Government.	Raised by Local Taxation.	From Other Sources.	Total.
	£	£	£	£
Victoria	80,681	981,412	248,297	1,310,390
New South Wales	64,274	602,277	169,224	835,775
Queensland	3,174	376,891	83,598	463,663
South Australia	29,018	167,520	85,300	281,838
Western Australia	80,938	104,760	73,872	259,570
Tasmania	2,493	91,265	50,314	144,072
Australia	260,578	2,324,125	710,605	3,295,308
New Zealand	176,519	1,050,936	928,765	2,156,220

19.—STATE FUNDED DEBTS, 30TH JUNE, 1904.

State.	Loans Repayable in—								Total Funded Debt.		Treasury Bills in aid of Revenue.	Accumulated Sinking Fund.
	London.				Australasia.				Amount.	Per Head of Population.		
	Debentures.	Inscribed Stock.	Treasury Bills in aid of Public Works.	Total.	Debentures.	Inscribed Stock.	Treasury Bills in aid of Public Works.	Total.				
£	£	£	£	£	£	£	£	£	£	£	£	
Victoria ...	1,114,700	41,501,675	2,183,800	44,800,175	2,599,295	3,120,492	1,000,000	6,719,787	51,519,962	42·67	300,000	520,957
New South Wales ...	7,132,850	51,512,500	5,004,000	63,649,350	233,300	11,048,005	3,125,300	14,406,605	78,055,955	54·12	1,977,626	894,621
Queensland ...	9,821,100	25,588,247	...	35,409,347	3,659,880	...	...	3,659,880	39,069,227	75·25	1,130,000	...
South Australia ...	9,146,800	13,764,020	...	22,910,820	63,400	3,349,925	1,180,550	4,593,875	27,504,695	74·40	1,088,950	114,476
Western Australia ...	216,000	13,349,553	...	13,565,553	220,350	2,304,385	...	2,524,735	16,090,288	68·03	...	864,772
Tasmania ...	2,923,750	4,906,500	...	7,830,250	109,600	1,276,988	...	1,386,588	9,216,838	51·54	220,000	200,385
Australia ...	30,355,200	150,622,495	7,187,800	188,165,495	6,885,825	21,099,795	5,305,850	33,291,470	221,456,965	56·01	4,716,576	2,395,191
New Zealand (31.3.04)	3,220,276	44,828,566	...	48,048,842	8,999,097	474,276	...	9,473,373	57,522,215	68·57	...	2,457,887

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Australasian Statistics.

GENERAL
TABLES.

33.—COMMERCE, 1904.

State.	Countries Imported from or Exported to—				Total Value.	Value per Head.
	Other States of Australia.	The United Kingdom.	Other British Possessions (including New Zealand).	Foreign Countries.		
IMPORTS.						
	£	£	£	£	£	£ s. d.
Victoria	7,354,018	7,266,239	1,857,004	3,619,181	20,096,442	16 12 10
New South Wales ..	14,152,101	7,867,880	1,912,406	3,353,571	27,285,958	18 18 5
Queensland	3,022,393	2,118,293	215,580	695,898	6,052,164	11 13 2
South Australia .. .	4,161,038	2,035,688	267,135	986,855	7,450,716	20 3 1
Western Australia ..	2,650,527	2,565,302	233,413	1,223,238	6,672,480	28 4 3
Tasmania	1,758,895	617,414	39,362	138,783	2,554,454	14 5 8
Australia	33,098,972	22,470,816	4,524,900	10,017,526	70,112,214	17 14 7
New Zealand	1,893,036	7,982,340	1,154,318	2,262,000	13,291,694	15 14 7
EXPORTS.						
	£	£	£	£	£	£ s. d.
Victoria	8,232,335	7,953,077	4,554,042	3,665,463	24,404,917	20 4 2
New South Wales ..	9,918,050	10,148,436	3,908,291	9,033,058	33,007,835	22 17 9
Queensland	8,179,573	1,861,100	563,041	549,669	11,153,383	21 9 7
South Australia .. .	3,772,760	2,606,557	1,110,845	992,043	8,482,205	22 18 10
Western Australia ..	359,079	4,440,817	5,050,437	421,178	10,271,511	43 8 7
Tasmania	2,358,550	555,013	66,403	9,634	2,989,600	16 14 4
Australia	32,820,347	27,565,000	15,253,059	14,671,045	90,309,451	22 16 10
New Zealand	1,817,622	11,876,273	271,069	783,384	14,748,348	17 9 0
EXPORTS OF DOMESTIC OR HOME PRODUCE.						
	£	£	£	£	£	£ s. d.
Victoria	5,478,995*	6,178,666	3,530,530	2,181,418	17,369,609	14 7 8
New South Wales ..	7,464,266*	7,358,920	1,460,886	6,415,999	22,700,071	15 14 10
Queensland	7,198,160*	1,821,627	505,336	529,114	10,054,237	19 7 4
South Australia .. .	2,823,363*	2,409,758	435,986	561,666	6,230,773	16 17 1
Western Australia ..	892,831*	4,426,350	5,044,004	373,372	10,146,557	42 18 0
Tasmania	2,020,000*	554,350	64,979	9,284	2,648,613	14 16 3
Australia	25,287,615	22,749,671	11,041,721	10,070,853	69,149,860	17 9 9
New Zealand	1,750,859	11,855,455	247,747	747,726	14,601,787	17 5 7

* Estimated.

34.—IMPORTS AND EXPORTS OF WOOL, 1904.

State.	Quantity.			Value.		
	Washed and Scoured.	Greasy.	Total.	Washed and Scoured.	Greasy.	Total.
IMPORTS.						
	lbs.	lbs.	lbs.	£	£	£
Victoria ..	3,751,987	47,697,050	51,449,037	253,574	1,823,384	2,076,958
New South Wales ..	6,941,300	10,706,614	17,647,914	521,352	401,136	922,488
Queensland ..	..	404	404	..	15	15
South Australia ..	656,003	5,244,526	5,900,529	37,983	134,981	172,964
Western Australia ..	..	..	..	..	..	..
Tasmania ..	7,943	3,090	11,033	330	116	446
Australia ..	11,357,233	63,651,684	75,008,917	813,239	2,359,632	3,172,871
New Zealand ..	22,270	123,848	146,118	1,323	2,913	4,236
EXPORTS.						
	lbs.	lbs.	lbs.	£	£	£
Victoria ..	8,002,174	115,205,959	123,208,133	510,779	4,942,194	5,452,973
New South Wales ..	38,277,199	199,502,652	237,779,851	2,843,508	7,407,250	10,250,758
Queensland ..	17,739,100	28,319,382	46,058,482	1,244,530	1,036,394	2,280,924
South Australia ..	2,772,626	37,427,135	40,199,761	161,655	1,317,547	1,479,202
Western Australia ..	299,550	11,914,085	12,213,635	19,897	399,498	419,395
Tasmania ..	163,757	10,419,697	10,583,454	7,372	394,586	401,958
Australia ..	67,254,406	402,788,910	470,043,316	4,787,741	15,497,469	20,285,210
New Zealand ..	29,114,348	115,533,028	144,647,376	1,099,208	3,574,618	4,673,826
NET EXPORTS.						
	lbs.	lbs.	lbs.	£	£	£
Victoria ..	4,250,187	67,508,909	71,759,096	257,205	3,118,810	3,376,015
New South Wales ..	31,335,899	188,796,038	220,131,937	2,322,156	7,006,114	9,328,270
Queensland ..	17,739,100	28,318,978	46,058,078	1,244,530	1,036,379	2,280,909
South Australia ..	2,116,623	32,182,609	34,299,232	123,672	1,182,566	1,306,238
Western Australia ..	299,550	11,914,085	12,213,635	19,897	399,498	419,395
Tasmania ..	155,814	10,416,607	10,572,421	7,042	394,470	401,512
Australia ..	55,897,173	339,137,226	395,034,399	3,974,502	13,137,837	17,112,339
New Zealand ..	29,092,078	115,409,180	144,501,258	1,097,885	3,571,705	4,669,590

35.—EXPORTS OF DOMESTIC OR HOME PRODUCE, 1904.

State.	Value.	Value per Head.	Percentage of Total Exports.
	£	£ s. d.	
Victoria	17,369,609	14 7 8	71·17
New South Wales	22,700,071	15 14 10	68·77
Queensland	10,054,237	19 7 4	90·15
South Australia	6,230,773	16 17 1	73·46
Western Australia	10,146,557	42 18 0	98·78
Tasmania	2,648,613	14 16 3	88·59
Australia	69,149,860	17 9 9	76·57
New Zealand	14,601,787	17 5 7	99·00

36.—IMPORTS AND EXPORTS OF BULLION AND SPECIE, 1904.

State.	Gold.		Silver.		Bronze.	Total.
	Bullion.	Coin.	Bullion.	Coin.	Coin.	
IMPORTS.						
	£	£	£	£	£	£
Victoria	896,528	79,100	1,356	5,427	1,005	983,416
New South Wales	971,626	1,133,122	464,108	31,680	1,506	2,602,042
Queensland	35,749	187,000	105	3,004	450	226,308
South Australia	13,872	116,795	197	1,461	100	132,425
Western Australia .. ..	..	..	..	2,000	..	2,000
Tasmania	13	1,620	7	2,620	..	4,260
Australia	1,917,788	1,517,637	465,773	46,192	3,061	3,950,451
New Zealand .. ..	..	365,208	40	26,028	428	391,704
EXPORTS.						
	£	£	£	£	£	£
Victoria	486,593	2,949,450	1,108	58	..	3,437,209
New South Wales	1,590,067	3,642,257	176,599	32,205	880	5,442,008
Queensland	2,733,942	260,268	9,685	787	..	3,004,682
South Australia	93,874	62,020	630,399	2,877	..	789,170
Western Australia	3,939,333	4,563,537	131,394	..	..	8,634,264
Tasmania	128,022	..	..	..	..	128,022
Australia	8,971,831	11,477,532	949,185	35,927	880	21,435,355
New Zealand	1,987,501	6,820	112,875	2,778	..	2,109,974

NOTE.—Not including Silver-lead, of which large quantities were produced in New South Wales and Tasmania. See Table 52 *post*.

37.—SHIPPING FROM VARIOUS COUNTRIES, 1904.

GENERAL TABLES.

State.	From United Kingdom.	From other Australian States.	From other British Possessions (including New Zealand).	From Foreign Countries.	Total.
NUMBER OF VESSELS.					
Victoria	68	2,163	135	129	2,495
New South Wales	187	1,581	501	449	2,718
Queensland	17	576	152	21	766
South Australia	79	980	104	65	1,228
Western Australia	101	352	92	106	651
Tasmania	42	829	68	18	957
Australia	494	6,481	1,052	788	8,815
New Zealand	99	403	56	71	629
TONNAGE OF VESSELS.					
Victoria	166,859	3,339,458	155,774	266,758	3,928,849
New South Wales	645,660	2,144,442	752,978	876,099	4,419,179
Queensland	38,307	785,151	98,202	27,941	949,601
South Australia	195,817	1,967,996	155,389	107,360	2,426,562
Western Australia	375,830	989,812	146,507	261,483	1,773,632
Tasmania	189,030	689,179	139,712	25,504	1,043,425
Australia	1,611,503	9,916,038	1,448,562	1,565,145	14,541,248
New Zealand	366,993	550,400	82,030	155,146	1,154,569

NOTE.—In 1904, for the first time, vessels are recorded as arriving from the last port of call. Only vessels arriving direct are recorded as from oversea countries, whereas in previous years the original country of departure was recorded. A similar alteration has been made in the record of outward shipping.

38.—SHIPPING TO VARIOUS COUNTRIES, 1904.

GENERAL
TABLES.

State.	To United Kingdom.	To Other Australian States.	To Other British Possessions (including New Zealand).	To Foreign Countries.	Total.
NUMBER OF VESSELS.					
Victoria	169	2,213	92	29	2,503
New South Wales ..	260	1,447	480	580	2,767
Queensland	3	554	164	40	761
South Australia ..	93	1,057	65	31	1,246
Western Australia ..	143	378	83	51	655
Tasmania	5	816	112	11	944
Australia	673	6,465	996	742	8,876
New Zealand	97	427	45	51	620
TONNAGE OF VESSELS.					
Victoria	303,479	3,401,201	142,357	59,655	3,906,692
New South Wales ..	841,961	1,861,585	708,593	1,047,875	4,460,014
Queensland	5,048	724,806	150,338	78,600	958,792
South Australia ..	182,881	2,117,102	81,607	75,258	2,456,848
Western Australia ..	480,823	996,539	167,012	132,812	1,777,186
Tasmania	21,834	701,712	311,768	14,868	1,050,182
Australia	1,836,026	9,802,945	1,561,675	1,409,068	14,609,714
New Zealand	352,065	608,271	82,298	102,130	1,144,764

See note to preceding Table.

39.—SHIPPING—DESCRIPTION OF VESSELS, 1904.

GENERAL
TABLES.

State.	Steam Vessels.		Sailing Vessels.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
INWARDS.						
Victoria ..	2,164	3,579,906	331	348,943	2,495	3,928,849
New South Wales	2,132	3,769,303	586	649,876	2,718	4,419,179
Queensland ..	644	931,178	122	18,423	766	949,601
South Australia	987	2,196,186	241	230,376	1,228	2,426,562
Western Australia	543	1,667,239	108	106,393	651	1,773,632
Tasmania ..	798	990,135	159	53,290	957	1,043,425
Australia ..	7,268	13,133,947	1,547	1,407,301	8,815	14,541,248
New Zealand ..	400	1,039,318	229	115,251	629	1,154,569
OUTWARDS.						
Victoria ..	2,176	3,571,558	327	335,134	2,503	3,906,692
New South Wales	2,123	3,745,584	644	714,430	2,767	4,460,014
Queensland ..	654	945,160	107	13,632	761	958,792
South Australia	1,002	2,223,918	244	232,930	1,246	2,456,848
Western Australia	545	1,663,875	110	113,311	655	1,777,186
Tasmania ..	798	998,539	146	51,643	944	1,050,182
Australia ..	7,298	13,148,634	1,578	1,461,080	8,876	14,609,714
New Zealand ..	394	1,023,985	226	120,779	620	1,144,764

GENERAL
TABLES.

TABLE 40.—SHIPPING AND COMMERCE AT PRINCIPAL PORTS, 1904.

Ports.	Shipping.		Commerce.	
	Entered.	Cleared.	Imports.	Exports.
	tons.	tons.	£	£
<i>In Victoria—</i>				
Melbourne	3,611,912	3,561,507	17,001,212	...
Geelong	265,501	272,730	202,267	...
Border Towns	31,598	33,076	2,871,219	...
Other Ports	19,838	39,379	21,744	...
Total	3,928,849	3,906,692	20,096,442	24,404,917
<i>In New South Wales—</i>				
Sydney	3,320,953	2,896,631	...	...
Newcastle	1,022,066	1,405,112	...	...
Other Ports	76,160	158,271	...	...
Total	4,419,179	4,460,014	27,285,958	33,007,835
<i>In Queensland—</i>				
Brisbane	749,592	703,532	3,813,782	...
Rockhampton	5,748	20,660	346,989	...
Townsville	14,070	55,362	675,478	...
Other Ports, &c.	180,191	179,238	1,215,915	...
Total	949,601	958,792	6,052,164	11,153,383
<i>In South Australia—</i>				
Port Adelaide	2,022,939	1,953,355	4,805,918	...
Port Pirie	187,404	284,036	238,058	...
Walleroo	94,175	61,345	97,105	...
Other Ports	63,331	99,399	2,226,788	...
Port Darwin(Northern Territory)	58,713	58,713	82,847	...
Total	2,426,562	2,456,848	7,450,716	8,482,205
<i>In Western Australia—</i>				
Fremantle	1,135,866	1,156,014	4,626,235	...
Albany	514,019	465,154	154,169	...
Bunbury	73,756	99,733	60,917	...
Broome	34,483	26,506	49,284	...
Other Ports, &c.	15,508	29,779	1,781,875	...
Total	1,773,632	1,777,186	6,672,480	10,271,511

TABLE 40.—SHIPPING AND COMMERCE AT PRINCIPAL PORTS, 1904—*continued.*

GENERAL TABLES.

Ports.	Shipping.		Commerce.	
	Entered.	Cleared.	Imports.	Exports.
	tons.	tons.	£	£
<i>In Tasmania—</i>				
Hobart	685,352	686,059	...	...
Launceston	174,954	147,175	...	...
Other Ports	183,119	216,948	...	...
Total	1,043,425	1,050,182	2,554,454	2,989,600
Total Australia	14,541,248	14,609,714	70,112,214	90,309,451
<i>In New Zealand—</i>				
Auckland	543,199	382,540	3,248,163	2,512,938
Wellington	311,965	413,218	3,796,746	2,779,684
Lyttelton	37,803	40,012	2,320,507	2,156,288
Dunedin	66,239	57,879	2,243,006	1,388,073
Bluff	135,990	155,564	361,784	790,923
Other Ports	59,373	95,551	1,321,488	5,120,442
Total	1,154,569	1,144,764	13,291,694	14,748,348

41.—FRIENDLY SOCIETIES.

State.	Year.	Number of Branches.	Members.		Funds.	
			Number.	Per 100 of Population.	Amount.	Average per Member.
					£	£ s. d.
Victoria*	1903	1,155	101,717	8·41	1,475,403	14 10 1
New South Wales	1903	1,023	94,044	6·59	851,600	9 1 1
Queensland	1903	404	31,913	6·19	314,711	9 17 3
South Australia... ..	1899	474	43,043	12·06	535,198	12 8 8.
Western Australia	1903	199	12,522	5·52	71,022	5 13 5
Tasmania	1903	163	16,073	8·95	127,986	7 19 3
Australia ... ..	...	3,418	299,312	7·64	3,375,920	11 5 7
New Zealand	1903	465	45,255	5·44	883,751	19 10 6

* Not including societies for women, of which there were 81 branches with 4,139 members, and funds amounting to £6,327.

GENERAL
TABLES.

42.—DEPOSITS IN BANKS, 1904.

State.	In Banks of Issue.	In Savings Banks.	Total.	Per Head of Population.
	£	£	£	£ s. d.
Victoria	31,674,797	10,582,808	42,257,605	34 18 4
New South Wales	33,281,275	12,743,735	46,025,010	31 11 8
Queensland	12,517,805	3,767,060	16,284,865	31 4 4
South Australia	6,054,033	4,217,836	10,271,869	27 15 8
Western Australia	4,726,158	2,079,763	6,805,921	28 15 6
Tasmania	3,458,165	1,263,684	4,721,849	26 4 1
Australia	91,712,233	34,654,886	126,367,119	31 15 8
New Zealand	18,548,739	8,839,307	27,388,046	31 18 9

43.—CAPITAL AND ANNUAL VALUE OF RATEABLE PROPERTY, 1904.

State.	Value of Rateable Property.	
	Capital.	Annual.
	£	£
Victoria	209,143,730	11,437,830
New South Wales *	137,213,700	8,542,060
Queensland	43,651,241	2,728,200†
South Australia	54,224,000	2,711,200
Tasmania	22,427,884	1,121,394
New Zealand	166,241,200	9,778,900†

* In Municipal Districts only, not for whole State. † Estimated from Capital Value.

44.—LIFE INSURANCE POLICIES IN FORCE.

State.	Year.	Policies.		Amount Assured.	
		Number.	Per 100 of Population.	Total.	Average per Policy.
Victoria	1904	224,212	18.5	£ 30,980,343	£ 133.2
New South Wales	1901	177,033	12.8	27,999,828	158.2
Queensland ... ..	..	60,713	11.9	10,109,762	166.5
South Australia .. ..	..	69,354	19.0	8,300,774	119.7
Western Australia	1903	26,021	11.5	5,188,934	199.4
Tasmania	1904	21,980	12.2	3,683,462	167.6
Australia ... ..	..	579,313	15.0	86,263,103	148.9
New Zealand*	1903	135,696	16.3	26,634,960	196.3

NOTE.—In Victoria there were also 409 annuities for £21,333; in New South Wales, 335 for £21,070; in Queensland, 52 for £2,737; in South Australia, 98 for £5,510; in Western Australia, 3 for £273; in Tasmania, 89 for 4,629; and in New Zealand (?) for £49,080.

* Including 43,116 policies, for £10,060,262, in the Government Insurance Department.

45.—PROBATE AND LETTERS OF ADMINISTRATION, 1904.

GENERAL
TABLES.

State.	Number of Estates.	Sworn Value of Property.
		£
Victoria	3 827	5,762,084
New South Wales	2,850	6,155,963
Queensland	588	1,513,237
South Australia	684	1,814,800
Western Australia	367	422,515
Tasmania (1903)	256	253,167
Australia	8,572	15,921,766
New Zealand	1,457	3,645,589

46.—INSOLVENCIES, 1904.

State.	Number of Petitions.			Total Liabilities.	Total Assets.
	Compulsory.	Voluntary.	Total		
				£	£
Victoria	26	436	462	387,882	138,301
New South Wales	139	352	491	440,063	252,293
Queensland	23	300	323	93,235	19,885
South Australia	14	9	23	34,370	12,509
Western Australia	27	74	101	62,487	13,882
Tasmania (1903)	5	72	77	16,259	5,312
Australia	234	1,243	1,477	1,034,296	442,182
New Zealand	40	217	257	130,911	86,094

47.—AREA AND PRODUCE OF PRINCIPAL CROPS, 1904.

Victorian Year-Book, 1904.

State.	Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Potatoes.	Hay.	Vines.	Green Forage.	Land in Fallow.	Other Tillage.	Total.
	AREA IN ACRES.											
Victoria ...	2,277,537	344,019	46,089	11,394	13,790	46,912	452,459	28,016	29,902	853,829	71,667	4,175,614
New South Wales	1,775,955	40,471	14,930	193,614	8,190	23,855	435,704	8,840	87,718	510,712	85,619	3,185,608
Queensland ...	150,958	643	17,387	119,171	359	9,771	48,740	2,194	35,861	38,680	154,132	577,896
South Australia ...	1,840,157	50,630	23,904	...	7,078	8,315	269,626	23,210	20,362	1,016,156	32,224	3,291,662
Western Australia	182,080	13,864	3,251	86	1,126	1,906	105,247	3,413	1,631	81,441	14,787	408,832
Tasmania ...	43,091	43,690	7,646	...	16,431	25,948	55,545	...	4,266	34,636	29,611	260,864
Australia ...	6,269,778	493,317	113,207	324,265	46,974	116,707	1,367,321	65,673	179,740	2,535,454	388,040	11,900,476
New Zealand ...	258,015	342,189	29,484	10,084	15,100	26,331	78,816	571	206,749	63,313	775,072	1,805,724

47.—AREA AND PRODUCE OF PRINCIPAL CROPS, 1904—continued.

State.	Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Potatoes.	Hay.	Wine.
TOTAL PRODUCE.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Gallons.
Victoria ...	21,092,139	6,203,429	874,099	623,736	231,723	92,872	514,316	1,832,386
New South Wales ...	16,464,415	652,646	266,781	4,951,132	77,424	48,754	366,293	928,160
Queensland ...	2,149,663	15,137	331,772	2,542,766	15,966	19,231	80,662	60,433
South Australia ...	12,023,172	555,696	346,718	...	93,818	19,521	294,252	2,625,430
Western Australia ...	2,013,237	226,318	37,332	896	13,064	5,614	113,794	185,070
Tasmania ...	792,956	1,178,819	163,194	...	340,204	110,547	73,457	...
Australia ...	54,535,582	8,832,045	2,019,896	8,118,530	772,199	296,539	1,442,774	5,631,479
New Zealand ...	9,123,673	14,553,611	1,128,164	490,405	499,771	134,608	157,632*	...
AVERAGE PRODUCE PER ACRE.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Gallons.
Victoria ...	9.26	18.03	18.97	54.74	16.80	1.98	1.14	65.40
New South Wales ...	9.27	16.13	17.87	25.57	9.45	2.04	0.84	105.00
Queensland ...	14.24	23.54	19.08	21.34	44.47	1.97	1.66	27.54
South Australia ...	6.53	10.98	14.50	...	13.25	2.35	1.09	113.13
Western Australia ...	11.06	16.32	11.48	10.42	11.60	2.94	1.08	54.23
Tasmania ...	18.40	26.98	21.34	...	20.70	4.26	1.32	...
Australia ...	8.70	17.90	17.84	25.04	16.44	2.54	1.06	85.75
New Zealand ...	35.36	42.53	38.26	48.63	33.10	5.11	2.00	...

* Estimated.

GENERAL
TABLES.

48.—DAIRY PRODUCTS.

State.	Year.	Butter.	Cheese.	Bacon and Ham.
		lbs.	lbs.	lbs.
Victoria	1904	61,002,841	4,747,851	14,851,944
New South Wales	1904	53,591,243	4,223,621	10,680,532
Queensland	1904	17,538,473	2,607,475	6,514,852
South Australia	1904	6,836,170	851,800	872,418*
Western Australia	1904	441,103	350	250,264
Tasmania	1904	845,378	187,960	574,781
Australia .. ..	..	140,255,208	12,619,057	33,744,791
New Zealand†	1900	29,758,310	15,644,944	6,267,168

* Figures for 1902.

† Output of factories.

49.—LIVE STOCK, 1904.

State.	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	All Cattle.		
Victoria	372,397	632,493	1,694,976	10,167,691	286,070
New South Wales	482,663	556,531	2,167,129	34,526,894	330,666
Queensland	413,165	...	2,722,340	10,843,470	185,141
South Australia—					
Proper	183,481	88,156	272,459	5,820,301	111,497
Northern Territory	16,760	670	247,920	54,678	1,087
Western Australia	90,225	27,724	461,490	2,853,424	70,299
Tasmania	36,565	50,230	202,206	1,556,460	77,943
Australia	1,595,256	...	7,768,520	65,822,918	1,062,703
New Zealand	314,322	498,241	1,736,850	18,280,806	255,320

50.—WOOL PRODUCTION, 1904.

State.	Wool Imported.		Wool Exported.		Wool used in Manufactures in the State.		Wool Production.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	£	lbs.	£
Victoria	51,449,037	2,076,958	123,208,133	5,452,973	4,027,080	167,795	75,786,176	3,543,810
New South Wales ..	17,647,914	922,488	237,779,851	10,250,758	370,868	27,456	220,502,805	9,355,726
Queensland	404	15	46,058,482	2,280,924	92,901	4,258	46,150,979	2,285,167
South Australia ..	5,900,529	172,964	40,199,761	1,479,202	..	..	34,299,232	1,306,238
Western Australia ..	..	..	12,213,635	419,395	..	..	12,213,635	419,395
Tasmania	11,033	446	10,583,454	401,958	840,500	33,270	11,412,921	434,782
Australia	75,008,917	3,172,871	470,043,316	20,285,210	5,331,349	232,779	400,365,748	17,345,118
New Zealand	146,118	4,236	144,647,376	4,673,826	5,191,451	167,640	149,692,709	4,837,230

Australasian Statistics.

51.—GOLD PRODUCTION.

Victorian Year-Book, 1904.

State.	Prior to 1904.		During 1904.		Total.	
	Quantity in fine ozs.	Value.	Quantity in fine ozs.	Value.	Quantity in fine ozs.	Value.
		£		£		£
Victoria	62,821,706	266,485,727	765,600	3,252,045	63,587,306	269,737,772
New South Wales	12,104,757	51,345,318	269,818	1,146,109	12,374,575	52,491,427
Queensland	13,746,494	58,311,920	639,151	2,714,934	14,385,645	61,026,854
South Australia	622,539	2,640,688	29,109	123,648	651,648	2,764,336
Western Australia	11,042,881	46,864,090	1,983,230	8,424,226	13,026,111	55,288,316
Tasmania	1,290,223	5,482,543	65,921	230,015	1,356,144	5,762,558
Australia	101,628,600	431,130,286	3,752,829	15,940,977	105,381,429	447,071,263
New Zealand	14,887,158	63,149,147	467,900	1,987,501	15,355,058	65,136,648

TABLE 52.—MINERAL PRODUCTION (OTHER THAN GOLD), 1904.

State.	Silver.		Silver-lead.		Copper.		Tin.		Coal.		Other Minerals.	Total.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Value.	Value.
	ozs.	£	tons.	£	tons.	£	tons.	£	tons.	£	£	£
Victoria	39,908	4,990	...	...	...	...	71	5,190	121,741	70,208	87,703	168,091
New South Wales ...	1,121,402	123,256	597,220	1,942,284	...	406,001	...	188,377	6,019,809	1,994,952	419,072	5,073,942
Queensland	654,929	71,858	...	...	4,370	257,896	3,923	270,276	512,015	166,536	222,741	989,307
South Australia— Proper ... ..	...	...	...	...	6,278	382,356	...	...	...	...	89,945	472,301
N. Territory ... ..	...	...	167	1,387	...	...	...	...	...	...	55,209	56,596
Western Australia	399,190	45,912	...	...	...	...	854	58,817	138,550	67,174	27,456	199,359
Tasmania	1,896,134	205,414	7,754	93,048	8,477	507,066	2,293	256,816	61,612	29,878	10,611	1,102,833
Australia	4,111,563	451,430	405,141	2,036,719	...	1,553,319	...	779,476	6,853,727	2,328,748	912,737	8,062,429
New Zealand	1,094,461	112,875	...	...	...	...	...	...	1,537,838	826,207	512,651	1,451,733

53.—CONDITION OF CROWN LANDS, 1904.

State.	Area in Acres.	During the Year 1904.						At the End of 1904.			
		Sold by Auction, Private Contract, &c.			Selected under System of Deferred Payments.	Granted without Purchase.	Total Extent Wholly or Conditionally Alienated.	Total Granted, Sold, or in Process of Alienation.	Total Leased or Licensed.	Total Unoccupied or Reserved for Public Purposes.	
		Area.	Amount of Purchase Money.	Average Price per Acre.							
		acres.	£	£ s. d.	acres.	acres.	acres.	acres.	acres.		
Victoria	56,245,760	9,588	43,342	4 10 5	253,592	..	263,180	25,797,312	13,747,762	16,700,686	
New South Wales ..	198,848,000	54,764	120,946	2 4 2	1,146,777	1,390	1,202,931	49,264,804	126,355,188	23,228,008	
Queensland	427,838,080	103,079	62,254	0 12 1	237,621	223	340,923	17,197,623	236,217,909	174,422,548	
South Australia—Proper ..	243,244,800	221,234	210,063	0 19 0	167,047	13	388,294	13,517,964	87,151,181	142,575,655	
„ Northern Territory	335,116,800	..	..	..	160	..	160	474,845	104,641,200	230,000,755
Western Australia	624,588,800	1,398	23,616	16 18 1	1,362,941	4,427	1,368,766	11,558,308	139,844,823	473,185,669	
Tasmania	16,778,000	133,854	120,923	0 18 1	..	..	133,854	5,168,821	1,345,302	10,263,877
Australia	1,902,660,240	523,917	581,144	1 2 2	3,168,138	6,053	3,698,108	122,979,677	709,303,365	1,070,377,198	
New Zealand	66,861,440	18,992	19,510	1 0 6	..	45,691	64,683	26,211,293	16,917,996	23,732,151	

54.—CRIME, 1904.

State.	Number of Offences brought before Magistrates on Arrest or Summons.					Result of Disposal by Magistrates.			In Superior Courts. Number—			Number of Prisoners in Gaols on 31st December.
	Against the Person.	Against Property.	Drunkenness.	Other Offences.	Total.	Summarily Convicted.		Committed for trial.	Tried.	Convicted.	Acquitted.	
						Drunkenness.	Other Offences.					
Victoria	1,846	3,257	13,881	30,666	49,650	9,281	27,864	707	605	398	207	1,066
New South Wales ..	3,388	5,709	20,440	30,314	59,851	20,314	29,788	1,551	1,407	890	517	1,880
Queensland	1,641	1,989	6,854	7,649	18,133	6,827	8,518	460	418	241	177	561
South Australia ..	269	480	2,387	2,879	6,015	2,352	2,545	127	133	109	24	295
Western Australia ..	729	1,423	3,597	9,191	14,940	3,531	8,845	266	350	213	137	720†
Tasmania *	284	553	526	4,612	5,975	511	4,366	85	67	51	16	110
Australia	8,157	13,411	47,685	85,311	154,564	42,816	81,926	3,196	2,980	1,902	1,078	4,632
New Zealand ‡ ..	1,504	2,884	9,626	16,920	30,934	9,566	15,671	874	673	512	161	750

* Figures for 1903, later information not being available.

† Excluding 245 Aborigines and 9 others not under sentence.

‡ Excluding Maoris, of whom 569 were brought before magistrates—435 being summarily convicted, and 33 committed for trial.

—SUMMARY FOR THIRTY-TWO YEARS.
VICTORIA AND NEW SOUTH WALES.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.		Public Expenditure.	Public Debt.	Imports.	Exports.	Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.					Vessels.	Tons.	Railway.	Telegraph line (poles).	Total Cultivation. †		
																		Acres.	Acres.	Bushels.
£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
VICTORIA	1873	772,039	28,100	11,501	4,974	29,460	26,294	3,644,135	1,784,056	3,504,953	12,445,722	16,533,856	15,302,454	4,413	1,519,015	458	2,295	964,996	349,976	4,752,280
	1874	783,274	28,800	12,222	4,925	30,732	27,365	4,106,790	1,896,842	4,177,338	13,990,555	16,953,985	15,441,109	4,222	1,569,619	605	2,467	1,011,776	332,936	4,850,165
	1875	791,317	26,720	15,287	4,985	32,744	29,342	4,236,423	1,724,822	4,318,121	13,995,093	16,685,874	14,766,974	4,394	1,673,889	617	2,629	1,126,831	321,401	4,978,914
	1876	801,799	26,769	13,561	4,949	35,797	31,977	4,325,156	1,780,392	4,572,844	17,011,382	15,705,354	14,196,487	4,236	1,657,088	719	2,743	1,231,105	401,417	5,279,730
	1877	815,494	26,010	12,776	5,103	41,196	33,943	4,723,877	1,770,685	4,358,096	17,018,913	16,362,304	15,137,687	4,411	1,874,985	950	2,885	1,420,502	564,564	7,018,257
	1878	827,439	26,581	12,702	5,092	42,268	37,492	4,504,413	1,712,953	4,634,349	17,022,065	16,161,880	14,925,707	4,292	1,913,427	1,052	2,970	1,609,278	691,622	8,000,737
	1879	840,620	26,839	12,120	4,986	44,384	39,212	4,621,520	1,730,088	4,833,379	20,050,753	15,035,538	12,454,170	4,167	1,940,222	1,125	3,155	1,688,275	707,188	9,398,858
	1880	860,067	26,148	11,652	5,286	56,965	45,294	4,621,282	1,690,923	4,875,029	22,060,749	14,556,894	15,954,559	4,191	2,179,899	1,199	*	1,997,943	977,285	9,727,369
	1881	879,886	27,145	12,302	5,896	59,066	51,744	5,186,011	2,317,706	5,108,642	22,426,502	16,718,521	16,232,103	4,248	2,411,902	1,247	*	2,411,902	926,729	8,714,377
	1882	899,562	26,747	13,634	6,309	59,404	48,524	5,592,362	2,317,706	5,145,764	22,103,202	18,748,081	16,193,579	4,168	2,690,884	1,355	*	2,040,916	969,362	8,751,454
	1883	920,694	27,541	13,006	6,771	66,592	55,562	5,611,253	2,334,255	5,651,885	24,308,175	17,743,846	16,393,863	4,087	2,964,331	1,662	*	2,215,923	1,104,392	15,570,245
	1884	944,564	28,850	13,505	7,218	72,202	58,061	5,934,687	2,318,520	5,715,293	27,526,667	19,201,633	16,050,465	3,975	3,151,587	1,663	*	2,323,493	1,096,354	10,433,146
	1885	969,262	29,975	14,364	7,395	76,976	61,994	6,290,361	2,548,171	6,140,356	25,628,588	18,044,604	15,551,758	4,273	3,260,158	1,676	*	2,405,157	1,020,082	9,170,538
	1886	1,000,510	30,824	14,952	7,737	93,404	68,102	6,481,021	2,634,560	6,513,540	30,114,203	18,530,575	11,735,321	4,631	3,735,387	1,743	*	2,417,582	1,052,685	12,100,036
	1887	1,032,993	33,043	16,005	7,638	97,047	68,121	6,733,826	2,739,635	6,561,251	33,127,382	19,022,151	11,351,145	4,853	3,858,243	1,880	*	2,576,405	1,232,943	13,328,765
	1888	1,076,966	34,503	16,287	8,946	102,032	60,229	7,607,593	3,071,003	7,287,151	34,627,382	23,972,134	13,853,763	5,354	4,307,883	2,018	*	2,564,742	1,217,191	8,647,709
	1889	1,103,727	36,359	19,392	9,194	84,582	68,418	8,675,990	3,749,670	7,919,902	37,367,027	24,402,760	12,734,734	5,741	4,599,178	2,199	3,967	2,627,262	1,178,735	11,495,720
	1890	1,133,266	37,578	18,012	9,187	79,777	63,820	8,519,159	3,630,814	9,445,737	41,443,216	22,954,010	18,266,222	4,933	4,363,341	2,471	6,628	2,652,768	1,145,163	12,751,295
	1891	1,157,678	38,505	18,631	8,780	82,448	53,172	8,343,583	3,252,638	9,125,949	43,638,897	21,711,608	16,068,743	5,091	4,715,109	2,764	6,840	2,697,575	1,332,683	13,679,268
	1892	1,168,600	37,831	15,851	7,723	62,951	69,214	7,729,572	3,149,310	8,482,917	46,774,125	17,174,545	14,214,546	4,521	4,456,254	2,958	6,762	2,907,115	1,342,504	14,814,645
	1893	1,176,160	36,552	16,508	7,004	74,047	60,460	6,959,229	2,522,779	7,989,757	46,064,004	13,283,814	13,308,551	3,776	4,029,738	3,053	6,755	3,019,009	1,469,359	15,255,200
	1894	1,182,290	34,258	15,430	7,029	81,269	60,110	6,716,814	2,497,567	7,100,246	46,804,382	12,470,599	10,026,546	4,128	4,029,738	3,053	6,773	3,080,299	1,373,668	11,445,878
	1895	1,185,950	33,706	15,636	7,181	81,199	68,886	6,712,152	2,712,313	6,780,439	46,828,517	12,472,344	14,547,732	3,837	4,348,686	3,104	6,731	2,884,514	1,412,736	5,669,174
	1896	1,180,280	32,178	15,714	7,625	84,872	69,419	6,458,682	2,691,009	6,540,182	46,854,311	14,554,837	14,198,518	3,782	4,566,230	3,106	6,447	3,097,998	1,580,613	7,091,029
	1897	1,182,710	31,301	15,126	7,568	90,447	67,301	6,630,217	2,645,187	6,568,932	46,929,321	15,454,482	16,739,670	3,770	4,865,372	3,113	6,418	3,260,312	1,657,450	10,580,217
	1898	1,183,060	30,172	18,695	7,620	94,436	68,225	6,898,240	2,910,237	6,692,444	47,058,088	16,768,904	15,872,246	4,051	4,956,737	3,113	6,445	3,277,922	2,154,163	19,581,814
	1899	1,189,470	31,008	16,578	8,140	85,384	66,947	7,396,944	3,085,805	7,114,706	48,354,277	17,952,894	18,567,780	4,053	5,341,455	3,127	6,579	3,820,505	2,165,693	15,237,948
	1900	1,197,206	30,779	15,215	8,308	82,157	63,684	7,460,856	2,984,592	7,293,136	48,774,885	18,301,811	17,422,552	4,235	5,873,581	3,202	6,445	3,924,898	2,017,321	17,847,321
	1901	1,208,705	31,008	15,904	8,406	93,107	60,126	7,712,099	1,964,629	7,672,780	49,546,275	18,270,340	18,646,097	4,765	6,715,491	3,238	6,468	3,810,413	1,754,417	12,127,382
	1902	1,211,450	30,461	16,177	8,477	87,557	67,933	6,997,792	1,818,274	7,398,832	50,408,957	18,270,245	18,210,523	4,564	6,739,040	3,303	6,589	3,738,873	1,994,271	2,569,364
	1903	1,208,854	29,569	15,595	7,605	82,576	66,167	6,954,719	950,183	6,759,960	51,097,900	17,859,171	19,707,068	4,467	6,857,854	3,376	6,596	4,021,590	1,968,599	28,525,579
	1904	1,210,304	29,763	14,393	8,210	55,049	65,831	7,319,949	1,012,119	7,339,068	51,519,922	20,096,442	24,404,907	4,998	7,835,541	3,381	6,494	4,175,614	2,277,537	21,092,139

NEW SOUTH WALES.

1873	553,833	21,444	7,611	4,384	24,022	16,770	3,324,713	1,382,752	2,333,166	10,842,415	11,088,388	11,815,829	4,373	1,762,478	397	*	456,825	166,647	2,238,414
1874	574,943	22,178	8,652	4,343	29,756	19,279	3,509,966	1,217,401	2,939,227	10,516,371	11,293,739	12,345,603	4,385	1,990,894	401	*	464,957	166,912	2,148,394
1875	594,297	22,528	10,771	4,605	30,967	20,350	4,121,996	1,188,901	3,341,324	11,470,637	13,490,239	13,671,580	4,670	2,163,187	437	*	451,139	133,610	1,958,640
1876	614,181	23,298	11,193	4,630	32,942	21,923	5,033,828	1,161,406	4,749,013	11,759,519	13,672,776	13,003,941	4,578	2,127,725	554	*	513,840	145,609	2,391,979
1877	643,707	23,851	9,869	4,994	38,628	20,174	5,748,245	1,235,021	4,527,979	11,724,419	14,606,594	13,125,819	4,662	2,237,981	643	6,000	546,556	176,687	2,445,507
1878	671,888	25,328	10,763	5,317	39,879	22,913	4,983,864	1,309,717	5,130,973	11,688,119	14,768,873	12,965,879	4,856	2,450,504	733	7,078	618,642	233,253	3,439,326
1879	709,459	26,933	10,200	5,391	44,501	20,695	4,475,059	1,272,721	5,839,150	14,937,419	14,198,847	13,086,819	4,787	2,540,724	736	7,517	635,641	293,368	3,613,266
1880	747,950	28,162	11,231	5,572	45,870	26,559	4,904,230	1,417,293	5,685,078	14,903,919	13,950,075	15,525,138	4,151	2,432,779	849	7,955	706,498	252,540	3,708,737
1881	782,080	28,993	11,536	6,284	50,097	29,354	6,714,327	1,770,848	5,890,580	16,924,019	17,469,326	16,049,503	4,357	2,786,500	1,041	8,515	645,068	221,888	4,005,966
1882	815,000	29,702	12,816	6,948	46,113	28,925	7,410,737	1,903,413	6,449,418	18,721,219	21,281,130	16,716,961	4,777	3,296,665	1,313	9,013	733,583	247,361	4,042,395
1883	861,310	31,281	12,249	7,405	65,837	36,724	6,470,341	1,891,708	7,787,081	21,632,459	20,960,157	19,886,018	5,361	4,006,237	1,365	9,315	789,082	289,757	4,445,437
1884	904,980	33,946	14,220	7,482	71,336	44,633	7,115,592	2,152,855	8,412,609	30,101,959	22,826,985	18,251,506	6,945	4,660,958	1,665	9,755	852,017	275,260	4,203,394
1885	949,570	35,043	15,282	7,618	75,736	48,001	7,584,593	2,252,651	8,573,288	35,564,259	23,385,196	16,541,745	5,184	4,133,077	1,777	10,351	868,093	264,867	2,733,133
1886	989,340	36,284	14,587	7,811	71,996	50,913	7,594,301	2,611,835	9,078,869	41,034,249	20,973,548	15,556,213	6,439	4,258,604	1,935	10,816	977,664	337,730	5,868,844
1887	1,020,330	37,236	13,448	7,590	67,854	56,993	8,582,811	2,664,548	9,098,460	40,995,350	18,806,236	18,496,917	5,721	4,322,758	2,081	10,721	1,048,305	389,390	4,695,849
1888	1,051,080	38,525	14,408	7,844	62,361	56,941	8,886,360	2,681,883	8,778,851	44,100,144	20,885,557	20,859,715	5,927	4,765,419	2,206	10,690	999,204	304,803	1,450,503
1889	1,081,820	37,295	14,796	7,530	69,919	52,073	9,063,397	2,677,169	9,498,620	46,646,449	22,863,057	23,294,934	6,483	5,321,179	2,252	10,732	1,164,475	419,758	6,570,335
1890	1,121,860	38,960	14,218	7,876	67,799	54,807	10,036,186	2,916,344	10,378,673	48,051,450	22,615,004	22,045,937	5,666	4,761,872	2,263	11,231	1,241,419	333,233	3,649,216
1891	1,162,190	39,458	16,286	8,457	69,919	52,073	10,036,186	2,916,344	10,378,673	48,051,450	22,615,004	22,045,937	5,666	4,761,872	2,263	11,231	1,241,419	333,233	3,649,216
1892	1,191,790	40,041	14,410	8,022	62,197	52,687	10,501,104	3,449,787	10,377,949	51,957,040	20,776,526	21,972,247	6,027	5,647,184	2,269	13,879	1,179,621	356,666	3,963,668
1893	1,214,550	40,342	16,022	7,749	66,909	58,850	9,499,814	2,782,264	9,932,102	56,176,149	18,107,035	22,921,223	6,530	5,193,328	2,435	14,282	1,509,404	593,810	6,502,715
1894	1,239,250	38,952	15,218	7,666	75,588	65,976	9,300,711	2,686,920	9,178,706	56,451,369	15,801,941	20,577,673	6,563	5,738,554	2,585	14,727	1,688,542	647,483	7,041,378
1895	1,262,270	38,775	14,914	8,030	76,051	66,334	9,235,156	2,662,867	9,633,303	57,075,519	15,992,415	21,934,785	6,211	5,860,038	2,615	14,847	1,649,462	596,684	5,195,312
1896	1,278,970	36,506	15,839	8,483	62,633	62,516	9,062,850	2,496,833	9,524,785	57,493,539	19,140,350	58,588,264	21,744,350	23,751,072	2,645	15,058	2,043,733	866,112	8,853,445
1897	1,301,780	37,247	14,264	8,813	67,016	60,410	9,107,208	2,396,512	9,140,350	58,588,264	21,744,350	23,751,072	2,645	6,744,431	2,724	15,469	2,198,231	993,350	10,560,111
1898	1,323,130	36,222	16,661	8,883	75,526	65,732	9,304,253	2,511,298	9,069,940	60,777,186	24,453,560	27,648,117	6,579	6,919,928	2,775	15,933	2,555,329	1,319,503	9,286,216
1899	1,344,080	36,461	15,901	9,275	77,634	65,817	9,572,912	2,514,488	9,403,237	61,572,831	25,594,315	28,445,466	6,418	6,995,551	2,791	16,354	2,818,491	1,426,166	13,004,166
1900	1,364,590	37,146	15,118	9,996	63,783	61,757	9,957,036	2,618,065	9,731,982	63,299,859	27,561,071	28,164,516	7,032	8,014,889	2,895	16,756	2,888,305	1,530,609	16,173,771
1901	1,379,700	37,875	16,021	10,538	76,139	61,160	10,612,422	2,980,885	10,729,741	65,475,012	26,928,218	27,351,124	6,827	8,521,234	2,928	16,963	2,746,209	1,392,070	14,808,703
1902	1,405,450	37,865	16,646	10,486	81,190	58,249	11,178,214	1,148,942	11,190,963	69,109,208	25,974,210	26,544,051	6,166	8,728,144	3,107	14,526	2,802,371	1,279,760	1,585,097
1903	1,427,342	35,966	16,497	9,759	70,570	63,626	11,532,231	1,145,232	11,703,397	75,465,361	26,770,169	26,738,111	6,775	9,005,401	3,220	14,395	3,046,905	1,561,111	27,334,141
1904	1,457,246	38,667	15,360	10,424	72,948	58,339	11,248,328	1,100,193	11,319,887	78,055,955	27,285,958	33,007,835	5,485	8,879,193	3,362	14,491	3,185,608	1,775,955	16,464,415

1873	16,173	302,600	3,559	66,225	116,141	4,120,112	1,607	25,191	14,212	42,281	70,701	108,945	4,526	575,985	36,399	26,860	334,462	2,794,327	18,990,505	240,680
1874	17,973	293,135	3,984	69,053	118,437	3,618,436	1,351	20,997	13,604	38,564	63,085	93,440	4,308	684,258	40,589	29,711	346,691	2,856,699	22,797,416	219,953
1875	18,856	352,966	4,817	98,576	117,582	3,410,517	1,091	14,349	13,806	41,203	77,123	88,968	4,459	831,749	50,634	29,159	357,696	3,134,086	25,353,924	199,950
1876	21,828	461,916	5,662	134,158	116,365	3,879,537	1,571	29,567	14,171	42,939	111,946	159,661	4,457	799,709	61,516	30,715	366,703	3,131,013	25,269,755	173,604
1877	18,581	358,853	5,055	99,485	105,510	3,551,806	1,465	33,309	13,862	34,958	125,778	154,076	4,184	708,431	65,073	30,360	328,150	2,746,385	21,521,662	191,677
1878	23,129	447,912	6,152	132,072	130,582	4,420,580	1,604	27,621	16,725	53,690	104,096	172,407	4,237	684,733	60,249	34,615	336,468	2,971,583	25,479,480	220,320
1879	23,883	516,937	6,130	131,541	135,034	4,761,856	1,128	18,728	19,271	62,228	112,414	162,768	4,266	733,576	64,644	35,503	360,038	2,914,210	30,062,910	256,026
1880	17,923	356,121	7,890	160,602	125,679	4,483,457	1,365	22,290	18,996	51,936	130,443	173,074	800	602,007	102,301	44,561	395,984	2,580,040	35,398,121	308,205
1881	16,348	356,566	6,427	135,218	117,478	4,930,956	1,119	17,298	15,944	44,323	146,610	198,532	4,028	513,688	75,825	39,401	398,577	2,997,348	36,591,946	213,916
1882	24,818	617,465	6,474	133,050	118,180	4,057,635	1,232	20,447	14,462	43,461	179,567	242,921	4,448	543,596	92,606	44,435	323,026	1,859,965	36,114,814	154,815
1883	17,810	376,635	5,081	106,496	123,634	4,538,604	1,425	20,535	14,954	36,977	178,504	229,242	2,660	589,604	107,994	47,263	326,984	1,640,753	37,915,510	189,050
1884	19,472	425,920	7,036	148,869	115,600	2,989,585	1,270	18,932	12,418	31,335	226,646	280,312	4,584	441,612	140,529	49,212	337,172	1,425,130	31,660,321	211,656
1885	14,117	279,107	5,298	85,606	132,709	4,336,163	932	14,531	15,166	38,695	219,886	191,372	5,247	555,470	156,710	53,161	344,697	1,317,315	37,820,906	208,697
1886	23,947	600,892	6,079	132,949	146,957	3,825,146	1,522	22,533	17,322	45,803	223,470	349,888	5,840	601,897	165,820	48,977	361,663	1,367,844	39,169,304	209,576
1887	19,393	394,762	4,402	84,533	171,662	4,953,125	1,291	24,036	20,915	61,455	176,324	230,597	7,715	668,382	212,721	51,462	390,609	1,575,487	46,965,152	264,411
1888	7,984	109,931	3,318	36,760	166,101	4,910,404	985	12,899	15,419	36,839	209,531	134,911	7,072	805,813	228,808	55,183	411,368	1,622,907	46,503,469	248,589
1889	22,358	543,330	5,440	113,109	173,836	5,354,827	1,573	28,057	17,551	50,096	212,106	366,229	7,867	688,685	245,319	55,667	430,777	1,741,592	50,106,768	238,585
1890	14,102	256,659	4,937	81,383	191,152	5,713,205	923	11,546	19,406	52,791	175,242	213,034	8,044	842,181	426,188	65,192	444,163	2,091,229	55,986,431	284,453
1891	12,958	276,259	4,459	93,446	174,577	5,721,706	1,017	16,419	22,560	61,326	163,738	209,322	8,281	913,107	363,501	69,864	469,047	2,128,838	61,831,416	253,189
1892	20,890	466,603	6,118	91,701	167,549	5,037,256	2,258	39,977	18,502	52,105	214,468	302,134	8,264	931,542	405,704	76,833	484,309	2,221,459	58,080,114	249,522
1893	34,148	701,804	6,613	114,272	205,885	7,011,526	2,322	43,778	26,559	83,838	205,424	235,562	7,375	748,949	345,918	81,850	493,231	2,269,852	66,980,686	240,860
1894	30,636	562,725	10,396	179,348	208,308	6,625,533	2,694	46,670	30,089	86,170	245,243	281,873	7,577	731,683	415,607	90,509	518,181	2,465,411	56,977,270	273,359
1895	23,750	374,196	7,590	96,119	211,104	5,687,030	2,275	35,150	24,722	56,179	319,296	229,671	7,519	885,673	367,695	88,827	487,943	2,150,057	46,508,363	221,597
1896	39,530	834,633	6,453	110,340	211,882	5,754,217	2,315	34,087	31,170	84,214	327,209	334,902	8,061	794,256	458,488	93,013	519,636	2,226,163	48,318,790	214,581
1897	28,605	543,946	5,151	99,509	209,588	6,713,000	3,181	46,401	23,816	55,332	401,073	405,353	8,083	864,514	438,203	87,181	498,034	2,085,096	43,952,897	207,738
1898	19,874	277,007	4,459	64,094	193,286	6,064,842	3,379	56,599	27,978	61,900	461,784	394,287	8,078	845,232	429,136	87,852	491,553	2,029,516	41,241,004	247,061
1899	29,125	627,904	7,154	132,476	214,697	6,976,022	5,613	89,374	34,968	81,337	554,048	546,850	8,278	739,668	454,370	84,072	482,200	1,967,081	36,213,514	239,973
1900	29,383	593,548	9,435	114,228	206,051	6,292,745	4,481	67,950	29,408	63,253	466,236	526,260	8,441	891,190	520,885	83,376	481,417	1,983,116	40,020,506	256,577
1901	32,245	687,179	6,023	106,361	167,333	3,844,993	6,862	81,488	26,158	39,146	442,613	472,321	8,606	868,479	580,899	83,850	486,716	2,047,454	41,857,099	265,730
1902	42,992	351,758	4,557	18,233	292,437	3,049,269	6,049	73,321	19,444	30,732	491,918	243,379	8,790	806,140	109,146	637,278	450,125	1,741,226	26,649,424	193,097
1903	51,621	1,252,156	10,057	174,147	226,834	6,836,740	7,918	149,389	20,851	56,743	496,017	816,810	8,940	1,086,820	77,093	586,463	458,014	1,880,579	28,656,501	221,592
1904	40,471	652,646	14,930	266,781	193,614	4,951,132	8,190	77,424	23,855	48,754	635,704	366,293	8,840	928,160	87,718	596,331	482,663	2,167,129	34,526,894	330,666

SOUTH AUSTRALIA.

1873	198,075	7,107	2,631	1,562	4,548	3,172	987,648	362,246	839,152	2,174,900	3,841,100	4,587,859	1,581	515,640	202	3,004	1,225,073	784,784	6,178,816
1874	204,623	7,696	3,434	1,611	5,557	3,271	1,003,820	370,440	1,051,622	2,989,750	3,983,290	4,402,855	1,440	534,550	234	3,065	1,330,484	839,638	9,862,693
1875	210,442	7,408	3,036	1,663	6,566	4,019	1,143,312	339,103	1,176,412	3,320,600	4,203,802	4,805,051	1,634	611,381	274	3,069	1,444,586	898,820	10,739,834
1876	225,677	8,224	3,550	1,852	13,841	4,995	1,320,204	445,548	1,323,337	3,837,100	4,576,183	4,816,170	1,771	732,330	328	3,470	1,514,916	1,083,732	5,857,569
1877	236,864	8,640	3,235	2,002	14,061	8,367	1,441,401	499,885	1,443,653	4,737,200	4,625,511	4,626,531	1,707	672,776	328	4,061	1,823,115	1,163,646	9,034,692
1878	248,795	9,282	3,749	2,299	14,572	8,174	1,592,634	519,254	1,620,310	5,329,600	5,719,611	5,355,021	2,061	906,273	454	4,217	2,011,319	1,305,851	9,332,049
1879	259,460	9,902	3,580	2,238	13,480	9,137	1,662,498	526,366	1,847,256	6,605,750	5,014,150	4,762,727	2,131	932,891	539	4,393	2,271,058	1,458,096	14,280,964
1880	267,573	10,262	3,912	2,291	14,765	13,002	2,027,963	529,450	1,923,605	9,865,500	5,581,497	5,574,505	2,156	1,200,904	667	4,754	2,574,489	1,733,542	8,606,510
1881	286,324	10,708	4,012	2,308	19,552	16,800	2,171,988	557,188	2,054,285	11,196,800	5,244,064	4,407,757	2,153	1,269,491	832	4,946	2,613,903	1,708,781	8,087,032
1882	293,509	10,844	4,393	2,530	14,870	14,136	2,087,076	653,864	2,146,599	12,472,600	6,707,788	5,359,890	2,212	1,337,218	945	5,092	2,370,980	1,746,531	7,356,117
1883	304,515	11,173	4,435	2,539	19,830	15,562	2,060,140	637,751	2,330,079	13,891,900	6,310,055	4,883,461	2,136	1,504,765	988	5,161	2,754,560	1,846,151	14,649,230
1884	312,781	11,847	4,789	2,555	17,290	16,082	2,024,928	563,841	2,398,191	15,473,800	5,749,353	6,623,704	2,231	1,834,532	1,059	5,278	2,785,490	1,942,453	14,621,755
1885	313,423	12,046	3,987	2,447	14,500	20,596	2,309,592	749,447	2,454,808	17,020,900	5,548,403	5,636,255	2,163	1,807,042	1,063	5,336	*	*	*
1886	309,086	11,177	4,234	1,976	17,623	25,231	1,975,269	585,123	2,234,395	18,340,200	4,852,750	4,489,008	1,737	1,558,476	1,382	5,459	*	1,950,000†	19,012,500†
1887	313,015	10,831	3,944	1,977	15,468	17,667	2,014,102	648,645	2,145,135	19,168,500	5,096,293	5,330,780	1,812	1,677,883	1,420	5,486	*	1,605,000†	6,187,000†
1888	311,491	10,510	3,759	2,084	12,637	12,760	2,494,556	739,353	2,376,399	19,147,700	5,413,638	6,984,098	1,988	1,973,651	1,518	5,509	*	*	*
1889	316,012	10,318	3,501	2,062	9,230	8,736	2,270,433	711,248	2,355,927	20,435,500	6,804,451	7,259,365	2,082	1,959,342	1,774	5,511	2,864,877	1,842,961	14,577,358
1890	319,145	10,364	3,923	2,235	9,904	7,114	2,557,772	790,177	2,579,258	20,401,500	8,376,808	8,982,386	2,122	2,190,442	1,774	5,526	2,649,098	1,673,573	9,399,389
1891	327,963	10,737	4,211	2,315	16,684	12,807	2,829,453	829,748	2,668,353	21,633,300	10,075,992	10,656,446	2,270	2,576,546	1,830	5,540	2,533,291	1,552,423	6,436,488
1892	336,994	10,570	3,741	2,123	17,906	15,005	2,538,995	782,362	2,707,775	21,239,700	7,517,447	7,993,713	2,170	2,545,076	1,824	5,493	2,625,741	1,520,580	9,240,108
1893	341,968	10,706	4,559	2,114	18,966	19,261	2,576,820	769,706	2,806,929	21,697,000	8,050,739	8,635,995	2,052	2,550,581	1,824	5,546	2,758,304	1,732,711	13,618,062
1894	344,440	10,499	4,041	2,099	34,692	36,993	2,591,271	794,162	2,650,262	22,306,500	6,325,635	7,528,783	2,355	2,911,585	1,826	5,580	*	1,576,950†	7,781,223†
1895	345,556	10,567	3,963	2,053	37,193	40,838	2,497,648	798,347	2,681,934	22,556,025	5,680,880	7,352,742	2,357	3,150,741	1,884	5,620	*	1,410,955†	5,929,300†
1896	345,994	10,048	4,083	2,184	56,963	59,805	2,585,230	838,766	2,640,688	23,367,200	7,263,522	7,743,063	2,716	3,494,966	1,884	5,570	2,584,395	1,599,860	2,804,493
1897	347,900	9,562	4,044	1,953	58,473	59,359	2,698,759	941,075	2,779,110	23,914,000	7,277,086	7,070,750	2,525	3,747,685	1,886	5,862	2,604,122	1,522,668	4,014,852
1898	350,576	8,970	4,732	2,221	55,465	54,636	2,633,727	891,324	2,750,959	24,309,035	6,298,765	6,978,370	2,297	3,667,526	1,890	5,793	2,967,370	1,788,770	8,778,900
1899	356,840	9,422	4,478	2,276	34,095	31,368	2,731,208	942,922	2,777,614	24,916,310	7,016,238	8,547,046	2,190	3,619,251	1,890	5,691	3,081,846	1,821,137	8,453,135
1900	361,451	9,177	3,837	2,313	31,460	30,809	2,853,329	902,362	2,936,619	26,131,780	8,174,218	8,191,376	2,122	3,695,771	1,902	5,508	3,279,406	1,913,247	11,253,148
1901	364,795	9,114	4,065	2,309	34,954	36,566	2,886,854	621,761	3,007,034	26,423,805	7,478,288	8,318,820	2,267	4,129,366	1,902	5,528	3,122,800	1,743,452	8,012,762
1902	365,791	8,947	4,314	2,383	37,162	40,469	2,477,432	267,790	3,233,578	26,423,045	6,181,200	7,890,072	2,163	4,131,276	1,902	5,301	3,113,539	1,746,842	6,354,912
1903	368,823	8,508	3,951	2,272	35,247	34,256	2,530,568	398,941	2,641,789	26,754,420	6,743,872	8,490,359	2,197	4,280,890	1,882	5,517	3,266,965	1,711,174	13,209,466
1904	372,682	9,133	3,778	2,534	14,370	13,818	2,568,101	353,433	2,707,253	27,504,695	7,450,716	8,482,205	2,474	4,883,410	1,882	5,550	3,291,662	1,840,157	12,023,172

QUEENSLAND AND SOUTH AUSTRALIA—continued.

State.	Year.	Agriculture.														Live Stock.					
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green† Forage.	Other Tillage.	Horses.	Cattle.	Sheep.	Pigs.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine, Gallons.	Acres.	Acres.				
1873	353	7,060	588	11,760	21,140	845,600	178	3,560	3,069	6,138	5,772	11,544	364	41,479	1,894	27,306	99,248	1,348,093	7,268,946	42,884	
1874	178	*	361	*	30,998	*	387	*	3,316	*	5,554	*	413	70,425	3,359	22,173	107,507	1,610,105	7,180,792	44,517	
1875	114	*	613	*	38,711	**	251	*	3,056	*	8,531	*	376	77,404	2,863	18,354	121,497	1,812,576	7,227,774	46,447	
1876	162	*	688	*	41,705	*	270	*	3,928	*	9,423	*	523	93,841	4,821	18,349	133,625	2,079,979	7,315,074	53,455	
1877	74	748	638	10,758	44,718	1,262,018	419	*	4,603	8,778	9,914	12,919	655	87,051	10,771	24,513	130,174	2,299,582	6,272,766	52,371	
1878	132	1,274	1,065	16,904	53,799	1,539,510	548	*	3,882	9,063	13,904	18,553	605	64,407	6,875	27,061	148,226	2,469,555	5,631,634	50,301	
1879	175	4,330	1,789	44,160	48,365	1,511,006	259	*	4,761	14,404	11,645	22,854	743	104,674	7,585	27,935	163,342	2,805,984	6,083,034	64,686	
1880	116	2,081	1,499	31,433	44,109	1,409,607	313	*	6,111	16,177	12,021	23,440	739	85,455	10,815	34,214	179,152	3,162,752	6,935,967	66,248	
1881	88	1,121	256	3,207	46,480	1,313,655	272	*	5,086	11,984	16,926	19,640	890	72,121	11,634	41,735	194,217	3,618,513	8,292,883	56,438	
1882	225	3,730	504	8,982	53,323	1,422,648	300	*	5,133	14,861	22,001	36,690	1,092	88,476	10,561	55,053	229,124	4,089,715	12,043,893	50,097	
1883	125	1,112	241	3,190	56,463	1,619,140	*	*	5,468	14,236	17,727	24,627	1,198	119,295	13,233	63,142	236,154	4,246,141	11,507,475	51,009	
1884	143	2,170	686	16,964	61,064	1,312,939	*	*	5,424	15,855	25,307	35,483	1,286	95,358	18,352	76,007	253,116	4,266,172	9,308,911	51,843	
1885	208	1,006	406	9,826	71,741	1,574,294	*	*	6,735	18,989	28,881	30,660	1,483	133,298	13,629	75,954	260,207	4,162,652	8,994,322	55,786	
1886	138	1,438	768	18,483	75,566	1,709,673	887	24,876	7,202	26,967	39,280	75,371	1,517	147,410	17,183	72,515	278,694	4,071,563	9,690,445	61,861	
1887	550	13,343	1,165	31,493	73,139	1,631,890	515	18,856	8,717	30,679	25,734	51,896	1,658	118,672	10,056	75,955	305,865	4,473,716	12,926,158	73,663	
1888	642	3,626	324	7,432	85,966	2,181,681	497	17,507	7,303	20,711	20,978	32,291	1,703	144,239	11,281	76,003	324,326	4,654,932	13,444,005	68,994	
1889	750	14,561	1,254	26,630	97,698	1,743,051	249	4,121	7,185	25,889	45,617	88,172	1,763	164,626	10,120	73,978	352,364	4,872,416	14,470,095	96,836	
1890	411	8,967	584	12,673	99,400	2,373,803	469	13,226	8,994	28,810	31,106	50,116	1,981	189,274	9,546	76,737	365,812	5,558,264	18,007,234	96,836	
1891	715	16,669	739	21,302	101,598	3,077,915	995	33,895	9,173	25,018	30,655	58,842	1,988	168,526	10,760	82,075	399,364	6,192,759	20,289,633	122,672	
1892	591	12,965	385	6,969	92,172	2,333,553	1,473	41,381	8,493	20,498	25,665	53,933	1,908	193,337	14,690	83,709	422,769	6,591,416	21,708,310	116,930	
1893	606	12,095	495	8,396	93,556	1,824,108	1,285	41,522	8,306	17,165	22,605	42,353	2,000	101,528	13,336	80,993	429,734	6,693,200	18,697,015	68,086	
1894	1,477	30,463	1,418	37,824	103,671	2,684,925	933	30,117	10,523	28,185	28,028	55,696	1,987	176,497	12,029	95,459	444,109	7,012,997	19,587,691	89,677	
1895	922	10,877	721	7,756	100,481	2,391,378	918	23,414	9,240	19,027	28,609	59,665	2,021	238,208	19,552	109,724	468,743	6,822,401	19,856,959	100,747	
1896	1,881	32,181	1,122	19,340	115,715	3,065,333	945	27,977	7,672	18,451	35,764	69,695	2,020	170,733	31,469	116,316	452,207	6,097,377	19,593,696	97,434	
1897	1,834	31,496	2,077	49,840	109,721	2,803,172	915	21,319	8,197	18,520	48,220	94,339	2,167	207,945	35,566	133,350	479,127	6,089,013	17,797,883	110,855	
1898	271	4,047	2,944	34,865	102,835	2,252,481	1,162	42,007	7,961	16,413	35,263	70,235	2,020	134,334	39,523	183,632	480,469	5,571,292	17,552,608	127,081	
1899	714	10,712	7,474	118,443	110,489	1,965,598	517	11,666	10,766	22,675	55,939	103,409	2,003	131,045	54,718	176,702	479,127	5,053,836	15,226,479	139,118	
1900	385	7,855	7,533	127,144	127,974	2,456,647	486	15,495	11,060	20,014	42,497	78,758	2,019	132,489	66,343	167,669	456,788	4,078,191	10,339,185	122,687	
1901	1,535	42,208	11,775	277,037	116,983	2,569,118	589	20,956	9,948	22,402	63,055	122,039	1,990	145,835	74,472	174,417	462,119	3,772,707	10,030,971	121,641	
1902	78	520	430	3,595	89,223	1,033,329	144	7,418	2,899	10,422	20,068	23,181	1,559	100,852	51,279	309,861	399,122	2,543,471	7,213,985	77,202	
1903	2,808	70,713	22,881	510,557	133,099	1,923,623	364	7,804	6,732	17,649	78,393	136,117	2,069	88,558	26,576	210,675	401,984	2,481,717	8,392,044	117,553	
1904	643	15,137	17,387	331,772	119,171	2,542,766	359	15,966	9,771	19,231	48,740	80,662	2,194	60,433	35,861	192,812	413,165	2,722,340	10,843,470	185,141	

1873	2,011	21,337	11,827	126,398	*	*	*	3,813	13,014	142,167	145,389	5,217	783,478	27,469	247,785	87,455	174,381	5,617,419	87,336	
1874	2,785	40,701	13,724	208,373	*	*	4,582	17,046	160,931	202,934	5,051	648,186	27,076	276,697	93,122	185,342	6,120,211	78,019		
1875	3,640	60,749	13,969	197,315	*	4,854	78,050	5,941	26,833	161,429	194,794	4,972	727,979	37,261	313,700	107,164	219,240	6,179,395	100,562	
1876	2,914	31,043	10,066	107,023	*	4,490	46,353	5,091	14,463	91,937	178,866	4,554	493,217	35,268	276,874	106,903	219,441	6,133,291	102,295	
1877	3,515	42,039	11,991	143,586	*	3,832	46,278	5,367	13,452	223,905	253,374	4,164	339,277	36,265	375,430	110,684	230,679	6,098,359	104,527	
1878	2,931	35,202	12,039	142,933	*	4,233	48,191	5,398	14,378	218,359	210,974	4,297	458,303	30,033	428,128	121,553	251,802	6,377,812	103,422	
1879	4,117	61,818	15,107	202,166	*	3,963	55,547	7,320	27,832	265,463	296,437	4,117	459,468	33,996	473,879	130,052	266,217	6,140,396	90,548	
1880	4,355	50,070	13,074	151,886	*	4,406	58,963	5,587	16,170	272,567	261,371	4,337	500,955	35,763	500,858	150,591	303,035	6,453,322	127,117	
1881	3,023	32,219	11,953	137,165	*	4,616	57,627	6,136	18,154	333,467	240,827	4,202	313,060	28,891	452,834	159,673	314,918	6,810,856	120,718	
1882	3,457	38,472	12,186	134,464	*	3,688	42,668	5,288	16,133	138,843	104,370	4,312	347,340	21,747	434,928	162,400	306,046	6,588,366	100,075	
1883	5,491	80,467	13,475	188,806	*	3,599	52,816	6,063	25,557	366,934	388,719	4,280	358,606	33,172	475,404	164,360	319,620	6,677,067	105,714	
1884	7,264	88,639	15,697	211,207	*	4,601	64,826	5,666	23,192	308,429	285,839	4,590	473,535	33,296	463,494	168,420	389,726	6,696,406	163,507	
1885	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1886	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1887	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1888	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1889	10,297	131,449	19,679	246,841	*	4,267	57,800	6,383	23,853	329,643	395,920	7,352	510,674	36,500	607,795	170,515	440,000†	7,254,000†	179,000†	
1890	12,475	116,229	14,472	175,583	*	4,358	64,068	6,626	23,963	345,150	310,125	9,535	762,776	28,780	554,129	199,605	430,000†	7,150,000†	170,000†	
1891	12,637	80,876	11,461	107,183	*	4,290	68,655	6,892	27,824	304,171	193,317	12,314	801,835	23,935	605,168	188,587	324,412	8,386,617	108,856	
1892	15,745	166,489	13,285	175,468	*	4,705	69,922	6,011	20,057	434,116	389,277	15,418	594,038	27,999	587,879	201,045	574,032	7,050,544	118,083	
1893	13,619	172,605	13,072	205,577	*	4,451	72,744	6,510	22,958	361,145	334,769	17,418	712,845	26,904	582,474	200,481	660,831	7,646,239	81,948	
1894	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1895	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1896	40,215	189,716	14,484	107,798	*	3,519	30,350	6,417	16,139	339,257	170,808	18,333	1,473,216	27,398	534,912	192,458	675,284	6,685,591	6,402,593	
1897	31,398	204,444	13,232	162,065	*	2,917	31,936	6,449	9,308	449,167	298,184	18,761	1,283,094	28,801	530,729	179,792	540,149	5,092,078	48,664	
1898	25,823	304,002	16,962	234,135	*	3,491	51,151	6,653	14,445	316,413	258,518	19,159	1,080,772	31,097	759,002	177,180	613,894	5,076,696	81,842	
1899	20,229	218,331	15,767	188,917	*	3,842	52,883	8,406	19,716	311,440	229,800	19,438	954,367	34,053	847,534	180,335	526,524	5,721,493	84,262	
1900	27,988	366,229	15,352	211,102	*	4,454	67,415	6,628	14,566	341,330	353,662	20,158	1,388,847	35,322	914,927	179,352	472,428	5,283,247	91,184	
1901	34,660	469,254	15,517	243,362	*	4,938	97,577	6,248	15,059	369,796	346,467	20,860	2,077,923	37,205	890,124	178,199	480,777	5,060,540	89,875	
1902	50,296	620,823	21,493	317,155	*	5,452	89,654	7,763	28,312	325,789	308,825	21,692	2,145,525	14,937	919,275	179,413	519,163	4,922,662	85,791	
1903	57,558	902,936	28,697	487,920	*	6,461	121,580	8,616	31,415	370,152	479,723	22,617	2,345,270	19,241	1,042,449	192,411	536,580	5,350,258	69,331	
1904	50,630	555,696	23,904	346,718	*	7,078	93,818	8,315	19,521	269,626	294,252	23,210	2,625,430	20,362	1,048,380	200,241	520,379	5,874,979	112,584	

WESTERN AUSTRALIA AND TASMANIA.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.		Public Expenditure.	Public Debt.	Imports.	Exports.	Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.					Vessels.	Tons.	Railway.	Telegraph line (poles).	Total Cultivation †	Wheat.	
																			Acres.	Acres.	Bushels.
1873	25,761	809	418	161	235	639	134,832	£ 71,625	£ 114,270	£ 35,000	£ 297,328	£ 265,217	287	140,237	30	750	51,724	25,697	345,368	
1874	26,209	876	487	181	660	601	148,073	82,275	143,266	119,000	364,263	428,837	297	132,827	38	763	45,292	23,427	281,124	
1875	26,709	760	473	192	733	520	157,775	80,645	169,230	135,000	349,840	391,217	305	134,161	33	766	47,571	21,561	237,171	
1876	27,321	918	383	191	409	650	162,189	85,177	179,434	135,000	386,037	397,293	330	154,126	38	1,159	45,933	18,769	225,168	
1877	27,833	912	433	176	613	575	165,413	81,286	182,959	161,000	362,707	373,352	290	151,133	68	1,567	50,591	22,834	251,174	
1878	23,166	877	394	182	322	471	163,344	75,849	198,243	184,556	379,050	428,491	316	162,735	68	1,569	51,065	23,008	229,342	
1879	23,663	971	411	215	214	278	196,315	83,329	195,812	361,000	407,299	494,884	324	170,037	102	1,569	65,492	25,762	384,813	
1880	29,019	933	382	214	577	777	180,050	101,257	204,333	361,000	353,669	499,183	333	250,429	102	1,555	63,903	27,687	413,644	
1881	30,013	1,005	412	197	757	690	254,313	109,199	197,386	511,000	404,831	502,770	368	285,046	122	1,585	53,353	21,951	153,657	
1882	30,766	1,039	430	215	932	838	250,372	134,658	205,451	511,000	508,755	583,056	403	344,247	122	1,585	56,691	22,718	249,808	
1883	31,700	1,058	569	217	1,507	1,071	284,364	126,131	240,566	611,000	516,847	447,010	431	389,102	122	1,585	61,449	22,768	373,984	
1884	32,958	1,094	707	230	2,434	1,563	290,319	127,338	291,307	765,000	521,167	405,693	442	442,886	143	1,885	79,669	29,416	382,400	
1885	35,186	1,200	600	256	3,047	1,419	323,213	145,833	303,849	1,288,100	650,391	446,692	461	468,035	192	2,254	76,929	29,511	339,376	
1886	39,584	1,466	806	297	5,615	1,877	383,564	184,999	394,675	1,286,000	758,013	630,393	542	497,508	219	2,385	86,248	24,043	238,576	
1887	42,483	1,557	702	316	4,450	2,400	377,903	188,911	456,897	1,280,700	666,344	604,655	440	464,637	239	2,548	105,592	29,491	269,611	
1888	42,137	1,518	673	304	1,598	2,794	357,003	179,944	385,129	1,275,200	786,250	680,344	529	812,393	272	2,961	106,015	30,739	322,739	
1889	43,693	1,594	611	300	2,850	2,272	382,213	194,248	386,000	1,371,981	818,127	761,392	694	1,004,818	497	2,961	117,833	35,517	497,238	
1890	46,230	1,561	540	278	3,567	1,996	414,314	204,405	401,751	1,367,444	874,447	671,813	548	904,861	524	2,921	122,032	33,820	465,025	
1891	53,279	1,786	869	413	6,346	2,661	497,670	264,055	433,623	1,613,594	1,230,093	799,466	593	1,045,555	656	2,921	131,900	26,866	595,526	
1892	58,658	1,848	931	412	7,440	2,963	543,889	304,760	550,616	2,261,864	1,391,109	882,143	676	1,124,565	651	3,258	161,466	35,061	429,497	
1893	65,037	2,112	945	392	8,928	3,705	570,651	293,336	640,801	2,873,098	1,494,438	918,147	581	1,071,418	827	3,578	124,520	42,672	520,198	
1894	82,014	2,123	1,081	482	25,588	9,892	680,195	354,620	449,362	3,417,339	2,114,414	1,251,400	721	1,329,073	1,142	4,403	145,877	21,433	170,401	
1895	101,143	2,373	1,634	633	29,523	11,129	1,125,941	549,243	936,400	3,990,112	3,774,951	1,332,554	918	1,578,553	1,145	4,577	153,112	23,241	198,076	
1896	137,796	2,782	2,020	1,077	55,215	19,266	1,858,695	853,965	1,823,863	4,736,373	6,493,557	1,650,226	1,451	2,136,378	1,160	5,430	138,343	31,488	243,927	
1897	161,694	4,021	2,643	1,659	49,387	26,787	2,842,751	1,185,002	2,839,453	7,310,815	6,418,565	3,940,098	1,428	2,377,832	1,361	5,958	176,397	38,705	403,995	
1898	167,810	4,963	2,716	1,674	32,709	23,756	2,754,747	1,114,326	3,256,912	9,203,738	5,241,965	4,960,006	1,264	2,389,626	1,487	5,886	155,960	75,032	487,909	
1899	170,651	5,174	3,324	1,671	20,278	20,225	2,478,811	382,967	2,339,358	10,488,363	4,473,532	6,985,642	1,353	2,638,648	1,850	5,941	237,744	84,462	966,601	
1900	179,708	5,454	2,240	1,781	24,921	19,021	2,875,396	1,055,637	2,615,675	11,674,640	5,962,178	6,852,054	1,516	3,232,028	1,978	6,052	236,585	74,308	774,653	
1901	194,889	5,718	2,519	1,821	32,782	20,780	2,964,412	644,948	3,051,331	12,709,430	6,418,171	8,515,623	1,785	3,714,263	1,984	6,173	286,666	94,709	956,886	
1902	215,140	6,232	2,823	2,024	37,860	21,001	3,349,450	173,548	3,151,427	14,942,310	7,218,352	9,051,358	1,528	3,358,074	1,989	6,112	300,717	92,398	956,569	
1903	226,954	6,699	2,788	2,064	30,943	20,216	3,630,238	221,247	3,521,763	15,627,298	6,769,922	10,324,732	1,411	3,335,895	2,145	6,079	366,799	137,964	1,876,252	
1904	242,289	7,176	2,817	2,088	31,517	19,563	3,550,016	235,114	3,698,312	16,090,288	6,672,480	10,271,511	1,306	3,550,818	2,168	6,199	408,832	182,080	2,013,237	

WESTERN AUSTRALIA.

TASMANIA.

1878	104,217	3,048,150	659	6,787	7,039	324,257	192,229	308,947	1,477,600	1,107,167	893,556	1,342	238,112	45	291	167,931	58,610	947,813
1874	104,176	3,087,1,689	712	6,265	7,714	333,732	207,311	325,195	1,476,700	1,257,785	925,325	1,227	239,507	45	291	326,486	57,633	1,066,861
1875	103,663	3,105,2,078	689	6,535	8,075	342,606	207,851	388,090	1,489,400	1,185,942	1,085,976	1,295	262,209	150	396	332,324	42,745	700,092
1876	105,484	3,149,1,730	746	8,571	8,169	327,017	210,611	341,889	1,520,500	1,133,003	1,130,983	1,255	277,484	172	513	332,558	38,977	752,070
1877	107,104	3,211,2,038	828	9,717	9,270	366,118	230,652	352,461	1,589,705	1,308,671	1,416,975	1,358	319,517	172	553	348,841	46,719	846,420
1878	109,947	3,502,1,700	864	9,568	8,483	385,936	241,732	379,232	1,747,400	1,324,812	1,315,695	1,381	315,854	172	692	355,403	48,392	778,977
1879	112,469	3,564,1,688	804	10,578	9,932	375,570	232,360	431,216	1,786,800	1,267,475	1,301,097	1,428	381,895	172	731	366,407	45,215	1,049,778
1880	114,762	3,739,1,832	839	10,411	10,025	442,158	300,241	415,196	1,943,700	1,369,223	1,511,931	1,309	413,303	172	745	373,299	50,022	750,040
1881	118,113	3,918,1,733	856	12,579	11,163	505,006	344,723	463,684	2,003,000	1,431,144	1,555,576	1,383	383,762	172	795	374,374	51,757	977,365
1882	120,834	4,043,1,906	969	12,822	11,403	550,006	370,856	500,801	2,050,600	1,670,872	1,587,389	1,451	417,418	167	915	377,486	46,721	946,889
1883	123,650	4,259,2,122	1,120	14,240	12,636	562,066	388,406	533,330	2,385,600	1,832,637	1,731,599	1,305	471,722	167	960	393,993	41,301	732,718
1884	127,054	4,578,1,990	1,003	14,257	12,524	549,741	344,192	577,876	3,202,300	1,656,118	1,475,857	1,340	614,198	215	1,000	425,845	34,091	654,638
1885	129,267	4,637,2,036	1,054	14,322	14,173	571,412	366,118	586,598	3,357,000	1,757,486	1,313,693	1,358	677,806	257	1,143	417,777	30,266	524,353
1886	131,616	4,627,1,076	985	15,399	14,630	568,924	371,544	584,756	4,026,720	1,756,567	1,331,540	1,405	692,429	303	1,280	446,391	35,322	632,573
1887	135,988	4,736,2,161	939	14,980	12,288	594,976	375,501	668,759	4,109,370	1,596,817	1,449,371	1,391	735,299	318	1,324	457,486	40,498	675,069
1888	138,346	4,777,2,036	951	18,866	17,936	640,068	405,807	709,486	4,499,470	1,610,664	1,333,865	1,565	776,278	327	1,403	481,533	40,657	819,497
1889	142,177	4,757,2,098	967	23,443	20,771	678,909	422,644	681,674	5,019,050	1,611,035	1,459,857	1,661	912,246	374	1,487	488,354	49,055	756,639
1890	145,290	4,818,2,118	954	29,517	27,070	758,100	454,431	722,746	6,292,800	1,897,512	1,486,992	1,509	951,247	399	1,645	517,174	39,452	642,980
1891	151,719	4,971,2,234	983	27,315	21,233	883,198	502,139	851,559	7,110,290	2,051,964	1,440,818	1,578	1,044,606	425	1,717	516,930	47,584	937,680
1892	150,631	4,965,2,069	995	23,744	24,407	787,764	438,136	919,802	7,156,070	1,497,161	1,346,965	1,645	1,137,140	475	1,856	535,433	58,897	1,018,553
1893	150,669	5,216,2,071	848	18,089	18,649	706,972	399,700	836,417	7,340,804	1,057,683	1,352,184	1,383	934,439	475	1,821	550,865	55,312	833,771
1894	152,708	4,852,1,938	847	17,009	15,786	696,795	418,870	789,805	7,414,345	979,676	1,489,041	1,423	898,367	475	1,789	575,286	52,028	872,000
1895	154,987	4,790,1,811	847	18,767	17,168	761,971	464,379	748,946	7,782,770	1,094,457	1,373,068	1,453	937,526	475	1,789	458,914	64,652	1,164,855
1896	159,286	4,603,1,901	964	19,076	15,419	797,976	467,054	750,244	7,782,470	1,192,410	1,496,576	1,339	890,761	475	1,813	455,514	74,516	1,286,330
1897	163,839	4,683,1,947	1,052	20,735	16,693	845,020	496,472	785,026	7,782,170	1,367,608	1,744,461	1,416	1,084,168	495	1,884	499,535	85,905	1,668,341
1898	163,194	4,580,2,359	1,097	24,074	19,322	908,223	540,503	830,168	7,776,326	1,650,018	1,803,369	1,525	1,158,993	509	1,927	532,267	85,287	2,303,512
1899	171,990	4,674,2,204	1,147	24,959	20,805	943,970	547,528	871,454	7,721,220	1,769,324	2,577,475	1,554	1,318,703	540	2,000	543,568	64,328	1,101,303
1900	172,377	4,864,1,902	1,332	23,056	22,574	1,054,980	644,510	923,371	8,429,705	2,073,657	2,610,617	1,484	1,232,918	587	2,091	560,151	51,825	1,110,421
1901	174,233	4,930,1,814	1,338	25,084	23,751	826,163	107,415	870,472	8,551,745	1,965,159	2,945,757	1,636	1,432,725	618	2,187	573,684	44,084	963,662
1902	177,077	5,085,1,914	1,313	27,550	24,572	734,663	105,401	850,684	9,009,051	2,442,745	3,244,508	1,908	1,767,215	620	2,187	576,239	40,898	976,971
1903	179,487	5,080,2,116	1,344	25,163	23,205	857,668	150,091	879,356	9,211,070	2,593,810	2,843,108	1,855	1,874,173	620	1,852	297,878	49,414	767,398
1904	180,200	5,292,1,974	1,350	25,432	24,922	842,139	109,874	874,210	9,216,838	2,554,454	2,989,600	1,901	2,093,607	618	1,961	260,864	43,091	792,956

WESTERN AUSTRALIA AND TASMANIA—continued.

State.	Year.	Agriculture.														Live Stock.					
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green Forage.	Other Tillage.	Horses.	Cattle.	Sheep.	Pigs.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine Gallons.							Acres.	Acres.
1873	1,474	28,390	5,083	87,529	113		2,110	1,475	18,243	473	1,263	15,941	31,882	775	*	*	693	26,290	47,640	748,536	20,948
1874	1,067	17,072	4,702	75,232	88		1,320	1,022	10,220	329	987	13,366	20,049	779	*	*	512	26,636	46,748	777,861	13,290
1875	1,256	18,840	5,014	70,196	60		1,200	1,293	8,880	395	1,179	17,319	17,319	675	*	*	*	29,379	50,416	881,861	14,420
1876	1,461	21,915	6,245	93,675	70		1,470	1,378	8,041	370	1,110	16,856	16,856	784	*	*	*	33,502	54,058	899,494	18,108
1877	1,290	18,060	5,948	77,324	46		920	799	8,789	354	705	18,013	18,013	718	*	*	*	30,691	52,057	797,156	18,942
1878	1,568	28,249	5,927	72,498	40		296	817	8,919	341	850	18,750	18,750	614	*	*	*	32,801	56,158	869,325	16,762
1879	1,734	32,948	7,233	130,284	35		490	890	11,888	362	1,269	19,035	23,856	718	*	*	*	594	30,691	52,057	797,156
1880	1,320	25,080	6,364	114,552	32		448	864	11,556	471	1,649	19,563	24,454	660	*	*	*	9,668	32,411	60,617	1,103,880
1881	827	8,270	3,679	36,790	36		432	640	5,120	278	556	24,445	18,334	527	*	*	*	970	31,755	63,009	1,267,912
1882	1,025	15,375	4,766	66,724	25		*	585	5,265	267	667	25,959	25,959	607	*	*	*	739	31,325	65,473	1,259,797
1883	1,395	23,715	5,547	88,768	23		812	530	5,830	310	930	20,295	20,295	725	*	*	*	3,851	32,884	64,558	1,315,155
1884	1,452	26,140	5,616	92,660	74		1,250	786	11,000	500	1,500	24,054	24,050	687	8	1,750	208	16,876	37,111	71,102	1,547,061
1885	1,596	23,142	6,178	89,581	156		1,950	675	*	434	1,085	19,677	19,677	624	59,488	191	17,887	34,392	70,408	1,702,719	
1886	1,766	28,512	5,185	82,816	171		3,933	628	*	356	1,071	25,718	25,718	649	98,350	1,075	26,657	33,360	88,254	1,809,071	
1887	1,689	25,424	5,935	69,710	164		1,762	1,270	25,000	474	1,180	25,807	24,157	672	124,240	856	39,234	41,100	93,544	1,909,940	
1888	1,787	41,852	5,009	73,680	61		1,769	720	14,000	481	1,974	23,914	23,914	894	135,888	268	42,142	41,390	93,822	2,112,393	
1889	2,075	41,500	5,475	93,075	80		1,200	649	12,980	462	1,386	25,694	25,694	1,088	205,632	329	46,464	42,806	119,571	2,366,681	
1890	1,934	37,693	5,322	87,813	81		1,023	501	10,020	510	1,655	23,183	26,495	1,023	194,881	161	55,497	44,384	130,970	2,524,913	
1891	1,691	18,214	3,768	48,594	23		483	400	8,000	531	1,595	28,534	23,534	1,004	166,664	238	69,265	40,812	133,690	1,962,212	
1892	1,694	29,645	3,666	56,823	33		775	454	9,080	529	1,586	35,124	43,904	1,218	160,776	214	83,473	49,973	162,886	1,885,500	
1893	2,571	47,597	3,603	48,390	37		573	568	11,360	630	2,309	29,589	33,039	1,643	77,484	359	42,848	45,747	173,747	2,249,642	
1894	1,634	20,246	1,948	14,675	54		756	532	10,640	703	2,545	49,890	38,455	1,864	75,814	254	67,559	50,001	137,214	2,132,311	
1895	1,880	19,326	1,932	18,691	23		596	327	6,540	668	2,290	63,804	53,757	2,217	79,550	430	58,590	58,506	200,091	2,295,332	
1896	1,753	18,871	1,903	12,816	30		504	340	2,483	720	2,088	69,436	50,500	2,294	75,693	4,858	25,521	57,527	199,793	2,248,976	
1897	1,678	29,266	1,694	23,423	243		4,826	428	4,733	1,361	4,270	80,933	75,464	2,654	89,099	4,278	44,418	62,222	244,971	2,210,742	
1898	3,073	55,854	2,186	29,295	110		1,365	700	7,726	1,675	5,698	79,223	77,297	2,961	113,799	3,154	47,846	62,442	245,907	2,625,855	
1899	3,940	73,556	3,885	56,587	133		2,263	921	9,490	2,837	8,373	78,293	70,078	3,245	86,802	2,997	56,431	65,020	297,075	2,434,311	
1900	4,790	86,433	2,536	29,188	91		1,399	844	7,658	1,794	4,836	104,254	103,813	3,325	130,377	12,154	52,489	68,253	398,547	2,828,806	
1901	9,751	163,654	2,669	34,723	513		5,203	718	6,838	1,829	5,739	92,654	89,729	3,629	185,735	13,274	66,920	73,710	398,547	2,434,311	
1902	10,334	167,882	3,783	46,255	109		2,110	868	9,976	2,084	6,488	105,791	94,007	3,528	158,853	636	81,186	80,158	437,136	2,600,633	
1903	14,563	258,503	3,609	53,227	163		2,487	1,038	11,312	1,823	4,542	109,002	121,934	3,324	138,371	672	94,654	82,747	497,617	2,600,633	
1904	13,864	226,318	3,251	37,332	86		896	1,126	13,064	1,906	5,614	105,247	113,794	3,413	185,070	1,631	96,228	90,225	401,490	2,853,424	

TASMANIA.

1873	26,750	561,247	6,440	124,459	*	*	*	*	7,910	24,970	26,406	28,430	*	*	1,565	40,250	22,612	106,308	1,490,746	59,628		
1874	32,704	877,243	5,129	125,469	*	*	*	*	5,714	112,342	6,978	26,169	41,144	*	*	94,234	93,608	23,208	110,450	1,724,953	51,468	
1875	32,556	827,043	5,939	165,357	*	*	*	*	6,585	137,050	6,906	24,455	34,758	49,217	*	*	103,167	100,168	23,473	118,694	1,731,723	47,664
1876	23,609	571,485	6,258	147,537	*	*	*	*	7,263	130,832	7,954	27,290	29,664	35,907	*	*	114,978	103,855	22,622	124,459	1,768,785	60,681
1877	21,883	488,350	4,283	86,840	*	*	*	*	5,854	90,104	8,336	27,106	29,440	33,331	*	*	120,376	111,950	22,195	126,882	1,818,125	55,652
1878	28,802	714,987	4,040	97,845	*	*	*	*	5,099	92,403	8,079	27,257	33,933	40,499	*	*	118,478	108,580	24,107	126,276	1,838,831	39,595
1879	37,216	1,064,966	6,491	181,178	*	*	*	*	6,313	141,063	9,743	30,956	35,538	54,008	*	*	118,690	107,201	24,593	127,187	1,835,970	38,610
1880	19,853	439,446	8,297	169,156	*	*	*	*	6,432	106,396	10,421	32,548	31,615	35,883	*	*	134,656	112,003	25,267	127,317	1,783,611	48,029
1881	27,535	783,129	4,597	102,475	*	*	*	*	5,906	113,862	9,670	33,565	34,790	44,957	*	*	137,681	102,438	27,805	130,526	1,847,479	49,660
1882	28,849	788,713	3,229	89,739	*	*	*	*	5,301	108,608	9,681	37,526	38,043	49,513	*	*	149,571	96,091	25,857	122,504	1,845,455	47,827
1883	23,160	634,354	3,205	81,962	*	*	*	*	6,103	115,238	9,601	34,509	41,414	53,421	*	*	153,382	115,827	26,840	130,525	1,831,069	55,774
1884	28,956	829,611	5,646	167,086	*	*	*	*	6,827	145,323	9,037	39,503	44,735	55,587	*	*	189,376	107,177	27,188	128,834	1,720,027	57,303
1885	29,247	784,325	6,833	176,466	*	*	*	*	7,774	171,600	11,073	53,521	41,693	51,872	*	*	185,434	105,457	28,610	138,642	1,648,627	67,395
1886	21,607	560,622	2,749	61,585	*	*	*	*	9,385	164,649	16,084	75,773	47,269	50,158	*	*	198,935	115,040	29,684	148,665	1,609,046	73,118
1887	21,169	385,195	3,766	52,240	*	*	*	*	7,546	96,159	16,394	42,520	44,562	50,901	*	*	185,899	137,602	29,528	147,092	1,547,242	52,408
1888	33,834	946,354	4,670	109,979	*	*	*	*	7,476	124,954	13,653	66,721	52,521	58,290	37	*	180,350	148,335	29,238	142,019	1,480,065	43,227
1889	40,169	1,148,354	4,446	105,574	*	*	*	*	8,055	165,742	17,015	72,275	50,913	73,859	30	*	192,919	125,752	29,778	150,004	1,551,429	58,632
1890	20,740	519,395	4,376	99,842	*	*	*	*	10,142	183,471	20,133	73,158	45,381	52,021	30	*	202,557	174,363	31,165	162,440	1,619,256	81,716
1891	28,360	876,573	2,650	71,686	*	*	*	*	10,220	240,656	16,393	63,000	45,445	67,164	29	*	209,697	156,552	31,312	167,788	1,664,118	73,520
1892	22,976	631,746	3,929	80,205	*	*	*	*	10,898	196,653	16,535	60,245	46,070	53,544	*	*	228,786	147,842	31,976	170,085	1,623,338	59,267
1893	33,755	837,720	4,876	110,174	*	*	*	*	10,713	202,797	19,068	76,769	47,500	54,889	32	*	218,726	160,883	31,587	169,141	1,535,047	51,592
1894	34,885	927,875	8,167	202,625	*	*	*	*	13,225	225,867	23,415	90,810	61,373	80,227	*	*	222,117	160,576	34,835	177,038	1,727,200	65,620
1895	32,699	906,934	6,178	138,833	*	*	*	*	13,649	245,611	19,247	81,423	54,748	62,345	30	*	214,586	53,125	31,580	162,801	1,523,846	70,142
1896	44,768	971,996	3,988	74,790	158	*	*	*	13,853	249,354	21,651	72,241	47,798	44,344	*	*	203,306	45,476	29,547	157,730	1,650,567	55,301
1897	38,166	1,102,285	4,097	69,992	68	*	*	*	10,378	152,126	22,357	49,124	57,828	78,849	*	*	228,041	52,695	29,898	157,486	1,598,631	43,520
1898	59,509	2,271,070	5,693	184,225	*	*	*	*	11,120	237,666	20,241	88,166	49,277	82,448	*	*	240,771	60,369	29,797	148,558	1,488,588	45,274
1899	45,110	1,148,160	7,606	142,721	*	*	*	*	13,963	234,411	26,951	101,670	42,492	51,123	*	*	291,868	51,250	31,189	160,204	1,672,068	74,451
1900	45,073	1,406,913	4,502	116,911	*	*	*	*	10,553	244,585	23,068	93,862	61,541	94,198	*	*	309,929	53,660	31,607	165,516	1,683,956	68,291
1901	54,089	1,702,659	6,104	167,483	180	*	*	*	11,903	280,028	25,444	114,704	61,495	88,125	*	*	318,504	51,881	32,399	168,661	1,792,481	58,716
1902	55,058	1,752,745	8,281	201,133	*	*	*	*	12,098	235,165	34,625	163,518	66,038	89,210	*	*	3,355	55,856	33,465	178,385	1,679,518	52,092
1903	60,663	1,621,950	8,084	212,459	*	*	*	*	12,745	267,894	29,180	171,298	66,947	115,513	*	*	3,100	67,765	35,541	185,938	1,597,053	56,538
1904	43,690	1,178,819	7,646	163,194	*	*	*	*	16,431	340,204	25,948	110,547	55,545	73,457	*	*	4,266	64,247	36,565	202,206	1,556,460	77,943

NEW ZEALAND.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.		Public Expenditure.	Public Debt.	Imports.	Exports.	Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.					Vessels.	Tons.	Railway.	Telegraph line (poles).	Total Cultivation. †		
																		Acres.	Acres.	Bushels.
	1873	295,946	11,222	3,647	2,276	13,572	4,761	2,776,388	1,055,296	2,119,524	10,913,936	6,464,687	5,610,371	1,443	571,144	145	2,389	376,156	132,428	3,391,634
	1874	341,860	12,344	4,161	2,823	43,965	5,859	3,063,811	1,294,276	3,035,511	13,366,936	8,121,812	5,251,269	1,678	784,829	209	2,632	549,844	105,674	2,974,339
	1875	375,856	14,438	5,712	3,209	31,737	6,467	2,813,928	1,350,296	3,431,973	17,400,031	8,029,172	5,828,627	1,866	834,547	542	3,156	607,138	90,804	2,863,619
	1876	399,075	16,168	4,904	3,196	18,414	6,459	3,580,294	1,350,025	4,305,337	18,678,111	6,905,171	5,673,465	1,744	786,514	718	3,170	787,824	141,614	4,054,377
	1877	417,622	16,856	4,685	3,115	12,987	6,611	3,916,023	1,343,945	3,822,426	20,691,111	6,973,418	6,327,472	1,660	789,177	954	3,307	959,528	243,406	6,336,369
	1878	432,519	17,770	4,642	3,385	16,263	5,761	4,167,889	1,533,393	4,365,275	22,608,311	8,755,663	6,015,525	1,812	884,983	1,070	3,434	1,134,185	264,577	7,070,599
	1879	463,729	18,070	5,583	3,404	23,957	5,234	3,134,905	1,441,838	3,845,036	23,958,311	8,374,585	5,743,126	1,802	949,692	1,171	3,605	1,237,601	270,198	6,610,012
	1880	484,864	19,341	5,437	3,181	15,154	7,923	3,283,396	1,535,700	4,019,850	28,583,311	6,162,011	6,352,692	1,516	819,716	1,258	3,706	1,029,764	324,933	8,147,705
	1881	500,910	18,732	5,491	3,281	9,688	8,072	3,757,493	1,881,024	3,675,797	29,659,111	7,457,045	6,060,866	1,527	833,621	1,287	3,824	1,319,460	365,715	8,297,890
	1882	517,707	19,009	5,701	3,602	10,945	7,456	3,917,160	1,999,000	3,824,735	30,235,711	8,609,270	6,658,008	1,564	899,836	1,465	3,974	1,389,747	390,818	7,700,591
	1883	540,877	19,202	6,061	3,612	19,215	9,186	3,871,267	2,080,084	3,924,005	31,385,411	7,974,038	7,095,999	1,656	1,002,491	1,480	4,074	1,412,800	377,706	9,827,136
	1884	557,110	19,846	5,740	3,800	20,021	10,700	3,707,488	1,869,496	4,101,318	32,860,922	7,663,888	7,091,667	1,724	1,063,430	1,570	4,264	1,343,235	270,043	6,866,777
	1885	575,226	19,693	6,081	3,813	16,199	11,695	3,859,996	1,995,012	4,282,901	35,790,422	7,479,921	6,819,939	1,566	1,032,700	1,654	4,463	1,265,975	173,891	8,242,255
	1886	589,386	19,299	6,135	3,489	16,101	15,037	3,688,016	1,962,162	4,310,875	37,587,776	6,759,013	6,672,791	1,432	990,903	1,809	4,625	1,372,219	253,025	6,297,638
	1887	603,361	19,135	6,137	3,563	13,689	12,712	3,463,495	1,876,235	3,954,290	38,225,537	6,245,515	6,866,169	1,328	988,337	1,841	4,646	1,440,055	357,359	9,424,059
	1888	607,380	18,905	5,708	3,617	13,606	22,781	4,109,815	2,031,658	3,962,912	38,325,550	5,941,907	7,767,325	1,384	1,057,913	1,865	4,992	1,465,319	362,153	8,770,246
	1889	616,052	18,457	5,772	3,632	15,392	15,178	3,991,919	2,086,081	3,981,721	38,483,250	6,297,900	6,819,939	1,566	1,032,700	1,654	4,784	1,560,605	335,861	8,448,506
	1890	625,508	18,278	5,994	3,797	15,028	16,810	4,208,029	2,031,658	3,962,912	38,325,550	6,297,900	6,819,939	1,566	1,032,700	1,654	5,060	1,636,179	301,460	5,723,010
	1891	634,058	18,273	6,518	3,805	14,431	17,629	4,146,231	2,179,139	4,135,544	38,713,068	6,503,849	9,566,397	1,481	1,244,322	2,016	5,349	1,565,231	402,273	10,257,738
	1892	650,433	17,876	6,459	4,002	18,122	13,164	4,389,251	2,392,796	4,044,690	39,257,440	6,943,556	9,534,851	1,375	1,331,323	2,036	5,470	1,543,359	381,245	8,378,017
	1893	672,265	18,187	6,767	4,115	26,135	15,723	4,407,963	2,353,250	4,170,616	39,826,845	6,911,515	8,985,364	1,252	1,258,070	2,108	5,613	1,456,954	242,737	4,891,695
	1894	686,126	18,523	6,918	4,178	25,237	22,984	4,288,716	2,296,785	4,398,930	40,386,964	6,788,020	9,231,047	1,223	1,262,350	2,168	6,049	1,386,637	148,575	6,133,097
	1895	698,706	18,546	6,863	4,110	21,862	20,967	4,453,139	2,393,195	4,408,349	43,050,780	6,400,129	8,550,224	1,208	1,321,897	2,100	6,245	1,547,568	245,441	6,433,768
	1896	712,801	18,612	6,432	4,423	17,236	15,764	4,725,799	2,521,910	4,633,981	44,362,118	7,137,320	9,321,105	1,181	1,241,756	2,185	6,126	1,656,912	258,680	6,926,523
	1897	727,695	18,737	6,595	4,928	18,592	15,840	4,987,630	2,678,576	4,842,772	44,963,424	8,230,600	10,517,955	1,242	1,531,048	2,251	7,485	1,684,443	315,801	5,070,017
	1898	742,102	18,955	7,244	5,091	18,855	16,159	5,258,228	2,707,099	5,283,511	46,937,606	8,739,633	11,938,335	1,213	1,619,049	2,292	7,477	1,815,053	269,749	6,521,194
	1899	755,144	18,835	7,680	5,461	18,506	16,619	5,699,618	2,891,126	5,590,127	47,873,732	10,646,096	13,246,161	1,229	1,679,907	2,300	7,240	1,710,619	208,465	6,587,158
	1900	787,657	20,491	7,634	6,095	25,086	18,564	5,906,916	3,042,890	5,979,703	49,590,815	11,817,915	12,881,424	1,187	1,362,232	2,222	6,716	1,684,443	315,801	5,070,017
	1901	807,929	20,655	8,375	6,388	30,293	22,301	6,152,839	3,113,079	5,895,915	52,966,447	11,326,723	13,644,977	1,249	1,237,949	2,404	7,749	1,773,203	194,355	7,457,915
	1902	832,505	21,829	8,528	6,748	30,833	19,608	6,447,435	3,277,964	6,414,019	55,999,019	12,788,676	15,010,378	1,225	1,215,229	2,441	7,770	1,786,095	230,346	7,891,654
	1904	857,539	22,766	8,087	6,983	32,632	22,277	7,130,116	3,649,601	6,784,281	57,522,215	13,291,694	14,748,348	1,249	2,299,333	2,487	7,944	1,805,724	258,015	9,123,673

NEW ZEALAND—continued.

Agriculture.

Live Stock.

State	Year.	Agriculture.														Live Stock.					
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green† Forage.	Other Tillage.	Horses.	Cattle.	Sheep.	Pigs.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine, Galls.	Acres.	Acres.				
1873	110,472	3,292,807	22,124	606,492	1,253	18,795	5,000	75,000	11,617	51,758	43,616	62,187	*	*	25,515	24,131	*	*	*	*	
1874	157,545	5,548,729	16,236	477,162	*	*	*	*	12,154	63,685	62,216	52,202	*	*	*	196,019	99,859	494,917	11,704,853	123,921	
1875	168,252	6,357,431	27,656	993,219	*	*	*	*	14,655	71,599	49,537	72,184	*	*	30,883	225,351	*	*	*	*	
1876	150,717	4,707,836	27,679	801,379	*	*	*	*	16,204	86,922	49,760	65,080	*	*	32,459	369,391	*	*	*	*	
1877	190,844	6,029,962	22,713	576,823	*	*	*	*	17,564	94,478	45,090	58,671	*	*	*	440,411	*	*	*	*	
1878	277,547	8,357,150	28,646	709,465	*	*	*	*	17,299	86,186	53,022	64,520	*	*	49,187	443,907	137,768	578,430	13,069,338	207,337	
1879	330,208	12,062,607	57,484	1,751,432	*	*	*	*	21,260	119,523	71,911	108,833	*	*	48,584	437,856	*	*	*	*	
1880	215,007	6,891,251	46,877	1,221,241	2,321	*	*	*	22,530	111,329	54,028	68,710	*	*	51,154	312,914	161,736	698,637	12,985,085	200,083	
1881	243,387	6,924,848	29,808	664,093	*	*	*	*	22,540	121,890	68,423	89,081	*	*	61,431	528,156	*	*	*	*	
1882	319,858	10,520,428	28,146	737,163	*	*	*	*	20,488	104,581	61,054	75,764	*	*	65,466	503,917	*	*	*	*	
1883	262,954	9,231,339	32,907	964,456	4,435	*	*	*	21,102	113,198	73,997	102,649	*	*	83,020	556,179	*	*	13,384,075	*	
1884	354,794	12,360,449	30,703	1,205,906	3,393	*	*	819	21,348	123,504	56,670	79,868	*	*	424,190	177,275	*	*	14,056,266	*	
1885	329,488	8,603,702	34,603	896,816	3,286	*	*	1,507	24,823	113,753	40,304	45,813	*	*	399,692	256,381	187,382	895,461	16,677,445	369,992	
1886	387,228	11,973,219	27,912	760,874	5,732	223,270	11,126	*	27,683	134,965	57,938	79,013	*	*	416,682	193,191	*	*	*	*	
1887	336,474	10,512,116	45,027	1,402,537	4,768	207,275	14,693	357,061	26,331	133,682	50,656	71,296	*	*	421,719	186,970	*	*	15,122,133	*	
1888	367,225	10,977,065	42,402	1,342,823	6,253	270,282	15,918	427,160	30,577	159,729	45,889	65,476	*	*	419,555	174,911	*	*	15,503,263	*	
1889	426,071	13,673,584	42,402	1,342,823	6,253	270,282	15,918	427,160	30,577	159,729	45,889	65,476	*	*	474,204	183,430	*	*	18,117,186	*	
1890	346,224	9,947,036	32,740	758,833	5,759	238,864	17,146	330,092	32,691	178,121	44,045	62,901	*	*	607,695	248,419	211,040	831,831	18,128,186	308,812	
1891	323,508	11,009,020	24,268	638,683	5,447	238,746	14,282	337,181	27,266	162,046	46,652	67,361	*	*	542,517	179,018	*	*	18,570,752	*	
1892	326,531	9,873,989	24,906	654,231	4,491	171,661	15,918	382,517	18,338	104,173	61,811	93,293	*	*	513,636	196,483	*	*	851,851	19,380,869	
1893	376,646	11,939,068	28,857	724,653	5,116	244,539	16,494	444,126	21,121	126,540	60,740	86,198	*	*	517,747	186,496	*	*	885,305	20,230,329	
1894	351,852	10,221,393	36,519	1,000,612	5,525	232,890	17,708	451,350	25,339	139,869	194,765	75,489	*	*	417,378	188,976	*	*	964,034	19,826,604	
1895	364,788	12,265,540	35,358	1,035,762	13,834	611,200	15,429	446,040	31,997	207,011	257,301	140,034	*	*	467,252	116,168	237,418	1,047,901	19,188,493	239,778	
1896	372,597	11,232,803	29,813	821,506	12,584	503,652	17,352	359,444	29,990	157,529	297,813	161,000	361	*	493,744	144,100	249,732	1,138,572	19,687,954	209,853	
1897	354,819	9,738,391	29,920	709,874	14,837	541,550	11,661	188,908	36,402	121,947	268,896	403,344	264	*	438,864	212,979	252,834	1,209,165	19,673,752	186,027	
1898	417,320	16,511,388	45,671	1,077,908	18,539	813,379	11,904	340,993	38,604	298,561	75,620	151,240†	357	*	431,917	576,220	258,115	1,203,024	19,348,506	193,512	
1899	398,243	16,325,832	48,003	1,585,145	17,429	669,896	12,261	408,792	36,984	222,124	68,234	136,468†	442	*	608,914	350,791	261,931	1,210,439	19,347,846	249,751	
1900	449,534	19,085,837	30,831	1,027,651	14,232	602,967	10,203	345,344	28,524	169,042	65,023	136,046†	525	*	595,840	300,445	266,245	1,256,680	20,186,784	250,975	
1901	405,924	15,045,233	26,514	855,993	12,503	571,834	11,836	280,867	31,259	206,815	62,984	125,968†	543	*	621,867	327,295	279,672	1,361,784	20,233,099	224,024	
1902	483,659	21,766,708	27,921	1,136,232	12,038	607,609	12,916	420,391	31,408	193,267	69,342	138,684†	705	*	205,357	735,502	286,955	1,460,663	20,342,727	193,740	
1903	391,640	15,107,237	34,683	1,190,504	11,156	530,291	14,150	440,825	31,778	208,787	77,167	154,334†	749	*	211,408	783,020	298,714	1,593,547	18,954,553	226,591	
1904	342,189	14,553,611	29,484	1,128,164	10,084	490,405	15,100	499,771	26,331	134,608	78,816	157,632†	571	*	206,749	838,365	314,322	1,736,850	18,280,806	255,320	

Australasian Statistics.

* No record.

† Estimated, the statistics not having been collected.

‡ Not including artificial grass since 1901.

§ Half-year ended 30th June, 1904.