

CHAPTER XXIV.

MANUFACTURING INDUSTRY.

NOTE.—Working proprietors are included in all cases in the "Number of Persons Engaged".

Single-year tables in this issue relate to the year 1947-48 and in the immediately preceding issue to the year 1945-46. Corresponding tables for 1946-47 may be found in the *Production Bulletin* 1946-47, No. 41, Part I.—Secondary Industries.

§ 1. Number of Factories.

1. **Number of Factories in each State.**—For statistical purposes, a "factory" was defined by the Conference of Statisticians in 1902 as any factory, workshop or mill where four or more persons are employed or power is used. The statistics which follow should be read in the light of this definition. The following table shows the number of factories in each State for the five years 1943-44 to 1947-48 compared with 1938-39:—

FACTORIES : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	9,464	9,250	3,087	2,067	2,129	944	26,941
1943-44 ..	10,755	9,317	2,652	2,149	1,807	994	27,674
1944-45 ..	11,359	9,669	2,783	2,182	1,931	1,006	28,930
1945-46 ..	12,287	10,195	2,945	2,395	2,280	1,082	31,184
1946-47 ..	13,961	10,949	3,367	2,707	2,615	1,169	34,768
1947-48 ..	15,194	11,642	3,642	2,865	2,788	1,225	37,356

2. **Number of Factories in Industrial Classes.**—(i) *Australia.* The next table shows the number of factories in Australia during 1938-39 and the years 1943-44 to 1947-48 classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902. The definition of a factory adopted at the Conference of Statisticians in 1902 is, however, still used. Details of some of the principal industries included in the table will be found in § 9 hereinafter.

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	564	417	458	591	743	933
II. Bricks, Pottery, Glass, etc. ..	471	289	318	410	481	517
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	666	816	862	886	929	975
IV. Industrial Metals, Machines and Conveyances ..	7,255	7,788	8,173	8,816	10,055	10,910
V. Precious Metals, Jewellery and Plate ..	290	258	267	337	465	555
VI. Textiles and Textile Goods (not Dress)	611	821	865	883	930	982
VII. Skins and Leather (not Clothing or Footwear) ..	533	563	581	651	703	727
VIII. Clothing (except Knitted) ..	4,314	4,462	4,773	5,215	5,733	6,069
IX. Food, Drink and Tobacco ..	5,202	5,457	5,664	5,865	6,236	6,475
X. Woodworking and Basketware ..	2,822	2,799	2,873	3,148	3,668	4,001
XI. Furniture of Wood, Bedding, etc. ..	1,149	917	959	1,140	1,407	1,568
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,816	1,673	1,688	1,703	1,770	1,852
XIII. Rubber ..	299	275	286	308	345	371
XIV. Musical Instruments ..	34	35	37	41	48	56
XV. Miscellaneous Products ..	413	624	650	714	832	899
Total, Classes I. to XV. ..	26,439	27,194	28,454	30,708	34,294	36,890
XVI. Heat, Light and Power ..	502	480	476	476	474	466
Grand Total ..	26,941	27,674	28,930	31,184	34,768	37,356

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. From 1931-32 to 1940-41 the number of factories increased each year but in the two succeeding years there were decreases. However, this was followed by increases in 1943-44 and each succeeding year to 1947-48 when the number of factories in Australia reached the record total of 37,356 or 38.7 per cent. greater than in 1938-39.

(ii) *States, 1947-48.* The following table shows the number of factories in each State in 1947-48, classified according to the nature of the industry :—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, 1947-48.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-Metalliferous Mine and Quarry Products ..	350	316	63	92	74	38	933
II. Bricks, Pottery, Glass, etc. ..	251	120	39	54	39	14	517
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	501	281	57	71	46	19	975
IV. Industrial Metals, Machines, Conveyances ..	4,486	3,390	1,014	848	894	278	10,910
V. Precious Metals, Jewellery and Plate ..	248	176	33	46	44	8	555
VI. Textiles and Textile Goods (not Dress) ..	346	528	26	41	27	14	982
VII. Skins and Leather (not Clothing or Footwear) ..	332	258	49	45	32	11	727
VIII. Clothing (except Knitted) ..	2,750	2,105	363	405	377	69	6,069
IX. Food, Drink and Tobacco ..	2,294	1,783	940	648	532	276	6,475
X. Woodworking and Basketware ..	1,581	988	507	230	264	371	4,001
XI. Furniture of Wood, Bedding, etc. ..	540	485	178	137	157	71	1,568
XII. Paper, Stationery, Printing, Book-binding, etc. ..	764	652	164	125	119	28	1,852
XIII. Rubber ..	145	111	42	38	21	14	371
XIV. Musical Instruments ..	25	15	3	7	6	..	56
XV. Miscellaneous Products ..	449	326	42	34	39	9	899
Total, Classes I. to XV. ..	15,062	11,536	3,580	2,821	2,671	1,220	36,890
XVI. Heat, Light and Power ..	132	106	62	44	117	5	466
Grand Total ..	15,194	11,642	3,642	2,865	2,788	1,225	37,356

§ 2. Classification of Factories according to Number of Persons Engaged.

1. *General.*—Prior to 1945-46 the classification of factories used ended at the group "Over 100". This was regarded as too restricted as it did not permit of any analysis of the development of factories in size groups above 100 employees. In consultation with the State Statistical Bureaux, it was agreed to extend, in 1945-46, the classification of factories according to size in the manner shown in the table below in respect of numbers of factories and, in the table which follows, in respect of numbers employed.

2. *States, 1947-48.*—The following table shows, for each State, the number of factories classified according to the number of persons engaged in 1947-48 :—

FACTORIES : CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1947-48.

Size of Factory (Persons engaged).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	4,402	3,314	930	738	1,219	388	10,991
4 ..	1,372	1,025	373	260	139	127	3,296
5 to 10 ..	4,152	2,938	1,072	827	751	384	10,124
11 to 20 ..	2,272	1,794	561	443	303	163	5,536
21 to 50 ..	1,799	1,517	426	347	238	102	4,429
51 to 100 ..	625	559	132	141	90	38	1,585
101 to 200 ..	315	279	102	52	34	12	794
201 to 300 ..	85	90	25	28	11	3	242
301 to 400 ..	49	44	7	10	2	..	112
401 to 500 ..	39	28	2	2	..	2	73
501 to 750 ..	34	30	7	7	..	2	80
751 to 1,000 ..	18	15	2	3	..	2	40
Over 1,000 ..	32	9	3	7	1	2	54
Total ..	15,194	11,642	3,642	2,865	2,788	1,225	37,356

The relative importance of large and small factories is illustrated by a classification of the average number of persons engaged according to the size of factory in which they work :—

FACTORIES : CLASSIFICATION OF PERSONS ENGAGED ACCORDING TO SIZE OF FACTORY, 1947-48.

Size of Factory (Persons engaged).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
AVERAGE NUMBER ENGAGED DURING PERIOD WORKED.							
Under 4 ..	9,166	6,853	1,998	1,563	2,541	877	22,998
4 ..	5,488	4,100	1,492	1,040	556	508	13,184
5 to 10 ..	28,784	20,236	7,490	5,752	5,016	2,566	69,844
11 to 20 ..	33,220	26,440	8,139	6,451	4,455	2,354	81,059
21 to 50 ..	56,440	47,556	13,141	10,775	7,615	3,250	138,777
51 to 100 ..	43,618	39,462	9,595	9,612	6,021	2,773	111,081
101 to 200 ..	42,831	38,523	14,879	7,179	4,597	1,625	109,634
201 to 300 ..	20,854	21,928	6,047	6,559	2,588	850	58,826
301 to 400 ..	16,777	14,751	2,363	3,279	775	..	37,945
401 to 500 ..	17,368	12,466	966	920	..	890	32,610
501 to 750 ..	20,613	17,173	4,357	4,155	..	1,291	47,589
751 to 1,000 ..	15,399	13,137	1,734	2,696	..	1,559	34,525
Over 1,000 ..	56,292	17,335	5,103	13,883	2,468	3,515	98,596
Total ..	366,850	279,960	77,304	73,864	36,632	22,058	856,668
Average per Factory	24.14	24.05	21.23	25.78	13.14	18.01	22.93

3. Australia, 1938-39 and 1943-44 to 1947-48.—In the following table factories in Australia during 1938-39 and each of the five years 1943-44 to 1947-48 are classified according to the number of persons engaged, in conformity with the practice prior to 1945-46.

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS ENGAGED, AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tabl- ish- ments.	Persons en- gaged.	Es- tabl- ish- ments.	Persons en- gaged.	Es- tabl- ish- ments.	Persons en- gaged.	Es- tabl- ish- ments.	Persons en- gaged.
1938-39—								
Number ..	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average per establishment ..	..	5.89	..	42.60	..	287.55	..	21.25
Percentage on total ..	81.59	22.62	14.90	29.86	3.51	47.52	100.00	100.00
1943-44—								
Number ..	22,050	129,239	4,325	182,561	1,299	460,802	27,674	772,602
Average per establishment ..	..	5.86	..	42.21	..	354.74	..	27.92
Percentage on total ..	79.68	16.73	15.63	23.63	4.69	59.64	100.00	100.00
1944-45—								
Number ..	23,059	137,153	4,579	193,359	1,292	427,002	28,930	757,514
Average per establishment ..	..	5.95	..	42.23	..	330.50	..	26.18
Percentage on total ..	79.70	18.11	15.83	25.52	4.47	56.37	100.00	100.00
1945-46—								
Number ..	24,819	154,242	5,080	211,781	1,285	390,538	31,184	756,561
Average per establishment ..	..	6.21	..	41.69	..	302.77	..	24.26
Percentage on total ..	79.59	20.39	16.29	27.99	4.12	51.62	100.00	100.00
1946-47—								
Number ..	27,676	173,371	5,771	239,768	1,321	399,881	34,768	813,020
Average per establishment ..	..	6.26	..	41.55	..	302.77	..	23.38
Percentage on total ..	79.60	21.32	16.60	29.50	3.80	49.18	100.00	100.00
1947-48—								
Number ..	29,947	187,085	6,014	249,858	1,395	419,725	37,356	856,668
Average per establishment ..	..	6.25	..	41.55	..	300.88	..	22.93
Percentage on total ..	80.17	21.84	16.09	29.16	3.74	49.00	100.00	100.00

§ 3. Power Equipment in Factories.

1. **General.**—In 1936–37 statistics of power equipment in factories were collected on a basis different from that previously in use. Information now obtained relates to the “rated horse-power” of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of Central Electric Stations are collected in greater detail. To avoid duplication it is essential that some distinction should be made between Central Electric Stations and other classes of industries. In the following tables Central Electric Stations have been treated separately from other factories.

In par. 2 below, 1,322 factories are shown as using no power other than hand-power, the distribution of these factories among the various industries being as follows: Lime, Plaster and Asphalt, 17; Chemicals, Drugs and Medicines, 17; Galvanized Ironworking, Tinsmithing, 39; Ready-made Tailoring and Clothing, 372; Dressmaking, 117; Millinery, 45; Bakeries, 163; Cabinet and Furniture Making, 40; all other industries, 512.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories using steam, gas, oil, electricity, or water power, those using hand-power, and the rated horse-power of engines ordinarily in use and in reserve or idle during 1947–48:—

FACTORIES(a) : RATED HORSE-POWER OF ENGINES, 1947–48.

State.	Number of Establishments.			Rated Horse-power of Engines.	
	Using Power.	Others.	Total.	Ordinarily in use.	In Reserve or Idle (omitting obsolete)
New South Wales ..	14,837	264	15,101	1,095,939	133,155
Victoria ..	11,192	383	11,575	740,046	102,647
Queensland ..	3,392	204	3,596	271,141	31,956
South Australia ..	2,604	220	2,824	205,220	27,262
Western Australia ..	2,463	212	2,675	101,506	10,384
Tasmania ..	1,183	39	1,222	121,715	16,711
Australia ..	35,671	1,322	36,993	2,535,567	322,115

(a) Excludes Central Electric Stations.

3. **Rated Horse-power of Engines Ordinarily in Use.**—(i) *According to Type, States.* Particulars of the types of engines ordinarily in use in each State and their rated horse-power are given in the next table:—

FACTORIES(a) : TYPES AND RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1947–48.

State.	Rated Horse-power of Engines ordinarily in use.							
	Steam.		Internal Combustion.			Water.	Motors driven by electricity.	
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)
N.S.W. ..	110,974	55,958	2,959	10,363	15,819	424	899,442	71,422
Victoria ..	25,113	32,487	2,831	7,136	10,786	1,150	660,543	26,984
Queensland ..	80,448	15,283	7,174	6,133	16,777	..	145,326	51,880
S. Australia ..	6,843	4,784	1,928	3,029	9,484	10	179,142	20,157
W. Australia ..	8,778	121	2,289	2,056	9,825	..	78,437	7,155
Tasmania ..	2,960	2,013	1	4,939	1,037	246	110,519	..
Australia ..	235,116	110,646	17,182	33,656	63,728	1,830	2,073,409	177,598

(a) Excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(ii) *According to Type, Australia.* In the following table details of the horse-power of the various types of engines in use are given for Australia for the years 1943-44 to 1947-48 compared with 1938-39.

FACTORIES(a) : TYPES AND RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, AUSTRALIA.

Year.		Rated Horse-power of Engines ordinarily in use.								
		Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
		Recipro- cating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Pur- chased.	Own Genera- tion. (c)	
1938-39	..	268,409	84,149	32,914	17,970	55,800	1,616	1,017,911	179,889	1,478,769
1943-44	..	244,042	121,570	20,318	19,500	56,693	1,621	1,602,264	192,631	2,066,008
1944-45	..	239,319	118,438	21,280	21,407	57,012	1,581	1,673,348	191,619	2,132,385
1945-46	..	236,378	117,736	20,481	23,876	56,189	1,737	1,755,036	226,692	2,211,433
1946-47	..	234,752	110,292	18,522	29,283	58,262	1,964	1,912,921	182,112	2,366,001
1947-48	..	235,116	110,646	17,182	33,656	63,728	1,830	2,073,405	177,598	2,535,567

(a) Excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1947-48.* The next table shows the rated horse-power of engines ordinarily in use in the various classes of industry in each State during 1947-48.

FACTORIES(a) : RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1947-48.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.Aust.	W.Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	52,293	39,625	9,309	10,361	5,862	13,542	131,082
II. Bricks, Pottery, Glass, etc. ..	33,951	20,149	4,084	4,855	4,091	1,060	68,190
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	56,342	62,877	4,267	12,908	8,018	796	145,208
IV. Industrial Metals, Machines, Conveyances ..	532,428	199,132	60,508	91,989	26,019	38,099	948,175
V. Precious Metals, Jewellery and Plate ..	3,790	4,261	259	608	259	42	9,219
VI. Textiles and Textile Goods (not Dress) ..	35,257	67,015	3,311	6,624	1,454	5,123	118,784
VII. Skins and Leather (not Clothing or Footwear) ..	15,315	14,569	3,071	3,591	1,666	642	38,854
VIII. Clothing (except Knitted) ..	18,238	18,525	1,986	2,103	1,333	452	42,637
IX. Food, Drink and Tobacco ..	151,655	128,470	124,953	38,752	25,824	11,463	481,117
X. Woodworking and Basketware ..	92,044	65,901	45,048	17,732	17,882	17,897	256,504
XI. Furniture of Wood, Bedding, etc. ..	12,769	10,671	5,100	4,384	3,093	1,301	37,318
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	36,256	54,896	5,543	7,241	4,287	30,673	138,896
XIII. Rubber ..	29,838	32,441	1,547	1,265	206	167	65,464
XIV. Musical Instruments ..	1,514	132	16	19	10	..	1,691
XV. Miscellaneous Products ..	12,654	13,333	569	1,228	347	303	28,434
Total, Classes I. to XV. ..	1,084,344	731,997	269,661	203,660	100,351	121,560	2,511,573
XVI. Gas Works ..	11,595	8,049	1,480	1,560	1,155	155	23,994
Grand Total ..	1,095,939	740,046	271,141	205,220	101,506	121,715	2,535,567

(a) Excludes Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—
(i) *According to Type, Australia.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1947-48 are given in the following table:—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA, 1947-48.

Particulars.		Capacity of Engines and Generators.						
		Steam.		Internal Combustion.			Water.	Total.
		Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		
Engines installed—								
Total installed	Rated H.P.	21,173	2,458,760	21,040	3,985	167,413	375,596	3,047.9
Generators installed—								
Kilowatt capacity—								
Total installed	K.W.	13,936	1,822,523	14,525	3,921	109,472	270,927	2,235,304
Effective capacity	"	13,561	1,610,163	11,299	3,791	99,591	244,480	1,982,885
Maximum load	"	12,493	1,519,895	9,660	2,394	76,730	243,096	1,864,298
Horse-power equivalent—								
Total installed	H.P.	18,683	2,443,183	19,472	5,256	146,753	363,191	2,996,538
Effective capacity	"	18,179	2,158,506	15,147	5,082	133,507	327,737	2,658,158
Maximum load	"	16,748	2,037,495	12,990	3,210	102,860	325,883	2,499,186

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1947-48 are given in the next table.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, 1947-48.

Particulars.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Engines installed	Rated H.P.	1,238,141	800,659	314,321	280,999	159,497	254,350	3,047,967
Generators installed—								
Kilowatt capacity—								
Total installed	K.W.	962,688	554,173	216,086	205,661	113,716	182,980	2,235,304
Effective capacity	"	839,612	530,799	162,050	189,812	103,390	157,222	1,982,885
Maximum load	"	771,484	518,573	173,626	152,969	91,123	156,523	1,864,298
Horse-power equivalent—								
Total installed	H.P.	1,290,531	742,897	289,674	275,699	152,443	245,294	2,996,538
Effective capacity	"	1,125,542	711,563	217,236	254,453	138,600	210,764	2,658,158
Maximum load	"	1,034,213	695,173	232,755	205,063	122,155	209,827	2,499,186

§ 4. Employment in Factories.

1. *Number Engaged.*—(1) *General.* All persons engaged in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see par. 4 (ii) hereinafter) are counted as factory employees, while all those are excluded who are engaged in selling and distributing, such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods and retailing storemen. Prior to 1945-46 the classification of employment distinguished between (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) enginedrivers and firemen; (v) workers, skilled and unskilled; (vi) carters and messengers; and (vii) others. This grouping, however, did not make adequate provision for measuring the development that has taken place in the employment of chemists and other research workers. As a result, the classification of factory employment was amended in 1945-46 to read as follows:—(i) Working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen and other laboratory and research staff; (iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers and persons working regularly at home for factory, mill or workshop.

Prior to the year 1928-29 employment in factories was computed by dividing the sum of the number engaged each week by the number of weeks worked. The figures therefore, represented the average number engaged over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29 the figure represents the equivalent average number engaged over a full year of fifty-two weeks. The classification of factories according to the number of persons engaged (*see § 2 ante*), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia*, 1938-39 to 1947-48. Particulars of the number employed, the increase in employment and the rate per cent. of such increase are given for years 1938-39 to 1947-48 in the following table :—

FACTORIES : EMPLOYMENT, AUSTRALIA.

Year.	Males.			Females.			Persons.		
	Number Employed.	Increase on Previous Year.		Number Employed.	Increase on Previous Year.		Number Employed.	Increase on Previous Year.	
		Number.	Per cent.		Number.	Per cent.		Number.	Per cent.
1938-39 ..	412,591	3,989	0.98	152,515	1,957	1.30	565,106	5,946	1.06
1939-40 ..	426,934	14,343	3.48	160,729	8,214	5.39	587,663	22,557	3.99
1940-41 ..	473,058	46,124	10.80	177,015	16,286	10.13	650,073	62,410	10.62
1941-42 ..	524,383	51,325	10.85	200,959	23,944	13.53	725,342	75,260	11.58
1942-43 ..	535,570	11,187	2.13	223,475	22,516	11.20	759,045	33,703	4.65
1943-44 ..	539,141	3,571	0.67	227,365	3,890	1.74	766,506	7,451	0.98
1944-45 ..	535,893	-3,248	-0.60	214,686	-12,679	-5.58	750,579	-15,927	-2.08
1945-46 ..	548,888	12,995	2.42	196,370	-18,316	-8.53	745,258	-5,321	-0.71
1946-47 ..	604,300	55,412	10.10	200,629	4,259	2.17	804,929	59,671	8.01
1947-48 ..	640,925	36,625	6.06	207,951	7,322	3.65	848,876	43,947	5.46

NOTE.—Minus sign (—) indicates decrease.

(iii) *States*, 1938-39 and 1943-44 to 1947-48. The following table shows, for each of the years 1938-39 and 1943-44 to 1947-48 (a) the average number of persons (including both sexes of all ages) engaged in manufacturing industries in each State; (b) for each State, the percentage of the total number engaged in Australia; and (c) the number engaged per ten thousand of the mean population in each State and Australia.

FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER ENGAGED DURING FULL YEAR (52 WEEKS).							
1938-39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106
1943-44 ..	323,032	261,331	64,682	69,569	28,101	19,791	766,506
1944-45 ..	314,678	257,637	64,135	65,472	29,146	19,511	750,579
1945-46 ..	310,870	256,249	65,460	63,188	30,256	19,235	745,258
1946-47 ..	343,119	265,757	71,599	70,711	33,806	19,937	804,929
1947-48 ..	363,365	278,271	76,754	73,346	35,967	21,173	848,876

PERCENTAGE ON AUSTRALIAN TOTAL.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00
1943-44 ..	42.14	34.09	8.44	9.08	3.67	2.58	100.00
1944-45 ..	41.93	34.33	8.54	8.72	3.88	2.60	100.00
1945-46 ..	41.72	34.38	8.78	8.48	4.06	2.58	100.00
1946-47 ..	42.63	33.01	8.90	8.78	4.20	2.48	100.00
1947-48 ..	42.81	32.78	9.04	8.64	4.24	2.49	100.00

FACTORIES : EMPLOYMENT—*continued.*

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PER 10,000 OF POPULATION.							
1938-39 ..	836	1,078	537	729	497	581	815
1943-44 ..	1,125	1,319	613	1,129	588	811	1,054
1944-45 ..	1,085	1,289	600	1,051	601	790	1,021
1945-46 ..	1,060	1,272	604	1,002	617	769	1,003
1946-47 ..	1,158	1,303	653	1,104	680	783	1,070
1947-48 ..	1,209	1,345	690	1,124	707	809	1,111

2. Rates of Increase, 1938-39 and 1943-44 to 1947-48.—The percentage increase on the average number of persons engaged in the preceding year is shown below for each State for 1938-39 and 1943-44 to 1947-48.

FACTORIES : ANNUAL PERCENTAGE INCREASE OF PERSONS ENGAGED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1943-44 ..	2.38	-0.39	0.61	-4.37	8.86	8.09	0.98
1944-45 ..	-2.59	-1.41	-0.85	-5.89	3.72	-1.41	-2.08
1945-46 ..	-1.21	-0.54	2.07	-3.49	3.81	-1.41	-0.71
1946-47 ..	10.37	3.71	9.38	11.91	11.73	3.65	8.01
1947-48 ..	5.90	4.71	7.20	3.73	6.39	6.20	5.46

NOTE.—Minus sign (—) indicates decrease.

3. Persons Engaged in Classes of Industry.—(i) *Australia.* The following table shows the average number of persons engaged in factories under each industrial group in Australia for the years 1938-39 and 1943-44 to 1947-48.

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	10,343	7,701	7,933	9,929	12,673	14,263
II. Bricks, Pottery, Glass, etc. ..	15,709	9,616	10,459	13,466	16,535	17,536
III. Chemicals, Dyes, Explosives, Paints Oils and Grease ..	19,816	42,551	36,340	31,471	31,252	31,808
IV. Industrial Metals, Machines, Conveyances ..	177,677	341,030	319,314	292,477	300,921	320,948
V. Precious Metals, Jewellery and Plate ..	3,726	2,373	2,399	3,240	4,921	6,069
VI. Textiles and Textile Goods (not Dress)	46,082	58,539	57,204	55,008	59,810	61,911
VII. Skins and Leather (not Clothing or Footwear) ..	10,767	12,708	12,474	14,492	16,080	15,624
VIII. Clothing (except Knitted) ..	86,092	80,692	86,391	93,370	106,894	111,693
IX. Food, Drink and Tobacco ..	83,846	101,630	105,194	105,878	109,840	113,595
X. Woodworking and Basketware ..	30,739	34,827	35,382	38,346	43,457	47,052
XI. Furniture of Wood, Bedding, etc. ..	15,287	9,563	9,930	13,107	16,579	18,546
XII. Paper, Stationery, Printing, Book-binding, etc. ..	39,913	35,193	36,726	39,905	46,651	47,813
XIII. Rubber ..	7,502	7,961	7,970	8,699	10,173	10,753
XIV. Musical Instruments ..	451	353	392	459	788	887
XV. Miscellaneous Products ..	7,727	12,699	13,018	14,838	17,059	18,235
Total, Classes I. to XV. ..	555,677	757,436	741,126	734,685	793,633	836,733
XVI. Heat, Light and Power ..	9,429	9,070	9,453	10,573	11,296	12,143
Grand Total ..	565,106	766,506	750,579	745,258	804,929	848,876

Following the outbreak of war in the Pacific in 1941, the transfer of man-power to the more essential industries became apparent, and industries not directly concerned with Australia's war effort showed a marked decline. The industries which declined were those in Class I., Mine and Quarry Products; Class II., Bricks, Pottery, Glass, etc. Class V., Precious Metals; Class VIII., Clothing; Class XI., Furniture; and Class XII.

Paper, etc., while industries where the war-time expansion in employment occurred were those in Class III., Chemicals, etc.; Class IV., Metals, etc.; Class VI., Textiles; Class VII., Skins and Leather; and Class IX., Food.

Following some downward movement from war-time levels of employment which occurred in Class III., Chemicals, etc.; Class IV., Metals, etc.; and Class VI., Textiles in 1945-46, there was a general upward trend in 1946-47, and this continued in respect of each class of industry in 1947-48.

(ii) *States.* Particulars of the numbers engaged in each industrial class are shown in the following table for each State:—

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, 1947-48.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
I. Treatment of Non-metallic Mine and Quarry Products ..	5,956	4,263	1,423	1,071	1,007	543	14,263
II. Bricks, Pottery, Glass, etc. ..	9,845	4,124	952	1,577	851	187	17,536
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	14,914	11,030	1,141	3,008	1,540	175	31,808
IV. Industrial Metals, Machines, Conveyances ..	153,367	89,771	24,162	35,165	12,422	6,061	320,948
V. Precious Metals, Jewellery and Plate ..	2,183	3,029	257	359	214	27	6,069
VI. Textiles and Textile Goods (not Dress) ..	21,759	32,745	1,461	2,579	605	2,762	61,911
VII. Skins and Leather (not Clothing or Footwear) ..	6,374	5,518	1,329	1,485	640	278	15,624
VIII. Clothing (except Knitted) ..	46,747	44,506	7,825	7,105	4,511	939	111,693
IX. Food, Drink and Tobacco ..	37,541	35,708	20,091	10,235	5,769	4,251	113,595
X. Woodworking and Basketware ..	17,030	11,826	8,772	3,147	3,552	2,725	47,052
XI. Furniture of Wood, Bedding, etc. ..	7,098	5,077	2,620	1,815	1,305	631	18,546
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	20,979	15,674	4,119	3,010	1,969	2,062	47,813
XIII. Rubber ..	5,037	4,242	793	483	106	92	10,753
XIV. Musical Instruments ..	657	123	32	51	24	..	887
XV. Miscellaneous Products ..	8,904	7,320	584	756	412	259	18,235
Total, Classes I. to XV.	358,391	274,956	75,561	71,906	34,927	20,992	836,733
XVI. Heat, Light and Power ..	4,974	3,315	1,193	1,440	1,040	181	12,143
Grand Total ..	363,365	278,271	76,754	73,346	35,967	21,173	848,876

4. **Persons Engaged According to Occupational Status.**—(i) *General.* In the following table the average number of persons engaged in each State during 1947-48 are classified according to their occupational status. As mentioned previously, persons employed in factories are now classified on a basis different from that adopted prior to 1945-46. The nature of this change is indicated in § 4 (i).

PERSONS ENGAGED : OCCUPATIONAL STATUS, 1947-48.

State.	Average Number of Persons Engaged.						Total.
	Working Proprietors.	Managerial and Clerical Staff, etc. (a)	Chemists, Draftsmen, etc.	Foremen and Overseers.	Workers in Factory (Skilled and Unskilled).	Carters (excluding Delivery only) and Messengers, etc. (b)	
New South Wales ..	12,283	35,939	4,269	13,753	294,699	2,422	363,365
Victoria ..	9,774	26,753	3,120	10,972	225,515	2,137	278,271
Queensland ..	3,022	6,821	552	2,460	63,241	658	76,754
South Australia ..	2,015	7,492	893	2,734	59,843	369	73,346
Western Australia ..	2,021	2,618	237	1,216	29,736	139	35,967
Tasmania ..	828	1,878	258	816	17,249	144	21,173
Australia ..	29,943	81,501	9,329	31,951	690,283	5,869	848,876

(a) Includes salaried managers and working directors at home.

(b) Includes persons working regularly

EMPLOYMENT IN FACTORIES.

1101

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and technically embraces only those to whom work is given out by factory owners to be done in the employees' own homes. Details of the numbers of outworkers employed for years up to 1944-45 were shown on page 1048 of Official Year Book No. 37 and in earlier issues. Owing to the altered classification of employment adopted in 1945-46, persons working regularly at home for factories are now included with carters and messengers and separate details of the numbers of homeworkers are no longer available.

5. *Monthly Employment, 1938-39 and 1944-45 to 1948-49.*—The number of persons employed in factories (excluding working proprietors) on the pay-day nearest to the 15th of each month is shown in the following table for the years 1938-39 and 1944-45 to 1948-49.

FACTORIES : MONTHLY EMPLOYMENT, AUSTRALIA.

Month.	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.	1948-49. (a)
--------	----------	----------	----------	----------	----------	-----------------

MALES.

July ..	387,693	518,841	518,734	571,662	602,188	624,926
August ..	389,979	518,672	519,122	579,354	606,142	625,294
September ..	391,576	517,013	511,909	583,281	608,934	625,316
October ..	393,977	516,152	505,753	584,007	608,651	624,833
November ..	395,192	515,695	503,296	575,255	608,531	627,069
December ..	394,438	515,384	489,040	564,055	608,135	624,764
January ..	385,742	512,269	513,396	565,550	608,046	627,716
February ..	392,056	513,880	533,761	574,034	609,111	630,145
March ..	395,146	515,455	543,347	578,469	610,476	633,858
April ..	391,005	514,414	547,253	580,792	619,963	633,050
May ..	393,609	513,232	553,980	589,070	622,665	635,979
June ..	390,973	514,501	558,428	593,202	625,019	623,319
Mean ..	391,780	515,459	524,835	578,228	611,488	628,022

FEMALES.

July ..	147,282	217,633	204,705	193,337	200,857	208,827
August ..	149,294	216,491	204,150	195,225	201,697	209,626
September ..	151,159	215,491	199,331	196,271	203,009	211,801
October ..	152,473	213,686	193,587	197,480	204,329	212,861
November ..	152,806	212,604	191,689	197,874	204,931	213,799
December ..	151,165	211,507	183,899	196,748	203,568	212,345
January ..	141,853	207,464	184,810	193,565	200,980	209,107
February ..	151,883	210,401	188,632	198,264	205,741	213,311
March ..	154,854	212,206	192,699	200,737	208,250	215,600
April ..	152,614	209,147	192,084	199,467	208,488	215,239
May ..	150,693	207,556	192,215	199,341	207,385	215,633
June ..	148,601	206,335	192,137	199,893	208,041	210,337
Mean ..	150,390	211,710	193,328	197,350	204,773	212,374

(a) Preliminary estimates.

FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA—continued.

Month.	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.	1948-49. (a)
PERSONS.						
July	534,975	736,474	723,439	764,999	803,045	833,753
August	539,273	735,163	723,272	774,579	807,839	834,920
September	542,735	732,504	711,240	779,552	811,943	837,117
October	546,450	729,838	699,340	781,487	812,980	837,694
November	547,998	728,299	694,985	773,129	813,462	840,868
December	545,603	726,891	672,939	760,803	811,703	837,109
January	527,595	719,733	698,206	759,115	809,026	836,823
February	543,939	724,281	722,393	772,298	814,852	843,456
March	550,000	727,661	736,046	779,206	818,726	849,458
April	543,619	723,561	739,337	780,259	828,451	848,289
May	544,302	720,788	746,195	788,411	830,050	851,612
June	539,574	720,836	750,565	793,095	833,060	833,656
Mean	542,170	727,169	718,163	775,578	816,261	840,396

(a) Preliminary estimates.

6. Distribution of Employees According to Age.—(i) *States.* The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 onwards, instead of three as in previous years. The particulars are collected as at June. The numbers employed in each age-group in June, 1948, are given below :—

FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1948.
(Excluding Working Proprietors.)

Age Groups.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
Under 16 years ..	2,125	2,743	1,265	732	704	165	7,734
16 years	4,702	3,220	1,440	871	802	299	11,334
17 "	6,037	3,684	1,687	1,060	888	393	13,749
18 "	6,555	3,983	1,736	1,139	872	460	14,745
19 "	6,493	3,943	1,607	1,167	759	435	14,404
20 "	6,392	4,021	1,650	1,255	812	456	14,586
21 " and over ..	232,867	171,096	54,426	51,817	23,590	14,671	548,467
Total	265,171	192,690	63,811	58,041	28,427	16,879	625,019
FEMALES.							
Under 16 years ..	1,831	2,564	955	722	357	120	6,549
16 years	3,696	2,940	876	673	532	195	8,912
17 "	4,729	3,374	961	734	681	286	10,765
18 "	5,292	3,666	959	816	615	297	11,645
19 "	5,012	3,418	902	743	472	290	10,837
20 "	4,599	3,229	785	726	451	252	10,042
21 " and over ..	65,074	59,915	7,968	10,062	3,410	2,862	149,291
Total	90,233	79,106	13,406	14,476	6,518	4,302	208,041
PERSONS.							
Under 16 years ..	3,956	5,307	2,220	1,454	1,061	285	14,283
16 years	8,398	6,160	2,316	1,544	1,334	494	20,246
17 "	10,766	7,058	2,648	1,794	1,569	679	24,514
18 "	11,847	7,649	2,695	1,955	1,487	757	26,390
19 "	11,505	7,361	2,509	1,910	1,231	725	25,241
20 "	10,991	7,250	2,435	1,981	1,263	708	24,628
21 " and over ..	297,941	231,011	62,394	61,879	27,000	17,533	697,758
Total	355,404	271,796	77,217	72,517	34,945	21,181	833,060

(ii) *Australia.* As comparative details based on the new age grouping are not available for the years prior to 1945-46, the following table shows the age distribution in sexes for Australia in June, 1939 and 1944 to 1948 on the old basis.

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, AUSTRALIA
(Excluding Working Proprietors.)

In June—	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per. Cent.
MALES.								
1939 ..	16,109	4.12	76,418	19.55	298,446	76.33	390,973	100
1944 ..	13,114	2.53	64,990	12.54	440,072	84.93	518,176	100
1945 ..	11,706	2.28	66,875	13.00	435,920	84.72	514,501	100
1946 ..	9,016	1.61	69,413	12.43	479,999	85.96	558,428	100
1947 ..	7,998	1.35	71,194	12.00	514,010	86.65	593,202	100
1948 ..	7,734	1.24	68,818	11.01	548,467	87.75	625,019	100
FEMALES.								
1939 ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100
1944 ..	9,445	4.34	60,844	27.98	147,141	67.68	217,430	100
1945 ..	9,178	4.45	56,158	27.22	140,999	68.33	206,335	100
1946 ..	7,881	4.10	53,018	27.59	131,238	68.31	192,137	100
1947 ..	7,401	3.70	52,805	26.42	139,687	69.88	199,893	100
1948 ..	6,549	3.15	52,201	25.09	149,291	71.76	208,041	100
PERSONS.								
1939 ..	31,606	5.86	132,691	24.59	375,277	69.55	539,574	100
1944 ..	22,559	3.07	125,834	17.11	587,213	79.82	735,606	100
1945 ..	20,884	2.90	123,033	17.07	576,919	80.03	720,836	100
1946 ..	16,897	2.25	122,431	16.31	611,237	81.44	750,565	100
1947 ..	15,399	1.94	123,999	15.64	653,697	82.42	793,095	100
1948 ..	14,283	1.71	121,019	14.53	697,758	83.76	833,060	100

§ 5. Sex Distribution in Factories.

1. *Distribution According to Sex of Persons Engaged.*—(i) *General.* In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and in 1947-48 was one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and in 1947-48 was about one to two. In the remaining States the ratio in 1947-48 was roughly one female engaged to every four males. For Australia as a whole the ratio of females employed in factories was highest in 1943-44 at about two females to five males but by 1947-48 the ratio had declined to the level of one female to three males.

(ii) *Average Number of Males and Females Engaged.* The following table shows the average number of males and females engaged in factories in each State for 1938-39 and the five years 1943-44 to 1947-48:—

FACTORIES : MALES AND FEMALES ENGAGED.

State.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
MALES.						
New South Wales ..	167,172	226,824	223,770	227,454	255,733	272,600
Victoria ..	136,218	175,078	174,424	178,951	188,758	199,003
Queensland ..	43,941	50,822	51,483	53,587	59,309	63,526
South Australia ..	35,406	50,660	49,056	49,523	56,739	59,071
Western Australia ..	18,704	21,060	22,404	24,268	27,575	29,517
Tasmania ..	11,150	14,697	14,756	15,105	16,186	17,208
Australia ..	412,591	539,141	535,893	548,888	604,300	640,925
FEMALES.						
New South Wales ..	61,609	96,208	90,908	83,416	87,386	90,765
Victoria ..	65,613	86,253	83,213	77,298	76,999	79,268
Queensland ..	10,169	13,860	12,652	11,873	12,290	13,228
South Australia ..	7,965	18,909	16,416	13,665	13,972	14,275
Western Australia ..	4,507	7,041	6,742	5,988	6,231	6,450
Tasmania ..	2,652	5,094	4,755	4,130	3,751	3,965
Australia ..	152,515	227,365	214,686	196,370	200,629	207,951

2. **Rate of Variation for each Sex.**—The percentages of increase or decrease on the average numbers of males and females engaged in the preceding year are shown below for the years 1938-39 and 1943-44 to 1947-48 :—

ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES ENGAGED.

State.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
MALES.						
New South Wales ..	1.69	1.42	-1.35	1.65	12.43	6.60
Victoria ..	0.04	-0.15	-0.37	2.60	5.48	5.43
Queensland ..	3.79	1.11	1.30	4.09	10.68	7.11
South Australia ..	-2.39	-4.04	-3.17	0.95	14.57	4.11
Western Australia ..	-0.30	8.00	6.38	8.32	13.63	7.04
Tasmania ..	4.40	5.42	0.40	2.37	7.16	6.31
Total ..	0.98	0.67	-0.60	2.42	10.10	6.06
FEMALES.						
New South Wales ..	1.88	4.74	-5.51	-8.24	4.76	3.87
Victoria ..	-0.03	-0.88	-3.52	-7.11	-0.39	2.95
Queensland ..	3.96	-0.77	-8.72	-6.16	3.51	7.63
South Australia ..	1.98	-5.24	-13.18	-16.76	2.25	2.17
Western Australia ..	3.06	11.55	-4.25	-11.18	4.06	3.51
Tasmania ..	6.51	16.59	-6.65	-13.14	-9.18	5.71
Total ..	1.30	1.74	-5.58	-8.53	2.17	3.65

NOTE.—The minus sign (—) indicates decrease.

3. **Masculinity of Persons Engaged in Factories.**—The extent to which females are engaged in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons engaged in each State. The following table shows particulars for the years 1938-39 and 1943-44 to 1947-48 :—

FACTORIES : MASCULINITY(a) OF PERSONS ENGAGED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39 ..	271	208	432	445	415	420	271
1943-44 ..	236	203	367	268	299	289	237
1944-45 ..	246	210	407	299	332	310	250
1945-46 ..	273	232	451	362	405	366	280
1946-47 ..	293	245	483	406	443	432	301
1947-48 ..	300	251	480	414	458	434	308

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 300 males engaged in factories for every 100 females, but in that year the proportion of males began to fall with the increasing activity in the clothing and textile industries, in which the number of females to males is relatively high. As these trades were not so seriously affected by the depression as the heavier industries, the proportion of males continued to fall, until in 1932-33 there were only 239 males engaged to every 100 females. With the recovery of employment in the heavier industries subsequent to that year, the proportion of males per 100 females had increased to 271 in 1937-38 and 1938-39.

The decrease in masculinity from 1938-39 to 1943-44 resulted from the enlistment of men in the armed services and the expansion of industry caused by the war. In many industries the younger men were released for service in the defence forces and large numbers of women were absorbed as an adjustment to the industrial effort of Australia. Following the cessation of hostilities in 1945 and the return of servicemen to civilian life, the number of females employed in factories declined and masculinity increased. In 1947-48 there were 308 males per 100 females employed in factories, compared with 271 in 1938-39.

4. **Employment of Females in Particular Industries.**—(i) *General.* The greater number of females in manufacturing industries are engaged in four classes, namely:—IV., Industrial Metals, Machines, etc.; VI., Textiles; VIII., Clothing; and IX., Food, Drink and Tobacco. In 1947-48 these industries accounted for 86.16 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 109 females to every 100 males and in Class VIII., Clothing, with 245 females per 100 males. The following tables show the average number of males and females engaged in each of these classes in 1947-48:—

MALES AND FEMALES ENGAGED IN PARTICULAR INDUSTRIES, 1947-48.

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
IV. Industrial Metals, etc. ..	139,250	81,047	23,037	32,129	11,881	5,812	293,156
VI. Textiles and Textile Goods (not Dress) ..	10,075	15,629	790	1,355	305	1,412	29,566
VIII. Clothing (except Knitted) ..	13,163	13,524	1,962	2,045	1,293	366	32,353
IX. Food, Drink and Tobacco ..	25,915	26,169	17,293	7,876	4,504	3,066	84,823
All Other Classes ..	84,197	62,634	20,444	15,666	11,534	6,552	201,027
Total ..	272,600	199,003	63,526	50,071	29,517	17,208	640,925
FEMALES.							
IV. Industrial Metals, etc. ..	14,117	8,724	1,125	3,036	541	249	27,792
VI. Textiles and Textile Goods (not Dress) ..	11,684	17,116	671	1,224	300	1,350	32,345
VIII. Clothing (except knitted) ..	33,584	30,982	5,863	5,120	3,218	573	79,340
IX. Food, Drink and Tobacco ..	11,626	9,539	2,798	2,359	1,265	1,185	28,772
All Other Classes ..	19,754	12,907	2,771	2,536	1,126	668	39,702
Total ..	90,765	79,268	13,228	14,275	6,450	3,965	207,951

(ii) *Females Engaged in Clothing Trade.* The employment of females in the several industries of Class VIII., Clothing—in which class the largest number of females is employed—and the relation of their number to that of the males so engaged are shown in the following table:—

FEMALES ENGAGED IN CLOTHING INDUSTRIES, 1947-48.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)
Tailoring and Ready-made Clothing ..	3,298	15,723	477	2,588	6,326	244	1,747	5,693	326
Waterproof and Oil-skin Clothing ..	61	252	413	98	306	312	12	82	683
Dressmaking, Hem-stitching ..	130	2,179	1,676	1,171	10,116	864	184	3,618	1,966
Millinery ..	192	1,282	668	243	1,073	442	50	655	1,310
Shirts, Collars and Underclothing ..	634	4,858	766	520	3,946	759	164	1,758	1,072
Foundation Garments ..	113	1,276	1,129	167	975	584	25	188	752
Handkerchiefs, Ties and Scarves ..	146	811	555	73	409	560	4	13	325
Hats and Caps ..	668	645	97	461	257	56	28	129	461
Gloves ..	115	393	342	135	498	369	29	122	421
Boots and Shoes ..	3,763	3,863	103	5,629	5,410	96	1,986	1,579	80
Boot and Shoe Repairing ..	1,497	90	6	763	26	3	643	30	5
Boot and Shoe Accessories ..	271	233	86	116	178	153	23	1	4
Umbrellas and Walking Sticks ..	33	66	200	16	47	294	10	23	230
Dyeworks and Cleaning (including Renovating and Repairing) ..	2,220	1,793	81	1,491	1,197	80	761	869	114
Other ..	22	120	545	53	218	411	..	14	(b)
Total ..	13,163	33,584	255	13,524	30,982	229	5,666	14,774	261

(a) Number of females per 100 males.

(b) Not applicable.

§ 6. Child Labour in Factories.

1. **Conditions of Child Labour.**—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.

2. **Number of Children Engaged, 1939 and 1944 to 1948.**—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The decline in the number of children employed from the peak of 33,553 reached in June, 1940 to 14,283 in June, 1948, which is most marked in all States excepting Western Australia, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate which occurred about 1929, and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

The following table shows the number of children of each sex employed in manufacturing industries in June of the years 1939 and 1944 to 1948.

FACTORIES : CHILDREN ENGAGED, JUNE.

State.	1939.	1944.	1945.	1946.	1947.	1948.
MALES.						
New South Wales	5,759	3,881	3,287	2,451	2,186	2,125
Victoria	6,167	5,031	4,607	3,449	2,929	2,743
Queensland	1,790	1,732	1,567	1,237	1,236	1,265
South Australia	1,296	1,232	1,066	829	788	732
Western Australia	705	753	763	739	673	704
Tasmania	392	485	416	311	186	165
Australia	16,109	13,114	11,706	9,016	7,998	7,734
FEMALES.						
New South Wales	7,084	3,014	2,870	2,265	2,094	1,831
Victoria	5,005	3,731	3,609	3,007	2,810	2,564
Queensland	1,334	1,017	992	1,020	998	955
South Australia	1,053	1,020	1,017	885	884	722
Western Australia	521	356	338	478	454	357
Tasmania	500	307	352	226	161	120
Australia	15,497	9,445	9,178	7,881	7,401	6,549
TOTAL.						
New South Wales	12,843	6,895	6,157	4,716	4,280	3,956
Victoria	11,172	8,762	8,216	6,456	5,739	5,307
Queensland	3,124	2,749	2,559	2,257	2,234	2,220
South Australia	2,349	2,252	2,083	1,714	1,672	1,454
Western Australia	1,226	1,109	1,101	1,217	1,127	1,061
Tasmania	892	792	768	537	347	285
Australia	31,606	22,559	20,884	16,897	15,399	14,283

3. **Percentage of Children on Total Number of Persons Engaged.**—The following table shows the percentage of children on the total number of persons engaged in the various states in June of each of the six years 1939 and 1944 to 1948. In 1948 the percentage was highest in Western Australia and lowest in New South Wales.

PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF PERSONS ENGAGED.
(Excluding Working Proprietors.)

State.	June—					
	1939.	1944.	1945.	1946.	1947.	1948.
New South Wales ..	5.85	2.23	2.04	1.48	1.26	1.11
Victoria ..	5.81	3.51	3.32	2.53	2.20	1.95
Queensland ..	6.01	4.31	4.14	3.63	3.14	2.88
South Australia ..	5.78	3.42	3.33	2.64	2.41	2.01
Western Australia ..	5.61	4.03	3.84	3.99	3.40	3.04
Tasmania ..	6.78	4.07	4.09	2.77	1.75	1.35
Australia ..	5.86	3.07	2.90	2.25	1.94	1.71

4. Industries Employing Child Labour.—The distribution of children employed in factories in June, 1948, and the percentage on the total number employed are given in the following table according to the class of industry:—

FACTORIES : CHILDREN EMPLOYED, BY CLASSES, JUNE, 1948.

Class of Industry.	Children Employed.		Total Number Employed.(a)		Percentage of Children on Total Number Employed. (a)	
	Males.	Females.	Males.	Females.	Males.	Females.
I. Treatment of Non-metalliferous Mine and Quarry Products..	99	8	13,425	461	0.74	1.74
II. Bricks, Pottery, Glass, etc.	119	23	16,489	1,212	0.72	1.90
III. Chemicals, Dyes, Explosives. Paints, Oils and Grease ..	147	164	24,367	7,845	0.60	2.09
IV. Industrial Metals, Machines. Conveyances ..	3,254	561	289,062	28,556	1.13	1.96
V. Precious Metals, Jewellery and Plate ..	108	27	4,625	903	2.34	2.99
VI. Textiles and Textile Goods (not Dress) ..	638	1,115	29,830	32,700	2.14	3.41
VII. Skins and Leather (not Clothing or Footwear) ..	117	82	11,687	3,458	1.00	2.37
VIII. Clothing (except Knitted) ..	563	3,292	28,191	79,531	2.00	4.14
IX. Food, Drink and Tobacco ..	891	569	82,438	27,538	1.08	2.07
X. Woodworking and Basketware ..	466	35	42,296	1,821	1.10	1.92
XI. Furniture of Wood, Bedding, etc.	512	58	14,933	2,623	3.43	2.21
XII. Paper, Stationery, Printing. Bookbinding, etc. ..	542	402	34,116	12,924	1.59	3.11
XIII. Rubber ..	74	39	8,964	2,269	0.83	1.72
XIV. Musical Instruments ..	14	4	734	146	1.91	2.74
XV. Miscellaneous Products ..	163	169	11,520	5,962	1.41	2.83
Total, Classes I. to XV.	7,707	6,548	612,677	207,949	1.26	3.15
XVI. Heat, Light and Power..	27	1	12,342	92	0.22	1.09
Grand Total ..	7,734	6,549	625,019	208,041	1.24	3.15

(a) Excludes working proprietors.

5. Apprenticeship.—In all the States, acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

§ 7. Salaries and Wages Paid and Value of Production.

NOTE.—In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

1. *General.*—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1947-48 was £1,210,119,397, of which amount £683,729,030 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £37,093,719 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, namely £489,296,648, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e. "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production." The total amount of salaries and wages paid in factories in 1947-48 was £285,765,264. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £48,591,498 or 20.49 per cent. on that for the previous year.

2. *Salaries and Wages Paid.*—(i) *In Classes of Industry, 1947-48.* The amounts of salaries and wages paid in the various classes of industry in each State are shown in the following table:—

FACTORIES: SALARIES AND WAGES PAID, 1947-48.

(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metallic Mine and Quarry Products	2,326,204	1,522,682	498,254	377,818	322,505	180,403	5,227,871
II. Bricks, Pottery, Glass, etc.	3,589,325	1,441,108	305,788	554,939	259,989	61,810	6,212,959
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	5,504,866	4,205,483	386,315	1,071,828	553,488	57,033	11,779,013
IV. Industrial Metals, Machines, Conveyances	58,278,851	33,572,220	7,844,775	13,192,744	3,945,705	2,256,180	119,090,478
V. Precious Metals, Jewellery and Plate	667,814	1,034,775	60,013	99,404	57,822	5,794	1,925,632
VI. Textiles and Textile Goods (not Dress)	6,431,759	9,800,202	370,162	819,503	154,550	808,386	18,384,622
VII. Skins and Leather (not Clothing or Footwear)	2,215,483	2,004,176	445,032	560,703	211,595	113,062	5,550,651
VIII. Clothing (except Knitted)	11,406,555	11,519,717	1,665,266	1,541,169	864,010	213,166	27,209,883
IX. Food, Drink and Tobacco	12,349,696	12,116,072	7,089,927	3,243,842	1,802,779	1,326,380	37,928,696
X. Woodworking and Basketware	5,482,517	3,835,538	2,575,473	986,024	1,057,840	777,028	14,714,420
XI. Furniture of Wood, Bedding, etc.	2,230,181	1,524,951	735,284	510,172	327,718	150,900	5,479,209
XII. Paper, Stationery, Printing, Book-binding, etc.	7,497,062	5,579,463	1,274,894	967,928	625,943	743,776	16,689,066
XIII. Rubber	2,045,132	1,737,573	249,553	145,332	27,686	24,571	4,209,849
XIV. Musical Instruments	225,567	38,783	9,092	15,044	5,999	..	294,484
XV. Miscellaneous Products	2,726,124	2,324,419	146,112	193,530	89,171	71,107	5,550,463
Total, Classes I. to XV.	122,057,136	122,257,166	23,656,540	24,280,010	10,306,816	6,789,598	280,247,296
XVI. Heat, Light and Power	2,388,742	1,545,022	506,670	572,958	428,831	75,739	5,517,968
Grand Total	125,345,878	123,802,188	24,163,210	24,852,968	10,735,647	6,865,337	285,765,264

(ii) *Totals and Averages, 1938-39 and 1943-44 to 1947-48.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years indicated. The average wage paid is not comparable with that shown in similar tables in issues of the Official Year Book prior

to No. 23, 1930, on account of the change in the method of computing the average number of hands employed, as explained earlier. The figures exclude working proprietors and the amounts drawn by them :—

FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.

(£.)

Year.	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
1938-39	Total amount paid...	44,606,497	36,026,542	10,887,229	8,169,350	4,573,558	2,479,886	106,743,002
	Average per employee...	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1943-44	Total amount paid...	93,518,326	73,961,193	18,071,689	18,711,413	7,417,595	5,193,603	216,873,819
	Average per employee...	297.45	291.85	288.27	275.00	273.44	270.85	291.16
1944-45	Total amount paid...	89,243,041	70,560,011	17,979,827	17,246,148	7,614,243	5,008,530	207,651,800
	Average per employee...	291.93	282.90	289.91	269.53	271.20	265.32	281.21
1945-46	Total amount paid...	87,647,460	70,499,214	18,011,966	16,769,768	7,883,814	5,006,511	205,818,733
	Average per employee...	290.75	284.09	285.00	272.71	273.01	269.85	284.17
1946-47	Total amount paid...	103,587,559	77,993,765	20,310,541	20,538,958	9,105,010	5,637,933	237,173,766
	Average per employee...	312.12	303.82	295.51	298.72	284.35	294.39	305.12
1947-48	Total amount paid...	125,345,878	93,802,188	24,163,216	24,852,998	10,735,047	6,865,337	285,765,264
	Average per employee...	357.03	349.36	327.72	343.42	316.26	337.45	343.95

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there is a large number of hands employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1947-48 were paid in New South Wales, Victoria and South Australia in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a record high level of £291 was attained as a result of war-time conditions. In 1944-45 the average dropped to £285 and remained at this level in 1945-46. In 1946-47 average earnings rose again, and in 1947-48 reached a new record level of almost £349.

(iii) *Earnings of Males and Females, 1947-48.* The following table shows the approximate amount of salaries and wages paid to males and females in each class of industry in each State during the year 1947-48 :—

SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES, 1947-48.

(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
I. Treatment of Non-metalliferous Mine and Quarry Products	2,272,105	1,490,845	490,653	369,760	317,287	177,404	5,118,054
II. Bricks, Pottery, Glass etc.	3,461,527	1,360,080	301,109	536,347	253,055	60,998	5,973,116
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	4,572,114	3,634,446	337,671	972,071	523,652	52,652	10,092,606
IV. Industrial Metals, Machines, Conveyances	55,147,749	31,517,807	7,624,552	12,529,961	3,849,360	2,209,430	112,878,859
V. Precious Metals, Jewellery and Plate	592,673	939,266	54,471	94,897	56,074	5,604	1,743,045
VI. Textiles and Textile Goods (not Dress)	3,861,368	6,084,067	243,933	513,599	99,704	519,259	11,321,930
VII. Skins and Leather (not Clothing or Footwear)	1,803,084	1,775,123	414,167	510,052	192,762	110,274	4,805,462
VIII. Clothing (except Knitted)	4,421,490	1,696,446	572,068	597,667	311,844	108,720	10,708,241
IX. Food, Drink and Tobacco	9,807,083	10,004,683	6,540,714	2,800,772	1,588,257	1,079,390	31,820,899
X. Woodworking and Basketware	5,333,589	3,740,917	2,506,656	953,229	1,051,604	766,704	14,352,759
XI. Furniture of Wood, Bedding, etc.	1,961,050	1,386,014	695,835	461,767	306,599	144,241	4,955,509
XII. Paper, Printing, Stationery, Book-binding, etc.	6,236,262	4,769,921	1,056,378	820,340	545,712	670,552	14,105,165
XIII. Rubber	1,823,343	1,540,302	191,476	130,864	26,461	23,283	3,735,729
XIV. Musical Instruments	190,959	37,993	9,092	14,851	5,999	...	264,894
XV. Miscellaneous Products	2,158,175	1,705,066	114,232	157,558	73,770	59,522	4,358,323
Total, Classes I. to XV	103,648,571	74,772,976	21,153,007	21,463,735	9,202,140	5,994,162	230,234,591
XVI. Heat, Light and Power	2,379,252	1,530,240	505,832	571,484	427,201	74,249	5,497,258
Grand Total	106,027,823	76,312,216	21,658,839	22,035,219	9,629,341	6,068,411	241,731,819

SALARIES AND WAGES: MALE AND FEMALE FACTORY EMPLOYEES,
1947-48—*continued.*
(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
I. Treatment of Non-metalliferous Mine and Quarry Products ..	54,099	31,837	7,601	8,058	5,221	3,001	109,817
II. Bricks, Pottery, Glass, etc. ..	127,798	81,028	4,679	18,592	6,934	812	239,843
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	932,752	571,037	48,644	99,757	29,836	4,381	1,686,407
IV. Industrial Metals, Machines, Conveyances ..	3,131,102	2,054,413	220,223	662,783	96,348	46,750	6,211,619
V. Precious Metals, Jewellery and Plate ..	75,141	95,509	5,542	4,507	1,758	130	182,587
VI. Textiles and Textile Goods (not Dress) ..	2,570,391	3,716,135	126,229	305,964	54,846	289,127	7,062,692
VII. Skins and Leather (not Clothing or Footwear) ..	412,399	229,053	31,465	50,651	18,833	2,788	745,189
VIII. Clothing (except Knitted) ..	6,985,065	6,823,271	1,093,198	943,502	552,166	104,440	16,501,642
IX. Food, Drink and Tobacco ..	2,542,613	2,111,389	549,213	443,070	214,522	246,990	6,107,797
X. Woodworking and Basketware ..	148,928	94,621	68,817	32,795	6,236	10,264	361,661
XI. Furniture of Wood, Bedding, etc. ..	269,131	138,940	39,449	48,405	21,119	6,656	523,700
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,260,800	809,542	218,516	147,588	80,231	67,224	2,583,901
XIII. Rubber ..	201,789	197,273	58,077	14,468	1,225	1,288	474,120
XIV. Musical Instruments ..	28,608	789	..	193	..	..	29,590
XV. Miscellaneous Products ..	567,949	529,353	31,880	35,972	15,401	11,585	1,192,140
Total, Classes I. to XV.	19,308,505	17,484,190	2,503,533	2,816,305	1,104,676	795,436	44,012,705
XVI. Heat, Light and Power ..	9,490	5,782	844	1,474	1,630	1,490	20,710
Total ..	19,318,055	17,489,972	2,504,377	2,817,779	1,106,306	796,926	44,033,415

(iv) *Total and Average Earnings of Males and Females, 1938-39 and 1943-44 to 1947-48.* Particulars for these years are given in the table hereunder:—

TOTAL AND AVERAGE SALARIES AND WAGES: MALES AND FEMALES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
1938-39. Amount paid .. £	38,271,867	29,005,746	9,920,001	7,487,828	4,128,824	2,234,413	91,048,679
Per cent. on total ..	85.80	80.51	91.12	91.66	90.28	90.10	85.30
Average per employee .. £	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1943-44. Amount paid .. £	77,087,334	58,610,714	15,984,325	15,499,866	6,367,387	4,374,298	177,923,924
Per cent. on total ..	82.43	79.25	88.45	82.84	85.84	84.22	82.04
Average per employee .. £	352.15	349.02	326.70	314.99	316.28	310.15	342.68
1944-45. Amount paid .. £	73,934,690	56,114,675	16,058,748	14,553,972	6,657,713	4,265,044	171,584,842
Per cent. on total ..	82.85	79.53	89.32	84.39	87.44	85.16	82.63
Average per employee .. £	342.98	336.03	324.60	305.39	311.36	301.54	333.03
1945-46. Amount paid .. £	73,380,046	56,772,773	16,177,606	14,654,533	7,037,530	4,353,562	172,376,050
Per cent. on total ..	83.72	80.53	89.82	87.39	89.27	86.96	83.75
Average per employee .. £	335.34	330.86	314.56	305.70	306.74	301.35	326.99
1946-47. Amount paid .. £	87,122,808	63,035,226	18,279,996	18,194,115	8,148,191	4,991,493	199,771,829
Per cent. on total ..	84.11	80.82	90.00	88.58	89.49	88.53	84.23
Average per employee .. £	355.02	349.29	322.54	331.31	315.15	323.62	345.18
1947-48. Amount paid .. £	106,027,823	76,312,216	21,658,839	22,035,219	9,629,341	6,068,411	241,731,849
Per cent. on total ..	84.58	81.35	89.64	88.66	89.70	88.39	84.59
Average per employee .. £	405.77	401.52	357.14	385.31	349.33	369.89	394.24

TOTAL AND AVERAGE SALARIES AND WAGES: MALES AND FEMALES

—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
1938-39. Amount paid .. £	6,334,630	7,020,796	967,228	681,522	444,734	245,473	15,694,383
Per cent. on total ..	14.20	19.49	8.88	8.34	9.72	9.90	14.70
Average per employee £	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1943-44. Amount paid .. £	16,430,992	15,350,479	2,087,364	3,211,547	1,050,208	819,303	38,949,895
Per cent. on total ..	17.57	20.75	11.55	17.16	14.16	15.78	17.96
Average per employee £	172.07	179.55	151.65	170.59	150.14	161.57	172.62
1944-45. Amount paid .. £	15,308,351	14,445,336	1,921,079	2,692,176	956,530	743,486	36,066,938
Per cent. on total ..	17.15	20.47	10.68	15.61	12.56	14.84	17.37
Average per employee £	169.83	175.27	153.12	164.86	142.91	157.09	169.44
1945-46. Amount paid .. £	14,267,414	13,726,441	1,834,360	2,115,235	846,284	652,949	33,442,683
Per cent. on total ..	16.28	19.47	10.18	12.61	10.73	13.04	16.25
Average per employee £	172.65	179.26	155.85	156.05	142.62	159.02	171.88
1946-47. Amount paid .. £	16,464,751	14,958,539	2,030,545	2,344,843	956,819	646,440	37,401,937
Per cent. on total ..	15.89	19.18	10.00	11.42	10.51	11.47	15.77
Average per employee £	190.48	196.20	167.04	169.41	155.20	173.45	188.36
1947-48. Amount paid .. £	19,318,055	17,489,972	2,504,377	2,817,779	1,106,306	796,926	44,033,415
Per cent. on total ..	15.42	18.65	10.36	11.34	10.30	11.61	15.41
Average per employee £	215.16	222.98	191.38	199.25	173.38	202.32	213.99

(v) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1947-48 and shows the amounts paid to managers, clerical staff, etc., and those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases :—

SALARIES AND WAGES: MANAGERS, CLERICAL STAFF, ETC., AND OTHER EMPLOYEES, 1947-48.

(£.)

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Clerical Staff, Chemists, Draftsmen, etc.		All Other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	603,463	72,081	4,514,591	37,736	5,118,054	109,817	5,227,871
II. Bricks, Pottery, Glass, etc. ..	477,205	95,975	5,495,911	143,868	5,973,116	239,843	6,212,959
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	2,194,394	496,127	7,898,212	1,190,280	10,092,606	1,686,407	11,779,013
IV. Industrial Metals, Machines, Conveyances ..	14,872,847	2,885,924	98,006,012	3,325,695	112,878,859	6,211,619	119,090,478
V. Precious Metals, Jewellery and Plate ..	170,743	56,618	1,572,302	125,969	1,743,045	182,587	1,925,632
VI. Textiles and Textile Goods (not Dress) ..	1,424,285	479,526	9,897,645	6,583,166	11,321,930	7,062,692	18,384,622
VII. Skins and Leather (not Clothing or Footwear) ..	586,289	92,155	4,219,173	653,034	4,805,462	745,189	5,550,651
VIII. Clothing (except Knitted) ..	1,669,083	792,172	9,039,158	15,709,470	10,708,241	16,501,642	27,209,883
IX. Food, Drink and Tobacco ..	4,837,497	1,162,295	26,983,402	4,945,502	31,820,899	6,107,797	37,928,696
X. Woodworking and Basketware ..	1,301,036	232,530	13,051,723	129,131	14,352,759	361,661	14,714,420
XI. Furniture of Wood, Bedding, etc. ..	448,770	117,443	4,506,739	406,257	4,955,509	523,700	5,479,209
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,086,226	613,138	12,018,939	1,940,763	14,105,165	2,583,901	16,689,066
XIII. Rubber ..	607,095	119,607	3,128,634	354,513	3,735,729	474,120	4,209,849
XIV. Musical Instruments ..	28,035	15,074	236,859	14,516	264,894	29,590	294,484
XV. Miscellaneous Products ..	659,265	205,028	3,699,058	987,112	4,358,323	1,192,140	5,550,463
Total, Classes I. to XV.	31,966,233	7,465,693	204,268,358	36,547,012	236,234,591	44,012,705	280,247,296
XVI. Heat, Light and Power ..	537,508	17,481	4,959,750	3,229	5,497,258	20,710	5,517,968
Grand Total ..	32,503,741	7,483,174	209,228,108	36,550,241	241,731,849	44,033,415	285,765,264
Average paid per employee	554.30	232.46	377.31	210.57	394.24	213.99	348.95

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1947-48.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1947-48 it amounted to a new high level of £37,093,719, an increase of £6,073,619 as compared with the previous year and more than two and one third times the corresponding value in 1938-39. The following table, shows the value of power, fuel and light, etc., used in the different classes of industry in 1947-48 :—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED (a), 1947-48.

(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metaliferous Mine and Quarry Products ..	523,521	383,600	183,492	131,742	124,105	89,351	1,435,811
II. Bricks, Pottery, Glass, etc. ..	1,049,065	491,025	80,793	154,255	99,540	19,003	1,893,681
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	835,002	628,433	55,886	231,200	148,565	7,157	1,906,243
IV. Industrial Metals, Machines, Conveyances ..	6,222,134	1,368,441	390,848	1,726,039	200,288	396,530	10,304,280
V. Precious Metals, Jewellery and Plate ..	33,906	35,361	2,360	7,261	2,772	201	81,861
VI. Textiles and Textile Goods (not Dress) ..	398,266	767,964	23,168	78,799	12,501	48,128	1,328,826
VII. Skins and Leather (not Clothing or Footwear) ..	164,162	222,947	33,093	81,691	29,651	20,440	551,984
VIII. Clothing (except knitted) ..	301,298	315,943	34,254	39,748	21,937	10,388	723,568
IX. Food, Drink and Tobacco ..	1,946,118	1,702,883	970,657	590,932	363,352	150,151	5,724,093
X. Woodworking and Basketware ..	352,315	186,860	127,132	42,485	74,792	46,358	829,942
XI. Furniture of Wood, Bedding, etc. ..	50,229	31,076	15,230	13,432	6,345	3,030	119,342
XII. Paper, Stationery, Printing, Book-binding, etc. ..	336,824	554,566	43,093	91,109	22,072	216,922	1,264,586
XIII. Rubber ..	236,254	290,521	21,386	13,509	3,209	3,213	568,092
XIV. Musical Instruments ..	12,421	951	126	175	50	..	13,723
XV. Miscellaneous Products ..	140,160	128,286	7,581	19,467	4,474	2,098	302,066
Total, Classes I. to XV.	12,601,675	7,108,857	1,989,090	3,221,844	1,113,653	1,012,970	27,048,098
XVI. Heat, Light and Power ..	4,712,265	1,906,048	1,195,056	1,058,895	1,170,974	2,383	10,045,621
Grand Total ..	17,313,940	9,014,905	3,184,155	4,280,739	2,284,627	1,015,353	37,093,719

(a) Includes value of lubricants and water.

(ii) *Values of Items, 1947-48.* The following table shows the values of the various items of power, fuel and light used in factories in each State during the year 1947-48 :—

FACTORIES : VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a), 1947-48.

(£.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal, Black ..	5,946,953	1,102,083	1,543,186	1,032,579	644,937	161,507	10,431,245
" Brown ..	..	1,088,257	..	..	..	..	1,088,257
Brown Coal Briquettes ..	..	884,602	..	..	..	..	884,602
Coke ..	2,898,059	430,593	56,952	1,009,258	62,358	60,537	4,517,757
Wood ..	277,902	688,425	254,352	243,091	473,614	145,018	2,082,402
Fuel Oil ..	1,628,148	1,248,864	318,180	682,988	453,514	96,493	4,428,187
Tar (Fuel) ..	192,863	109,640	148	42,240	13,530	8,219	366,640
Electricity ..	4,054,918	2,365,742	632,147	903,101	433,809	471,451	8,861,258
Gas ..	1,081,924	223,732	40,617	62,532	20,180	6,547	1,435,532
Other (Charcoal, etc.) ..	66,250	197,854	61,185	97,331	11,647	1,619	435,886
Water ..	713,613	391,866	123,301	115,541	86,055	26,521	1,450,900
Lubricating Oils ..	453,310	283,247	154,087	92,078	84,893	37,431	1,105,053
Total ..	17,313,940	9,014,905	3,184,155	4,280,739	2,284,627	1,015,353	37,093,719

(a) Includes value of lubricants and water.

(iii) *Quantities of Fuel used, 1947-48.* The following table shows the quantities of fuel used in factories in each State during the year 1947-48 :—

FACTORIES : QUANTITIES OF FUEL USED, 1947-48.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal, Black ..	Ton	3,758,674	452,128	810,732	494,301	347,655	93,896	5,957,386
" Brown ..	"	"	4,894,588	"	"	"	"	4,894,588
Brown Coal Briquettes ..	"	"	486,064	"	"	"	"	486,064
Coke ..	"	1,496,361	164,783	23,071	309,952	24,188	16,053	2,034,408
Wood ..	"	223,841	609,134	271,640	191,901	440,880	133,039	1,870,435
Fuel Oil ..	Gal.	35,899,953	29,700,196	5,941,015	15,901,331	9,192,906	1,404,004	98,039,405
Tar (Fuel) ..	"	19,118,286	5,385,098	20,944	2,008,002	651,170	426,524	27,610,024

(iv) *Total Value, 1938-39 and 1943-44 to 1947-48.* The next table shows the sums expended on power, fuel and light during the years 1943-44 to 1947-48 compared with 1938-39 :—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.(a)

(£.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39 ..	7,651,627	3,999,934	1,423,549	1,017,537	1,169,268	438,006	15,699,921
1943-44 ..	12,808,040	6,826,742	2,162,113	2,436,049	1,503,344	844,381	26,580,669
1944-45 ..	12,564,956	6,946,053	2,222,879	2,555,739	1,645,987	897,137	26,821,751
1945-46 ..	12,206,641	6,940,980	2,298,019	2,851,320	1,835,677	904,011	27,036,648
1946-47 ..	13,964,552	7,835,022	2,627,507	3,620,194	2,049,489	923,336	31,020,100
1947-48 ..	17,313,940	9,014,005	3,184,155	4,280,739	2,284,627	1,015,333	37,093,719

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1947-48.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1947-48 reached £683,729,030 representing 56·50 per cent. of the value of the final output (*see par. 5*). The following table shows the value of the materials used in various classes of industry in each State :—

FACTORIES : VALUE OF MATERIALS USED, 1947-48.

(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metaliferous Mine and Quarry Products ..	6,367,487	2,583,385	975,967	685,690	530,647	374,826	11,518,502
II. Bricks, Pottery, Glass, etc. ..	2,724,026	1,134,177	188,661	517,153	185,818	58,190	4,808,025
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	25,852,120	16,277,080	1,789,394	4,259,821	3,486,745	338,204	52,003,364
IV. Industrial Metals, Machines, Conveyances ..	107,070,746	40,833,728	9,911,352	25,640,473	4,366,757	3,892,201	191,715,257
V. Precious Metals, Jewellery and Plate ..	666,374	1,547,748	36,656	52,358	52,756	1,251	2,357,143
VI. Textiles and Textile Goods (not Dress) ..	15,446,102	22,943,431	1,078,474	1,420,837	384,252	1,725,429	42,998,525
VII. Skins and Leather (not Clothing or Footwear) ..	7,561,710	6,013,391	4,041,437	3,864,311	442,318	324,875	22,248,042
VIII. Clothing (except Knit-ty) ..	19,335,257	22,797,069	2,415,030	1,667,234	1,119,668	179,321	47,513,579
IX. Food, Drink and Tobacco ..	64,031,341	62,541,990	49,903,361	17,529,019	10,703,521	5,651,295	210,363,527
X. Woodworking and Basketware ..	12,346,321	8,174,775	4,542,581	2,633,091	1,637,291	1,422,836	30,756,898
XI. Furniture of Wood, Bidding, etc. ..	4,746,468	3,006,794	1,234,335	1,046,665	721,338	216,434	10,972,034
XII. Paper, Stationery, Printing, Book-binding, etc. ..	13,862,673	11,104,810	1,741,385	1,270,518	827,737	1,163,417	30,030,540
XIII. Rubber ..	5,269,412	4,829,785	473,926	228,861	46,813	47,839	10,896,636
XIV. Musical Instruments ..	206,779	20,718	2,793	2,329	1,812	"	234,431
XV. Miscellaneous Products ..	4,181,731	3,557,684	202,871	347,391	91,159	42,143	8,722,979
Total, Classes I. to XV. ..	289,668,547	207,730,068	78,538,223	61,165,751	24,508,632	15,438,261	677,139,482
XVI. Heat, Light and Power ..	2,888,242	2,166,032	635,612	454,889	358,340	86,433	6,589,548
Grand Total ..	292,556,789	209,896,100	79,173,835	61,620,640	24,956,972	15,524,694	683,729,030

(ii) *Total Amount, 1938-39 and 1943-44 to 1947-48.* The following table shows the values of materials used in factories for the years 1943-44 to 1947-48 compared with 1938-39:—

FACTORIES : VALUE OF MATERIALS USED.
(£.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	120,501,795	82,971,608	42,596,049	20,308,797	9,603,657	5,321,540	281,303,446
1943-44 ..	223,603,640	154,490,654	57,945,796	36,730,842	15,193,718	10,958,410	498,923,060
1944-45 ..	215,219,002	158,098,951	59,593,548	35,284,903	17,134,744	11,557,523	496,888,671
1945-46 ..	201,706,086	159,797,941	58,633,079	37,770,050	18,360,635	12,019,637	488,287,428
1946-47 ..	245,436,182	176,106,507	62,134,914	52,015,884	20,472,010	12,978,867	569,144,364
1947-48 ..	292,556,789	209,896,100	79,173,835	61,620,640	24,956,072	15,524,604	683,720,030

5. *Value of Output.*—(i) *In Classes of Industry, 1947-48.* The value of the output of factories in the various classes in each State in 1947-48 is shown in the following table. It represents the wholesale selling value at the factory of goods made or processed during the year, including by-products. In addition, it includes the value of other work done such as repair work, assembling and making up for customers. The figures given include not only the increase in value due to the process of manufacture, but also the values of the raw materials and the power, fuel and light used. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the real value of factory production (*see par. 6*).

FACTORIES : VALUE OF OUTPUT, 1947-48.
(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metaliferous Mine and Quarry Products ..	10,968,503	6,018,357	2,087,298	1,448,096	1,219,911	917,912	22,660,077
II. Bricks, Pottery, Glass, etc. ..	9,065,698	3,826,545	729,111	1,545,613	716,962	173,475	16,057,404
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	40,864,344	26,998,327	2,649,884	6,783,493	4,786,015	468,194	82,550,257
IV. Industrial Metals, Machines, Conveyances ..	204,190,215	90,004,030	24,420,868	45,616,431	10,709,869	8,387,406	383,328,819
V. Precious Metals, Jewellery and Plate ..	1,750,087	3,012,805	145,335	218,626	154,557	9,616	5,291,026
VI. Textiles and Textile Goods (not Dress) ..	27,397,633	40,969,968	1,689,448	2,690,904	677,296	2,982,262	76,407,511
VII. Skins and Leather (not Clothing or Footwear) ..	11,326,966	9,516,197	4,825,966	5,076,343	818,754	509,181	32,073,407
VIII. Clothing (except Knitted) ..	37,634,270	41,999,675	5,053,092	3,890,304	2,499,820	500,141	91,577,302
IX. Food, Drink and Tobacco ..	93,384,322	89,330,013	64,263,167	24,134,230	14,969,388	8,177,170	294,258,290
X. Woodworking and Basketware ..	21,949,394	15,047,370	8,780,465	4,290,138	3,363,663	2,648,260	56,079,290
XI. Furniture of Wood, Bedding, etc. ..	8,419,159	5,719,557	2,389,557	1,881,784	1,322,764	456,146	20,188,067
XII. Paper, Stationery, Printing, Book-binding etc. ..	27,579,145	21,388,413	3,920,079	3,062,981	1,935,190	3,002,384	60,888,195
XIII. Rubber ..	8,001,650	8,313,923	920,226	473,658	107,008	94,411	17,910,876
XIV. Musical Instruments ..	523,944	78,600	16,442	20,950	10,163	..	650,104
XV. Miscellaneous Products ..	9,461,932	7,825,674	433,025	708,701	230,322	167,266	18,826,920
Total, Classes I. to XV ..	512,517,262	370,049,454	122,323,903	101,842,255	43,521,687	28,493,824	1,178,748,445
XVI. Heat, Light and Power ..	15,964,323	7,362,571	2,920,380	2,728,829	2,104,109	290,740	31,370,952
Grand Total ..	528,481,585	377,412,025	125,244,343	104,571,084	45,625,796	28,784,564	1,210,119,397

(ii) *Total, 1938-39 and 1943-44 to 1947-48.* The following table shows the value of output in each State during each of the years shown.

FACTORIES : VALUE OF OUTPUT.
(£.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	218,419,313	152,967,611	63,321,073	35,005,264	19,548,511	11,158,205	500,419,977
1943-44 ..	399,137,690	284,647,914	90,318,437	67,578,377	29,208,588	20,848,210	891,739,216
1944-45 ..	387,658,585	287,422,311	92,718,465	65,107,692	31,740,740	21,356,984	886,004,777
1945-46 ..	367,092,216	286,989,408	91,200,751	66,222,998	34,022,839	22,119,305	867,647,517
1946-47 ..	445,947,142	315,437,679	100,099,090	86,702,572	38,269,975	24,569,748	1,011,026,206
1947-48 ..	528,481,585	377,412,025	125,244,343	104,571,084	45,625,796	28,784,564	1,210,119,397

6. Value of Production.—(i) *In Classes of Industry, 1947-48.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production".

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the "value of output". All these deductions with the exception of depreciation are included in the items "value of materials used" and "value of fuel used" as defined above. On account of the difficulty experienced in securing accurate figures for depreciation, it was subsequently agreed that the particulars obtained should be published but that no deduction should be made on this account for the present. The value of production as given in the following tables is obtained, therefore, by deducting "value of materials used" and "value of fuel used" from the "value of the output."

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 8, par. 4, was estimated at £20,591,370 for 1947-48. Many miscellaneous expenses, such as taxation, insurance, advertising and other sundry charges have not been taken into account. Therefore, it must not be inferred that when wages and salaries are deducted from the value of production the whole of the "surplus" is available for interest and profit.

The value of factory production therefore approximates "net value added" in the manufacturing process. It amounted in 1947-48 to £489.3 million to which Class IV., Industrial Metals, etc., with £181.3 million or almost three times the value of production of this class in 1938-39, made the greatest contribution. This total value of production in 1947-48 represented an increase of £78.4 million over the figure for 1946-47 and almost £286 million (or 140 per cent.) on the value of production recorded in 1938-39.

The following table shows the value of production in 1947-48 in each State for the various classes of industry:—

FACTORIES : VALUE OF PRODUCTION, 1947-48.
(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metallic Mineral and Quarry Products ..	4,077,495	3,050,872	927,839	630,664	565,159	453,735	9,705,764
II. Bricks, Pottery, Glass, etc. ..	5,292,607	2,201,343	459,657	874,205	431,604	96,282	9,355,698
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	14,177,222	10,092,814	804,604	2,292,472	1,150,705	122,833	28,640,650
IV. Industrial Metals, Machines, Conveyances ..	90,897,335	47,801,861	14,118,668	18,249,919	6,142,824	4,098,675	181,309,282
V. Precious Metals, Jewellery and Plate ..	1,049,807	1,429,696	106,319	159,007	99,029	8,164	2,852,022
VI. Textiles and Textile Goods (not Dress) ..	11,553,265	17,258,573	587,806	1,191,268	280,543	1,208,705	32,080,160
VII. Skins and Leather (not Clothing or Footwear) ..	3,601,094	3,279,859	751,436	1,130,341	346,785	163,866	9,273,381
VIII. Clothing (except Knitted) ..	17,997,715	18,886,663	2,603,808	2,183,322	1,358,215	310,432	43,340,155
IX. Food, Drink and Tobacco ..	27,406,863	25,082,140	13,389,149	6,014,279	3,902,515	2,375,724	78,170,670
X. Woodworking and Basketware ..	9,250,758	6,685,732	4,110,752	1,614,562	1,651,580	1,179,066	24,492,450
XI. Furniture of Wood, Bedding, etc. ..	3,622,462	2,681,687	1,139,992	821,687	595,081	236,682	9,097,591
XII. Paper, Stationery, Printing, Book-binding, etc. ..	13,379,648	9,669,037	2,135,601	1,701,357	1,085,381	1,622,045	29,593,069
XIII. Rubber ..	2,495,984	3,193,617	424,914	231,288	56,986	43,359	6,446,148
XIV. Musical Instruments ..	304,744	56,931	13,523	18,446	8,306	..	401,950
XV. Miscellaneous Products ..	5,140,041	3,839,704	222,573	341,843	134,689	123,025	9,801,875
Total, Classes I. to XV. ..	310,247,040	155,210,529	41,796,641	37,454,060	17,809,402	12,042,593	474,506,865
XVI. Heat, Light and Power ..	8,363,816	3,200,491	1,089,712	1,215,045	574,795	201,024	14,735,783
Grand Total ..	318,610,856	158,501,020	42,886,353	38,669,705	18,384,197	12,244,517	489,296,648

(ii) *Total and Averages, 1938-39 and 1943-44 to 1947-48.* The value of production and the amount per person engaged and per head of population are shown in the following table for the last five years compared with 1938-39. For Australia as a whole the value of production per head of population increased from £29.41 per head in 1938-39 to £64.04 per head in 1947-48. For value per person engaged, the increase was not so pronounced (from £360 per head in 1938-39 to £576 in 1947-48) owing to the considerable increase in the numbers of persons engaged in 1947-48 as compared with 1938-39.

FACTORIES : VALUE OF PRODUCTION.

(£.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
1938-39 ..	99,265,891	65,996,069	19,301,475	13,678,930	8,775,586	5,398,659	203,416,610
1943-44 ..	162,726,010	123,330,518	30,210,528	28,411,486	12,511,526	9,045,419	366,235,487
1944-45 ..	159,874,627	122,377,307	30,902,038	27,267,050	12,960,009	8,902,324	362,283,355
1945-46 ..	153,179,489	120,250,487	30,269,653	25,601,628	13,826,527	9,195,657	352,323,441
1946-47 ..	186,546,408	131,496,150	33,336,009	31,066,494	15,748,476	10,667,545	410,861,742
1947-48 ..	218,610,856	158,501,020	42,886,353	38,669,795	18,384,197	12,244,517	489,296,648

PER PERSON ENGAGED.

1938-39 ..	395	327	357	315	378	391	360
1943-44 ..	504	472	467	408	445	457	478
1944-45 ..	508	475	482	416	445	456	483
1945-46 ..	493	469	462	405	457	478	473
1946-47 ..	544	495	494	439	466	535	510
1947-48 ..	602	570	559	527	511	578	576

PER HEAD OF POPULATION.

1938-39 ..	32.99	35.25	19.15	22.99	18.79	22.72	29.41
1943-44 ..	56.66	62.22	28.65	46.11	26.15	37.04	50.53
1944-45 ..	55.09	61.23	28.92	43.75	26.73	36.05	49.47
1945-46 ..	52.23	59.66	27.92	40.57	28.21	36.74	47.42
1946-47 ..	62.95	64.46	32.21	48.50	31.67	41.90	54.83
1947-48 ..	72.71	76.60	38.54	59.28	39.13	49.77	64.04

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1947-48 was estimated at £1,210,119,397, there remained, after payment of £683,729,030 for the value of the materials used, £285,765,264 for salaries and wages, and £37,093,719 for power, fuel and light, a balance of £203,531,384 to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation etc., as well as drawings by working proprietors and profit. The following table gives corresponding particulars for each State expressed absolutely and as percentages on the total value of the output for the year 1947-48 :—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1947-48.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance (Output less Materials, Fuel and Wages.)(c)	Total Value of Output.
VALUE AND COST, ETC. (£.)					
New South Wales ..	292,556,789	17,313,940	125,345,878	93,264,978	528,481,585
Victoria ..	209,896,100	9,014,905	93,802,188	64,698,832	377,412,025
Queensland. ..	79,173,835	3,184,155	24,163,216	18,723,137	125,244,343
South Australia ..	61,620,640	4,280,739	24,852,098	13,816,707	104,571,084
Western Australia ..	24,956,972	2,284,627	10,735,647	7,648,550	45,625,796
Tasmania ..	15,524,694	1,015,353	6,865,337	5,379,180	28,784,564
Australia ..	683,729,030	37,093,719	285,765,264	203,531,384	1,210,119,397

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
(b) Includes lubricants and water. (c) See paragraph preceding this table.

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1947-48—
continued.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance (Output less Materials, Fuel and Wages.)(c)	Total Value of Output.
--------	---------------------------	----------------------------------	------------------------	---	---------------------------

PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

New South Wales ..	55.36	3.28	23.72	17.64	100.00
Victoria ..	55.61	2.39	24.85	17.15	100.00
Queensland ..	63.22	2.54	19.29	14.95	100.00
South Australia ..	58.93	4.09	23.77	13.21	100.00
Western Australia ..	54.70	5.01	23.53	16.76	100.00
Tasmania ..	53.93	3.53	23.85	18.69	100.00
Australia ..	56.50	3.07	23.61	16.82	100.00

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant
(b) Includes lubricants and water. (c) See paragraph preceding this table.

§ 8. Value of Land, Buildings, Plant and Machinery.

1. **General.**—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1947-48 :—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1947-48.

(£.)

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
Land and buildings	91,860,393	66,229,391	16,608,766	20,690,827	9,482,660	6,271,365	211,143,402
Plant and machinery	86,714,082	65,829,201	21,830,685	20,239,623	9,189,910	9,915,837	213,719,338
Total ..	178,574,475	132,058,592	38,439,451	40,930,450	18,672,570	16,187,202	424,862,740

(a) Includes estimated value of rented premises and plant.

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates for premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. **Value of Land and Buildings.**—(i) *Total for Australia, 1938-39 and 1943-44 to 1947-48.* The following table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39 and 1943-44 to 1947-48.

FACTORIES : VALUE OF LAND AND BUILDINGS(a), AUSTRALIA.

(£.)

Class of Industry.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,778,746	2,623,361	2,642,425	3,019,524	3,376,681	3,860,244
II. Bricks, Pottery, Glass, etc. ..	2,953,557	2,706,737	2,940,413	3,331,150	3,771,332	3,952,449
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	7,377,551	18,635,144	18,432,290	18,461,520	17,064,501	18,624,009
IV. Industrial Metals, Machines, Conveyances ..	34,841,028	60,043,410	60,783,523	59,530,238	59,008,483	64,868,139
V. Precious Metals, Jewellery and Plate ..	633,009	590,482	615,779	751,611	1,041,763	1,278,652
VI. Textiles and Textile Goods (not Dress) ..	5,999,671	8,378,695	8,770,139	9,111,725	9,608,636	10,602,891
VII. Skins and Leather (not Clothing or Footwear) ..	2,095,886	2,327,945	2,493,751	2,965,986	3,228,483	3,441,318
VIII. Clothing (except Knitted) ..	10,623,619	11,852,661	12,660,045	13,993,956	15,608,247	16,916,828
IX. Food, Drink and Tobacco ..	33,273,248	37,376,297	39,321,977	40,129,049	42,610,494	45,450,787
X. Woodworking and Basketware ..	4,106,963	4,811,963	5,030,273	5,441,290	6,156,881	6,911,869
XI. Furniture of Wood, Bedding, etc. ..	2,533,254	2,259,307	2,293,762	2,828,984	3,300,578	3,834,648
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	10,639,315	11,408,044	11,576,815	11,604,666	12,071,708	13,023,072
XIII. Rubber ..	1,676,043	1,684,331	1,737,861	1,865,044	1,990,884	2,152,455
XIV. Musical Instruments ..	104,838	98,829	116,074	133,182	193,402	233,601
XV. Miscellaneous Products ..	1,432,857	2,292,206	2,588,535	2,964,894	3,125,309	3,679,765
Total, Classes I. to XV...	121,069,585	167,089,412	172,003,662	176,133,119	182,157,472	198,830,727
XVI. Heat, Light and Power...	9,850,829	10,057,193	10,576,445	10,806,100	10,994,312	12,312,675
Grand Total ..	130,920,414	177,146,605	182,580,107	186,939,219	193,151,784	211,143,402

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1947-48.* The following table gives particulars of the various classes of industry in each State.

FACTORIES : VALUE OF LAND AND BUILDINGS, (a) 1947-48.

(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,889,441	1,179,140	237,421	237,453	116,366	200,423	3,860,244
II. Bricks, Pottery, Glass, etc. ..	2,514,320	893,342	144,265	249,019	124,869	26,634	3,952,449
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	6,806,339	4,856,756	280,273	5,737,643	860,822	82,176	18,624,009
IV. Industrial Metals, Machines, Conveyances ..	31,036,193	19,632,209	4,537,443	5,291,054	2,645,939	1,725,391	64,868,139
V. Precious Metals, Jewellery and Plate ..	510,414	581,296	49,552	61,687	65,218	10,485	1,278,652
VI. Textiles and Textile Goods (not Dress) ..	3,996,433	5,532,924	171,559	499,026	130,205	272,744	10,602,891
VII. Skins and Leather (not Clothing or Footwear) ..	1,328,306	1,449,960	161,175	302,442	133,838	65,597	3,441,318
VIII. Clothing (except Knitted) ..	7,872,047	6,396,244	769,800	903,228	840,699	134,810	16,916,828
IX. Food, Drink and Tobacco ..	17,328,190	13,030,032	6,898,269	3,940,105	2,638,870	1,615,321	45,450,787
X. Woodworking and Basketware ..	3,315,526	1,775,674	693,379	515,559	384,654	227,077	6,911,869
XI. Furniture of Wood, Bedding, etc. ..	1,489,499	1,283,650	391,320	308,976	255,376	105,827	3,834,648
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	5,487,245	4,106,951	991,875	810,939	548,100	1,077,962	13,023,072
XIII. Rubber ..	997,879	838,644	139,114	99,045	51,622	26,151	2,152,455
XIV. Musical Instruments ..	170,863	44,742	2,622	9,494	5,880	..	233,601
XV. Miscellaneous Products ..	1,875,378	1,393,856	111,889	166,449	90,861	41,342	3,679,765
Total, Classes I. to XV...	86,618,073	62,005,470	15,579,956	19,132,119	8,893,319	5,611,840	198,830,727
XVI. Heat, Light and Power ..	5,242,320	3,233,971	1,028,810	1,558,708	589,341	659,525	12,312,675
Grand Total ..	91,860,393	65,229,391	16,608,766	20,690,827	9,482,660	6,271,365	211,143,402

(a) Includes estimated value of rented premises.

(iii) *Totals in each State.* The following table shows the value of land and buildings in each State for the years 1938-39 and 1943-44 to 1947-48 :—

FACTORIES : VALUE OF LAND AND BUILDINGS.(a)

(£.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	57,353,625	42,026,245	12,299,089	8,710,700	6,813,653	3,717,102	130,929,414
1943-44 ..	78,978,013	55,062,982	13,262,504	17,629,235	6,920,805	5,293,066	177,146,605
1944-45 ..	81,058,876	57,808,861	13,689,055	16,877,449	7,654,187	5,491,679	182,580,107
1945-46 ..	80,308,347	60,264,953	14,331,556	18,446,966	8,282,694	5,304,703	186,939,219
1946-47 ..	81,894,595	62,771,493	15,391,033	18,659,534	8,756,924	5,678,205	193,151,784
1947-48 ..	91,360,393	66,229,391	16,608,766	20,690,827	9,482,660	6,271,365	211,143,402

(a) Includes estimated value of rented premises.

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ended 1932-33, however, there was a decline of £12 million to £105.8 million, but since that year the value has risen annually and stood at £211.1 million in 1947-48.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39 and 1943-44 to 1947-48.* The following table shows for Australia the approximate value of plant and machinery used in factories in 1938-39 and each of the five years ended 1947-48 :—

FACTORIES : VALUE OF PLANT AND MACHINERY(a), AUSTRALIA.

(£.)

Class of Industry.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,028,382	5,089,274	4,955,979	4,916,338	5,429,881	6,060,951
II. Bricks, Pottery, Glass, etc. ..	3,144,586	2,246,369	2,509,661	2,967,690	3,423,142	3,699,837
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	6,754,248	17,411,181	19,208,586	17,791,778	15,271,732	17,515,884
IV. Industrial Metals, Machines, Conveyances ..	33,037,801	56,918,202	54,953,997	53,901,719	52,895,953	61,079,926
V. Precious Metals, Jewellery and Plate ..	197,059	219,266	207,620	253,062	375,783	580,634
VI. Textiles and Textile Goods (not Dress) ..	6,657,416	7,600,447	7,658,756	7,736,737	8,370,807	10,200,808
VII. Skins and Leather (not Clothing or Footwear) ..	973,181	1,224,852	1,264,612	1,584,051	1,707,214	1,861,369
VIII. Clothing (except Knitted) ..	2,557,388	3,225,678	3,552,899	4,134,906	4,862,517	5,905,080
IX. Food, Drink and Tobacco ..	32,100,675	31,904,522	32,692,162	33,233,935	35,133,478	37,999,396
X. Woodworking and Basketware ..	3,907,551	4,486,081	4,533,758	5,023,174	5,862,676	6,990,790
XI. Furniture of Wood, Bedding, etc. ..	727,857	545,199	572,308	740,627	929,587	1,189,427
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,188,227	9,531,486	8,961,222	8,556,477	9,800,832	11,517,261
XIII. Rubber ..	1,367,859	1,243,448	1,191,308	1,218,861	1,416,650	1,855,042
XIV. Musical Instruments ..	11,702	14,011	18,191	23,571	65,738	80,304
XV. Miscellaneous Products ..	758,273	1,547,403	1,763,939	1,855,931	1,847,270	2,356,419
Total, Classes I. to XV. ..	108,412,205	143,207,419	144,044,998	143,938,863	147,393,260	168,896,128
XVI. Heat, Light and Power ..	35,249,922	37,785,350	39,872,062	41,606,077	42,299,831	44,823,210
Grand Total ..	143,662,127	180,992,769	183,917,060	185,544,940	189,693,091	213,719,338

(a) Includes estimated value of rented plant.

Except for the years 1930-31 to 1933-34, when decreases were recorded, there has been a continuous increase in the value of plant and machinery in Australia. The increase in 1947-48 of £24.0 million extended over all industrial classes. The greatest increase occurred in Class IV., Industrial Metals, Machines, Conveyances.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1943-44 to 1947-48 compared with 1938-39. During 1947-48 increases occurred in all States, New South Wales showing the largest increase, £11.5 million.

FACTORIES : VALUE OF PLANT AND MACHINERY.(a)
(£.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	62,692,956	38,626,743	18,095,415	9,749,679	8,095,064	6,402,270	143,662,127
1943-44 ..	73,803,954	55,457,719	17,886,417	18,415,477	7,364,909	8,064,293	180,992,769
1944-45 ..	73,039,252	58,571,064	18,134,011	17,955,288	8,254,231	7,963,214	183,917,060
1945-46 ..	72,560,630	58,537,394	18,690,541	19,017,955	8,507,705	8,230,715	185,544,940
1946-47 ..	75,234,273	59,124,802	19,995,249	18,408,224	8,130,574	8,499,969	189,693,091
1947-48 ..	86,714,082	65,829,201	21,830,685	20,239,623	9,189,910	9,915,837	213,719,338

(a) Includes estimated value of rented plant.

(iii) *Value according to Class of Industry, 1947-48.* The following table shows the value of plant and machinery used in factories in each State during 1947-48 according to class of industry.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), 1947-48.
(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metaliferous Mine and Quarry Products ..	2,978,366	1,671,133	406,380	668,439	172,225	164,408	6,060,951
II. Bricks, Pottery, Glass, etc. ..	2,221,666	852,639	156,963	249,373	176,493	42,703	3,699,837
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	7,358,092	6,095,233	273,235	2,676,720	1,077,369	35,235	17,515,884
IV. Industrial Metals, Machines, Conveyances ..	30,529,076	17,176,695	3,820,032	5,904,895	1,750,371	1,898,857	61,079,926
V. Precious Metals, Jewellery and Plate ..	205,928	311,217	18,149	22,648	19,804	2,888	580,634
VI. Textiles and Textile Goods (not Dress) ..	4,048,970	5,021,903	202,028	562,104	106,568	259,235	10,200,808
VII. Skins and Leather (not Clothing or Footwear) ..	695,642	688,251	141,661	163,600	111,783	63,432	1,864,369
VIII. Clothing (except Knitted) ..	2,543,854	2,395,651	298,046	366,672	231,888	68,969	5,905,080
IX. Food, Drink and Tobacco ..	11,715,049	9,205,956	1,011,956	2,989,901	2,061,180	1,015,354	37,999,396
X. Woodworking and Basketware ..	2,882,833	1,672,332	1,047,537	348,176	530,458	509,454	6,990,790
XI. Furniture of Wood, Bedding, etc. ..	469,009	335,510	134,611	112,257	102,894	35,146	1,189,427
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,410,030	3,253,305	640,388	783,775	301,216	2,128,547	11,517,261
XIII. Rubber ..	764,412	891,337	88,544	74,373	21,262	15,114	1,855,042
XIV. Musical Instruments ..	61,851	15,482	985	1,347	639	..	80,304
XV. Miscellaneous Products ..	1,087,599	1,033,027	47,814	86,966	86,112	14,901	2,356,419
Total, Classes I. to XV.	71,972,377	50,619,671	18,288,329	15,011,246	6,750,262	6,254,243	168,896,128
XVI. Heat, Light and Power ..	14,741,705	15,209,530	3,542,356	5,228,377	2,439,648	3,661,594	44,823,210
Grand Total	86,714,082	65,829,201	21,830,685	20,239,623	9,189,910	9,915,837	213,719,338

(a) Includes estimated value of rented plant.

4. *Depreciation of Land and Buildings and Plant and Machinery.*—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State during the year 1947-48 as recorded by factory proprietors at the annual census of factory production.

ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1947-48.

(£.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
I. Treatment of Non-metalliferous Mine and Quarry Products ..	562,199	145,296	57,543	34,700	22,551	45,382	867,671
II. Bricks, Pottery, Glass, etc. ..	370,587	137,517	17,953	39,656	16,378	3,756	585,847
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	806,980	426,531	37,299	132,897	100,737	12,774	1,517,218
IV. Industrial Metals, Machines, Conveyances ..	3,368,996	1,744,563	357,474	801,590	151,362	266,059	6,690,044
V. Precious Metals, Jewellery and Plate ..	25,435	40,393	1,335	3,006	1,293	123	71,587
VI. Textiles and Textile Goods (not Dress) ..	512,729	827,725	12,196	83,552	19,679	32,930	1,488,811
VII. Skins and Leather (not Clothing or Footwear) ..	86,907	90,711	10,952	26,792	12,479	333	228,174
VIII. Clothing (except Knitted) ..	319,970	284,522	26,444	36,202	26,069	8,387	701,594
IX. Food, Drink and Tobacco ..	1,220,337	938,958	777,079	310,514	190,875	113,672	3,551,435
X. Woodworking and Basketware ..	340,795	203,422	112,873	58,997	57,338	58,859	832,284
XI. Furniture of Wood, Bedding, etc. ..	53,639	34,776	17,796	13,456	13,663	3,117	136,447
XII. Paper, Stationery, Printing, Book-binding, etc. ..	574,268	446,238	70,629	91,306	29,125	150,327	1,361,893
XIII. Rubber ..	216,363	214,256	13,329	16,276	5,471	3,719	469,414
XIV. Musical Instruments ..	7,101	1,284	39	21	109	..	8,554
XV. Miscellaneous Products ..	138,612	156,123	4,273	15,409	4,638	1,336	320,391
Total, Classes I. to XV.	8,604,918	5,692,317	1,517,214	1,664,374	651,767	700,774	18,831,364
XVI. Heat, Light and Power ..	826,410	181,269	225,255	328,138	141,096	57,838	1,760,006
Grand Total	9,431,328	5,873,586	1,742,469	1,992,512	792,863	758,612	20,591,370

In the following table particulars are given of the recorded values of land and buildings and plant and machinery in use by factories in Australia as at 30th June of the years 1939 and 1944 to 1948 and the value of additions and replacements made and depreciation allowed during each year.

VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY : AUSTRALIA.

(£'000.)

Year.	Book Values as at 30th June.(a)		Additions and Replacements during year.		Depreciation allowed during year.	
	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.
1938-39 ..	130,920	143,662	5,578	17,781	1,911	8,736
1943-44 ..	177,147	180,993	9,741	19,544	3,532	17,275
1944-45 ..	182,580	183,917	5,020	17,780	2,978	15,808
1945-46 ..	186,939	185,545	6,245	21,766	2,537	14,597
1946-47 ..	193,152	189,693	7,791	27,110	2,747	15,978
1947-48 ..	211,143	213,719	9,739	35,616	2,537	18,054

(a) Includes estimated value of rented premises and machinery.

§ 9. Individual Industries.

1. **General.**—The preceding pages afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one to two establishments of a particular industry in a State, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

2. **Portland Cement and Cement Goods.**—The manufacture of portland cement and cement goods is an important industry included in Class I. Following changes in classification introduced in 1945-46 and 1946-47, it is now possible to publish separate details for each of the three groups Portland Cement, Asbestos Cement Sheets and Mouldings, and Other Cement Goods. Particulars for each group are shown for 1947-48 in the following table.

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS ETC., AND OTHER CEMENT GOODS : AUSTRALIA, 1947-48.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories	10	11	307	328
Number of persons engaged	1,836	2,043	2,877	6,756
Value of land and buildings	£ 881,611	312,719	644,445	1,838,775
Value of plant and machinery	£ 1,868,805	306,675	742,468	2,917,948
Salaries and wages paid	£ 691,615	787,876	946,136	2,425,627
Value of power, fuel, etc., used	£ 877,251	43,211	39,099	959,561
Value of materials used	£ 1,432,803	1,510,498	1,429,257	4,372,558
Total value of output	£ 3,919,596	2,939,857	3,202,313	10,061,766
Value of production	£ 1,609,542	1,386,148	1,733,957	4,729,647
Portland cement, grey, produced ton	1,012,911	..	..	1,012,911
Asbestos Cement Building Sheets sq. yd.	3,893,023	..	..	3,893,023
.. ..	£ ..	19,695,311	..	19,695,311
.. ..	£ ..	2,076,715	..	2,076,715

3. **Chemicals, Drugs and Medicines.**—In 1945-46 the classification of factories was amended to provide for the separate tabulation of factories engaged in the production of Industrial and Heavy Chemicals and Acids and those engaged in producing Pharmaceutical and Toilet Preparations which previously had been combined. Details for each of these industries are given in the next two tables for 1947-48. However, it should be noted that in order to avoid the publication of confidential information, particulars relating to Industrial and Heavy Chemicals include details for the explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES), 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	91	61	16	7	6	1	182
Number of persons engaged	3,341	4,293	210	(a)	(a)	(a)	8,901
Value of land and buildings	£ 3,056,065	2,770,267	46,339	(a)	(a)	(a)	10,930,497
Value of plant and machinery	£ 3,297,318	4,166,948	76,870	(a)	(a)	(a)	9,312,880
Salaries and wages paid	£ 1,399,617	1,748,633	71,329	(a)	(a)	(a)	3,613,670
Value of power, fuel, etc., used	£ 316,791	263,962	17,285	(a)	(a)	(a)	759,986
Value of materials used	£ 4,127,617	3,206,094	126,267	(a)	(a)	(a)	7,862,690
Total value of output	£ 7,424,847	6,416,271	303,676	(a)	(a)	(a)	15,511,474
Value of production	£ 2,980,439	2,946,215	160,124	(a)	(a)	(a)	6,888,778

(a) Not available for publication ; included with total for Australia.

PHARMACEUTICAL AND TOILET PREPARATIONS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	140	47	4	14	6	2	213
Number of persons engaged ..	3,068	1,618	98	(a)	(a)	(a)	5,491
Value of land and buildings £	1,016,557	428,089	21,644	(a)	(a)	(a)	1,635,835
Value of plant and machinery £	318,782	314,555	5,830	(a)	(a)	(a)	726,820
Salaries and wages paid £	896,287	461,258	22,604	(a)	(a)	(a)	1,555,710
Value of power, fuel, etc., used £	27,231	21,293	622	(a)	(a)	(a)	62,550
Value of materials used £	3,197,437	1,849,319	73,068	(a)	(a)	(a)	5,750,891
Total value of output £	6,569,757	3,645,315	116,604	(a)	(a)	(a)	11,358,547
Value of production ..	£ 3,345,089	1,774,703	42,914	(a)	(a)	(a)	5,545,106

(a) Not available for publication ; included with total for Australia.

4. White Lead, Paint and Varnish.—(i) *Details for each State.* The following table shows particulars of this industry for each State during 1947-48 :—

WHITE LEAD, PAINT AND VARNISH FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	67	47	9	13	6	1	143
Number of persons engaged ..	2,691	790	95	355	(a)	(a)	3,980
Value of land and buildings £	988,610	297,766	27,021	130,993	(a)	(a)	1,474,227
Value of plant and machinery £	579,698	181,300	18,407	89,251	(a)	(a)	882,794
Salaries and wages paid £	1,084,747	310,946	32,899	119,980	(a)	(a)	1,565,684
Value of power, fuel, etc., used £	83,956	16,453	1,567	6,504	(a)	(a)	109,255
Value of materials used £	4,899,180	1,985,601	263,647	867,615	(a)	(a)	8,155,047
Total value of output £	7,380,076	2,995,635	422,656	1,241,125	(a)	(a)	12,240,763
Value of production ..	£ 2,396,940	993,581	157,442	567,006	(a)	(a)	3,976,461

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Total for Australia.* The next table gives particulars for the years 1943-44 to 1947-48 compared with 1938-39 :—

WHITE LEAD, PAINT AND VARNISH FACTORIES : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	102	111	113	122	133	143
Number of persons engaged ..	2,271	2,350	2,501	3,197	3,612	3,980
Value of land and buildings £	761,345	897,777	936,927	973,166	1,064,876	1,474,227
Value of plant and machinery £	324,222	415,552	459,252	524,065	602,967	882,794
Salaries and wages paid £	535,014	727,843	792,437	1,005,121	1,243,482	1,565,684
Value of power, fuel, etc., used £	44,992	66,262	70,274	80,675	94,115	109,255
Value of materials used £	2,275,027	3,943,679	4,465,958	4,775,075	5,950,115	8,155,047
Total value of output £	3,905,104	5,931,990	6,694,321	7,304,167	9,233,244	12,240,763
Value of production £	1,585,085	1,922,049	2,158,089	2,448,417	3,189,014	3,976,461

5. Soap and Candle Factories.—(i) *Details for each State.* The following table gives particulars of soap and candle factories in each State for 1947-48 :—

SOAP AND CANDLE FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	50	17	10	5	3	3	88
Number of persons engaged ..	1,896	700	331	187	66	24	3,204
Value of land and buildings £	406,216	186,454	37,688	49,892	16,396	12,408	709,054
Value of plant and machinery £	167,852	161,384	21,875	36,792	8,003	2,151	398,057
Salaries and wages paid £	676,146	252,016	108,419	61,061	20,087	6,204	1,123,933
Value of power, fuel, etc., used £	66,221	88,230	8,444	6,319	2,475	1,155	172,844
Value of materials used £	2,397,080	1,280,420	293,032	171,856	126,913	25,864	4,295,165
Total value of output £	4,363,984	2,069,443	473,074	271,323	177,796	47,229	7,402,849
Value of production ..	£ 1,900,683	700,793	171,598	93,148	48,408	20,210	2,934,840

(ii) *Total for Australia.* The next table gives similar particulars for the years 1943-44 to 1947-48 compared with 1938-39 :—

SOAP AND CANDLE FACTORIES : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	65	65	67	73	79	88
Number of persons engaged ..	2,620	2,938	2,906	3,020	3,181	3,204
Value of land and buildings £	665,546	686,091	675,578	676,405	705,060	709,054
Value of plant and machinery £	576,732	422,467	376,788	372,940	376,810	398,057
Salaries and wages paid £	501,174	805,919	779,341	860,354	946,193	1,123,933
Value of power, fuel, etc., used £	76,283	139,713	126,739	123,250	127,517	172,841
Value of materials used £	1,567,999	2,757,710	2,853,368	3,051,046	3,062,073	4,295,105
Total value of output £	3,529,723	5,290,607	5,464,765	5,801,953	5,904,437	7,402,849
Value of production ..	£ 1,885,441	2,303,184	2,484,658	2,627,657	2,714,247	2,934,840

(iii) *Raw Materials Used and Production.* The following statement shows the quantities of certain raw materials used and the production in soap and candle factories in Australia for the years 1943-44 to 1947-48 compared with 1938-39 :—

SOAP AND CANDLE FACTORIES : RAW MATERIALS USED AND PRODUCTION, AUSTRALIA.

Particulars.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Tallow used .. cwt.	535,511	856,031	859,109	834,057	768,939	893,826
Alkali used ..	229,881	201,992	203,697	160,304	153,036	156,042
Cocoa-nut oil used—refined ..	138,954	74,915	79,299	86,576	57,191	80,518
and unrefined ..	1,189,345	1,461,209	1,512,361	1,535,304	1,478,877	1,679,839
Soap made (a) ..	27,459	38,291	23,159	23,194	10,539	13,382
Candles made ..						

(a) Soap made in all factories including those not classified as "Soap and Candles" factories.

The output for the year comprised the following quantities of soap :—Household, 599,144 cwt. ; Flakes and Chips, 48,698 cwt. ; Industrial, 60,971 cwt. ; Sand, 63,293 cwt. ; Toilet, 260,009 cwt. ; Shaving (including Sticks and Creams), 9,517 cwt. ; Soft, 23,458 cwt. ; Liquid (including liquid Shampoo), 84,438 cwt. ; Soap Extracts and Powders (including Shampoo Powder), 530,311 cwt. This includes 105,766 cwt. of soap made in establishments not classified as Soap and Candle Factories.

6. *Chemical Fertilizers.*—(i) *Details for each State.* The following table gives particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1947-48. Details of the consumption, imports and exports of fertilizers will be found in Chapter XX.—"Agricultural Production".

CHEMICAL FERTILIZERS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	14	8	7	7	6	5	47
Number of persons engaged ..	552	1,182	202	873	758	54	3,621
Value of land and buildings £	181,018	474,124	89,165	365,467	576,979	34,780	1,721,533
Value of plant and machinery £	457,579	697,311	101,193	746,199	839,670	15,005	2,856,957
Salaries and wages paid £	238,881	541,949	71,015	358,869	315,748	22,735	1,549,197
Value of power, fuel, etc., used £	46,291	78,311	3,810	43,839	95,890	1,464	269,605
Value of materials used £	1,217,476	3,471,435	682,839	1,801,974	2,540,752	240,948	9,958,424
Total value of output £	1,673,809	4,626,828	844,843	2,428,471	3,264,208	269,367	13,107,526
Value of production ..	£ 410,042	1,074,082	158,194	582,658	627,566	26,955	2,879,497

(ii) *Total for Australia.* The development of this industry since 1938-39 is set out hereunder :—

CHEMICAL FERTILIZERS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	36	36	38	38	39	47
Number of persons engaged ..	2,540	1,818	2,452	3,127	3,450	3,621
Value of land and buildings ..	1,449,157	1,454,051	1,468,653	1,571,948	1,617,318	1,721,533
Value of plant and machinery ..	2,352,819	2,244,501	2,365,895	2,409,368	2,396,536	2,859,957
Salaries and wages paid ..	604,477	632,115	872,466	1,091,275	1,283,817	1,519,197
Value of power, fuel, etc., used ..	113,749	86,876	122,215	181,418	205,302	269,605
Value of materials used ..	3,231,953	3,659,176	5,938,073	7,898,493	8,288,987	9,958,421
Total value of output ..	4,944,800	4,867,464	7,700,895	10,046,710	10,577,165	13,107,526
Value of production ..	1,599,998	1,121,412	1,640,607	1,966,799	2,082,876	2,879,497

7. **Iron and Steel Works and Engineering.**—(i) *General.* In 1945-46 the classification of factories was amended to provide for the tabulation in four separate groups of those industries previously included under Iron and Steel and Engineering. The first group (Smelting, Converting, Refining and Rolling of Iron and Steel) covers blast furnaces, steel works and rolling mills. The second group, Foundries (Ferrous), covers those engaged in the founding of iron and steel. The third group (Plant, Equipment and Machinery including Machine Tools) covers those industries engaged in the production of boilers, engines, machines including machinery, machine tools, structural steel fabrications, steel furniture, etc. The fourth group (Other Engineering) includes jobbing and general engineers not elsewhere included.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table particulars are given for 1947-48 for each State for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	17	12	..	1	1	..	31
Number of persons engaged ..	11,246	(a)	..	(a)	(a)	..	12,503
Value of land and buildings ..	2,031,349	(a)	..	(a)	(a)	..	2,379,084
Value of plant and machinery ..	4,964,657	(a)	..	(a)	(a)	..	5,670,072
Salaries and wages paid ..	5,177,738	(a)	..	(a)	(a)	..	5,771,917
Value of power, fuel, etc., used ..	3,440,427	(a)	..	(a)	(a)	..	4,232,728
Value of materials used ..	24,744,251	(a)	..	(a)	(a)	..	25,418,776
Total value of output ..	39,288,670	(a)	..	(a)	(a)	..	41,932,002
Value of production ..	11,103,992	(a)	..	(a)	(a)	..	12,280,498

(a) Not available for publication; figures are included in the total for Australia.

(iii) *Foundries (Ferrous).* Particulars covering those industries engaged in the founding of iron and steel are given for each State for 1947-48 in the following table :—

FOUNDRIES (FERROUS), 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	76	224	16	18	15	..	349
Number of persons engaged ..	2,568	2,617	422	512	478	..	6,597
Value of land and buildings ..	436,948	552,715	57,333	49,118	67,137	..	1,163,251
Value of plant and machinery ..	262,572	384,128	63,064	73,776	73,748	..	857,288
Salaries and wages paid ..	1,083,259	1,003,973	151,584	195,572	102,969	..	2,597,357
Value of power, fuel, etc., used ..	87,830	98,841	11,159	19,640	28,995	..	246,465
Value of materials used ..	584,464	858,485	99,786	115,181	105,882	..	1,763,798
Total value of output ..	2,182,765	2,408,338	332,000	393,389	355,168	..	5,676,660
Value of production ..	1,510,471	1,451,012	226,055	258,568	220,291	..	3,666,397

(iv) *Plant, Equipment and Machinery including Machine Tools.* In the next table particulars are given for 1947-48 for those industries included in the third group mentioned previously.

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS), 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	703.	362	76	84	61	..	1,286
Number of persons engaged ..	26,211	14,212	3,535	5,198	1,753	..	50,909
Value of land and buildings £	4,878,587	2,795,748	480,998	663,689	287,315	..	9,106,337
Value of plant and machinery £	4,287,317	2,843,682	485,287	724,755	321,441	..	8,662,482
Salaries and wages paid £	10,000,092	5,587,965	1,180,338	1,966,831	580,415	..	19,315,641
Value of power, fuel, etc., used £	354,463	218,709	49,915	79,964	26,957	..	730,008
Value of materials used £	13,496,147	7,399,315	1,384,301	2,540,387	597,235	..	25,417,385
Total value of output £	28,779,152	16,093,150	3,219,532	5,375,710	1,459,253	..	54,926,797
Value of production ..	£ 14,928,542	8,475,126	1,785,316	2,755,359	835,061	..	28,779,404

(v) *Other Engineering.* Details covering jobbing and general engineering works are given for each State for 1947-48 in the following table.

OTHER ENGINEERING, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	528	401	66	118	97	57	1,267
Number of persons engaged ..	3,917	6,023	774	2,257	515	746	14,232
Value of land and buildings £	1,561,888	1,343,663	148,031	314,149	115,153	169,745	3,652,629
Value of plant and machinery £	1,162,192	1,072,961	92,295	325,340	78,802	167,837	2,899,427
Salaries and wages paid £	1,177,757	2,250,544	246,226	734,702	132,159	261,154	4,802,542
Value of power, fuel, etc., used £	45,915	71,145	9,747	27,189	8,003	9,722	171,721
Value of materials used £	1,195,598	2,072,488	308,476	633,195	148,060	208,130	4,566,847
Total value of output £	3,255,813	5,558,920	676,060	1,689,290	384,811	598,578	12,163,472
Value of production ..	£ 2,014,300	3,415,287	357,837	1,028,906	227,848	380,720	7,424,904.

8. *Extracting and Refining of Non-ferrous Metals ; Alloys.—(i) Details for each State.* The following table gives particulars of metal extraction and ore reduction works, other than those connected with iron and steel. The returns exclude ore reduction works operating at mines.

EXTRACTING AND REFINING OF NON-FERROUS METALS ; ALLOYS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust. (a)	Tas.	Australia.
Number of factories ..	21	16	10	3	..	4	54
Number of persons engaged ..	1,684	208	887	1,631	..	2,433	6,843
Value of land and buildings £	297,696	59,837	275,412	103,491	..	725,022	1,461,458
Value of plant and machinery £	1,110,278	23,634	932,993	520,092	..	1,246,904	3,833,901
Salaries and wages paid £	825,182	78,760	433,272	962,701	..	1,079,115	3,379,030
Value of power, fuel, etc., used £	374,884	13,327	129,387	486,968	..	353,897	1,358,463
Value of materials used £	13,891,581	796,274	1,665,225	11,079,783	..	2,724,145	30,775,008
Total value of output £	17,539,312	1,008,904	4,873,377	13,775,900	..	5,581,700	42,779,193
Value of production ..	£ 3,272,847	199,303	3,078,765	1,609,149	..	2,503,658	10,663,722

(a) In Western Australia the majority of the plants are worked on the mines and are therefore not included.

(ii) *Total for Australia.* The development of this industry since 1938-39 is set out hereunder :—

EXTRACTING AND REFINING OF NON-FERROUS METALS ; ALLOYS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	42	43	40	49	51	54
Number of persons engaged ..	5,532	6,321	5,885	6,060	6,597	6,843
Value of land and buildings £	1,177,348	1,358,722	1,359,548	1,384,721	1,577,706	1,461,458
Value of plant and machinery £	3,525,659	3,930,910	3,816,583	3,795,038	3,680,348	3,833,901
Salaries and wages paid £	1,613,107	2,291,782	2,173,352	2,279,072	2,856,150	3,379,030
Value of power, fuel, etc., used £	597,951	788,797	1,033,829	1,057,934	1,166,337	1,358,403
Value of materials used £	16,844,310	17,755,594	16,567,693	18,042,070	26,806,144	30,757,008
Total value of output £	21,333,872	23,513,675	22,750,733	24,626,916	37,406,311	42,779,193
Value of production ..	£ 3,891,611	4,969,284	5,149,211	5,526,906	9,433,830	10,663,722

9. *Electrical Machinery, Cables and Apparatus.*—(i) *Details for Each State.* The following table shows particulars of this industry for each State during 1947-48 :—

ELECTRICAL MACHINERY, CABLES AND APPARATUS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	358	214	36	53	59	12	732
Number of persons engaged ..	18,585	6,577	729	989	592	107	27,579
Value of land and buildings £	2,925,112	1,096,714	112,977	195,375	116,280	41,748	4,488,206
Value of plant and machinery £	2,001,600	753,506	72,191	83,245	44,438	32,983	2,987,963
Salaries and wages paid £	6,426,999	2,306,918	233,491	299,177	158,300	29,406	9,454,291
Value of power, fuel, etc., used £	203,594	65,131	4,920	11,370	5,105	1,297	291,417
Value of materials used £	9,011,641	4,204,538	326,241	473,995	247,972	45,865	14,310,252
Total value of output £	18,832,647	6,780,949	692,606	986,225	509,908	88,940	27,891,275
Value of production ..	£ 9,617,412	2,511,280	361,445	500,860	256,831	41,778	13,289,606

(ii) *Total for Australia.* The increased output of electrical energy in Australia within recent years, referred to in par. 39 below, caused a corresponding demand for electrical equipment. Difficulties, due to war, in obtaining electrical equipment from abroad have been responsible for considerable development in the manufacture of electrical goods and equipment in Australia, as shown in the following table.

ELECTRICAL MACHINERY, CABLES AND APPARATUS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	360	431	475	551	658	732
Number of persons engaged ..	10,666	20,659	21,669	22,825	25,077	27,579
Value of land and buildings £	1,627,183	2,713,999	2,829,443	3,507,375	3,950,804	4,488,206
Value of plant and machinery £	896,553	1,724,045	1,806,169	2,084,018	2,524,818	2,987,963
Salaries and wages paid £	2,031,098	5,710,782	5,857,210	6,301,035	7,455,375	9,454,291
Value of power, fuel, etc., used £	104,594	193,542	190,677	208,729	244,384	291,417
Value of materials used £	3,195,032	7,804,575	7,991,641	8,085,443	10,467,524	14,310,252
Total value of output £	6,954,498	16,346,709	16,892,366	17,789,829	21,996,743	27,891,275
Value of production ..	£ 3,654,872	8,348,592	8,710,048	9,495,657	11,284,835	13,289,606

10. **Railway and Tramway Workshops.**—(i) *Details for each State, 1947-48.* The railway and tramway workshops which form an important item in Class IV. are chiefly State-owned institutions and their development is a reflection of the growth of the railway and tramway systems of Australia. The following table includes, in addition, municipal establishments for manufacturing and repairing rolling stock. Private institutions numbering 9 in 1947-48 have been excluded :—

TRAMCARS AND RAILWAY ROLLING STOCK(a), 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	49	25	11	14	22	7	128
Number of persons engaged ..	17,195	6,873	5,358	4,206	3,039	825	37,496
Value of land and buildings £	3,679,641	1,392,840	564,346	1,096,922	569,960	209,799	7,513,508
Value of plant and machinery £	3,966,697	375,743	477,065	1,028,610	497,960	178,943	6,525,018
Salaries and wages paid £	7,016,379	2,587,775	1,699,598	1,603,014	1,071,466	319,170	14,297,402
Value of power, fuel, etc., used £	151,029	64,724	39,053	64,053	41,751	11,016	371,626
Value of materials used £	4,426,750	1,824,810	923,626	881,435	914,522	103,229	9,074,372
Total value of output £	12,987,090	5,168,993	2,959,151	2,804,929	2,436,428	476,456	26,833,047
Value of production ..	8,409,311	3,279,459	1,996,472	1,859,441	1,480,155	362,211	17,387,049

(a) Government and municipal only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars of this establishment are not included in any of the tables in this chapter.

(ii) *Total for Australia.* The following table shows the development of railway and tramway workshops in Australia since 1938-39 :—

TRAMCARS AND RAILWAY ROLLING STOCK(a) : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	117	116	116	115	115	128
Number of persons engaged ..	27,310	39,058	37,972	36,962	37,347	37,496
Value of land and buildings £	6,736,924	6,902,264	6,911,284	6,960,491	7,081,749	7,513,508
Value of plant and machinery £	5,399,179	5,707,808	5,824,728	6,034,499	5,647,996	6,525,018
Salaries and wages paid £	6,720,990	13,407,931	12,463,846	11,656,718	12,051,260	14,297,402
Value of power, fuel, etc., used £	226,108	454,130	418,288	371,865	370,715	371,626
Value of materials used £	4,976,353	8,590,203	8,056,849	8,143,346	8,131,925	9,074,372
Total value of output £	13,223,114	24,947,557	23,099,306	22,308,803	22,773,668	26,833,047
Value of production ..	8,020,653	15,903,224	14,624,169	13,793,592	14,271,028	17,387,049

(a) Government and Municipal only.

11. **Motor Vehicles.**—The industries catering for the motor trade are included in Class IV. "Industrial Metals, Machines and Conveyances". In the table below a summary is given of the principal statistics for 1947-48 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC. : AUSTRALIA, 1947-48.

Items.	Construction and Assembly.	Motor Bodies.	Repairs.	Motor Accessories.	Total.
Number of factories ..	55	337	4,082	118	4,592
Number of persons engaged ..	6,902	13,990	29,886	5,210	55,988
Value of land and buildings ..	£ 1,445,261	2,060,236	9,557,873	988,158	14,051,528
Value of plant and machinery ..	£ 821,208	1,228,894	2,842,230	1,026,724	5,920,056
Salaries and wages paid ..	£ 2,815,700	5,287,738	8,729,121	2,054,744	18,883,703
Value of power, fuel, etc., used ..	£ 93,223	124,705	282,037	97,579	597,544
Value of materials used ..	£ 645,070	6,674,612	9,321,832	1,875,859	18,517,373
Total value of output ..	£ 5,821,317	13,567,021	23,359,141	5,118,418	47,865,897
Value of production ..	£ 5,083,024	6,767,704	13,755,272	3,144,980	28,750,980

In the next table similar details are shown on a State basis for these branches combined.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas. (a)	Australia.
Number of factories ..	1,768	1,335	564	308	458	159	4,592
Number of persons engaged ..	17,343	19,250	5,386	9,786	3,033	1,202	55,988
Value of land and buildings £	5,642,080	4,703,374	1,070,286	1,307,207	897,760	430,821	14,051,528
Value of plant and machinery £	1,883,447	2,072,766	453,000	1,126,476	303,492	80,875	5,920,056
Salaries and wages paid £	5,635,041	6,865,546	1,515,966	3,672,762	869,930	326,458	18,883,703
Value of power, fuel, etc., used £	202,480	204,354	52,509	97,618	33,002	6,981	597,544
Value of materials used £	5,311,075	6,120,718	1,524,720	4,077,108	1,142,520	341,232	18,517,373
Total value of output £	14,980,457	15,964,429	4,446,260	8,997,166	2,726,227	851,358	47,865,897
Value of production ..	9,466,902	9,639,357	2,869,031	4,722,440	1,550,105	503,145	28,750,980

(a) Includes horse-drawn vehicles.

The table below shows the output of motor bodies together with the number imported into Australia for 1938-39 and the years 1942-43 to 1947-48 :-

MOTOR BODIES (a) : PRODUCTION AND IMPORTS, AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Motor Bodies—							
Number made .. No.	79,436	44,286	29,309	22,805	19,473	45,374	58,354
Value .. £	6,421,142	4,652,771	2,582,912	2,530,043	2,356,778	5,690,715	9,209,651
Number imported No.	532	270	694	6	223	742	13,721
Value .. £	64,571	64,991	60,231	1,295	34,050	148,999	2,174,214

(a) Excludes sidecars.

In the next table particulars are given of the number and value of motor chassis imported into Australia for the years shown.

MOTOR CHASSIS : IMPORTS, AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number imported No.	76,094	14,547	9,186	6,660	10,113	66,785	66,832
Value .. £	7,315,321	4,056,496	2,900,638	3,153,608	1,879,046	11,479,744	15,180,490

12. *Agricultural Machines and Implements.*—(i) *General.* Owing to the extensive agricultural activities conducted in Australia and the demand for modern mechanized farm equipment the manufacture of agricultural implements constitutes an important branch of Australian industry. The articles manufactured include a wide range of implements for tillage, seeding and planting and the harvesting of crops. Other farm machinery made includes oil engines, windmills, chaff-cutters and machinery used in the dairying industry.

(ii) *Details for States.* The following table gives details of agricultural implement works in each State for 1947-48 :-

AGRICULTURAL MACHINES AND IMPLEMENTS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	63	64	17	30	12	..	186
Number of persons engaged ..	1,826	4,557	1,315	1,329	158	..	9,185
Value of land and buildings £	372,600	836,504	108,095	151,042	62,699	..	1,530,940
Value of plant and machinery £	220,470	1,034,171	131,909	218,248	20,537	..	1,625,335
Salaries and wages paid £	668,005	1,869,139	439,246	466,774	55,694	..	3,498,858
Value of power, fuel, etc., used £	25,895	118,099	20,332	38,599	1,135	..	204,060
Value of materials used £	806,174	1,808,505	442,240	503,511	18,189	..	3,578,619
Total value of output £	1,778,208	4,406,863	994,967	1,120,825	96,780	..	8,397,643
Value of production ..	946,139	2,480,259	532,395	578,715	77,456	..	4,614,964

(iii) *Total for Australia.* Comparative statistics for 1938–39 and the years 1943–44 to 1947–48 are given hereunder:—

AGRICULTURAL MACHINES AND IMPLEMENTS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	161	145	146	172	181	186
Number of persons engaged ..	6,563	9,178	9,149	9,510	8,743	9,185
Value of land and buildings £	996,949	1,046,702	1,035,331	1,199,952	1,251,975	1,530,940
Value of plant and machinery £	910,520	1,121,626	1,265,985	1,229,597	1,232,482	1,625,335
Salaries and wages paid £	1,373,213	2,821,968	2,745,909	2,893,892	2,856,273	3,498,858
Value of power, fuel, etc., used £	81,736	198,680	187,970	186,150	172,416	204,060
Value of materials used £	1,485,018	2,822,460	2,817,698	2,717,302	2,901,313	3,578,619
Total value of output £	3,403,091	6,604,402	6,589,942	6,701,344	6,717,194	8,397,643
Value of production ..	1,836,337	3,583,262	3,584,274	3,797,892	3,643,465	4,614,964

13. *Wireless and Amplifying Apparatus.*—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930–31 a new classification of factories was adopted and “Wireless Apparatus” was shown as a separate industry. The industry is confined mainly to New South Wales and Victoria, but is becoming increasingly important in South Australia. The number of broadcast listeners’ licences increased from 331,128 in 1930–31 to 1,832,816 in 1947–48 and this increase reflects the advancement of the industry during that period. During the war years considerable expansion took place in the industry to meet the requirements of the fighting services and apart from a slight drop in output in 1945–46, this expansion has continued.

WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	72	85	89	97	127	134
Number of persons engaged ..	4,828	11,020	10,534	8,709	8,935	9,543
Value of land and buildings £	557,953	895,642	998,470	969,105	1,133,159	1,115,494
Value of plant and machinery £	305,468	613,088	643,914	711,805	587,179	643,732
Salaries and wages paid £	754,302	2,959,291	2,784,985	2,295,866	2,569,491	3,070,698
Value of power, fuel, etc., used £	23,525	68,553	70,055	58,244	62,365	91,072
Value of materials used £	1,355,683	3,379,511	3,445,575	3,446,056	4,169,444	4,919,968
Total value of output £	2,502,338	7,190,028	7,290,352	6,514,935	7,721,018	9,235,861
Value of production ..	1,123,130	3,741,964	3,774,722	3,010,639	3,489,209	4,224,821

The number of domestic receiving sets assembled in 1947–48 was 333,332 and the number of domestic chassis (unmounted) made was 119,747 compared with 163,821 and 123,655 respectively in 1938–39.

14. *Cotton.*—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The average annual quantity of unginned cotton produced during the five years ended 1938–39 was 18 million lb. and slightly under 5 million lb. in the five years ended 1947–48. Arising out of the development in the local manufacture of cotton materials and the further expansion following the outbreak of war in 1939, plans were completed for an extension of the area devoted to the cultivation of this crop, but since the commencement of the Pacific War there has been a definite downward trend. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XX.—“Agricultural Production”.

(ii) *Ginning.* The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly from India, Brazil and the United States of America.

(iii) *Spinning and Weaving.* The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been established and Australia is now producing an extensive range of

cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre cord and tyre cord fabric. The number of establishments engaged in cotton spinning and weaving in Australia and other particulars of the industry are given in the following table for the five years ended 1947-48 in comparison with 1938-39.

COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	33	70	74	78	81	79
Number of persons engaged ..	3,589	7,908	7,667	7,253	7,765	7,702
Value of land and buildings .. £	703,790	1,427,401	1,523,800	1,529,150	1,709,711	1,867,737
Value of plant and machinery .. £	735,529	2,080,785	2,170,792	1,913,775	1,985,327	2,042,326
Salaries and wages paid .. £	493,109	1,768,268	1,732,481	1,714,669	2,152,044	2,511,918
Value of power, fuel, etc., used .. £	50,011	142,534	146,726	149,990	186,563	209,096
Value of materials used .. £	1,357,280	5,375,438	5,370,733	4,559,560	5,574,689	6,075,570
Total value of output .. £	2,385,990	8,930,324	8,879,653	7,936,716	9,499,843	10,371,439
Value of production .. £	978,699	3,412,352	3,362,194	3,227,166	3,738,591	4,086,773

15. Wool Carding, Spinning and Weaving.—(i) *Details for each State.* The importance of this industry is emphasized by the fact that Australia is the world's chief source of wool and the development of the woollen industry since its establishment at an early period in Australian history is of singular interest. The production consists chiefly of woollen cloth and tweed, worsted cloth rugs, blankets and yarn, all of which have acquired a reputation for purity and durability. The following table gives particulars for 1947-48.

WOOL CARDING, SPINNING AND WEAVING, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	52	76	3	4	2	5	142
Number of persons engaged ..	8,107	11,298	(a)	602	(a)	2,532	23,480
Value of land and buildings .. £	1,238,986	1,836,130	(a)	41,000	(a)	214,186	3,459,547
Value of plant and machinery .. £	1,376,292	1,703,135	(a)	68,363	(a)	180,071	3,527,484
Salaries and wages paid .. £	2,404,414	3,606,286	(a)	187,504	(a)	740,681	7,164,651
Value of power, fuel, etc., used .. £	187,761	386,195	(a)	29,451	(a)	44,577	672,032
Value of materials used .. £	5,067,287	8,574,541	(a)	376,251	(a)	1,543,043	16,072,097
Total value of output .. £	9,269,076	15,484,006	(a)	703,182	(a)	2,717,853	29,030,831
Value of production .. £	4,014,028	6,523,270	(a)	297,480	(a)	1,130,233	12,286,702

(a) Not available for publication; figures are included in total for Australia.

(ii) *Total for Australia.* The extent of the wool textile industry in Australia in the years 1943-44 to 1947-48 compared with 1938-39 is shown in the following table. Detailed particulars for the several States are not available for publication.

WOOL CARDING, SPINNING AND WEAVING : AUSTRALIA.

Items.	1938-39. (a)	1943-44. (a)	1944-45. (a)	1945-46	1946-47.	1947-48.
Number of factories ..	90	116	122	114	126	142
Number of persons engaged ..	19,608	24,858	23,095	21,536	22,851	23,480
Value of land and buildings .. £	2,380,009	2,867,297	2,996,246	3,028,066	3,080,180	3,459,547
Value of plant and machinery .. £	3,369,517	2,995,835	2,967,911	2,925,811	3,060,414	3,527,484
Salaries and wages paid .. £	2,887,907	5,896,320	5,484,589	5,324,388	6,085,426	7,164,651
Value of power, fuel, etc., used .. £	392,537	658,800	609,139	511,416	615,667	672,032
Value of materials used .. £	7,331,117	15,455,106	13,780,546	12,314,413	14,133,889	16,072,097
Total value of output .. £	12,514,610	25,433,289	23,250,907	21,776,979	25,153,735	29,030,831
Value of production .. £	4,790,956	9,319,383	8,861,222	8,951,150	10,404,179	12,286,702
Woollen cloth and tweed sq. yd.	8,336,226	13,055,199	12,679,864	16,707,262	18,626,138	18,811,635
Worsted Cloth ..	17,986,091	19,944,042	17,296,854	12,643,557	14,276,818	16,459,496
Serge ..	792,314	1,840,316	1,395,201	1,022,388	746,048	827,798
Flannel—						
For outer clothing ..	2,143,835	2,611,476	2,205,174	2,192,849	2,682,917	3,227,006
For underwear (pure) ..	1,557,373	2,704,382	2,020,022	1,566,932	1,850,643	1,641,085
For underwear (mixtures) ..	813,530	218,431	185,630	655,803		
Blankets .. pair	573,795	1,687,720	1,597,395	981,036	692,647	721,089

(a) Includes Woolscouring Works in Victoria and Tasmania and Woolscouring Works and Fellingmongeries in South Australia.

16. **Hosiery and Other Knitted Goods.**—(i) *Details for each State.* In addition to the woollen mills there were 420 hosiery and knitting mills operating in Australia during 1947-48. The total number of persons engaged in these establishments was 20,337, of whom 14,160 were females. Details for each State are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	120	278		9	7		420
Number of persons engaged ..	5,911	13,741	(a)	122	154	(a)	20,337
Value of land and buildings £	931,238	1,747,451	(a)	17,600	19,172	(a)	2,753,994
Value of plant and machinery £	673,744	1,223,383	(a)	12,328	16,653	(a)	1,964,508
Salaries and wages paid £	1,608,734	3,094,131	(a)	28,143	33,319	(a)	5,469,665
Value of power, fuel, etc., used £	59,614	168,766	(a)	989	1,553	(a)	235,077
Value of materials used £	3,693,096	6,920,171	(a)	32,550	88,665	(a)	10,897,809
Total value of output £	6,614,347	13,496,207	(a)	82,977	157,784	(a)	20,661,106
Value of production .. £	2,861,637	6,398,270	(a)	49,438	67,566	(a)	9,528,220

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Total for Australia.* Comparative statistics for 1938-39 and the years 1943-44 to 1947-48 are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	313	341	363	376	397	420
Number of persons engaged ..	18,159	16,017	16,691	17,091	19,264	20,337
Value of land and buildings £	1,962,336	2,243,181	2,354,232	2,444,369	2,608,352	2,753,994
Value of plant and machinery £	1,930,564	1,367,754	1,295,962	1,358,482	1,521,026	1,964,508
Salaries and wages paid £	2,331,536	3,187,545	3,290,370	3,687,445	4,502,549	5,469,665
Value of power, fuel, etc., used £	133,154	168,218	169,935	185,159	212,469	235,077
Value of materials used £	4,284,216	7,873,375	7,141,525	7,202,997	8,786,552	10,897,809
Total value of output £	8,226,468	13,771,177	13,938,366	13,252,876	16,831,684	20,661,106
Value of production .. £	3,809,098	5,729,584	5,726,906	5,864,720	7,832,663	9,528,220

(iii) *Raw Materials used and Production, 1947-48.* The main raw materials consumed in establishments manufacturing hosiery and other knitted goods during 1947-48 consisted of woollen yarn, 9,761,887 lb ; cotton yarn, 8,725,841 lb. ; and rayon yarn, 5,227,106 lb. Production comprised 38,346,048 garments, valued at £10,246,169 ; 1,567,448 dozen pairs of stockings, valued at £4,657,275 ; and 1,982,097 dozen pairs of socks, valued at £2,769,945.

17. **Tanning, Currying and Leather Dressing.**—(i) *Details for each State.* In Class VII. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

TANNING, CURRYING AND LEATHER DRESSING, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	74	44	13	11	5		149
Number of persons engaged ..	1,969	2,385	600	188	(a)	(a)	5,361
Value of land and buildings £	475,526	535,292	62,759	35,177	(a)	(a)	1,154,301
Value of plant and machinery £	357,085	354,257	79,301	28,139	(a)	(a)	857,186
Salaries and wages paid £	818,403	1,000,531	215,883	67,706	(a)	(a)	2,182,874
Value of power, fuel, etc., used £	62,259	78,484	14,362	4,301	(a)	(a)	165,777
Value of materials used £	2,542,668	2,592,019	728,808	196,159	(a)	(a)	6,308,195
Total value of output £	3,805,662	4,214,377	1,091,525	295,515	(a)	(a)	9,804,867
Value of production .. £	1,200,735	1,543,874	318,355	95,055	(a)	(a)	3,330,895

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Total for Australia.* The development of the tanning industry during the years 1938-39 and 1943-44 to 1947-48 is shown in the following table :—

TANNING, CURRYING AND LEATHER DRESSING : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	132	142	147	152	154	149
Number of persons engaged ..	4,375	4,631	4,668	5,022	5,428	5,361
Value of land and buildings £	813,713	919,016	952,161	1,048,240	1,127,454	1,154,301
Value of plant and machinery £	523,538	543,796	605,625	704,551	785,894	857,186
Salaries and wages paid £	919,781	1,495,549	1,520,672	1,662,156	1,953,573	2,182,874
Value of power, fuel, etc., used £	87,670	135,568	131,818	127,824	148,501	165,777
Value of materials used £	2,983,041	5,007,149	4,959,660	5,237,697	6,218,200	6,308,195
Total value of output £	4,592,642	7,509,327	7,552,095	8,055,696	9,646,020	9,804,867
Value of production ..	1,521,931	2,426,610	2,460,617	2,690,175	3,279,319	3,330,895

(iii) *Raw Material Used and Production.* The quantities of raw material used and leather produced in tanneries in each State in 1947-48 are shown in the following table. Some leather is also produced in works other than tanneries, but this is excluded.

TANNERIES : RAW MATERIAL USED AND PRODUCTION, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides.. No.	896,698	1,041,683	371,241	(a)	130,340	(a)	2,560,818
Skins—							
Calf ..	550,752	563,685	(a)	2,372	(a)	(a)	1,282,810
Goat ..	1,113,387	(a)	(a)	..	..	..	1,231,771
Sheep ..	1,301,779	603,724	(a)	(a)	..	(a)	1,957,120
Marsupial ..	22,484	69,719	(a)	(a)	..	..	137,095
Pelts treated ..	1,962,859	(a)	(a)	(a)	..	..	2,716,454
Bark used—							
Wattle .. tons	3,551	4,284	2,482	1,357	(a)	(a)	11,807
Mallet ..	..	787	..	..	463	..	1,250
Other ..	(a)	830	..	(a)	56	..	1,773
Tanning extract used ..	4,992	3,158	2,153	(a)	1,091	(a)	11,792
Leather made—							
Sole and Belting lb.	12,215,201	13,015,662	7,647,858	1,237,592	(a)	(a)	36,952,207
Harness ..	751,020	500,427	560,256	490,931	48,088	..	2,349,825
Upholstery .. sq. ft.	(a)	(a)	..	(a)	..	..	8,938,966
Dressed and Upper from Hides—							
Sold by Measurement—							
Patent sq. ft.	288,605	1,000,209	..	..	..	..	1,288,814
All Other	13,086,059	17,683,530	5,316,980	1,638,161	(a)	(a)	39,870,123
Sold by Weight (all kinds) lb.	55,774	191,649	(a)	129,846	(a)	(a)	408,227
Dressed from skins—							
Calf .. sq. ft.	4,051,635	4,385,787	(a)	(a)	38,611	(a)	9,504,464
Goat ..	4,916,781	(a)	(a)	(a)	..	..	5,460,300
Sheep ..	12,197,497	3,657,959	(a)	(a)	(a)	..	19,737,507
Marsupial ..	70,019	340,737	(a)	(a)	..	..	562,905

(a) Not available for publication; figures are included in the total for Australia.

18. *Tailoring and Ready-made Clothing Factories.*—(i) *Details for each State.* Statistics showing the distribution in 1947-48 of this industry between States are shown in the following table :—

TAILORING AND READY-MADE CLOTHING FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	848	411	142	139	123	24	1,687
Number of persons engaged ..	19,021	8,914	3,071	2,665	1,253	451	35,375
Value of land and buildings £	2,739,415	1,215,187	320,084	385,390	190,605	64,685	4,915,366
Value of plant and machinery £	728,979	299,183	66,917	34,021	25,314	10,961	1,215,375
Salaries and wages paid £	4,412,237	2,278,751	618,654	548,594	228,729	99,170	8,186,135
Value of power, fuel, etc., used £	77,127	45,164	10,650	11,285	3,962	1,532	149,720
Value of materials used £	8,199,453	4,978,547	1,098,265	602,350	275,879	78,230	15,232,733
Total value of output £	14,929,998	8,556,628	2,149,808	1,391,780	632,985	211,467	27,872,666
Value of production ..	6,653,418	3,532,917	1,040,593	778,145	353,144	131,696	12,490,213

(ii) *Total for Australia.* Details for the five years 1943-44 to 1947-48 compared with 1938-39 are as follows:—

TAILORING AND READY-MADE CLOTHING FACTORIES : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	1,177	1,160	1,268	1,420	1,576	1,687
Number of persons engaged ..	26,499	25,872	28,108	30,047	33,441	35,375
Value of land and buildings ..	£ 3,175,748	£ 3,453,279	£ 3,728,531	£ 4,141,384	£ 4,653,424	£ 4,915,366
Value of plant and machinery ..	£ 355,503	£ 567,800	£ 689,437	£ 828,695	£ 965,847	£ 1,215,375
Salaries and wages paid ..	£ 3,168,472	£ 4,543,027	£ 4,970,774	£ 5,506,614	£ 6,899,245	£ 8,186,135
Value of power, fuel, etc., used ..	£ 72,431	£ 98,915	£ 104,945	£ 116,616	£ 133,904	£ 149,720
Value of materials used ..	£ 4,946,519	£ 8,843,064	£ 9,416,961	£ 9,616,801	£ 12,255,029	£ 15,232,733
Total value of output ..	£ 9,830,646	£ 16,189,527	£ 17,588,937	£ 18,614,368	£ 23,244,804	£ 27,872,666
Value of production ..	£ 4,811,696	£ 7,247,548	£ 8,067,031	£ 8,880,951	£ 10,855,871	£ 12,490,213

19. *Dressmaking, Hemstitching and Millinery Establishments.*—Particulars of dressmaking, hemstitching and millinery establishments in Australia for the five years ended 1947-48 compared with 1938-39 are shown in the following table:—

DRESSMAKING, HEMSTITCHING AND MILLINERY ESTABLISHMENTS : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	869	838	904	998	1,002	1,175
Number of persons engaged ..	16,398	13,822	15,604	18,051	20,437	20,893
Value of land and buildings ..	£ 2,051,611	£ 2,149,258	£ 2,335,994	£ 2,723,617	£ 2,956,635	£ 3,303,687
Value of plant and machinery ..	£ 189,263	£ 237,809	£ 279,771	£ 362,063	£ 438,127	£ 509,603
Salaries and wages paid ..	£ 1,652,868	£ 2,134,257	£ 2,436,294	£ 3,037,698	£ 3,768,483	£ 4,367,523
Value of power, fuel, etc., used ..	£ 33,067	£ 39,699	£ 45,088	£ 57,379	£ 66,489	£ 77,300
Value of materials used ..	£ 2,609,363	£ 4,093,738	£ 4,601,884	£ 5,280,433	£ 6,238,057	£ 8,300,052
Total value of output ..	£ 5,234,727	£ 7,874,479	£ 8,806,159	£ 10,507,792	£ 12,330,358	£ 15,665,395
Value of production ..	£ 2,592,297	£ 3,741,042	£ 4,159,187	£ 5,169,980	£ 6,025,812	£ 7,288,043

20. *Shirts, Collars and Underclothing.*—(i) *Details for each State.* Particulars of this industry are shown for 1947-48 in the following table:—

SHIRTS, COLLARS AND UNDERCLOTHING, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	194	142	18	32	18	..	404
Number of persons engaged ..	5,492	4,466	903	518	501	..	11,880
Value of land and buildings ..	£ 798,638	£ 685,879	£ 54,406	£ 50,226	£ 42,425	..	£ 1,631,574
Value of plant and machinery ..	£ 272,873	£ 210,535	£ 33,324	£ 18,679	£ 12,460	..	£ 547,871
Salaries and wages paid ..	£ 1,226,412	£ 1,003,249	£ 199,011	£ 99,269	£ 93,810	..	£ 2,621,751
Value of power, fuel, etc., used ..	£ 20,515	£ 19,268	£ 3,325	£ 1,594	£ 979	..	£ 45,681
Value of materials used ..	£ 3,165,167	£ 3,376,470	£ 220,190	£ 126,142	£ 178,218	..	£ 7,066,187
Total value of output ..	£ 5,117,236	£ 5,255,858	£ 518,379	£ 266,529	£ 307,827	..	£ 11,465,829
Value of production ..	£ 1,931,554	£ 1,860,120	£ 294,864	£ 138,793	£ 128,630	..	£ 4,353,961

(ii) *Total for Australia.* The following table shows the progress of the industry since 1938-39:—

SHIRTS, COLLARS AND UNDERCLOTHING : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	283	298	320	347	376	404
Number of persons engaged ..	11,081	9,716	9,984	9,903	11,184	11,880
Value of land and buildings ..	£ 945,972	£ 1,079,603	£ 1,145,703	£ 1,310,863	£ 1,425,838	£ 1,631,574
Value of plant and machinery ..	£ 230,579	£ 275,596	£ 315,196	£ 396,597	£ 468,581	£ 547,871
Salaries and wages paid ..	£ 1,142,855	£ 1,574,283	£ 1,673,929	£ 1,728,513	£ 2,252,398	£ 2,621,751
Value of power, fuel, etc., used ..	£ 23,639	£ 26,162	£ 27,707	£ 31,626	£ 40,538	£ 45,681
Value of materials used ..	£ 2,650,779	£ 4,874,577	£ 4,968,808	£ 4,445,741	£ 5,590,294	£ 7,066,187
Total value of output ..	£ 4,435,209	£ 7,339,928	£ 7,697,154	£ 7,078,821	£ 9,041,903	£ 11,465,829
Value of production ..	£ 1,760,791	£ 2,439,189	£ 2,700,639	£ 2,601,454	£ 3,411,071	£ 4,353,961

21. **Boot and Shoe Making.**—(i) *Boot and Shoe (not Rubber) Factories.* The boot and shoe factories hold an important place both in regard to employment afforded and extent of output. The following table relates to 1947-48 and refers to boot and shoe factories as distinct from those devoted to repairing and bespoke work. It has been necessary to include details of Boot and Shoe Repairing factories in Tasmania, in order to conceal confidential information for that State. Factories engaged in the manufacture of rubber boots and shoes are excluded, being classified under Rubber Goods (including Tyres made); *vide par.* 38.

BOOT AND SHOE (NOT RUBBER) FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas. (a)	Australia.
Number of factories ..	188	231	24	22	11	16	492
Number of persons engaged ..	7,626	11,039	1,347	1,413	638	167	22,230
Value of land and buildings ..	£ 789,090	909,639	74,098	93,545	53,495	20,845	1,940,712
Value of plant and machinery ..	£ 391,345	784,065	88,980	123,683	59,835	12,275	1,460,183
Salaries and wages paid ..	£ 2,214,984	3,302,882	368,955	387,775	165,294	43,164	6,483,054
Value of power, fuel, etc., used ..	£ 31,895	52,762	3,690	5,626	2,488	634	97,095
Value of materials used ..	£ 3,149,093	5,325,123	538,931	511,776	237,057	66,667	9,828,647
Total value of output ..	£ 6,347,017	10,332,454	1,049,949	990,306	403,041	124,918	19,307,685
Value of production ..	£ 3,166,029	4,954,569	507,328	472,904	223,496	57,617	9,381,943

(a) Includes details of Boot and Shoe Repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made at factories in each State are shown for 1947-48 in the following table. Particulars relating to the output of rubber boots and shoes are not included :—

BOOT AND SHOE (NOT RUBBER) FACTORIES : OUTPUT, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
--------------	--------	-----------	---------	----------	---------	------	------------

QUANTITY.

Boots and shoes .. pairs	5,634,230	7,804,988	935,047	1,149,311	587,175	91,830	16,202,581
Slippers	3,143,341	4,749,785	822,577	153,041	426,880	..	9,295,624
Uppers (b)	11,625	237,075	(a)	(a)	(a)	..	252,682

VALUE.

Boots and shoes ..	£ 5,148,867	6,908,202	749,122	907,075	288,171	79,909	14,081,346
Slippers	£ 819,260	1,346,660	225,200	37,543	132,511	..	2,561,174
Uppers (b)	£ 7,532	62,682	(a)	(a)	(a)	..	73,611

(a) Not available for publication ; figures are included in total for Australia.

(b) Made for other than factory use.

22. **Flour-milling.**—(i) *Details for States.* The following table shows the position of the grain-milling industry in each State for the year 1947-48.

FLOUR-MILLING, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	56	39	10	33	20	9	167
Number of persons engaged ..	1,674	1,260	401	607	526	155	4,623
Value of land and buildings ..	£ 991,760	715,429	197,492	267,493	250,555	82,458	2,505,196
Value of plant and machinery ..	£ 841,746	547,261	153,843	210,159	254,038	26,731	2,033,778
Salaries and wages paid ..	£ 701,324	517,704	145,747	240,422	224,103	55,733	1,885,035
Value of power, fuel, etc., used ..	£ 124,699	100,317	25,273	55,263	53,082	6,412	365,047
Value of materials used ..	£ 8,820,079	6,942,700	1,542,332	3,193,133	2,995,055	549,761	24,943,060
Total value of output ..	£ 10,489,850	8,015,452	1,928,302	3,611,307	3,439,428	628,577	28,112,916
Value of production ..	£ 1,545,072	972,435	360,697	362,911	391,290	72,404	3,704,809

(ii) *Production of Flour and By-products.* The production of flour by the mills in each State for the years 1938-39 and 1943-44 to 1947-48 was as follows :—

FLOUR-MILLING : PRODUCTION OF FLOUR.

(Tons of 2,000 lb.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1943-44 ..	496,853	409,190	125,603	149,892	159,799	17,153	1,358,490
1944-45 ..	516,168	393,036	124,473	194,967	161,690	22,534	1,412,868
1945-46 ..	451,895	315,525	95,984	164,986	166,791	22,657	1,218,838
1946-47 ..	541,469	449,170	98,232	202,366	176,727	21,695	1,489,659
1947-48 ..	552,784	501,325	108,022	215,155	197,104	23,753	1,598,143

The 1947-48 production of 1,598,143 tons of flour in Australia was valued at £21,979,405. In addition, 634,403 tons of bran and pollard, valued at £4,655,641, were made. The quantity of wheat ground was 76,926,847 bushels.

23. *Bakeries.*—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1947-48 is given in the table below. It should be noted, however, that the details refer only to establishments coming within the definition of a factory, as explained in § 1, par. 1, page 1092. For that reason there is a large number of bakehouses omitted, and consequently the table does not give complete details of the industry. This is true of all other industries covered by the statistics of manufacturing production, but, in view of the omission of such a large number of establishments in this instance, special mention is deemed necessary.

BAKERIES (INCLUDING CAKES AND PASTRY), 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	1,107	824	385	194	218	103	2,831
Number of persons engaged ..	6,597	4,473	2,386	1,231	805	1,322	16,814
Value of land and buildings £	3,710,891	2,035,796	645,540	409,435	333,406	388,865	7,524,933
Value of plant and machinery £	1,070,067	654,026	304,906	243,919	116,631	185,704	2,575,253
Salaries and wages paid £	1,800,734	1,179,604	573,516	355,797	183,354	367,430	4,460,435
Value of power, fuel, etc., used £	274,571	178,367	81,955	55,846	33,690	37,733	665,162
Value of materials used £	5,268,933	3,701,301	1,926,253	1,084,047	651,111	1,292,268	13,923,913
Total value of output £	9,225,808	6,324,892	3,263,834	1,866,005	1,094,280	1,940,605	23,656,024
Value of production .. £	3,682,304	2,445,224	1,252,626	666,712	409,479	610,604	9,066,949

(a) Includes confectionery.

24. *Sugar-mills.*—(i) *General.* Sugar-cane is grown in New South Wales and Queensland and particulars of area, yield, etc., are given in extended detail in Chapter XX. "Agricultural Production".

The products of the sugar-mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Particulars of cane crushed and sugar produced embodied in the following two tables refer to the quantities treated during the years ended 30th June, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced may differ slightly from those given in Chapter XX.—"Agricultural Production", which relate to harvest years.

(ii) *Details for New South Wales.* The following table gives details of the operations of sugar mills in New South Wales for the year 1938-39, and each year 1944-45 to 1947-48 :—

SUGAR-MILLS : NEW SOUTH WALES.

Items.	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories	3	3	3	3	3
Number of employees	212	246	283	297	236
Cane crushed tons	337,038	200,050	166,069	309,655	267,261
Raw sugar produced (94 net titre) tons	45,106	26,423	21,220	39,768	33,560
Molasses produced gals.	1,489,090	1,037,600	1,110,000	1,281,920	(a)

(a) Not available for publication.

(iii) *Details for Queensland.* Particulars relating to the operations of sugar-mills in Queensland are shown in the following table for the year 1938-39 and each year 1944-45 to 1947-48. Particulars of the seasonal distribution of molasses as recorded by the mills are also shown.

SUGAR-MILLS : QUEENSLAND.

Items.	1938-39.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories	33	32	32	31	32
Number of persons engaged	4,419	4,276	4,665	4,205	4,762
Cane crushed tons	5,432,193	4,398,268	4,551,971	3,717,330	4,150,986
Raw sugar produced (94 net titre)	775,064	643,520	644,661	512,086	571,694
Molasses—					
Sold to distillers and others gals.	8,275,887	9,136,862	9,380,679	10,691,581	8,256,892
Used as fodder	4,237,196	4,719,517	4,675,909	6,932,902	5,320,970
Used as manure	3,293,343	2,745,017	3,074,755	2,899,167	3,558,155
Run to waste	498,926	16,660	50,902	63,466	15,035
Burnt as fuel	3,748,590	2,251,737	1,748,299	954,970	1,427,775
Sold or used for other purposes	232,049	254,358	423,085	241,045	312,930
Total molasses disposed of	20,286,191	19,124,751	19,353,629	21,783,131	18,891,757

25. *Sugar Refineries.*—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1947-48 there were two sugar refineries in the States of Victoria and Queensland, and one in each of the States of New South Wales, South Australia and Western Australia. The quantity of raw sugar treated amounted to 452,468 tons, for a yield of 435,584 tons of refined sugar, valued at £14,715,758.

26. *Confectionery Factories.*—(i) *Details for each State.* The figures for 1947-48 are given hereunder:—

SUGAR CONFECTIONERY FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia. (b)
Number of factories	98	86	22	23	13	(a)	242
Number of persons engaged	3,084	2,718	441	427	391	(a)	7,061
Value of land and buildings £	870,392	550,078	96,912	111,060	80,530	(a)	1,709,572
Value of plant and machinery £	707,621	551,303	33,739	37,284	63,159	(a)	1,393,106
Salaries and wages paid £	918,362	794,842	90,682	98,627	75,517	(a)	1,978,030
Value of power, fuel, etc., used £	75,468	78,711	6,080	10,128	9,248	(a)	179,635
Value of materials used £	3,456,469	2,321,198	263,597	255,561	327,368	(a)	6,624,193
Total value of output £	5,594,325	4,075,657	545,409	422,028	490,985	(a)	11,128,404
Value of production £	2,062,388	1,675,748	275,732	156,339	154,369	(a)	4,324,576

(a) Not available for publication.

(b) Excludes Tasmania.

(ii) *Total for Australia, excluding Tasmania.* Particulars of the confectionery industry during the last five years are compared with 1938-39 in the following table. Confectionery establishments in Tasmania have been combined with bakeries in order to conceal confidential information. Production in Australia is more than sufficient to supply local requirements.

SUGAR CONFECTIONERY FACTORIES(a) : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	148	163	182	198	237	242
Number of persons engaged ..	7,256	5,796	5,795	5,965	6,574	7,061
Value of land and buildings £	1,423,406	1,451,329	1,480,439	1,559,321	1,649,081	1,709,572
Value of plant and machinery £	1,363,619	1,194,194	1,160,005	1,142,484	1,295,007	1,393,106
Salaries and wages paid £	1,040,984	1,258,561	1,298,281	1,389,479	1,660,411	1,978,030
Value of power, fuel, etc., used £	106,869	129,175	134,914	138,512	160,280	179,635
Value of materials used £	3,101,955	4,305,338	4,504,124	4,668,928	5,436,640	6,624,193
Total value of output £	5,627,247	7,642,094	7,933,135	8,121,623	9,281,800	11,128,404
Value of production ..	2,418,423	3,208,181	3,294,097	3,314,183	3,684,880	4,324,576

(a) Excludes Tasmania.

27. *Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar Factories.*—
(i) *Details for each State.* The following table gives particulars of factories included in this class for 1947-48 :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, ETC., FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	62	52	17	14	14	18	177
Number of persons engaged ..	3,323	1,368	845	1,003	258	1,264	11,061
Value of land and buildings £	801,467	1,092,770	256,949	231,428	65,560	313,816	2,761,990
Value of plant and machinery £	680,418	1,007,063	262,433	138,494	52,201	192,066	2,332,675
Salaries and wages paid £	1,125,199	1,465,618	257,902	297,548	59,962	446,531	3,652,763
Value of power, fuel, etc., used £	89,382	116,342	17,398	23,077	5,263	32,784	284,246
Value of materials used £	4,365,891	6,351,338	1,212,543	862,858	175,668	1,504,104	14,475,402
Total value of output £	6,508,215	9,014,490	1,680,933	1,322,182	272,914	2,189,609	21,588,403
Value of production ..	2,052,972	3,143,810	450,992	436,247	92,013	652,721	6,828,755

(ii) *Total for Australia.* Particulars of these establishments in Australia for the five years 1943-44 to 1947-48 compared with 1938-39 are given hereunder :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, ETC., FACTORIES : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	123	152	168	157	170	177
Number of persons engaged ..	6,476	11,416	12,858	11,403	10,700	11,061
Value of land and buildings £	1,382,150	2,055,850	2,409,005	2,183,654	2,406,588	2,761,990
Value of plant and machinery £	720,639	1,195,954	1,652,407	1,629,979	1,870,378	2,332,675
Salaries and wages paid £	1,148,991	2,740,715	3,065,087	2,947,366	3,018,713	3,652,763
Value of power, fuel, etc., used £	97,521	269,996	327,558	260,079	252,046	284,246
Value of materials used £	4,799,515	11,886,635	13,141,842	12,325,758	12,224,225	14,475,402
Total value of output £	7,230,914	16,985,506	19,169,509	17,664,531	18,291,803	21,588,403
Value of production ..	2,333,878	4,828,875	5,700,109	5,078,694	5,815,532	6,828,755

During the 1939-45 War production of jams and jellies expanded greatly and a high level of output of 171 million lb. was attained in 1943-44. Production afterwards receded but attained a new record of 198 million lb. in 1947-48. The peak output of fruit preserved in liquid also occurred in 1947-48 with 176,273,000 lb., compared with the previous highest level of 161.1 million lb. attained in 1940-41.

There has also been a marked development in the production of canned vegetables. In 1938-39 output totalled 10,255,000 lb. but, as a result of the war-time demand by the armed services, production reached the record level of 119,149,000 lb. in 1944-45. However, it has since declined to 46,331,000 lb. in 1947-48.

(iii) *Production.* The following table shows the quantity and value of jams, pickles, sauces and other items manufactured in each State in 1947-48 :—

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : OUTPUT, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY.							
Jams and Jellies .. '000 lb.	58,978	(a) 106,669	14,215	15,790	2,802	(b)	198,454
Fruit Pulp—							
Consumed in own works .. cwt.	53,478	39,764	2,411	18,738	30,740	48,131	193,262
For sale or addition to stock .. cwt.	32,845	88,342	(c)	20,304	(c)	553,375	745,919
Tomato Pulp—							
Consumed in own works .. cwt.	43,602	114,717	(c)	24,907	(c)	(c)	200,974
For sale or addition to stock .. cwt.	42,943	318,781	..	12,534	(c)	(c)	392,718
Fruit, preserved in liquid '000 lb.	30,057	103,468	24,235	14,030	(c)	(c)	176,273
Vegetables, preserved in liquid .. '000 lb.	25,480	12,903	(c)	(c)	(c)	(c)	46,331
Pickles .. '000 pints	3,750	2,724	(c)	1,809	365	(c)	8,775
Sauces .. " "	11,544	13,651	1,308	3,115	(c)	(c)	30,728
VALUE (£).							
Jams and Jellies ..	2,079,808	43,354,752	507,242	480,823	84,970	(b)	6,507,595
Fruit, preserved in liquid ..	1,122,203	3,211,062	827,617	364,026	(c)	(c)	5,076,760
Vegetables, preserved in liquid ..	1,282,431	531,980	(c)	(c)	(c)	(c)	2,153,142
Pickles ..	227,517	127,684	(c)	100,179	19,123	(c)	483,909
Sauces ..	764,053	736,501	53,158	140,835	(c)	(c)	1,747,061

(a) Includes Tasmania.

(b) Included with Victoria.

(c) Not available for publication; figures are included in total for Australia.

28. *Bacon-curing Factories.*—(i) *Details for each State.* The table hereunder gives particulars of factories engaged in bacon-curing in each State for 1947-48 :—

BACON-CURING FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	34	20	8	12	6	10	90
Number of persons engaged ..	573	729	763	319	309	67	2,760
Value of land and buildings £	272,619	251,883	230,557	118,927	57,468	28,797	960,251
Value of plant and machinery £	103,442	111,637	144,810	58,613	31,711	9,130	459,343
Salaries and wages paid £	218,219	250,373	265,748	113,086	103,726	21,842	972,994
Value of power, fuel, etc., used £	28,411	36,148	29,643	22,617	17,619	2,803	137,241
Value of materials used £	2,194,212	2,161,720	2,482,979	1,176,825	1,207,674	268,406	9,491,816
Total value of output £	2,637,374	2,720,095	2,872,550	1,312,361	1,371,450	317,846	11,232,576
Value of production .. £	414,751	523,127	359,928	112,019	146,157	46,637	1,603,519

(ii) *Quantity and Value of Production.* The number of pigs cured and the quantity and value of production of factories in each State for 1947-48 are shown in the following table :—

BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
PIGS CURED.							
Pigs cured on own account ..	217,287	231,645	234,177	107,116	91,639	26,175	908,030
Pigs cured on commission ..	26,228	2,950	(b)	358	263	(b)	30,468
Total	243,515	234,595	(b)	107,474	91,902	(b)	938,507
PRODUCTS (TONS).							
Bacon and ham	14,113	11,086	9,671	4,644	4,232	1,275	45,021
Lard	426	617	895	256	278	90	2,562
VALUE (£).							
Bacon and ham (a)	1,791,602	2,023,052	1,569,467	795,671	688,310	208,775	7,076,877
Lard	33,878	59,725	82,306	18,232	23,111	6,620	223,872

(a) Partly estimated.

(b) Not available for publication ; figures are included in total for Australia.

Bacon and ham and other pig products are dealt with more fully in Chapter XXI.—“ Farmyard, Dairy and Bee Products ”.

29. **Butter, Cheese and Condensed Milk Factories.**—(i) *Details for each State.* The following table gives particulars of butter, cheese and condensed milk factories in each State for 1947-48 :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	107	148	101	46	15	29	449
Number of persons engaged ..	2,069	4,446	1,575	927	307	318	9,642
Value of land and buildings £	1,021,874	1,730,366	777,483	287,810	103,095	152,305	4,072,933
Value of plant and machinery £	1,211,336	1,530,640	884,594	260,987	145,014	123,844	4,156,415
Salaries and wages paid £	771,663	1,755,797	531,895	319,253	104,060	95,340	3,578,020
Value of power, fuel, etc., used £	217,852	115,156	120,975	66,991	30,083	22,939	873,999
Value of materials used £	5,440,175	17,212,792	12,953,786	3,162,555	1,550,207	1,099,803	44,419,318
Total value of output £	10,065,655	21,346,980	13,879,391	3,933,001	1,833,796	1,344,128	52,402,951
Value of production .. £	1,407,628	3,719,032	804,630	703,452	253,506	221,386	7,109,634

(ii) *Total for Australia.* The progress of industries included in this group during the five years 1943-44 to 1947-48 is compared with 1938-39 in the following table :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	523	472	469	462	460	449
Number of persons engaged ..	6,851	8,712	8,694	8,806	9,223	9,642
Value of land and buildings £	2,880,323	3,360,498	3,429,238	3,506,020	3,689,495	4,072,933
Value of plant and machinery £	3,066,840	3,499,065	3,487,660	3,597,366	3,690,273	4,156,415
Salaries and wages paid £	1,569,531	2,526,017	2,566,477	2,737,217	3,014,595	3,578,020
Value of power, fuel, etc., used £	389,501	708,211	701,016	755,755	781,736	873,999
Value of materials used £	29,161,983	35,300,830	31,535,021	34,990,910	35,619,549	44,419,318
Total value of output £	33,094,851	40,703,304	37,100,708	40,771,127	42,134,803	52,402,951
Value of production .. £	3,543,367	4,694,263	4,864,671	5,024,462	5,733,516	7,109,634

(iii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced and the quantities of milk used in their production during 1947-48. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED MILK FACTORIES : PRODUCTION, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MILK USED ('000 GALLONS).							
For the manufacture of—							
Butter	157,838	260,022	210,593	40,159	32,054	22,862	723,528
Cheese	5,963	34,761	21,536	24,514	2,253	1,013	90,040
Condensed, Dried and other Milk Products (incl. Ice Cream)(b) ..	20,380	51,328	(a)	3,000	(a)	(a)	78,311
PRODUCTS (TONS).							
Butter	33,958	56,717	46,454	9,043	6,974	4,441	157,587
Cheese	2,637	16,167	(c) 9,641	11,530	1,019	447	41,441
Condensed and concentrated milk	11,377	38,368	(a)	(a)	(a)	..	59,039
Powdered milk	4,528	15,426	(a)	(a)	..	(a)	20,394
VALUE (£'000).							
Butter	7,003	11,767	9,558	1,931	1,380	920	32,559
Cheese	371	1,950	(c) 1,150	1,378	126	51	5,026
Condensed and concentrated milk	641	2,880	(a)	(a)	(a)	..	4,415
Powdered milk	780	1,902	(a)	(a)	..	(a)	2,725

(a) Not available for publication; figures are included in total for Australia. (b) Includes Whole Milk equivalent of cream and butter fat purchased as such. (c) Includes 181 tons of cheese, valued at £18,902, made in establishments not classified as factories.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXI.—“Farmyard, Dairy and Bee Products”

30. **Meat and Fish Preserving Works.**—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. The substitution of chilled for frozen meat exported has already been referred to in Chapter XIX.—“Pastoral Production”. In recent years there has been considerable expansion in the canning of meat and fish.

MEAT AND FISH PRESERVING WORKS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	8	16	20	16	12	9	81
Number of persons engaged ..	668	1,077	5,112	314	444	268	7,883
Value of land and buildings £	141,994	351,786	1,678,043	68,135	449,135	94,822	2,783,915
Value of plant and machinery £	119,081	178,011	852,436	52,484	452,245	51,704	1,705,961
Salaries and wages paid £	224,830	387,587	2,269,243	91,823	169,913	88,710	3,232,106
Value of power, fuel, etc., used £	27,861	37,700	249,327	9,146	22,735	6,180	352,955
Value of materials used £	1,147,277	2,357,266	12,729,504	564,836	662,180	261,017	17,722,080
Total value of output £	1,541,668	3,162,127	15,994,160	720,930	967,470	464,635	22,850,930
Value of production	306,470	767,161	3,015,329	146,948	282,555	197,432	4,775,895

Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XIX.—“Pastoral Production”.

31. **Breweries.**—(i) *Details for each State.* The following table gives particulars of breweries in each State for the year 1947-48. It should be noted, however, that the data shown below are not strictly comparable throughout, owing to the inability or failure of some breweries to furnish a separate return for each branch of activity. Consequently the figures for some States include details of employment, wages, output, etc., not connected with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

BREWERIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	6	7	6	5	6	2	32
Number of persons engaged ..	1,428	1,651	493	(a)	479	(a)	4,677
Value of land and buildings £	1,218,374	708,287	524,664	(a)	267,614	(a)	3,241,603
Value of plant and machinery £	676,834	881,287	339,177	(a)	200,553	(a)	2,795,685
Salaries and wages paid £	600,586	759,332	202,473	(a)	216,631	(a)	2,029,578
Value of power, fuel, etc., used £	164,635	110,950	52,115	(a)	54,886	(a)	452,699
Value of materials used £	1,620,076	1,654,331	484,600	(a)	607,983	(a)	5,108,560
Total value of output (b) £	4,405,365	3,156,136	1,404,867	(a)	1,472,925	(a)	11,954,243
Value of production ..	2,620,654	1,390,855	868,152	(a)	810,056	(a)	6,392,894

(a) Not available for publication; figures are included in total for Australia.

(b) Excludes Excise Duty.

(ii) *Total for Australia.* The next table shows the extent of this industry for 1938-39 and the five years 1943-44 to 1947-48:—

BREWERIES : AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46	1946-47.	1947-48.
Number of factories ..	34	33	33	33	33	32
Number of persons engaged ..	3,698	3,873	3,919	4,121	4,516	4,677
Value of land and buildings £	2,801,147	3,196,938	3,188,239	3,185,582	3,215,403	3,241,603
Value of plant and machinery £	2,737,042	2,505,508	2,458,703	2,484,442	2,617,866	2,795,685
Salaries and wages paid £	1,215,473	1,444,363	1,496,658	1,586,366	1,805,196	2,029,578
Value of power, fuel, etc., used £	121,286	339,482	338,913	351,184	425,596	452,699
Value of materials used £	3,406,572	4,015,503	4,142,863	4,255,684	4,998,158	5,108,560
Total value of output £	9,030,309	9,969,828	10,151,935	10,476,340	12,267,499	11,954,243
Value of production £	5,372,451	5,614,843	5,670,159	5,869,472	6,843,715	6,392,894

The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter increased each year to 109.2 million gallons in 1941-42. Under the Control of Liquor Order which operated between March, 1942 and March, 1946, the production of beer was restricted and consequently output remained static at about 100 million gallons from 1942-43 to 1944-45. Production rose to 125 million gallons in 1947-48 and to 148 million gallons in 1948-49.

The average annual consumption of ale, stout and beer prior to the economic depression of the early thirties exceeded 11 gallons per head of the population; it dropped to 7.32 gallons in 1931-32, increased to 13.76 gallons in 1941-42 and declined again to about 13 gallons during the period of control. In 1947-48 the consumption per head increased to 15.47 gallons.

(iii) *Materials Used and Production.* The table below shows the quantities of raw materials used and the quantity and value of ale, stout and beer brewed in each State during 1947-48:—

BREWERIES : MATERIALS USED AND PRODUCTION, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
RAW MATERIALS USED.							
Malt .. bushels	1,298,607	1,230,794	412,401	394,850	(b)	(b)	3,926,802
Hops .. lb.	399,076	921,979	309,586	311,351	(b)	(b)	2,805,555
Sugar .. cwt.	190,740	142,920	53,840	40,960	(b)	(b)	466,780

RAW MATERIALS USED PER 1,000 GALLONS OF ALE, STOUT AND BEER PRODUCED.

Malt .. bushels	28.46	31.46	29.46	35.76	36.19	41.65	31.37
Hops .. lb.	19.71	23.57	22.72	30.92	21.26	20.96	22.42
Sugar .. cwt.	4.41	3.65	3.95	3.71	2.49	2.25	3.73

ALE, STOUT AND BEER BREWED.

Quantity .. gallons	45,626,466	39,123,475	13,624,672	11,040,366	(b)	(b)	125,158,216
Value (a) .. £	4,320,734	3,128,763	1,399,684	1,145,486	(b)	(b)	11,782,943

(a) Excludes Excise Duty.

(b) Not available for publication; figures are included in total for Australia.

32. **Distilleries.**—Distilleries are located in all the States except Tasmania. The following table, which has been compiled from returns of the Excise Branch of the Department of Trade and Customs, shows the materials used in distilleries in Australia and the quantity of spirits distilled therefrom for the years 1943-44 to 1947-48 compared with the year 1938-39.

DISTILLERIES : AUSTRALIA.

Particulars.	Unit of Quantity.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
PRINCIPAL MATERIALS USED.							
Barley Malt	bus.	89,528	240,386	245,306	296,002	349,070	340,000
Barley	"	80,548	170,954	145,993	208,847	263,460	172,644
Wheat	"	"	706,712	683,350	108,590	90,503	16,497
Malted Wheat	"	"	11,495	14,209	46,912	27,190	27,900
Maize	"	7,643	18,208	55,625	58,688	15,532	52,640
Molasses	cwt.	1,405,271	1,086,747	1,158,870	1,158,439	1,808,517	1,849,988
Sugar	"	"	1,078,714	477,906	522,982	86,433	44,655
Sugar Syrup	"	"	321,183	268,509	240,216	100,294	91,204
Wine	gal.	11,364,208	12,631,059	10,420,236	15,749,146	19,804,495	18,916,227
Raisins	cwt.	19,521	15,031	44,455	14,477	47,386	36,690

SPIRITS DISTILLED (PROOF GALLONS).

From—						
Barley and other Grain						
Malt	434,578	3,710,810	3,778,128	1,836,659	1,978,708	1,782,439
Molasses and Sugar	7,025,416	18,566,633	12,463,738	11,842,105	10,959,334	10,672,356
Wine and Wine Lees	2,249,265	2,365,028	1,872,533	2,879,030	3,440,071	3,983,384
Other	7,305	76,304	158,079	105,117	143,971	270,978
Total	9,716,564	24,718,775	18,272,578	16,662,911	16,522,084	16,709,157
Spirits denatured	4,553,152	18,391,976	12,219,648	8,780,290	8,288,830	7,819,271

33. **Tobacco, etc., Factories.**—(i) *Details for each State.* During 1947-48 there were 33 establishments in which the manufacture of tobacco, cigars or cigarettes was carried on. There are no such factories in Tasmania.

TOBACCO, CIGAR AND CIGARETTE FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	12	15				33
Number of persons engaged	2,986	2,282	(a) 4	(a) 1	(a) 1	5,470
Value of land and buildings	£ 702,363	£ 412,238	(a)	(a)	(a)	£ 1,143,363
Value of plant and machinery	£ 503,446	£ 407,404	(a)	(a)	(a)	£ 932,616
Salaries and wages paid	£ 936,463	£ 692,398	(a)	(a)	(a)	£ 1,076,954
Value of power, fuel, etc., used	£ 37,893	£ 22,876	(a)	(a)	(a)	£ 62,339
Value of materials used	£ 9,295,718	£ 5,065,656	(a)	(a)	(a)	£ 14,492,198
Total value of output	£ 11,061,168	£ 6,622,395	(a)	(a)	(a)	£ 17,915,412
Value of production	£ 1,727,557	£ 1,533,863	(a)	(a)	(a)	£ 3,360,875

(a) Not available for publication ; figures are included in total for Australia.

(ii) *Total for Australia.* This industry was among the first to be established in Australia. In 1861 New South Wales had eleven factories and Victoria one. The Australian market has for many years been largely supplied with local manufactures from the imported leaf. Imports during 1947-48 comprised—manufactured tobacco 517,036 lb., cigars 22,140 lb., and cigarettes 2,847,035 lb., and the quantities manufactured in

Australian factories were respectively 19,715,000 lb., 163,000 lb., and 10,147,000 lb. The following tables show the extent of the industry in Australia for the five years 1943-44 to 1947-48 compared with 1938-39:—

TOBACCO, CIGAR AND CIGARETTE FACTORIES: AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	30	25	25	26	31	33
Number of employees ..	5,544	5,112	5,203	5,255	5,641	5,470
Value of land and buildings £	1,041,798	968,985	952,066	959,192	1,159,772	1,143,363
Value of plant and machinery £	942,644	789,755	752,361	723,962	840,171	932,616
Salaries and wages paid £	1,095,912	1,243,646	1,230,863	1,300,481	1,536,796	1,676,954
Value of power, fuel, etc., used £	34,483	44,366	44,389	52,174	61,127	62,339
Value of materials used £	7,080,574	10,087,241	10,436,032	10,602,03*	13,657,189	14,492,198
Total value of output £	9,800,413	12,934,104	12,851,221	13,042,558	16,361,165	17,915,112
Value of production ..	2,685,356	2,802,497	2,370,800	2,388,349	2,645,549	3,360,875

LEAF USED AND PRODUCTION ('000 lb.).

Leaf used—						
Australian (stemmed) ..	4,899	4,951	4,658	4,685	3,611	2,924
Imported (stemmed) ..	16,011	19,202	18,704	18,822	23,411	23,675
Tobacco made ..	16,305	18,187	17,448	17,901	20,190	19,715
Cigars made ..	238	134	122	125	139	163
Cigarettes made ..	6,731	8,929	8,740	8,482	10,082	10,147

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw material. Increased import duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31. During the 1939-45 War about 4.7 million lb. of Australian-grown leaf was used annually but in subsequent years the figure fell to the 1947-48 level of 2.9 million lb. In this connexion, see Chapter XX.—“Agricultural Production”.

34. *Sawmills, etc.*—(i) *Details for States.* The most important industry in Class X. is that of sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town, they have been combined in the following tables, together with plywood and bark mills.

SAWMILLS, PLYWOOD AND BARK MILLS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	844	465	408	75	161	288	2,241
Number of persons engaged ..	8,834	5,577	6,947	1,711	2,639	2,103	27,811
Value of land and buildings £	1,383,427	704,767	594,714	319,992	236,703	141,914	3,291,577
Value of plant and machinery £	1,560,975	1,107,469	882,104	232,510	430,901	457,411	4,677,370
Salaries and wages paid £	2,768,536	1,741,359	2,005,475	567,441	793,098	601,142	8,537,051
Value of power, fuel, etc., used £	175,847	121,053	101,583	26,022	67,052	41,114	534,171
Value of materials used £	7,317,056	4,852,181	3,548,831	1,861,790	1,228,739	1,162,636	19,971,233
Total value of output £	12,336,328	8,212,213	6,896,665	2,846,343	2,543,173	2,121,139	34,958,061
Value of production ..	4,813,625	3,238,379	3,240,251	957,631	1,249,382	917,389	14,452,657

(ii) *Total for Australia.* Comparative statistics for 1938-39 and 1943-44 to 1947-48 are shown in the following table:—

SAWMILLS, PLYWOOD AND BARK MILLS: AUSTRALIA.

Items.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.	1947-48.
Number of factories ..	1,660	1,622	1,645	1,765	1,996	2,241
Number of persons engaged ..	19,104	23,023	20,608	22,591	25,723	27,811
Value of land and buildings £	2,054,611	2,163,399	2,256,446	2,523,249	2,840,497	3,291,577
Value of plant and machinery £	2,765,716	3,162,761	3,165,992	3,460,945	4,079,916	4,677,370
Salaries and wages paid £	3,634,627	5,087,183	5,315,207	5,841,968	7,119,598	8,537,051
Value of power, fuel, etc., used £	225,782	325,212	344,560	375,437	449,405	534,171
Value of materials used £	8,522,895	10,871,168	11,016,417	12,174,016	16,001,148	19,971,233
Total value of output £	14,537,888	19,278,114	20,033,902	21,707,972	27,889,108	34,958,061
Value of production ..	5,789,211	8,081,734	8,672,925	9,158,519	11,438,555	14,452,657

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in 1938-39 and stood at 1,117 million super. feet in 1947-48. Further reference is made to the sawmilling industry in Chapter XXII.—“Forestry”.

35. Cabinet and Furniture Making and Upholstery Factories.—These industries constitute the principal manufactures in Class XI. The following table gives particulars for each State in 1947-48:—

CABINET AND FURNITURE MAKING AND UPHOLSTERY FACTORIES, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	392	394	148	105	141	55	1,235
Number of persons engaged ..	5,039	4,028	2,244	1,448	1,115	558	14,432
Value of land and buildings £	1,121,997	983,765	330,239	238,373	220,411	89,385	2,984,170
Value of plant and machinery £	339,103	276,043	115,868	94,231	90,015	27,649	942,909
Salaries and wages paid £	1,626,405	1,184,661	639,450	414,654	275,932	133,780	4,274,891
Value of power, fuel, etc., used £	38,368	26,194	13,070	10,880	5,225	2,578	96,315
Value of materials used £	2,910,288	1,955,479	989,132	735,465	520,138	157,013	7,267,515
Total value of output £	5,472,077	4,070,545	1,970,485	1,398,384	1,009,482	364,618	14,285,591
Value of production ..	£ 2,523,421	2,088,872	968,283	652,039	484,119	205,027	6,921,761

36. Printing Works.—Printing and bookbinding works rank high in importance among the industries of Australia, and in 1947-48 afforded employment for about 31,000 employees, and paid nearly £10,914,000 in salaries and wages, while the value of output amounted to £34,141,000. The first table below gives particulars of establishments engaged in general printing in each State for 1947-48. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table to follow:—

GOVERNMENT AND GENERAL PRINTING WORKS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	389	396	89	66	68	18	1,026
Number of persons engaged ..	8,126	6,944	2,225	1,389	1,121	540	20,345
Value of land and buildings £	1,797,786	1,790,022	383,927	263,987	234,002	136,122	4,065,846
Value of plant and machinery £	1,459,486	1,158,304	220,336	248,316	154,949	80,672	3,322,063
Salaries and wages paid £	2,734,338	2,309,516	623,186	419,025	310,268	176,756	6,573,089
Value of power, fuel, etc., used £	58,216	54,464	13,998	9,796	7,523	3,563	147,560
Value of materials used £	3,722,371	3,445,530	826,567	447,269	436,248	174,921	9,052,906
Total value of output £	8,357,508	7,058,202	1,849,683	1,120,180	995,107	450,257	19,830,937
Value of production ..	£ 4,576,921	3,558,208	1,009,118	663,115	551,336	271,773	10,630,471

NEWSPAPERS AND PERIODICALS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	182	118	55	35	32	7	429
Number of persons engaged ..	5,271	2,655	1,470	780	598	269	11,043
Value of land and buildings £	1,907,928	792,716	501,031	344,318	252,490	46,535	3,845,018
Value of plant and machinery £	1,575,584	535,178	321,188	168,582	115,021	75,321	2,790,874
Salaries and wages paid £	2,000,753	1,064,651	534,799	297,120	241,439	111,743	4,340,505
Value of power, fuel, etc., used £	74,799	36,273	24,380	10,224	11,300	3,894	160,870
Value of materials used £	3,423,774	1,811,789	667,587	376,199	285,600	85,132	6,640,681
Total value of output £	7,281,812	3,567,925	1,570,815	891,719	699,860	291,903	14,310,035
Value of production ..	£ 3,783,639	1,719,864	884,818	505,296	402,960	202,877	7,499,484

37. **Paper Making.**—Although the paper manufacturing industry has been established in Australia for many years it was not until the manufacture of paper pulp from indigenous timber commenced in 1938–39 that any marked development occurred.

Plants producing pulp from eucalypt timber are operating in Victoria and Tasmania whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in 1938–39 to 88,000 tons in 1946–47, and then dropped slightly to 86,000 tons in 1947–48.

The number of factories operating in 1947–48 comprised two in New South Wales, five in Victoria, one in Queensland, South Australia and Western Australia and two in Tasmania. In the latter State, newsprint, writing and printing papers are produced and in the other States wrappings, other papers and boards. Particulars for this industry are given in the following table for the years 1938–39 and 1943–44 to 1947–48.

PAPER MAKING, INCLUDING PULP MILLS : AUSTRALIA.

Items.	1938–39.	1943–44.	1944–45.	1945–46.	1946–47.	1947–48.
Number of factories ..	7	12	12	12	12	12
Number of persons engaged ..	1,961	4,758	4,625	4,705	5,078	5,260
Value of land and buildings £	849,578	1,491,848	1,521,410	1,525,187	1,659,960	1,832,994
Value of plant and machinery £	1,712,662	3,178,251	2,920,885	2,509,426	2,923,957	3,584,740
Salaries and wages paid £	466,548	1,526,609	1,525,871	1,577,146	1,933,049	2,350,435
Value of power, fuel, etc., used £	200,998	586,710	596,399	598,979	782,038	849,308
Value of materials used £	1,095,318	4,047,788	4,081,491	3,802,205	4,056,766	4,978,685
Total value of output £	2,301,531	7,954,232	8,094,486	7,417,772	8,656,231	10,258,026
Value of production .. £	1,005,215	3,319,734	3,416,596	3,016,588	3,817,427	4,430,033

38. **Rubber Goods (Including Tyres made).**—The following table gives particulars of this industry for each State during 1947–48 :—

RUBBER GOODS (INCLUDING TYRES MADE), 1947–48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	22	32	4	7	2	..	67
Number of persons engaged ..	4,422	3,790	532	296	8	..	9,048
Value of land and buildings £	685,173	641,989	44,901	25,125	2,208	..	1,399,396
Value of plant and machinery £	627,273	773,759	28,267	36,018	479	..	1,465,796
Salaries and wages paid £	1,848,535	1,598,519	176,690	88,215	1,742	..	3,743,701
Value of power, fuel, etc., used £	216,609	274,064	11,714	7,497	148	..	510,122
Value of materials used £	4,881,597	4,556,620	298,630	112,175	2,720	..	9,851,742
Total value of output £	7,237,901	7,740,934	593,700	265,138	7,178	..	15,844,851
Value of production .. £	2,130,605	2,910,250	283,356	145,466	4,310	..	5,482,987

39. **Electric Light and Power Works.**—(i) *Details for each State.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1938–39 the production of electric light and power has increased from 4,688 to 8,360 million K.W.H. in 1947–48, or by 78 per cent. Particulars for the year 1947–48 are as follows :—

ELECTRIC LIGHT AND POWER WORKS, 1947–48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	93	67	46	41	113	3	363
Number of persons engaged ..	3,613	1,979	796	1,052	860	120	8,426
Value of land and buildings £	4,393,949	2,623,327	825,425	1,531,242	517,470	605,674	10,497,087
Value of plant and machinery £	11,638,150	10,776,345	2,854,345	4,046,942	2,023,804	3,479,027	31,818,613
Salaries and wages paid £	1,742,954	966,791	356,456	401,883	355,597	50,347	3,873,938
Value of power, fuel, etc., used £	4,220,329	1,861,044	1,182,895	1,056,118	1,129,368	181	9,449,935
Value of materials used £	750,765	196,701	216,575	56,630	94,604	18,710	1,333,085
Total value of output £	11,477,638	4,248,220	2,129,294	2,084,726	1,749,806	159,475	21,849,159
Value of production .. £	6,506,544	2,190,475	729,824	971,978	525,834	140,584	11,065,239

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 1097.

(ii) *Production.* The increase in the production of electric light and power in each of the States since 1938-39 is shown in the following table:—

ELECTRIC LIGHT AND POWER WORKS: PRODUCTION.
(⁰⁰⁰ K.W.H.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39	1,948,490	1,222,505	387,368	256,283	307,002	566,691	4,688,339
1943-44	2,826,132	1,777,769	563,489	393,794	313,261	801,945	6,676,390
1944-45	2,877,336	1,817,347	602,451	409,866	329,865	802,151	6,839,016
1945-46	2,831,801	1,904,403	612,672	402,134	338,799	819,958	6,909,767
1946-47	3,228,670	2,001,994	655,797	458,899	378,266	803,801	7,527,427
1947-48	3,546,345	2,259,938	759,080	519,531	402,300	872,680	8,359,874

40. *Gas-works.*—(i) *Details for each State.* Gas-works are in operation in the majority of important towns in Australia. New South Wales returned seven coke factories and Queensland one, working as separate industries, but under the present classification these are included in Class I.—Treatment of Non-metalliferous Mine and Quarry Products. The following table gives particulars of gas-works in each State for the year 1947-48:—

GAS-WORKS, 1947-48.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	39	39	16	3	4	2	103
Number of persons engaged ..	1,361	1,337	397	388	(a)	(a)	3,718
Value of land and buildings £	848,371	609,894	203,365	27,466	(a)	(a)	1,814,838
Value of plant and machinery £	3,103,555	4,433,182	688,011	1,181,435	(a)	(a)	10,004,594
Salaries and wages paid £	645,788	577,636	150,220	171,975	(a)	(a)	1,643,435
Value of power, fuel, etc., used £	491,936	44,307	12,161	2,777	(a)	(a)	594,989
Value of materials used £	2,137,477	1,968,606	419,037	398,259	(a)	(a)	5,254,838
Total value of output £	4,486,685	3,114,351	791,086	644,103	(a)	(a)	9,521,793
Value of production	£ 1,857,272	1,101,438	359,888	243,067	(a)	(a)	3,671,966

(a) Not available for publication; figures are included in total for Australia.

(ii) *Coal Used and Production.* The following table gives details for 1947-48:—

GAS-WORKS: COAL USED AND PRODUCTION, 1947-48.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
COAL USED.							
Coal tons	887,594	709,512	179,675	126,228	(a)	(a)	1,981,733
PRODUCTS.							
Gas produced '000 cubic ft.	18,092,738	12,166,559	2,660,715	(a)	960,591	(a)	36,303,702
Gas sold '000 cubic ft.	15,758,281	10,769,564	2,344,334	(a)	870,480	(a)	31,865,153
Coke produced .. tons	585,098	389,505	84,459	75,190	(a)	(a)	1,170,545
Coke for sale .. tons	318,542	238,408	36,736	49,256	(a)	(a)	656,315

VALUE (£).

Gas sold	3,150,465	3,470,545	980,523	(a)	314,823	(a)	8,874,012
Coke for sale	457,732	517,422	47,739	137,712	(a)	(a)	1,193,974

(a) Not available for publication; figures are included in total for Australia.

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached 36 thousand million cubic feet in 1947-48.