

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 1945-46 and in the immediately preceding issue to the year 1943-44. Corresponding tables for 1944-45 may be found in the *Production Bulletin* 1944-45 No. 39, 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 four years 1942-43 to 1945-46 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
1942-43 ..	10,110	8,738	2,641	2,134	1,799	992	26,414
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

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 1942-43 to 1945-46 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 This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902.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.	1942-43.	1943-44.	1944-45.	1945-46.
I. Treatment of Non-metalliferous Mine and Quarry Products	564	412	417	458	591
II. Bricks, Pottery, Glass, etc.	471	322	289	318	170
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	666	770	816	862	886
IV. Industrial Metals, Machines, Implements and Conveyances	7,255	7,306	7,788	8,173	8,816
V. Precious Metals, Jewellery and Plate	290	262	258	267	337
VI. Textiles and Textile Goods	611	785	821	865	883
VII. Skins and Leather	533	529	563	581	651
VIII. Clothing	4,314	4,201	4,462	4,773	5,215
IX. Food, Drink and Tobacco	5,202	5,179	5,457	5,664	5,865
X. Woodworking and Basketware	2,822	2,689	2,799	2,873	3,148
XI. Furniture, Bedding, etc.	1,149	933	917	959	1,140
XII. Paper, Stationery, Printing, Bookbinding, etc.	1,816	1,681	1,673	1,688	1,703
XIII. Rubber	299	260	275	286	308
XIV. Musical Instruments	34	35	35	37	41
XV. Miscellaneous Products	413	576	624	650	714
Total, Classes I. to XV.	26,439	25,940	27,194	28,451	30,798
XVI. Heat, Light and Power	502	474	480	476	476
Grand Total	26,941	26,414	27,674	28,930	31,184

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. In 1943-44, however, a substantial increase occurred and has continued until 1945-46 when the number of factories in Australia reached the new high level of 31,184.

(ii) *States, 1945-46.* The following table shows the number of factories in each State in 1945-46, classified according to the nature of the industry :—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, 1945-46.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-Metalliferous Mine and Quarry Products ..	225	178	42	68	54	24	591
II. Bricks, Pottery, Glass, etc. ..	194	100	32	51	23	10	410
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	445	272	44	65	41	19	886
IV. Industrial Metals, Machines, Im- plements and Conveyances ..	3,530	2,934	773	661	688	230	8,816
V. Precious Metals, Jewellery and Plate ..	126	125	22	30	29	5	337
VI. Textiles and Textile Goods ..	290	490	23	38	27	15	883
VII. Skins and Leather ..	307	216	49	41	28	10	651
VIII. Clothing ..	2,287	1,933	320	329	283	63	5,215
IX. Food, Drink and Tobacco ..	2,037	1,656	809	592	503	268	5,865
X. Woodworking and Basketware ..	1,188	819	426	183	203	329	3,148
XI. Furniture, Bedding, etc. ..	370	372	114	108	120	56	1,140
XII. Paper, Stationery, Printing, Book- binding, etc. ..	686	618	147	115	109	28	1,703
XIII. Rubber ..	118	92	40	27	18	13	308
XIV. Musical Instruments ..	16	14	3	7	1	..	41
XV. Miscellaneous Products ..	329	268	38	32	40	7	714
Total, Classes I. to XV. ..	12,148	10,087	2,882	2,347	2,167	1,077	30,708
XVI. Heat, Light and Power ..	139	108	63	48	113	5	476
Grand Total ..	12,287	10,195	2,945	2,395	2,280	1,082	31,184

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

1. *General.*—The classification of factories previously in use 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.

Comparative details on the new basis are not available but those on the old basis are continued in par. 3 hereafter.

2. *States, 1945-46.*—The following table shows, for each State, the number of factories classified according to the number of persons engaged in 1945-46 :—

FACTORIES : CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1945-46.

Size of Factory (Persons engaged).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	3,536	3,065	753	585	996	334	9,269
4 ..	1,118	785	282	244	120	126	2,675
5 to 10 ..	3,304	2,520	858	707	587	345	8,321
11 to 20 ..	1,803	1,584	469	328	242	128	4,554
21 to 50 ..	1,490	1,286	326	322	218	86	3,728
51 to 100 ..	518	490	123	108	75	38	1,352
101 to 200 ..	282	247	96	58	32	15	730
201 to 300 ..	85	101	19	19	7	1	232
301 to 400 ..	43	46	3	5	..	3	100
401 to 500 ..	26	22	5	2	1	..	56
501 to 750 ..	41	27	5	8	1	4	86
751 to 1,000 ..	13	10	3	1	..	..	27
Over 1,000 ..	28	12	3	8	1	2	54
Total ..	12,287	10,195	2,945	2,395	2,280	1,082	31,184

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, 1945-46.

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	7,302	6,045	1,611	1,259	2,009	756	18,982
4	4,472	3,140	1,128	976	480	504	10,700
5 to 10	22,902	17,633	5,908	4,916	3,918	2,366	57,643
11 to 20	26,395	23,501	6,894	4,801	3,485	1,841	66,917
21 to 50	46,458	40,778	10,078	10,252	7,007	2,704	117,277
51 to 100	36,155	34,309	8,648	7,444	5,253	2,695	94,504
101 to 200	38,628	34,533	13,930	8,316	4,387	2,079	101,873
201 to 300	20,736	24,624	4,589	4,440	1,606	296	56,291
301 to 400	14,572	15,728	972	1,662	..	1,061	33,995
401 to 500	11,796	9,955	2,279	930	448	..	25,408
501 to 750	25,248	16,130	2,943	4,571	694	2,762	52,348
751 to 1,000	11,535	8,547	2,409	772	..	..	23,323
Over 1,000	49,575	22,870	5,082	14,498	2,119	3,156	97,300
Total	315,774	257,793	66,531	64,837	31,406	20,220	756,561
Average per Factory	25.70	25.29	22.59	27.07	13.77	18.69	24.26

3. Australia, 1938-39 and 1942-43 to 1945-46.—In the following table factories in Australia during 1938-39 and each of the four years 1942-43 to 1945-46 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- tablish- ments.	Persons en- gaged.	Es- tablish- ments.	Persons en- gaged.	Es- tablish- ments.	Persons en- gaged.	Es- tablish- ments.	Persons en- gaged.
1938-39—								
Number	21,982	120,505	4,013	170,071	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
1942-43—								
Number	21,032	123,039	4,104	173,187	1,278	469,175	26,414	765,401
Average per establishment	5.85	..	42.20	..	367.12	..	..	28.98
Percentage on total	79.62	16.08	15.54	22.63	4.84	61.29	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	5.85	..	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	..	303.92	..	..	24.26
Percentage on total	79.59	20.39	16.29	27.99	4.12	51.62	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 para. 2 below, 1,125 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, 22; Galvanized Ironworking, Tinsmithing, 34; Ready-made Tailoring and Clothing, 306; Dressmaking, 105; Millinery, 36; Bakeries, 145; Cabinet and Furniture Making, 20; all other industries, 440.

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 1945–46:—

FACTORIES(a) : RATED HORSE-POWER OF ENGINES, 1945–46.

State.	Number of Establishments.			Rated Horse-power of Engines.	
	Using Power.	Others.	Total.	Ordinarily in use.	In Reserve or Idle (omitting obsolete).
	No.	No.	No.	H.P.	H.P.
New South Wales	12,016	271	12,287	952,325	112,018
Victoria	9,851	344	10,195	654,026	99,005
Queensland	2,807	138	2,945	241,809	27,226
South Australia	2,234	161	2,395	187,144	28,605
Western Australia	2,102	178	2,280	86,337	7,531
Tasmania	1,049	33	1,082	89,792	11,221
Australia..	30,059	1,125	31,184	2,211,433	286,506

(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, 1945–46.

State.	Rated Horse-power of Engines ordinarily in use.								Total. (b)
	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	
N.S.W.	104,638	56,812	3,221	6,489	14,057	141	766,967	81,674	952,325
Victoria	29,543	37,725	3,501	4,709	10,392	1,389	566,677	60,389	654,026
Queensland	80,748	15,068	7,459	3,819	14,842	..	119,873	49,055	241,809
S. Australia	9,073	6,010	3,953	2,991	7,756	15	157,346	16,989	187,144
W. Australia	9,169	80	2,281	2,059	7,716	..	65,032	6,855	86,337
Tasmania	3,207	2,041	66	3,719	1,426	192	79,141	11,730	89,792
Australia	236,378	117,736	20,481	23,876	56,189	1,737	1,755,036	226,692	2,211,433

(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 1942-43 to 1945-46 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.								Total. (d)
	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
1938-39 ..	268,409	84,149	32,914	17,970	55,800	1,616	1,017,011	179,889	1,478,769
1942-43 ..	246,661	123,967	21,898	18,079	56,669	1,749	1,509,186	190,991	1,978,509
1943-44 ..	244,042	121,570	20,181	19,500	56,603	1,621	1,602,261	192,631	2,066,008
1944-45 ..	239,319	118,438	21,280	21,407	57,012	1,581	1,673,348	191,610	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

(a) Excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1945-46.* The next table shows the rated horse-power of engines ordinarily in use in the various classes of industry in each State during 1945-46.

FACTORIES(a) : RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1945-46.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.Aust.	W.Aust.	Tas.	Aust.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metallic Mine and Quarry Products ..	41,600	34,512	8,167	6,556	5,205	9,294	105,334
II. Bricks, Pottery, Glass, etc. ..	28,523	18,496	3,914	4,576	2,776	778	59,063
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	45,763	59,587	3,991	23,036	7,607	536	140,520
IV. Industrial Metals, Machines, Implements and Conveyances ..	483,189	180,632	53,523	77,248	22,367	19,450	836,409
V. Precious Metals, Jewellery and Plate ..	1,931	2,351	158	498	189	14	5,141
VI. Textiles and Textile Goods ..	31,693	60,923	3,300	5,638	1,216	4,231	107,051
VII. Skins and Leather ..	12,551	12,678	3,126	2,750	1,434	586	33,125
VIII. Clothing ..	14,113	16,232	1,577	1,708	1,005	314	34,949
IX. Food, Drink and Tobacco ..	130,056	112,445	117,287	34,664	24,370	9,397	428,219
X. Woodworking and Basket-ware ..	67,019	52,344	35,474	14,643	13,396	14,962	197,838
XI. Furniture, Bedding, etc. ..	10,315	8,576	3,614	3,679	2,275	976	29,435
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	34,707	48,264	5,002	7,860	3,082	28,660	127,575
XIII. Rubber ..	28,505	29,414	1,312	837	134	163	60,365
XIV. Musical Instruments ..	826	65	15	15	..	..	921
XV. Miscellaneous Products ..	9,595	10,144	272	699	449	276	21,435
Total, Classes I. to XV. ..	940,386	646,663	240,732	184,457	85,505	89,637	2,187,380
XVI. Gas Works ..	11,939	7,363	1,077	2,687	832	155	24,053
Grand Total ..	952,325	654,026	241,809	187,144	86,337	89,792	2,211,433

(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 1945-46 are given in the following table:—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA, 1945-46.

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.	25,682	2,268,641	22,034	3,076	159,456	365,007	2,843,896
Generators installed— Kilowatt capacity— Total installed .. K.W.	16,792	1,644,448	14,814	1,968	106,186	268,518	2,052,726
Effective capacity .. "	16,000	1,368,068	12,743	1,801	95,864	236,824	1,731,300
Maximum load .. "	13,627	1,114,273	10,138	1,481	70,819	213,936	1,423,676
Horse-power equivalent— Total installed .. H.P.	22,510	2,204,465	19,850	2,638	142,348	359,962	2,751,782
Effective capacity .. "	21,449	1,833,964	17,083	2,414	128,510	317,471	2,320,894
Maximum load .. "	17,463	1,493,739	13,591	1,985	91,936	286,795	1,908,509

(ii) States. Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1945-46 are given in the next table.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, 1945-46.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Engines installed Rated H.P.	1,203,094	740,178	289,886	200,398	156,930	253,410	2,843,896
Generators installed— Kilowatt capacity— Total installed .. K.W.	899,201	513,833	196,587	142,461	113,019	187,625	2,052,726
Effective capacity .. "	782,492	409,853	139,436	141,776	100,099	156,742	1,731,300
Maximum load .. "	483,145	468,410	125,436	130,970	80,816	134,899	1,423,676
Horse-power equivalent— Total installed .. H.P.	1,205,424	688,819	263,534	190,976	151,508	251,521	2,751,782
Effective capacity .. "	1,018,070	519,431	186,921	190,058	135,394	210,120	2,320,894
Maximum load .. "	647,680	627,927	168,153	175,572	108,338	180,839	1,908,509

§ 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) engine-drivers 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, 1936-37 to 1945-46.* Particulars of the number employed, the increase in employment and the rate per cent. of such increase are given for years 1936-37 to 1945-46 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.
1936-37 ..	381,412	24,858	6.97	142,536	6,319	4.64	523,948	31,177	6.33
1937-38 ..	408,602	27,190	7.13	150,558	8,022	5.63	559,160	35,212	6.72
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	160,720	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	75,269	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	7,461	0.98
1944-45 ..	535,803	-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

NOTE.—Minus sign (—) indicates decrease.

(iii) *States, 1938-39 and 1942-43 to 1945-46.* The following table shows, for each of the years 1938-39 and 1942-43 to 1945-46 (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
1942-43 ..	315,524	262,358	64,292	72,748	25,813	18,310	759,045
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
PERCENTAGE ON AUSTRALIAN TOTAL.							
1938-39 ..	% 40.48	% 35.72	% 9.58	% 7.67	% 4.11	% 2.44	% 100.00
1942-43 ..	41.58	34.56	8.47	9.58	3.40	2.41	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

FACTORIES : EMPLOYMENT—*continued.*

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PER 10,000 OF POPULATION.							
1938-39 ..	837	1,076	537	730	502	583	816
1942-43 ..	1,116	1,332	617	1,188	538	759	1,055
1943-44 ..	1,133	1,316	612	1,125	583	812	1,056
1944-45 ..	1,092	1,286	599	1,048	598	792	1,023
1945-46 ..	1,067	1,268	603	999	615	771	1,005

2. Rates of Increase, 1938-39 and 1942-43 to 1945-46.—The percentage increase on the average number of persons engaged in the preceding year is shown below for each State for 1938-39 and 1942-43 to 1945-46.

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
1942-43 ..	5.79	1.53	3.85	11.49	7.64	4.29	4.65
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

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 1942-43 to 1945-46.

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	10,343	8,001	7,701	7,933	9,929
II. Bricks, Pottery, Glass, etc. ..	15,709	10,428	9,616	10,459	13,466
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	19,816	54,101	42,551	36,340	31,471
IV. Industrial Metals, Machines, Implements and Conveyances ..	177,677	328,142	341,030	319,314	292,477
V. Precious Metals, Jewellery and Plate ..	3,725	2,358	2,373	2,397	3,240
VI. Textiles and Textile Goods ..	46,082	58,661	58,539	57,204	55,008
VII. Skins and Leather ..	10,767	12,056	12,708	12,474	14,492
VIII. Clothing ..	86,002	80,573	80,692	86,391	93,370
IX. Food, Drink and Tobacco ..	83,816	96,448	101,630	105,194	105,878
X. Woodworking and Basketware ..	30,739	33,658	34,827	35,382	38,346
XI. Furniture, Bedding, etc. ..	15,287	10,216	9,563	9,930	13,107
XII. Paper, Stationery, Printing, Book-binding, etc. ..	39,913	35,645	35,193	36,726	39,005
XIII. Rubber ..	7,502	7,178	7,961	7,970	8,699
XIV. Musical Instruments ..	451	392	392	392	459
XV. Miscellaneous Products ..	7,727	12,320	12,690	13,018	14,838
Total, Classes I. to XV. ..	555,677	750,177	757,436	741,126	734,685
XVI. Heat, Light and Power ..	9,429	8,868	9,070	9,453	10,573
Grand Total ..	565,106	759,045	766,506	750,579	745,258

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 the cessation of hostilities in 1945 and the relaxation of man-power control which permitted movement of employees between industries, Class III., Chemicals, etc.; Class IV., Metals, etc.; and Class VI., Textiles recorded lower levels of employment in 1945-46 while in each other class of industry a higher level of employment was recorded.

(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, 1945-46.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-ferrous Metal and Quarry Products	4,376	2,659	880	888	670	447	9,929
II. Bricks, Pottery, Glass, etc.	7,466	3,574	615	1,168	517	126	13,466
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	13,164	11,961	955	3,845	1,396	150	31,471
IV. Industrial Metals, Machines, Implements and Conveyances	136,602	88,421	21,617	29,395	10,869	5,573	292,477
V. Precious Metals, Jewellery and Plate	1,110	1,602	165	238	109	16	3,240
VI. Textiles and Textile Goods	18,341	29,889	1,297	2,334	740	2,407	55,008
VII. Skins and Leather	6,385	4,884	1,168	1,323	526	206	14,492
VIII. Clothing	37,651	38,552	6,614	6,111	3,568	874	93,370
IX. Food, Drink and Tobacco	35,474	33,811	17,825	9,244	5,189	4,335	105,878
X. Woodworking and Basketware	13,499	10,139	6,967	2,571	2,819	2,351	38,346
XI. Furniture, Bedding, etc.	4,937	3,724	1,697	1,336	872	441	13,127
XII. Paper, Stationery, Printing, Bookbinding, etc.	16,959	13,723	3,349	2,583	1,515	1,776	39,905
XIII. Rubber	3,990	3,644	535	283	155	112	8,699
XIV. Musical Instruments	311	83	23	37	5	...	459
XV. Miscellaneous Products	6,407	6,570	596	580	446	239	14,838
Total, Classes I. to XV.	306,722	253,236	64,312	61,986	29,376	19,053	734,685
XVI. Heat, Light and Power	4,148	3,013	1,148	1,202	880	182	10,573
Grand Total	310,870	256,249	65,460	63,188	30,256	19,235	745,258

4. *Persons Engaged According to Grade of Employment.*—(i) *General.* In the following table the average number of persons engaged in the States during 1945-46 are classified on the new basis according to the grade of their employment. 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 : GRADE OF EMPLOYMENT, 1945-46.

Average Number of Persons Engaged.

State	Working Pro-priators.	Managerial and Clerical Staff, etc.(a)	Chemists, Drafts-men, etc.	Foremen and Overseers.	Workers in Factory (Skilled and Un-skilled).	Carters (excluding Delivery only) and Messen-gers, etc. (b)	Total.
New South Wales	9,414	31,616	3,873	10,577	253,145	2,245	310,870
Victoria	8,089	24,236	3,255	9,439	208,725	2,505	256,249
Queensland	2,261	6,064	396	1,838	54,119	782	65,460
South Australia	1,695	6,441	737	2,216	51,744	355	63,188
Western Australia	1,379	2,445	181	941	25,092	218	30,256
Tasmania	682	1,767	240	638	15,757	151	19,235
Australia	23,520	72,569	8,682	25,649	608,582	6,256	745,258

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

(b) Including persons working regularly

(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. Individuals working for themselves are not included. The following table gives particulars of the average number of outworkers employed by factories in each State during the years 1938-39 and 1941-42 to 1944-45. 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.

FACTORIES : OUTWORKERS.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39	201	120	6	11	7	11	356
1941-42	469	191	10	17	4	11	702
1942-43	534	196	5	17	12	8	772
1943-44	531	289	4	19	12	7	862
1944-45	599	389	7	29	18	7	1,049

(a) In all tables relating to number of hands employed in factories, outworkers are included.

5. *Monthly Employment, 1938-39 and 1943-44 to 1946-47.*—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 1943-44 to 1946-47.

FACTORIES : MONTHLY EMPLOYMENT, AUSTRALIA.

Month.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.
MALES.					
July	387,693	518,181	518,841	518,734	571,662
August	389,979	519,135	518,672	519,122	579,354
September	391,576	519,747	517,013	511,909	583,281
October	393,977	520,687	516,152	505,753	584,007
November	395,192	519,233	515,695	503,296	575,255
December	394,438	520,147	515,384	489,040	564,055
January	385,742	519,367	512,269	513,396	565,550
February	392,656	521,480	513,880	533,761	574,034
March	395,146	520,558	515,455	543,347	578,469
April	391,005	518,197	514,414	547,253	580,792
May	393,609	518,178	513,232	553,980	589,070
June	390,973	518,176	514,501	558,428	593,202
Mean	391,780	519,424	515,459	524,835	578,228
FEMALES.					
July	147,282	227,382	217,633	204,705	193,337
August	149,294	228,134	216,491	204,150	195,225
September	151,159	229,206	215,491	199,331	196,271
October	152,473	229,104	213,686	193,587	197,480
November	152,806	228,373	212,604	191,689	197,874
December	151,165	226,958	211,507	183,899	196,748
January	141,853	223,991	207,464	184,810	193,565
February	151,883	223,900	210,401	188,632	198,264
March	154,854	225,144	212,206	192,699	200,737
April	152,614	222,457	209,147	192,084	199,467
May	150,693	218,648	207,556	192,215	199,341
June	148,601	217,430	206,335	192,137	199,893
Mean	150,390	225,060	211,710	193,328	197,350

FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA—continued.

Month.	1938-39.	1943-44.	1944-45.	1945-46.	1946-47.
PERSONS.					
July	534,975	745,563	736,474	723,439	764,999
August	539,273	747,269	735,163	723,272	774,579
September	542,735	748,953	732,504	711,240	779,552
October	546,450	749,791	729,838	699,340	781,487
November	547,998	747,606	728,219	694,985	773,129
December	545,603	747,105	726,891	672,939	760,803
January	527,595	743,358	719,733	698,206	759,113
February	543,939	745,380	724,281	722,393	772,298
March	550,000	745,702	727,661	736,046	779,206
April	543,619	740,654	723,561	739,337	780,259
May	544,302	736,826	720,788	746,195	788,411
June	539,574	735,606	720,836	750,595	793,095
Mean	542,170	744,484	727,169	718,163	775,578

6. Distribution of Employees According to Age.—(i) *Stats.* 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 in 1945-46 instead of three as in previous years. The particulars are collected as at June. The number employed in each age-group in June, 1946, are given below:—

FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1946.
(Excluding Working Proprietors.)

Age Groups.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
Under 16 years ..	2,451	3,449	1,237	829	739	311	9,016
16 years	5,110	3,884	1,370	1,074	823	372	12,633
17 "	6,233	4,263	1,460	1,233	882	410	14,481
18 "	7,273	4,736	1,616	1,269	836	466	16,196
19 "	5,892	4,073	1,376	1,056	643	406	13,446
20 "	5,581	3,880	1,235	1,012	551	398	12,657
21 " and over ..	203,801	155,504	42,386	45,438	19,993	12,877	479,999
Total	236,341	179,780	50,680	51,911	24,467	15,240	558,428

FEMALES.							
Under 16 years ..	2,265	3,007	1,020	885	478	226	7,881
16 years	4,032	3,130	815	679	552	220	9,437
17 "	4,667	3,510	818	802	548	259	10,604
18 "	5,091	3,963	856	947	558	341	11,756
19 "	4,747	3,530	779	869	496	287	10,708
20 "	4,816	3,435	756	804	425	277	10,513
21 " and over ..	56,701	54,632	6,378	8,018	2,950	2,559	131,238
Total	82,319	75,207	11,422	13,004	6,007	4,178	192,137

PERSONS.							
Under 16 years ..	4,716	6,456	2,257	1,714	1,217	537	16,897
16 years	9,142	7,014	2,185	1,753	1,375	601	22,070
17 "	10,900	7,773	2,278	2,033	1,430	660	25,085
18 "	12,364	8,699	2,472	2,216	1,394	807	27,952
19 "	10,639	7,603	2,155	1,925	1,139	693	24,154
20 "	10,397	7,315	1,991	1,816	976	675	23,170
21 " and over ..	260,502	210,136	48,764	53,456	22,943	15,436	611,237
Total	318,660	254,996	62,102	64,915	30,474	19,418	750,565

(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 1943 to 1946 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.	%	No.	%	No.	%	No.	%
MALES.								
1939 ..	16,109	4.12	76,418	19.55	298,446	76.33	390,973	100
1943 ..	14,538	2.79	64,036	12.30	442,062	84.91	520,636	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
FEMALES.								
1939 ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100
1943 ..	9,897	4.33	63,646	27.84	155,057	67.83	228,600	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
PERSONS.								
1939 ..	31,606	5.86	132,691	24.59	375,277	69.55	539,574	100
1943 ..	24,435	3.26	127,682	17.04	597,119	79.70	749,236	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

§ 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 1945-46 was one to nearly 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 1945-46 was about one to two. In the remaining States the ratio in 1945-46 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 1945-46 the ratio had declined to about the pre-war level of one female to nearly 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 four years 1942-43 to 1945-46:—

FACTORIES : MALES AND FEMALES ENGAGED.

State.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
MALES.					
New South Wales ..	167,172	223,669	226,824	223,770	227,454
Victoria ..	136,218	175,341	175,078	174,424	178,951
Queensland ..	43,941	50,325	50,322	51,483	53,587
South Australia ..	35,406	52,793	50,660	49,056	49,523
Western Australia ..	18,704	19,501	21,060	22,404	24,268
Tasmania ..	11,150	13,941	14,697	14,756	15,105
Australia ..	412,591	535,570	539,141	535,893	548,888
FEMALES.					
New South Wales ..	61,609	91,855	96,208	90,908	83,416
Victoria ..	65,613	87,017	86,253	83,213	77,298
Queensland ..	10,169	13,967	13,860	12,652	11,873
South Australia ..	7,965	19,955	18,909	16,416	13,665
Western Australia ..	4,507	6,312	7,041	6,742	5,988
Tasmania ..	2,652	4,369	5,094	4,755	4,130
Australia ..	152,515	223,475	227,365	214,686	196,370

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 1942-43 to 1945-46:—

ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES ENGAGED.

State.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
MALES.					
	%	%	%	%	%
New South Wales ..	1.69	3.14	1.42	- 1.35	1.65
Victoria ..	0.04	-0.20	- 0.15	- 0.37	2.60
Queensland ..	3.79	1.27	1.11	1.30	4.09
South Australia ..	- 2.39	5.76	- 4.04	- 3.17	0.95
Western Australia ..	- 0.30	3.54	8.00	6.38	8.32
Tasmania ..	4.40	4.12	5.42	0.40	2.37
Total ..	0.98	2.16	0.67	- 0.60	2.42
FEMALES.					
New South Wales ..	1.88	12.86	4.74	- 5.51	- 8.24
Victoria ..	- 0.03	5.21	- 0.88	- 3.52	- 7.11
Queensland ..	3.96	14.35	- 0.77	- 8.72	- 6.16
South Australia ..	1.98	30.14	- 5.24	-13.18	-16.76
Western Australia ..	3.06	22.66	11.55	- 4.25	-11.18
Tasmania ..	6.51	4.85	16.59	- 6.65	-13.14
Total ..	1.30	11.20	1.74	- 5.58	- 8.53

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 1942-43 to 1945-46:—

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
1942-43 ..	244	202	360	265	309	319	240
1943-44 ..	236	203	367	268	299	289	237
1944-45 ..	246	210	407	299	337	310	250
1945-46 ..	273	232	451	362	425	366	280

(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 1945-46, at 280 males per 100 females, it was slightly higher than pre-war.

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 1945-46 these industries accounted for 80.92 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 129 females to every 100 males and in Class VIII., Clothing, with 270 females per 100 males. The following tables show the average number of males and females engaged in each of these classes in 1945-46:—

MALES AND FEMALES ENGAGED IN PARTICULAR INDUSTRIES, 1945-46.

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
IV. Industrial Metals, etc. ..	121,060	78,383	20,360	26,725	10,178	5,323	262,038
VI. Textiles and Textile Goods ..	7,610	13,208	597	1,121	375	1,071	23,932
VIII. Clothing ..	9,964	11,025	1,567	1,527	803	267	25,133
IX. Food, Drink and Tobacco ..	23,637	23,811	15,366	6,803	3,995	2,067	76,569
All Other Classes ..	65,183	52,524	15,688	13,347	8,837	5,477	161,036
Total ..	227,454	178,951	53,557	49,523	24,268	15,105	548,888
FEMALES.							
IV. Industrial Metals, etc. ..	15,542	10,038	1,248	2,670	691	250	30,439
VI. Textiles and Textile Goods ..	10,731	16,681	700	1,213	365	1,336	31,026
VIII. Clothing ..	27,687	27,527	5,047	4,584	2,675	607	68,127
IX. Food, Drink and Tobacco ..	11,337	10,000	2,459	2,441	1,204	1,268	29,309
All Other Classes ..	17,619	13,052	2,419	2,757	1,053	569	37,469
Total ..	83,416	77,298	11,873	13,665	5,988	4,130	196,370

(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 are employed—and the relation of their number to that of the males so engaged are shown in the following table:—

FEMALES ENGAGED IN EACH INDUSTRY IN CLASS VIII., 1945-46.

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 ..	2,319	12,848	554	1,943	6,489	334	1,280	5,168	404
Waterproof and Oil-skin Clothing ..	32	171	534	85	208	245	6	28	467
Dressmaking, Hem-stitching ..	75	1,781	2,375	849	9,031	1,064	122	3,179	2,606
Millinery ..	128	1,137	888	214	938	438	39	558	1,431
Shirts, Collars and Underclothing ..	453	4,435	979	351	2,915	830	142	1,606	1,131
Foundation Gar-ments ..	83	957	1,153	107	784	733	14	144	1,029
Handkerchiefs, Ties and Scarves ..	90	600	667	42	223	531	..	..	..
Hats and Caps ..	581	659	113	436	254	58	28	106	379
Gloves ..	73	325	445	107	498	465	32	145	453
Boots and Shoes ..	3,055	2,998	98	4,939	4,525	92	1,515	1,232	81
Boot and Shoe Re-paring ..	1,430	96	7	746	25	3	636	48	8
Boot and Shoe ac-cessories ..	220	125	57	96	134	140	27	2	7
Umbrellas and Walk-ing Sticks ..	24	36	150	9	14	156	8	17	213
Dyeworks and Clean-ing (including Re-novating and Repairing) ..	1,392	1,444	104	1,013	1,053	104	405	675	167
Other ..	9	75	833	88	436	495	..	5	(b)
Total ..	9,964	27,687	278	11,025	27,527	250	4,254	12,913	304

(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 1943 to 1946.**—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 16,897 in June, 1946, 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 1943 to 1946.

FACTORIES : CHILDREN ENGAGED, JUNE.

State.	1939.	1943.	1944.	1945.	1946.
MALES.					
New South Wales	5,759	4,221	3,881	3,287	2,451
Victoria	6,167	5,251	5,031	4,607	3,449
Queensland	1,790	2,126	1,732	1,567	1,237
South Australia	1,296	1,506	1,232	1,066	829
Western Australia	705	878	753	763	739
Tasmania	392	556	485	416	311
Australia	16,109	14,538	13,114	11,706	9,016
FEMALES.					
New South Wales	7,084	3,158	3,014	2,870	2,265
Victoria	5,005	3,477	3,731	3,609	3,007
Queensland	1,334	1,308	1,017	992	1,020
South Australia	1,053	1,206	1,020	1,017	883
Western Australia	521	404	356	338	478
Tasmania	500	344	307	352	226
Australia	15,497	9,897	9,445	9,178	7,881
TOTAL.					
New South Wales	12,843	7,379	6,895	6,157	4,716
Victoria	11,172	8,728	8,762	8,216	6,456
Queensland	3,124	3,434	2,749	2,559	2,257
South Australia	2,349	2,712	2,252	2,083	1,714
Western Australia	1,226	1,282	1,109	1,101	1,217
Tasmania	892	900	792	768	537
Australia	31,606	24,435	22,559	20,884	16,897

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 five years 1939 and 1943 to 1946. In 1946 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.	1943.	1944.	1945.	1946.
	%	%	%	%	%
New South Wales ..	5.85	2.35	2.23	2.04	1.48
Victoria ..	5.81	3.43	3.51	3.32	2.53
Queensland ..	6.01	5.35	4.31	4.14	3.63
South Australia ..	5.78	3.81	3.42	3.33	2.64
Western Australia ..	5.61	4.79	4.03	3.84	3.09
Tasmania ..	6.78	4.75	4.07	4.09	2.77
Australia ..	5.86	3.26	3.07	2.90	2.25

4. Industries Employing Child Labour.—The distribution of children employed in factories in June, 1946, 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, 1946.

Class of Industry.	Children Employed.		Total Number Employed.(a)		Percentage of Children on Total Number Employed. (a)	
	Males.	Females.	Males.	Females.	Males.	Females.
	No.	No.	No.	No.	%	%
I. Treatment of Non-metalliferous Mine and Quarry Products ..	91	5	10,746	300	0.85	1.28
II. Bricks, Pottery, Glass, etc. ..	141	26	14,031	1,046	1.00	2.49
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	230	213	22,932	8,141	1.00	2.62
IV. Industrial Metals, Machines, Implements and Conveyances ..	3,796	614	264,455	26,422	1.44	2.32
V. Precious Metals, Jewellery and Plate ..	114	39	2,976	581	3.83	6.71
VI. Textiles and Textile Goods ..	735	1,280	26,788	30,942	2.74	4.14
VII. Skins and Leather ..	157	113	11,273	3,788	1.39	2.98
VIII. Clothing ..	624	3,810	24,068	70,663	2.59	5.39
IX. Food, Drink and Tobacco ..	969	848	72,935	26,807	1.33	3.15
X. Woodworking and Basketware ..	620	46	35,779	1,602	1.73	2.72
XI. Furniture, Bedding, etc. ..	485	81	11,834	2,281	4.10	3.55
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	625	604	30,968	12,157	2.02	4.97
XIII. Rubber ..	81	20	7,906	1,645	1.02	1.22
XIV. Musical Instruments ..	12	3	384	102	3.13	2.94
XV. Miscellaneous Products ..	304	179	10,383	5,296	2.93	3.38
Total, Classes I. to XV.	8,984	7,881	547,458	192,043	1.64	4.10
XVI. Heat, Light and Power ..	32	..	10,970	94	0.29	..
Grand Total ..	9,016	7,881	558,428	192,137	1.61	4.10

(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 1945-46 was £867,647,517. of which amount £488,287,428 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £27,036,648 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 £352,323,441, 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 1945-46 was £205,818,733. This figure, which excludes amounts drawn by working proprietors, shows a decrease of £1,833,067 or slightly under 1 per cent. on that for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1945-46.* 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, 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products	1,363,653	815,994	269,924	260,466	166,096	119,209	2,995,344
II. Bricks, Pottery, Glass, etc.	2,213,130	1,002,859	163,309	314,436	136,066	34,026	3,863,826
III. Chemicals, Dyes Explosives, Paints, Oils and Grease	3,968,805	3,714,276	274,282	1,160,736	428,058	44,063	9,590,220
IV. Industrial Metals, Machines, Implements and Conveyances	12,478,010	26,876,774	6,362,770	8,523,323	3,074,708	1,655,688	88,071,273
V. Precious Metals, Jewellery and Plate	280,786	433,617	32,475	57,100	24,892	2,763	831,633
VI. Textiles and Textile Goods	4,262,638	7,233,154	274,030	527,066	161,630	554,812	13,013,339
VII. Skins and Leather	1,734,110	1,471,729	340,388	363,300	141,785	60,822	4,115,224
VIII. Clothing	7,316,412	8,018,580	1,143,726	1,025,849	554,190	151,800	18,210,557
IX. Food, Drink and Tobacco	9,736,354	9,419,282	5,405,176	2,393,615	1,438,649	1,052,475	29,445,551
X. Woodworking and Basketware	3,585,682	2,715,949	1,767,616	629,089	726,577	557,020	9,981,933
XI. Furniture, Bedding, etc.	1,375,447	843,010	399,371	291,245	188,698	78,864	3,176,635
XII. Paper, Stationery, Printing, Book-binding, etc.	4,885,988	3,857,265	900,275	654,634	411,547	554,239	11,263,948
XIII. Rubber	1,255,163	1,158,070	143,492	71,518	30,075	23,573	2,681,891
XIV. Musical Instruments	89,232	22,331	5,443	8,465	1,079	..	126,550
XV. Miscellaneous Products	1,578,997	1,805,674	133,271	109,258	86,412	55,771	3,769,383
Total, Classes I. to XV.	86,124,407	69,391,564	17,615,548	16,390,190	7,570,471	4,045,125	202,037,305
XVI. Heat, Light and Power	1,523,053	1,107,650	396,418	379,578	313,343	61,386	2,781,428
Grand Total	87,647,460	70,499,214	18,011,966	16,769,768	7,883,814	5,006,511	205,818,733

(ii) *Totals and Averages, 1938-39 and 1942-43 to 1945-46.* 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 . . .	44,606,407	36,026,542	10,887,229	8,169,350	4,573,558	2,479,886	106,743,062
	Average per employee . . .	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1942-43	Total amount paid . . .	88,900,826	73,035,753	16,737,515	19,243,200	6,477,113	4,472,816	208,866,848
	Average per employee . . .	289.12	286.21	268.64	270.10	260.74	252.73	282.75
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 . . .	291.91	282.90	289.91	269.53	271.20	265.32	285.23
1945-46	Total amount paid . . .	87,647,160	70,499,114	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	285.17

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 1945-46 were paid in New South Wales, Queensland and Victoria in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when the 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.

(iii) *Earnings of Males and Females, 1945-46.* 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 1945-46 :—

SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES, 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
	£	£	£	£	£	£	£
MALES.							
I. Treatment of Non-metaliferous Mine and Quarry Products . . .	1,335,224	791,119	265,016	254,814	162,932	117,700	2,926,805
II. Bricks, Pottery, Glass etc.	2,106,839	944,413	158,553	394,587	128,800	33,598	3,676,790
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease . . .	3,286,849	3,127,920	236,071	995,839	403,896	41,045	8,091,620
IV. Industrial Metals, Machines, Implements and Conveyances . . .	39,575,345	24,929,679	6,142,095	8,064,602	2,954,262	1,614,903	83,280,886
V. Precious Metals, Jewellery and Plate . . .	247,222	378,489	29,228	53,402	23,763	2,633	734,737
VI. Textiles and Textile Goods	2,428,585	4,298,800	168,405	305,963	102,126	329,403	7,633,282
VII. Skins and Leather . . .	1,392,795	1,281,866	319,081	324,015	128,664	58,766	3,513,190
VIII. Clothing	2,759,345	3,189,277	391,558	370,155	204,594	69,432	6,984,361
IX. Food, Drink and Tobacco	7,706,684	7,714,343	5,016,027	2,031,811	1,264,563	828,025	24,561,453
X. Woodworking and Basketware . . .	3,458,288	2,640,432	1,718,331	607,072	722,711	547,175	9,694,009
XI. Furniture, Bedding, etc.	1,189,924	742,037	372,324	260,758	173,594	75,125	2,813,762
XII. Paper, Stationery, Printing, Book-binding, etc. . . .	4,009,136	3,217,956	732,988	542,815	354,972	511,277	9,369,144
XIII. Rubber	1,108,546	1,012,129	127,302	66,076	28,091	22,331	2,364,475
XIV. Musical Instruments . . .	74,835	22,109	5,443	8,039	1,079	..	111,595
XV. Miscellaneous Products	1,186,965	1,371,748	90,221	86,196	70,927	41,723	2,856,780
Total, Classes I. to XV	71,866,582	55,670,317	15,781,616	14,276,144	6,724,974	4,293,136	168,612,799
XVI. Heat, Light and Power	1,513,464	1,102,456	395,060	378,389	312,556	60,426	3,763,251
Grand Total	73,380,046	56,772,773	16,177,000	14,654,533	7,037,530	4,353,562	172,376,050

SALARIES AND WAGES: MALE AND FEMALE FACTORY EMPLOYEES,
1945-46—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	28,420	24,875	4,908	5,652	3,164	1,500	68,537
II. Bricks, Pottery, Glass, etc. ..	106,291	58,446	4,756	9,849	7,266	428	187,036
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	681,956	586,356	38,211	164,897	24,162	3,018	1,498,600
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,902,665	1,947,095	220,675	458,721	120,446	40,785	5,690,387
V. Precious Metals, Jewellery and Plate ..	33,564	55,128	3,247	3,698	1,129	130	96,896
VI. Textiles and Textile Goods ..	1,831,053	2,034,354	105,625	221,103	59,513	225,409	5,380,057
VII. Skins and Leather ..	311,315	181,863	21,301	39,375	13,121	2,056	602,034
VIII. Clothing ..	4,557,067	4,829,303	752,168	655,694	349,596	82,368	11,226,196
IX. Food, Drink and Tobacco ..	2,029,670	1,704,939	389,149	361,804	174,086	224,450	4,884,098
X. Woodworking and Basketware ..	127,394	75,517	49,285	22,017	3,866	9,845	287,924
XI. Furniture, Bedding, etc. ..	185,523	100,973	27,047	30,487	15,104	3,739	362,873
XII. Paper, Stationery, Printing, Book-binding, etc. ..	876,852	639,309	167,287	111,819	56,575	42,062	1,804,804
XIII. Rubber ..	146,617	145,941	16,190	5,442	1,984	1,242	317,416
XIV. Musical Instruments ..	14,397	222	..	426	..	..	15,045
XV. Miscellaneous Products ..	392,032	433,926	34,050	23,062	15,488	14,048	912,603
Total, Classes I. to XV.	14,257,825	13,721,247	1,833,902	2,114,046	815,497	651,989	33,424,506
XVI. Heat, Light and Power ..	9,580	5,191	458	1,180	787	960	18,177
Total ..	14,267,414	13,726,441	1,834,360	2,115,235	846,284	652,949	33,442,683

(iv) Total and Average Earnings of Males and Females, 1938-39 and 1942-43 to 1945-46. 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
1942-43. Amount paid ..	£ 74,554,677	58,089,270	14,939,988	16,118,870	5,650,928	3,876,990	173,230,723
Per cent. on total ..	83.86	79.54	89.26	83.76	87.24	86.68	82.94
Average per employee £	344.72	344.06	308.49	313.74	304.34	290.30	335.17
1943-44. Amount paid ..	£ 77,087,334	58,610,714	15,984,325	15,499,866	6,367,387	4,374,298	177,923,024
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	314.00	316.28	310.15	342.68
1944-45. Amount paid ..	£ 73,914,690	56,114,675	16,058,718	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	336.93	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	172,376,030
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

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	9.00	14.70
Average per employee	£ 103.66	108.35	96.00	86.44	99.58	93.19	103.02
1942-43. Amount paid	£ 14,346,149	14,945,983	1,797,557	3,124,420	826,185	595,326	35,636,120
Per cent. on total	16.14	20.46	10.74	16.24	12.76	13.32	17.06
Average per employee	£ 157.29	173.10	129.55	157.27	131.70	137.19	160.59
1943-44. Amount paid	£ 16,430,992	15,350,479	2,087,364	3,211,547	1,050,208	819,305	38,949,805
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	36,066,058
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	142.01	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

(v) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1945-46 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, 1945-46.

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	392,111	48,837	2,534,694	19,700	2,926,805	68,537	2,995,342
II. Bricks, Pottery, Glass, etc.	368,674	78,925	3,308,116	108,111	3,676,790	187,036	3,863,826
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	1,745,860	406,080	6,345,760	1,092,520	8,091,620	1,498,600	9,590,220
IV. Industrial Metals, Machines, Implements and Conveyances	11,060,663	2,453,057	72,220,223	3,237,330	83,280,886	5,690,387	88,971,273
V. Precious Metals, Jewellery and Plate	79,723	32,920	655,014	63,976	734,737	96,896	831,633
VI. Textiles and Textile Goods	1,082,204	370,786	6,551,078	5,000,271	7,633,282	5,380,057	13,013,339
VII. Skins and Leather	439,812	74,388	3,073,378	527,646	3,513,190	602,034	4,115,224
VIII. Clothing	1,142,070	609,580	5,842,291	10,616,616	6,984,361	11,226,196	18,210,557
IX. Food, Drink and Tobacco	3,841,954	936,482	20,719,499	3,947,616	24,561,453	4,884,098	29,445,551
X. Woodworking and Basketware	906,273	178,881	8,787,736	109,043	9,694,009	287,924	9,981,933
XI. Furniture, Bedding, etc.	287,340	84,270	2,526,422	278,603	2,813,762	362,873	3,176,635
XII. Paper, Stationery, Printing, Book-binding, etc.	1,475,664	494,803	7,893,480	1,400,001	9,369,144	1,804,804	11,263,948
XIII. Rubber	437,130	100,885	1,927,345	216,531	2,364,475	317,416	2,681,891
XIV. Musical Instruments	8,409	6,805	103,096	8,240	111,505	15,045	126,550
XV. Miscellaneous Products	584,720	191,381	2,272,060	721,222	2,856,780	912,603	3,769,383
Total, Classes I. to XV.	23,852,607	6,077,080	144,760,192	27,347,426	168,612,799	33,424,506	202,037,305
XVI. Heat, Light and Power	455,106	15,344	3,307,145	2,833	3,763,251	18,177	3,781,428
Grand Total	24,308,713	6,092,424	148,067,337	27,350,259	172,376,050	33,442,683	205,818,733
Average paid per employee	489.62	192.78	310.08	167.82	326.90	171.87	285.17

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1945-46.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1945-46 it amounted to £27,036,648, an increase of £203,897 as compared with the previous year. The following table shows the value of power, fuel and light, etc., used in the different classes of industry in that year:—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED (a), 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	356,471	258,369	96,552	99,703	58,940	72,351	942,386
II. Bricks, Pottery, Glass, etc. ..	688,295	381,040	45,895	116,266	65,640	11,234	1,308,370
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	589,499	480,236	48,931	224,031	121,689	7,027	1,471,413
IV. Industrial Metals, Machines, Implements and Conveyances ..	4,557,202	1,260,881	293,453	968,739	161,931	362,632	7,604,838
V. Precious Metals, Jewellery and Plate ..	14,434	17,542	1,125	4,364	944	152	38,561
VI. Textiles and Textile Goods ..	285,883	558,628	16,204	54,700	14,439	39,422	969,276
VII. Skins and Leather ..	126,353	142,346	35,948	47,451	20,741	17,199	390,038
VIII. Clothing ..	203,857	220,122	26,621	27,952	15,359	5,510	499,421
IX. Food, Drink and Tobacco ..	1,596,197	1,455,216	808,687	455,709	328,867	147,991	4,792,667
X. Woodworking and Basketware ..	239,286	150,996	84,256	32,130	51,885	37,361	595,914
XI. Furniture, Bedding, etc. ..	37,340	22,982	10,088	10,030	4,063	2,131	86,634
XII. Paper, Stationery, Printing, Book-binding, etc. ..	226,105	378,010	36,211	78,331	19,836	193,534	932,027
XIII. Rubber ..	149,208	194,429	14,546	7,780	3,171	3,181	372,315
XIV. Musical Instruments ..	6,280	542	89	107	4		7,022
XV. Miscellaneous Products ..	76,907	85,505	4,995	7,335	2,129	2,037	178,908
Total, Classes I. to XV. ..	9,153,317	5,606,844	1,523,601	2,134,628	869,638	901,762	20,189,790
XVI. Heat, Light and Power ..	3,053,324	1,334,136	774,418	716,692	966,039	2,249	6,846,858
Grand Total ..	12,206,641	6,940,980	2,298,019	2,851,320	1,835,677	904,011	27,036,648

(a) Includes value of lubricants and water.

(ii) *Values of Items, 1945-46.* The following table shows the values of the various items of power, fuel and light used in factories in each State during the year 1945-46:—

FACTORIES : VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a), 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
Coal, Black ..	3,972,052	1,309,963	1,047,251	786,611	478,377	119,464	7,713,718
„ Brown ..	..	544,036	..	..	..	..	544,036
Brown Coal Briquettes ..	..	621,264	..	..	..	..	621,264
Coke ..	2,045,978	365,653	44,048	470,446	48,651	45,126	3,019,902
Wood ..	239,217	431,113	219,743	203,087	362,553	161,948	1,617,661
Fuel Oil ..	1,044,834	541,665	192,793	355,758	425,500	88,436	2,648,986
Tar (Fuel) ..	150,445	112,759	39	45,110	5,120	6,396	319,869
Electricity ..	2,939,851	2,053,152	471,173	677,911	338,405	422,644	6,903,136
Gas ..	839,920	189,696	34,565	61,255	18,867	6,562	1,150,865
Other (Charcoal, etc.) ..	50,428	136,426	52,733	88,033	12,644	1,746	342,010
Water ..	574,634	409,261	106,525	85,022	73,240	25,231	1,273,913
Lubricating Oil ..	349,282	225,992	129,149	78,087	72,320	26,458	881,288
Total ..	12,206,641	6,940,980	2,298,019	2,851,320	1,835,677	904,011	27,036,648

(a) Includes value of lubricants and water.

(iii) *Quantities of Fuel used, 1945-46.* The following table shows the quantities of fuel used in factories in each State during the year 1945-46 :—

FACTORIES : QUANTITIES OF FUEL USED, 1945-46.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Coal, Black ..	Ton	2,959,244	587,099	642,716	399,080	262,003	77,124	4,927,266
" Brown ..	"	..	4,226,326	..	..	..	..	4,226,326
Brown Coal Briquettes ..	"	..	417,460	..	..	..	..	417,460
Coke	"	1,180,805	166,330	20,457	174,394	19,649	12,725	1,574,360
Wood	"	176,962	508,848	254,882	158,602	399,222	168,004	1,666,520
Fuel Oil	Gal.	23,511,329	11,722,251	3,653,072	8,114,454	8,064,816	1,094,016	56,159,938
Tar (Fuel)	"	15,407,405	6,172,049	3,100	2,262,196	475,006	461,962	24,781,718

(iv) *Total Value, 1938-39 and 1942-43 to 1945-46.* The next table shows the sums expended on power, fuel and light during the years 1942-43 to 1945-46 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
1942-43	12,307,663	6,514,447	2,105,774	2,469,301	1,437,624	791,713	25,626,522
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	26,832,751
1945-46	12,206,641	6,940,980	2,298,019	2,851,320	1,835,677	904,011	27,036,648

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1945-46.* 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 1945-46 was £488,287,428, representing 56.28 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, 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	3,596,231	1,441,819	567,904	438,009	266,920	199,493	6,510,376
II. Bricks, Pottery, Glass, etc. ..	1,576,011	622,176	105,660	271,077	90,578	25,765	2,691,267
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	16,056,053	12,385,437	1,080,414	3,625,898	2,779,919	314,667	36,242,388
IV. Industrial Metals, Machines, Implements and Conveyances ..	72,762,281	36,817,123	7,146,788	13,750,681	3,324,068	3,163,046	136,963,987
V. Precious Metals, Jewellery and Plate ..	337,267	610,009	21,676	32,740	29,805	537	1,032,034
VI. Textiles and Textile Goods ..	10,913,554	16,425,777	672,272	1,140,628	357,686	1,234,474	30,744,391
VII. Skins and Leather ..	4,856,904	3,779,432	2,299,846	1,272,595	263,942	206,626	12,679,345
VIII. Clothing ..	12,220,703	15,471,407	1,671,201	1,087,311	768,428	158,480	31,377,620
IX. Food, Drink and Tobacco ..	51,897,036	49,387,219	39,183,374	12,354,839	8,000,053	4,599,844	165,422,363
X. Woodworking and Basketware ..	8,021,065	5,170,584	3,064,555	1,639,201	1,120,078	951,973	19,967,456
XI. Furniture, Bedding, etc. ..	2,548,535	1,742,823	721,724	525,354	378,811	115,953	6,033,200
XII. Paper, Stationery, Printing, Book-binding, etc. ..	8,769,589	7,856,302	1,115,959	900,208	576,401	898,529	20,116,988
XIII. Rubber ..	3,757,049	3,812,889	316,817	133,671	63,266	41,917	8,125,609
XIV. Musical Instruments ..	63,242	9,955	2,437	566	130	..	75,970
XV. Miscellaneous Products ..	2,330,858	2,547,719	139,524	183,459	76,587	31,813	5,300,960
Total, Classes I. to XV.	199,706,378	158,080,311	58,110,241	37,356,237	18,096,672	11,943,117	483,292,956
XVI. Heat, Light and Power ..	1,999,708	1,717,630	522,838	413,813	263,963	76,520	4,994,472
Grand Total ..	201,706,086	159,797,941	58,633,079	37,770,050	18,360,635	12,019,637	488,287,428

(ii) *Total Amount, 1938-39 and 1942-43 to 1945-46.* The following table shows the values of materials used in factories for the years 1942-43 to 1945-46 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	42,506,049	20,308,797	9,603,657	5,321,540	281,303,446
1942-43 ..	207,599,130	149,630,126	55,063,141	36,745,047	13,845,868	9,836,766	472,720,078
1943-44 ..	223,603,640	154,490,654	57,945,796	36,730,842	15,193,718	10,958,410	498,923,066
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	488,287,421

5. *Value of Output.*—(i) *In Classes of Industry, 1945-46.* The value of the output of factories in the various classes in each State in 1945-46 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, 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	6,352,882	3,315,588	1,160,360	975,209	594,432	527,331	12,925,802
II. Bricks, Pottery, Glass, etc.	5,574,133	2,718,311	408,589	901,054	377,671	85,326	10,065,084
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	28,024,635	20,260,798	1,725,382	6,154,150	3,732,871	397,424	60,295,266
IV. Industrial Metals, Machines, Implements and Conveyances ..	139,890,197	77,243,145	16,668,166	25,716,672	8,211,781	6,531,222	274,261,183
V. Precious Metals, Jewellery and Plate ..	817,156	1,349,056	82,473	116,609	77,052	4,105	2,446,451
VI. Textiles and Textile Goods ..	18,608,267	29,183,535	1,148,402	2,034,778	626,039	2,148,603	53,749,624
VII. Skins and Leather ..	7,829,553	6,469,308	2,890,982	1,924,824	511,424	293,434	19,919,525
VIII. Clothing ..	24,474,939	28,928,234	3,567,975	2,640,051	1,702,560	398,043	61,711,802
IX. Food, Drink and Tobacco ..	76,032,953	70,538,377	50,169,293	17,047,144	11,602,906	6,812,098	232,202,771
X. Woodworking and Basketware ..	14,025,443	9,518,189	5,759,750	2,770,365	2,267,449	1,812,466	36,153,662
XI. Furniture, Bedding, etc. ..	4,760,610	3,418,440	1,400,505	1,015,695	745,010	246,788	11,587,048
XII. Paper, Stationery, Printing, Book-binding, etc. ..	17,465,658	15,423,419	2,802,957	2,116,086	1,392,226	2,344,873	41,545,219
XIII. Rubber ..	5,492,063	6,131,232	573,716	260,250	131,870	90,469	12,679,600
XIV. Musical Instruments ..	214,653	46,238	11,584	16,164	1,326	..	289,965
XV. Miscellaneous Products ..	5,174,508	5,842,021	369,150	376,533	206,571	128,992	12,097,775
Total, Classes I. to XV.	354,737,650	280,385,891	88,739,284	64,065,584	32,181,188	21,821,174	841,930,771
XVI. Heat, Light and Power ..	12,354,566	6,603,517	2,461,467	2,157,414	1,841,651	298,131	25,716,746
Grand Total ..	367,092,216	286,989,408	91,200,751	66,222,998	34,022,839	22,119,305	867,647,517

(ii) *Total, 1938-39 and 1942-43 to 1945-46.* 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
1942-43 ..	373,489,055	277,635,940	86,213,475	67,568,707	26,737,549	18,703,930	850,348,656
1943-44 ..	399,137,690	284,047,914	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

6. Value of Production.—(i) *In Classes of Industry, 1945-46.* 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 £17,134,005 for 1945-46. 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 following table shows the value of production in 1945-46 in each State for the various classes of factories:—

FACTORIES : VALUE OF PRODUCTION, 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,400,180	1,615,400	495,904	437,497	268,572	255,487	5,473,040
II. Bricks, Pottery, Glass, etc.	3,309,827	1,715,095	257,034	513,711	221,453	48,327	6,065,447
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	11,379,083	7,395,125	596,037	2,304,221	831,263	75,730	22,581,459
IV. Industrial Metals, Machines, Implements and Conveyances ..	62,570,714	39,165,141	9,227,925	10,997,252	4,725,782	3,005,544	129,692,358
V. Precious Metals, Jewellery and Plate	465,455	721,505	59,672	79,505	46,303	3,416	1,375,856
VI. Textiles and Textile Goods ..	7,408,830	12,199,130	459,926	839,450	253,914	874,707	22,035,957
VII. Skins and Leather ..	2,846,296	2,547,530	555,188	604,778	226,741	69,609	6,850,142
VIII. Clothing	12,050,379	13,236,705	1,870,063	1,524,788	918,773	234,053	29,834,761
IX. Food, Drink and Tobacco	22,539,720	19,695,942	10,177,232	4,236,596	3,273,986	2,064,263	61,987,739
X. Woodworking and Basketware ..	5,765,092	4,196,609	2,610,939	1,099,034	1,095,486	823,132	15,590,292
XI. Furniture, Bedding, etc.	2,174,735	1,652,635	668,693	480,311	362,136	128,704	5,467,214
XII. Paper, Stationery, Printing, Book-binding, etc.	8,469,964	7,189,107	1,650,787	1,137,547	795,989	1,252,810	20,496,204
XIII. Rubber ..	1,585,806	2,123,914	242,353	118,799	65,433	45,371	4,181,676
XIV. Musical Instruments	145,131	36,101	9,058	15,491	1,192	..	206,973
XV. Miscellaneous Products ..	2,766,743	3,208,797	224,631	185,739	127,855	95,142	6,608,907
Total, Classes I. to XV.	145,877,955	116,698,736	29,105,442	24,574,719	13,214,878	8,976,295	338,448,025
XVI. Heat, Light and Power ..	7,301,534	3,551,751	1,164,211	1,026,909	611,649	219,362	13,875,416
Grand Total ..	153,179,489	120,250,487	30,269,653	25,601,628	13,826,527	9,195,657	352,323,441

(ii) *Total and Averages, 1938-39 and 1942-43 to 1945-46.* The value of production and the amount per person engaged and per head of population are shown in the following table for the last four years compared with 1938-39:—

FACTORIES : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
	£	£	£	£	£	£	£
1938-39 ..	90,265,891	65,996,069	19,301,475	13,678,930	8,775,586	5,398,659	203,416,610
1942-43 ..	153,682,262	121,391,367	29,044,560	28,354,359	11,454,057	8,075,451	352,002,056
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

PER PERSON ENGAGED.

	£	£	£	£	£	£	£
1938-39 ..	395	327	357	315	378	391	360
1942-43 ..	487	463	452	390	444	441	464
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

PER HEAD OF POPULATION.

	£	£	£	£	£	£	£
1938-39 ..	32.99	35.25	19.15	22.99	18.79	22.72	29.41
1942-43 ..	54.00	61.76	27.92	46.41	24.01	33.41	49.01
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

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1945-46 was estimated at £867,647,517, there remained, after payment of £488,287,428 for the value of the materials used, £205,818,733 for salaries and wages, and £27,036,648 for power, fuel and light, the sum of £146,504,708 to provide for all other expenditure, depreciation, interest and profits. The following table gives corresponding particulars for each State expressed absolutely and as percentages on the total value of the output for the year 1945-46:—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1945-46.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Margin for other miscellaneous expenses, charges, profits, etc.	Total Value of Output.
VALUE AND COST, ETC.					
	£	£	£	£	£
New South Wales ..	201,706,086	12,206,641	87,647,460	65,532,029	367,092,216
Victoria ..	159,797,941	6,940,980	70,499,214	49,751,273	286,989,408
Queensland ..	58,633,079	2,298,019	18,011,966	12,257,687	91,200,751
South Australia ..	37,770,050	2,851,320	16,769,768	8,831,860	66,222,998
Western Australia ..	18,360,635	1,835,677	7,883,814	5,942,713	34,022,839
Tasmania ..	12,019,637	904,011	5,006,511	4,189,146	22,119,305
Australia ..	488,287,428	27,036,648	205,818,733	146,504,708	867,647,517

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
 (b) Includes lubricants and water.

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1945-46—
continued.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Margin for other miscellaneous expenses, charges, profits, etc.	Total Value of Output
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PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

	%	%	%	%	%
New South Wales ..	54.95	3.33	23.88	17.84	100.00
Victoria ..	55.68	2.42	24.56	17.34	100.00
Queensland ..	64.29	2.52	19.75	13.44	100.00
South Australia ..	57.03	4.31	25.32	13.34	100.00
Western Australia ..	53.97	5.40	23.17	17.46	100.00
Tasmania ..	54.34	4.09	22.63	18.94	100.00
Australia ..	56.27	3.12	23.72	16.89	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.

§ 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 1945-46:—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1945-46.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia
	£	£	£	£	£	£	£
Land and buildings	80,308,347	60,264,953	14,331,556	18,446,966	8,282,694	5,304,703	186,939,219
Plant and machinery	72,560,630	58,537,394	18,690,541	19,017,955	8,507,705	8,230,715	185,544,940
Total ..	152,868,977	118,802,347	33,022,097	37,464,921	16,790,399	13,535,418	372,484,159

(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 1942-43 to 1945-46.* 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 1942-43 to 1945-46.

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

Class of Industry.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
I. Treatment of Non-metalliferous Mine and Quarry Products	£ 2,778,746	£ 2,615,787	£ 2,623,361	£ 2,642,425	£ 3,019,524
II. Bricks, Pottery, Glass, etc.	2,953,557	2,912,817	2,706,737	2,940,413	3,331,450
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	7,377,551	18,668,293	18,635,144	18,432,290	18,461,520
IV. Industrial Metals, Machines, Implements and Conveyances	34,841,028	53,041,129	60,043,410	60,783,523	59,530,236
V. Precious Metals, Jewellery and Plate	633,009	579,780	590,482	615,779	751,611
VI. Textiles and Textile Goods	5,999,671	7,996,992	8,378,695	8,770,139	9,111,725
VII. Skins and Leather	2,095,886	2,279,645	2,327,945	2,493,751	2,965,986
VIII. Clothing	10,623,619	11,133,533	11,852,661	12,660,045	13,993,956
IX. Food, Drink and Tobacco	33,273,248	35,927,769	37,376,297	39,321,977	40,129,049
X. Woodworking and Basketware	4,106,963	4,623,716	4,811,963	5,030,273	5,441,290
XI. Furniture, Bedding, etc.	2,533,254	2,366,887	2,259,307	2,293,762	2,828,984
XII. Paper, Stationery, Printing, Bookbinding, etc.	10,639,315	11,478,257	11,408,044	11,576,815	11,604,666
XIII. Rubber	1,676,043	1,643,420	1,684,331	1,737,861	1,865,044
XIV. Musical Instruments	104,838	99,949	98,829	116,074	133,182
XV. Miscellaneous Products	1,432,857	2,113,459	2,292,206	2,588,535	2,964,894
Total, Classes I. to XV.	121,069,585	157,481,433	167,089,412	172,003,662	176,133,119
XVI. Heat, Light and Power	9,850,829	10,112,514	10,057,193	10,576,445	10,806,100
Grand Total	130,920,414	167,593,947	177,146,605	182,580,107	186,939,219

(a) Includes estimated value of rented premises.

(ii) In Classes of Industry in States, 1945-46. The following table gives particulars of the various classes of industry in each State.

FACTORIES : VALUE OF LAND AND BUILDINGS, (a) 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non-metalliferous Mine and Quarry Products	£ 1,388,537	£ 943,917	£ 191,261	£ 212,759	£ 95,510	£ 187,540	£ 3,019,524
II. Bricks, Pottery, Glass, etc.	2,088,923	798,248	129,045	201,957	94,177	19,100	3,331,450
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	4,341,386	6,104,394	245,155	6,878,797	810,046	81,742	18,461,520
IV. Industrial Metals, Machines, Implements and Conveyances	30,564,445	17,174,574	3,736,404	4,315,509	2,385,627	1,353,679	59,530,238
V. Precious Metals, Jewellery and Plate	285,576	343,760	30,021	49,219	36,675	6,360	751,611
VI. Textiles and Textile Goods	3,374,885	4,821,139	157,375	381,178	118,161	258,987	9,111,725
VII. Skins and Leather	1,212,386	1,206,083	148,244	238,082	124,482	36,709	2,965,986
VIII. Clothing	6,487,800	5,462,115	636,163	707,521	571,223	129,134	13,993,956
IX. Food, Drink and Tobacco	14,974,926	11,877,394	6,203,697	3,191,680	2,387,230	1,494,122	40,129,049
X. Woodworking and Basketware	2,504,701	1,467,433	550,237	431,639	303,885	183,395	5,441,290
XI. Furniture, Bedding, etc.	1,082,318	1,011,363	284,180	207,662	181,460	62,001	2,828,984
XII. Paper, Stationery, Printing, Bookbinding, etc.	4,765,325	3,898,431	911,549	748,093	510,285	770,983	11,604,666
XIII. Rubber	856,381	721,245	129,471	75,123	47,834	34,990	1,865,044
XIV. Musical Instruments	86,989	32,339	2,560	8,174	3,120	..	133,182
XV. Miscellaneous Products	1,312,349	1,313,732	111,136	104,068	83,579	40,030	2,964,894
Total, Classes I. to XV.	75,326,927	57,176,167	13,466,498	17,751,461	7,753,294	4,658,772	176,133,119
XVI. Heat, Light and Power	4,981,420	3,088,786	865,058	695,505	529,400	645,931	10,806,100
Grand Total	80,308,347	60,264,953	14,331,556	18,446,966	8,282,694	5,304,703	186,939,219

(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 1942-43 to 1945-46 :—

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	130,920,414
1942-43 ..	72,622,902	52,642,052	13,159,140	17,473,537	6,770,121	4,926,195	167,593,947
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

(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 £186.9 million in 1945-46.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39 and 1942-43 to 1945-46.* The following table shows for Australia the approximate value of plant and machinery used in factories in 1938-39 and each of the four years ended 1945-46 :—

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

Class of Industry.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,028,382	5,624,798	5,089,274	4,955,979	4,916,338
II. Bricks, Pottery, Glass, etc. ..	3,144,586	2,580,261	2,246,369	2,509,661	2,967,696
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	6,754,248	17,083,211	17,411,181	19,208,586	17,791,778
IV. Industrial Metals, Machines, Implements and Conveyances ..	33,037,801	52,931,958	56,918,202	54,953,997	53,901,719
V. Precious Metals, Jewellery and Plate ..	197,059	200,445	219,266	207,620	253,062
VI. Textiles and Textile Goods ..	6,657,416	7,915,814	7,600,447	7,658,756	7,736,737
VII. Skins and Leather ..	973,181	1,160,754	1,224,852	1,264,612	1,584,051
VIII. Clothing ..	2,557,388	2,855,529	3,225,678	3,552,899	4,134,906
IX. Food, Drink and Tobacco ..	32,100,675	31,660,416	31,994,522	33,694,162	33,233,935
X. Woodworking and Basketware ..	3,907,551	4,299,740	4,486,081	4,533,758	5,023,174
XI. Furniture, Bedding, etc. ..	727,857	602,222	545,199	572,308	740,627
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,188,227	10,074,519	9,531,486	8,961,222	8,556,477
XIII. Rubber ..	1,367,859	1,220,467	1,243,448	1,191,308	1,218,861
XIV. Musical Instruments ..	11,702	13,325	14,011	18,191	23,571
XV. Miscellaneous Products ..	758,273	1,384,164	1,547,403	1,763,939	1,855,931
Total, Classes I. to XV. ..	108,412,205	139,607,623	143,207,419	144,044,998	143,938,863
XVI. Heat, Light and Power ..	35,249,922	37,357,703	37,785,350	39,872,062	41,606,077
Grand Total ..	143,662,127	176,965,326	180,992,769	183,917,060	185,544,940

(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 1945-46 of £1.6 million extended over all industrial classes except Classes III. Chemicals, IV. Industrial Metals and XII. Paper, where reductions occurred. The greatest increase occurred in Class XVI. Heat, Light and Power.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1942-43 to 1945-46 compared with 1938-39. During 1945-46 decreases in New South Wales and Victoria were more than offset by increases in the other States.

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
1942-43 ..	73,121,771	51,963,258	18,793,878	17,848,070	7,105,019	5,133,330	176,965,326
1943-44 ..	73,803,954	55,457,719	17,886,417	18,415,477	7,364,909	5,064,293	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

(a) Includes estimated value of rented plant.

(iii) *Value according to Industry, 1945-46.* The following table shows the value of plant and machinery used in factories in each State during 1945-46 classified according to industry :—

FACTORIES : VALUE OF PLANT AND MACHINERY,(a) 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,666,470	1,311,900	294,950	384,295	122,028	136,695	4,016,338
II. Bricks, Pottery, Glass, etc. ..	1,774,573	759,723	103,385	192,090	107,781	30,144	2,967,696
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	4,691,101	6,752,375	230,591	5,025,434	1,060,992	31,285	17,791,778
IV. Industrial Metals, Machines, Implements and Conveyances ..	27,024,690	15,661,705	3,068,199	4,863,037	1,749,748	1,534,340	53,901,719
V. Precious Metals, Jewellery and Plate ..	88,630	130,889	7,612	14,228	10,536	1,167	253,062
VI. Textiles and Textile Goods ..	2,846,663	3,989,692	140,125	455,503	107,098	197,656	7,736,737
VII. Skins and Leather ..	618,581	570,639	125,972	131,367	98,037	39,455	1,584,051
VIII. Clothing ..	1,693,383	1,787,796	219,203	240,590	150,342	43,592	4,134,906
IX. Food, Drink and Tobacco ..	10,121,255	7,754,106	10,259,802	2,368,521	1,790,366	939,885	33,233,935
X. Woodworking and Basketware ..	1,846,210	1,251,999	801,574	279,293	464,722	379,376	5,023,174
XI. Furniture, Bedding, etc. ..	291,503	214,390	75,047	83,722	55,856	20,109	740,627
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,478,128	2,645,775	462,316	634,954	230,262	1,105,042	8,556,477
XIII. Rubber ..	495,034	610,545	57,572	33,135	13,098	9,477	1,218,861
XIV. Musical Instruments ..	14,751	6,671	755	1,348	46	..	23,571
XV. Miscellaneous Products ..	711,868	1,016,211	37,064	42,141	35,839	12,808	1,855,931
Total, Classes I. to XV. ..	58,362,840	44,464,416	15,884,167	14,749,658	5,996,751	4,481,031	143,938,863
XVI. Heat, Light and Power ..	14,197,790	14,072,978	2,806,374	4,268,297	2,510,954	3,749,684	41,606,077
Grand Total ..	72,560,630	58,537,394	18,690,541	19,017,955	8,507,705	8,230,715	185,544,940

(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 1945-46 as recorded by factory proprietors at the annual census of factory production.

ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1945-46.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	451,784	116,085	39,659	22,252	6,815	21,826	658,421
II. Bricks, Pottery, Glass, etc. ..	220,440	81,350	13,626	17,529	10,309	1,256	344,510
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	770,090	542,849	31,163	203,344	85,336	7,964	1,640,746
IV. Industrial Metals, Machines, Implements and Conveyances ..	3,021,779	1,299,102	300,645	606,033	120,021	135,074	5,482,654
V. Precious Metals, Jewellery and Plate ..	9,965	11,863	660	2,019	949	97	25,553
VI. Textiles and Textile Goods ..	331,108	625,905	11,954	65,720	12,604	33,261	1,080,642
VII. Skins and Leather ..	58,279	60,570	12,071	20,136	9,591	9,269	169,916
VIII. Clothing ..	194,922	184,428	15,455	19,094	13,047	3,755	430,701
IX. Food, Drink and Tobacco ..	999,181	883,577	722,220	223,138	153,970	73,931	3,056,017
X. Woodworking and Basketware ..	212,296	125,403	79,206	39,206	46,223	39,522	541,856
XI. Furniture, Bedding, etc. ..	28,723	18,837	9,489	7,157	5,516	1,406	71,128
XII. Paper, Stationery, Printing, Book-binding, etc. ..	360,897	401,430	67,692	78,203	18,990	133,470	1,060,682
XIII. Rubber ..	143,037	173,516	8,216	4,682	1,808	1,479	332,738
XIV. Musical Instruments ..	2,022	216	86	122	5	..	2,451
XV. Miscellaneous Products ..	87,151	121,432	2,852	6,342	4,872	1,566	224,215
Total, Classes I. to XV. ..	6,891,674	4,646,563	1,314,994	1,314,977	490,146	463,876	15,122,230
XVI. Heat, Light and Power ..	1,196,078	229,747	208,301	235,560	78,081	64,008	2,011,775
Grand Total ..	8,087,752	4,876,310	1,523,295	1,550,537	568,227	527,884	17,134,005

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 1943 to 1946 and the value of additions and replacements made and depreciation allowed during each year.

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

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.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1938-39 ..	130,920	143,662	5,578	17,781	1,911	8,736
1942-43 ..	167,594	176,905	12,996	19,262	2,729	15,603
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

(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. **Cement (Portland) and Cement Goods.**—(i) *Details for each State.* The manufacture of portland cement and cement goods is an important industry included in Class I. and details for each State during 1945-46 are given in the following table :—

CEMENT (PORTLAND) AND CEMENT GOODS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	51	41	21	16	16	7	152
Number of persons engaged ..	1,981	1,011	644	440	314	192	4,582
Value of land and buildings £	680,162	365,801	153,410	93,015	34,737	136,170	1,463,595
Value of plant and machinery £	748,765	571,250	221,644	304,547	91,645	66,903	2,004,754
Salaries and wages paid £	585,901	286,854	104,739	138,909	83,666	43,653	1,333,722
Value of power, fuel, etc., used £	206,774	128,038	82,811	84,825	47,864	42,527	592,839
Value of materials used £	1,093,431	512,174	439,731	232,321	138,206	82,666	2,498,529
Total value of output £	2,351,085	1,296,952	917,636	550,247	315,033	237,191	5,668,144
Value of production ..	£ 1,050,880	656,740	395,094	233,101	128,963	111,998	2,576,776

(ii) *Total for Australia.* By reason of a change in classification in 1945-46, it is now possible to publish separate details for each of the two groups indicated above, viz. :— manufacture of portland cement and production of cement products. Particulars for each group are shown for 1945-46 in the following table.

CEMENT (PORTLAND) AND CEMENT GOODS : AUSTRALIA, 1945-46.

Items.	Cement (Portland).	Cement Goods.	Total.
Number of factories ..	10	142	152
Number of persons engaged ..	1,510	3,072	4,582
Value of land and buildings ..	£ 933,561	530,034	1,463,595
Value of plant and machinery ..	£ 461,671	461,981	2,004,754
Salaries and wages paid ..	£ 461,671	872,051	1,333,722
Value of power, fuel, etc., used ..	£ 544,352	48,487	592,839
Value of materials used ..	£ 918,832	1,579,697	2,498,529
Total value of output ..	£ 2,543,816	3,124,328	5,668,144
Value of production ..	£ 1,086,632	1,490,144	2,576,776
Cement, portland grey, produced ..	ton 723,348	..	723,348
	£ 2,486,306	..	2,486,306

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 1945-46.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	77	47	12	4	5	2	147
Number of persons engaged ..	2,508	1,616	183	432	164	23	5,016
Value of land and buildings £	1,173,129	571,805	48,324	(a)	(a)	(a)	2,188,040
Value of plant and machinery £	1,653,323	1,006,232	64,837	(a)	(a)	(a)	3,410,401
Salaries and wages paid £	926,556	570,604	51,762	(a)	(a)	(a)	1,750,604
Value of power, fuel, etc., used £	221,789	117,839	14,545	(a)	(a)	(a)	458,996
Value of materials used ..	£ 2,461,635	1,591,869	89,604	(a)	(a)	(a)	4,406,964
Total value of output ..	£ 4,794,502	2,970,628	229,420	(a)	(a)	(a)	8,820,483
Value of production ..	£ 2,111,078	1,260,920	125,271	(a)	(a)	(a)	3,954,523

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

PHARMACEUTICAL AND TOILET PREPARATIONS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	142	48	4	10	8	3	215
Number of persons engaged ..	3,008	1,730	101	525	128	22	5,514
Value of land and buildings £	934,413	426,781	23,439	(a)	(a)	(a)	1,534,058
Value of plant and machinery £	222,062	291,255	4,936	(a)	(a)	(a)	508,484
Salaries and wages paid £	700,899	414,543	21,168	(a)	(a)	(a)	1,278,233
Value of power, fuel, etc., used £	25,249	17,279	473	(a)	(a)	(a)	56,780
Value of materials used ..	£ 2,826,805	1,930,045	55,702	(a)	(a)	(a)	5,402,730
Total value of output ..	£ 6,035,652	3,226,080	97,759	(a)	(a)	(a)	10,249,317
Value of production ..	£ 3,183,598	1,277,856	41,584	(a)	(a)	(a)	4,789,807

(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 1945-46 :—

WHITE LEAD, PAINT AND VARNISH FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia
Number of factories ..	58	42	5	13	3	1	122
Number of persons engaged ..	2,180	678	69	236	28	6	3,197
Value of land and buildings ..	£ 616,016	241,018	11,538	87,802	(a)	(a)	973,166
Value of plant and machinery ..	£ 320,897	131,979	14,488	48,749	(a)	(a)	524,005
Salaries and wages paid ..	£ 721,122	192,117	21,235	60,019	(a)	(a)	1,005,121
Value of power, fuel, etc., used ..	£ 61,366	13,256	1,067	4,480	(a)	(a)	80,675
Value of materials used ..	£ 3,072,433	1,060,878	165,188	390,678	(a)	(a)	4,775,075
Total value of output ..	£ 4,776,482	1,624,138	234,183	551,911	(a)	(a)	7,304,167
Value of production ..	£ 1,642,683	550,004	67,928	156,753	(a)	(a)	2,448,417

(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 1942-43 to 1945-46 compared with 1938-39 :—

WHITE LEAD, PAINT AND VARNISH FACTORIES : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	102	110	111	113	122
Number of persons engaged ..	2,271	2,169	2,350	2,501	3,197
Value of land and buildings ..	£ 761,345	828,790	897,777	936,927	973,166
Value of plant and machinery ..	£ 324,222	368,410	415,552	459,252	524,065
Salaries and wages paid ..	£ 535,014	648,455	727,843	792,437	1,005,121
Value of power, fuel, etc., used ..	£ 44,992	58,080	66,262	70,274	80,675
Value of materials used ..	£ 2,275,027	3,180,267	3,943,679	4,465,958	4,775,075
Total value of output ..	£ 3,905,104	4,844,646	5,931,990	6,694,321	7,304,167
Value of production ..	£ 1,585,085	1,606,299	1,922,049	2,158,089	2,448,417

5. **Soap and Candle Factories.**—(i) *Details for each State.* The following table gives particulars of soap and candle factories in each State for 1945-46 :—

SOAP AND CANDLE FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	40	16	8	5	2	2	73
Number of persons engaged ..	1,721	738	308	173	61	19	3,020
Value of land and buildings ..	£ 376,634	185,865	37,268	53,429	(a)	(a)	676,405
Value of plant and machinery ..	£ 161,333	151,597	19,051	28,066	(a)	(a)	372,940
Salaries and wages paid ..	£ 495,275	213,617	83,793	45,945	(a)	(a)	860,354
Value of power, fuel, etc., used ..	£ 50,061	58,771	6,414	4,667	(a)	(a)	123,250
Value of materials used ..	£ 1,686,739	905,628	232,739	131,583	(a)	(a)	3,051,046
Total value of output ..	£ 3,408,769	1,613,919	423,757	202,795	(a)	(a)	5,801,953
Value of production ..	£ 1,671,969	649,520	186,604	66,545	(a)	(a)	2,627,657

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

(ii) *Total for Australia.* The next table gives similar particulars for the years 1942-43 to 1945-46 compared with 1938-39 :—

SOAP AND CANDLE FACTORIES : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	65	66	65	67	73
Number of persons engaged ..	2,620	3,084	2,938	2,906	3,020
Value of land and buildings ..	£ 665,546	691,066	686,091	675,578	676,405
Value of plant and machinery ..	£ 576,732	461,918	422,467	376,788	372,940
Salaries and wages paid ..	£ 501,174	802,011	805,919	779,341	860,354
Value of power, fuel, etc., used ..	£ 76,283	147,061	139,713	126,379	123,250
Value of materials used ..	£ 1,567,999	2,979,650	2,757,710	2,853,368	3,051,046
Total value of output ..	£ 3,529,723	6,116,396	5,290,607	5,464,765	5,801,953
Value of production ..	£ 1,885,441	2,089,685	2,393,184	2,484,658	2,627,657

(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 1942-43 to 1945-46 compared with 1938-39:—

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

Particulars.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Tallow used cwt.	535,511	1,053,412	856,031	859,109	834,057
Alkali used "	229,881	233,856	201,992	203,697	160,304
Cocoa-nut oil used—refined and unrefined .. "	138,954	86,367	74,915	79,299	86,576
Soap made "	986,087	1,355,708	966,982	868,489	968,792
Candles made "	27,459	43,788	38,291	23,159	23,194

The output for the year 1945-46 comprised the following quantities of soap:—household, 622,009 cwt.; toilet, 232,468 cwt.; sand, 56,494 cwt.; soft, 10,591 cwt.; and industrial, 47,230 cwt. This excludes 12,090 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 1945-46. Details of the consumption, imports and exports of fertilizers will be found in Chapter XX. "Agricultural Production".

CHEMICAL FERTILIZERS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	6	8	6	7	6	5	38
Number of persons engaged	327	1,179	131	742	699	49	3,127
Value of land and buildings £	111,425	465,131	68,630	342,110	546,431	38,221	1,571,948
Value of plant and machinery £	113,074	655,372	81,095	705,604	838,685	15,538	2,409,368
Salaries and wages paid £	121,735	419,340	43,299	248,476	240,471	17,954	1,091,275
Value of power, fuel, etc., used £	12,405	59,758	1,828	31,774	74,431	1,222	181,418
Value of materials used £	902,112	2,888,304	364,293	1,435,240	2,056,935	251,603	7,898,493
Total value of output £	1,189,003	3,676,922	468,653	1,855,868	2,585,219	271,045	10,046,710
Value of production £	274,486	728,860	102,532	388,848	453,853	18,220	1,966,799

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

CHEMICAL FERTILIZERS : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	36	34	36	38	38
Number of persons engaged	2,540	1,667	1,818	2,452	3,127
Value of land and buildings £	1,449,157	1,464,411	1,454,051	1,468,653	1,571,948
Value of plant and machinery £	2,352,819	2,176,426	2,244,501	2,305,895	2,409,368
Salaries and wages paid £	601,477	539,955	632,151	872,466	1,091,275
Value of power, fuel, etc., used £	113,749	75,104	86,876	122,215	181,418
Value of materials used £	3,231,053	2,945,694	3,659,176	5,938,073	7,898,493
Total value of output £	4,944,800	3,923,806	4,867,464	7,700,895	10,046,710
Value of production £	1,599,998	903,008	1,121,412	1,640,607	1,966,799

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, including Foundries (Ferrous).* In the following table particulars are given for 1945-46 for each State for those industries included under the groups Smelting, Converting, Refining and Rolling of Iron and Steel and Foundries (Ferrous). It is not possible to show separate details for each group without contravening the confidential clause of the Census and Statistics Act.

**SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL
(INCLUDING FOUNDRIES (FERROUS)), 1945-46.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	76	222	9	18	14	..	319
Number of persons engaged ..	10,456	3,867	376	603	455	..	15,757
Value of land and buildings £	2,060,673	681,795	37,007	341,560	63,702	..	3,184,737
Value of plant and machinery £	5,067,113	570,655	49,130	529,008	72,276	..	6,288,272
Salaries and wages paid £	4,130,640	1,207,679	133,220	163,558	140,550	..	5,775,647
Value of power, fuel, etc., used £	2,525,899	165,456	7,404	216,161	23,153	..	2,938,073
Value of materials used £	19,059,865	966,935	108,793	104,742	103,443	..	20,343,778
Total value of output £	28,999,164	2,790,706	342,577	547,984	335,761	..	33,016,192
Value of production ..	£ 7,413,400	1,658,315	226,380	227,081	209,165	..	9,734,341

(iii) *Plant, Equipment and Machinery including Machine Tools.* In the next table particulars are given for 1945-46 for those industries included in the third group mentioned above.

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS), 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	573	315	56	45	49	..	1,038
Number of persons engaged ..	23,966	14,720	2,546	3,243	1,648	..	46,123
Value of land and buildings £	4,012,690	2,410,725	275,190	262,303	265,817	..	7,226,725
Value of plant and machinery £	3,521,880	2,577,135	270,001	376,699	299,917	..	7,045,632
Salaries and wages paid £	7,497,968	4,622,060	736,736	934,698	467,122	..	14,258,584
Value of power, fuel, etc., used £	292,776	208,117	37,694	44,449	22,145	..	605,181
Value of materials used £	8,248,715	5,914,156	610,682	1,112,050	568,856	..	16,454,459
Total value of output £	19,486,008	13,154,372	1,651,834	2,540,116	1,277,617	..	38,103,947
Value of production ..	£ 10,944,517	7,032,099	1,003,458	1,383,617	680,616	..	21,044,307

(iv) *Other Engineering.* Details covering jobbing and general engineering works are given for each State for 1945-46 in the following table.

OTHER ENGINEERING, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	357	344	47	105	72	38	963
Number of persons engaged ..	2,298	6,516	521	2,681	439	657	13,112
Value of land and buildings £	569,531	1,195,642	90,442	310,772	88,446	114,466	2,369,299
Value of plant and machinery £	318,506	1,145,793	47,135	384,015	62,300	132,871	2,090,620
Salaries and wages paid £	526,959	1,970,270	142,181	701,989	106,179	186,221	3,633,799
Value of power, fuel, etc., used £	26,650	79,256	5,780	34,506	6,872	8,464	161,528
Value of materials used £	574,879	2,026,670	142,863	632,083	95,728	127,600	3,598,823
Total value of output £	1,526,448	5,028,087	348,765	1,643,945	269,784	375,729	9,192,758
Value of production ..	£ 924,919	2,922,161	200,122	978,356	167,184	239,665	5,432,407

8. *Extracting and Refining of Other 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 OTHER METALS ; ALLOYS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories ..	17	18	8	2	..	4	49
Number of persons engaged ..	1,372	183	827	1,423	..	2,255	6,060
Value of land and buildings £	283,111	(b)	282,233	(b)	..	641,806	1,384,721
Value of plant and machinery £	1,152,054	(b)	865,011	(b)	..	1,162,529	3,795,038
Salaries and wages paid £	506,885	(b)	285,407	(b)	..	783,051	2,279,972
Value of power, fuel, etc., used £	257,870	(b)	73,255	(b)	..	329,903	1,057,934
Value of materials used £	7,903,321	(b)	1,009,128	(b)	..	2,344,246	18,042,070
Total value of output £	10,113,113	(b)	1,993,580	(b)	..	4,486,328	24,626,910
Value of production ..	£ 1,951,922	(b)	821,197	(b)	..	1,812,179	5,526,906

(a) In Western Australia the majority of the plants are worked on the mines and are therefore not included.
(b) Not available for publication ; figures are included in the total for Australia.

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

EXTRACTING AND REFINING OF OTHER METALS ; ALLOYS : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46
Number of factories ..	42	41	43	40	49
Number of persons engaged ..	5,532	6,632	6,321	5,885	6,060
Value of land and buildings ..	£ 1,177,348	1,374,230	1,358,722	1,359,548	1,384,721
Value of plant and machinery ..	£ 3,525,659	4,080,282	3,930,010	3,816,583	3,795,038
Salaries and wages paid ..	£ 1,613,107	2,276,458	2,291,782	2,173,352	2,279,972
Value of power, fuel, etc., used ..	£ 507,951	849,979	788,797	1,033,829	1,057,934
Value of materials used ..	£ 16,844,310	17,669,490	17,755,504	16,567,603	18,042,070
Total value of output ..	£ 21,333,872	23,661,486	23,513,675	22,750,733	24,626,910
Value of production ..	£ 3,891,611	5,142,017	4,969,284	5,149,211	5,526,906

9. *Electrical Machinery, Cables and Apparatus.*—(i) *Details for Each State.* The following table shows particulars of this industry for each State during 1945-46 :—

ELECTRICAL MACHINERY, CABLES AND APPARATUS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	271	172	24	39	36	9	551
Number of persons engaged ..	14,645	6,399	469	769	459	84	22,825
Value of land and buildings ..	£ 2,148,893	933,375	79,810	247,111	79,233	18,953	3,507,375
Value of plant and machinery ..	£ 1,364,449	589,418	34,386	61,450	25,588	8,727	2,084,018
Salaries and wages paid ..	£ 4,123,425	1,749,827	127,533	169,368	110,761	20,121	6,301,035
Value of power, fuel, etc., used £	135,325	58,102	3,185	7,745	3,474	928	208,729
Value of materials used ..	£ 5,159,170	2,364,669	171,860	215,239	133,817	40,688	8,085,443
Total value of output ..	£ 11,522,910	5,045,516	373,121	461,310	308,314	78,658	17,789,829
Value of production ..	£ 6,228,415	2,622,745	198,106	238,326	171,023	37,042	9,495,657

(ii) *Total for Australia.* The increased output of electrical energy in Australia within recent years, referred to in par. 40 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.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	360	401	431	475	551
Number of persons engaged ..	10,666	19,442	20,659	21,669	22,825
Value of land and buildings ..	£ 1,627,183	2,442,968	2,713,999	2,829,443	3,507,375
Value of plant and machinery ..	£ 866,553	1,600,093	1,724,045	1,806,169	2,084,018
Salaries and wages paid ..	£ 2,031,098	5,280,102	5,710,782	5,857,210	6,301,035
Value of power, fuel, etc., used ..	£ 104,594	186,983	193,542	190,677	208,729
Value of materials used ..	£ 3,195,032	7,788,397	7,804,575	7,991,646	8,085,443
Total value of output ..	£ 6,954,498	15,875,437	16,346,709	16,802,366	17,789,829
Value of production ..	£ 3,654,872	7,900,057	8,348,592	8,710,048	9,495,657

10. **Railway and Tramway Workshops.**—(i) *Details for each State, 1945-46.* 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 10 in 1945-46 have been excluded :—

TRAMCARS, RAILWAY ROLLING STOCK AND CARRIAGES, ETC.(a), 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories	36	25	11	14	22	7	115
Number of persons engaged	15,681	7,262	5,282	5,285	2,613	839	36,962
Value of land and buildings	£ 3,246,576	1,487,546	557,175	1,055,734	518,822	94,638	6,960,491
Value of plant and machinery	£ 3,013,916	1,116,680	441,016	953,032	458,847	51,008	6,034,499
Salaries and wages paid	£ 4,831,165	2,344,878	1,827,188	1,610,305	801,577	241,515	11,656,718
Value of power, fuel, etc., used	£ 140,755	68,369	41,979	75,321	35,272	10,169	371,865
Value of materials used	£ 3,585,005	1,823,103	1,118,797	923,976	621,189	71,276	8,143,346
Total value of output	£ 9,465,324	4,525,198	3,310,325	2,870,662	1,782,038	355,256	22,308,803
Value of production	£ 5,739,564	2,633,726	2,149,549	1,871,365	1,125,577	273,811	13,793,592

(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, RAILWAY ROLLING STOCK AND CARRIAGES, ETC.(a) : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	117	114	116	116	115
Number of persons engaged	27,310	38,721	39,058	37,972	36,962
Value of land and buildings	£ 6,736,924	6,765,186	6,902,264	6,911,284	6,960,491
Value of plant and machinery	£ 5,390,179	5,684,696	5,707,808	5,824,728	6,034,499
Salaries and wages paid	£ 6,720,990	12,943,437	13,407,931	12,463,846	11,656,718
Value of power, fuel, etc., used	£ 226,108	451,527	454,130	418,288	371,865
Value of materials used	£ 4,976,353	7,731,445	8,590,203	8,056,849	8,143,346
Total value of output	£ 13,223,114	23,490,587	24,947,557	23,099,306	22,308,803
Value of production	£ 8,020,653	15,307,615	15,903,224	14,624,169	13,793,592

(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 1945-46 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC. : AUSTRALIA, 1945-46.

Items.	Construction and Assembly.	Body Building.	Repairs.	Accessories.	Total.
Number of factories	42	212	3,230	108	3,592
Number of persons engaged	4,077	10,682	21,012	3,935	39,706
Value of land and buildings	£ 1,042,157	1,635,292	6,555,724	644,787	9,877,960
Value of plant and machinery	£ 468,264	1,149,305	1,661,210	478,784	3,757,572
Salaries and wages paid	£ 1,346,248	3,298,350	4,790,367	1,147,049	10,582,014
Value of power, fuel, etc., used	£ 51,910	87,707	195,504	59,603	394,724
Value of materials used	£ 2,207,317	3,451,005	5,301,402	1,183,549	12,143,273
Total value of output	£ 4,042,078	7,879,250	13,337,929	3,097,500	28,356,307
Value of production	£ 1,782,851	4,340,538	7,841,023	1,853,898	15,818,310

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

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia
Number of factories ..	1,348	1,125	418	220	342	139	3,592
Number of persons engaged ..	11,069	14,304	4,312	7,024	2,043	954	39,706
Value of land and buildings £	3,651,528	3,585,520	712,017	926,815	667,429	334,651	9,877,960
Value of plant and machinery £	940,314	1,636,123	258,874	665,545	195,455	61,261	3,757,572
Salaries and wages paid £	2,696,270	4,070,174	1,040,653	2,063,938	501,984	208,995	10,582,014
Value of power, fuel, etc., used £	115,465	149,416	41,130	59,828	23,677	5,208	394,724
Value of materials used £	3,519,661	4,999,858	1,091,694	1,711,837	614,993	205,230	12,143,273
Total value of output £	7,802,179	11,045,782	2,801,580	4,089,914	1,488,719	528,133	28,356,307
Value of production ..	£ 4,167,053	6,496,508	1,668,756	2,318,249	850,049	317,695	15,818,310

(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 1941-42 to 1945-46 :—

MOTOR BODIES : PRODUCTION AND IMPORTS, AUSTRALIA.

Items.	1938-39.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Motor Bodies—						
Number made ..	No. 79,436	62,731	44,286	29,309	22,805	19,473
Value ..	£ 6,421,142	4,321,988	4,652,771	2,582,912	2,530,043	2,356,778
Number imported ..	No. 532	16	270	694	6	223
Value ..	£A 70,943	2,261	71,405	66,175	1,423	37,410

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.	1941-42.	1942-43.	1943-44.	1944-45.	1945-46.
Number imported ..	No. 76,094	35,696	14,547	9,186	6,660	10,113
Value ..	£A 8,037,228	5,945,180	4,456,808	3,186,885	3,464,820	2,064,478

12. **Agricultural Machines and Implements.**—(i) *General.* The manufacture of agricultural implements is an important branch of industry in Australia because of the extensive agricultural activities. 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 1945-46 :—

AGRICULTURAL MACHINES AND IMPLEMENTS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	57	57	15	34	9	..	172
Number of persons engaged ..	1,758	4,905	1,236	1,449	162	..	9,510
Value of land and buildings £	292,452	609,043	87,577	164,909	45,971	..	1,199,952
Value of plant and machinery £	189,547	719,690	114,276	197,193	8,801	..	1,229,597
Salaries and wages paid £	517,994	1,584,777	344,680	399,801	46,640	..	2,893,892
Value of power, fuel, etc., used £	21,252	120,141	16,493	27,420	844	..	186,150
Value of materials used ..	£ 415,819	1,568,582	257,882	450,972	24,047	..	2,717,302
Total value of output ..	£ 1,193,569	3,747,487	707,503	967,334	85,451	..	6,701,344
Value of production ..	£ 756,498	2,058,764	433,128	488,942	60,560	..	3,797,892

(iii) *Total for Australia.* Comparative statistics for 1938-39 and the years 1942-43 to 1945-46 are given hereunder:—

AGRICULTURAL MACHINES AND IMPLEMENTS : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	161	144	145	146	172
Number of persons engaged	6,563	9,457	9,178	9,149	9,510
Value of land and buildings	£ 996,949	1,037,513	1,046,702	1,035,331	1,199,952
Value of plant and machinery	£ 910,520	1,093,853	1,121,626	1,265,985	1,229,597
Salaries and wages paid	£ 1,373,213	2,954,294	2,821,968	2,745,909	2,893,802
Value of power, fuel, etc., used	£ 81,736	215,379	198,680	187,970	186,150
Value of materials used	£ 1,485,018	2,762,748	2,822,460	2,817,698	2,717,302
Total value of output	£ 3,403,091	6,727,818	6,604,402	6,589,942	6,701,344
Value of production	£ 1,836,337	3,749,691	3,583,262	3,584,274	3,797,892

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 almost entirely to New South Wales and Victoria. The number of broadcast listeners' licences increased from 331,128 in 1930-31 to 1,506,180 in 1945-46 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 but there was a recession in output in 1945-46.

WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	72	73	85	89	97
Number of persons engaged	4,828	9,554	11,020	10,534	8,709
Value of land and buildings	£ 557,953	754,977	895,642	998,470	969,105
Value of plant and machinery	£ 305,468	544,023	613,088	643,914	711,805
Salaries and wages paid	£ 754,302	2,429,430	2,959,291	2,784,985	2,295,866
Value of power, fuel, etc., used	£ 23,525	58,517	68,553	70,055	58,240
Value of materials used	£ 1,355,683	2,944,653	3,379,511	3,445,575	3,446,056
Total value of output	£ 2,502,338	6,180,276	7,190,028	7,290,352	6,514,935
Value of production	£ 1,123,130	3,177,106	3,741,964	3,774,722	3,010,639

The number of domestic receiving sets assembled in 1945-46 was 93,048 and the number of domestic chassis made was 76,587 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 14 million lb. in the five years ended 1945-46. 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 gineries 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 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 four years ended 1945-46 in comparison with 1938-39.

COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	33	69	70	74	78
Number of persons engaged	3,589	7,868	7,908	7,667	7,253
Value of land and buildings	£ 703,790	1,396,304	1,427,401	1,523,800	1,529,150
Value of plant and machinery	£ 735,529	2,177,698	2,080,785	2,170,792	1,913,775
Salaries and wages paid	£ 493,109	1,655,233	1,768,268	1,732,481	1,714,669
Value of power, fuel, etc., used	£ 50,011	133,138	142,534	146,726	149,990
Value of materials used	£ 1,357,280	4,547,556	5,375,438	5,370,733	4,539,560
Total value of output	£ 2,385,990	7,691,120	8,930,324	8,879,653	7,936,716
Value of production	£ 978,699	3,010,426	3,412,352	3,362,194	3,227,166

15. Woollen Mills.—(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 1945-46 :—

WOOLLEN MILLS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia
Number of factories	37	65	3	3	176	5	114
Number of persons engaged	6,801	11,094	677	577	176	2,211	21,536
Value of land and buildings	£ 1,085,639	1,600,950	(a)	39,668	(a)	224,590	3,028,060
Value of plant and machinery	£ 1,150,183	1,410,896	(a)	70,046	(a)	162,675	2,925,811
Salaries and wages paid	£ 1,655,356	2,855,086	(a)	139,082	(a)	507,197	5,324,388
Value of power, fuel, etc., used	£ 144,693	287,645	(a)	22,692	(a)	36,951	511,416
Value of materials used	£ 3,994,650	6,564,947	(a)	351,735	(a)	1,141,395	12,314,413
Total value of output	£ 6,884,484	11,752,967	(a)	600,012	(a)	2,002,206	21,776,979
Value of production	£ 2,745,141	4,900,375	(a)	225,585	(a)	823,860	8,951,150

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

(ii) *Total for Australia.* The extent of the woollen mill industry in Australia in the years 1942-43 to 1945-46 compared with 1938-39 is shown in the following table Detailed particulars for the several States are not available for publication.

WOOLLEN MILLS : AUSTRALIA.

Items.	1938-39. (a)	1942-43. (a)	1943-44. (a)	1944-45. (a)	1945-46.
Number of factories	90	118	116	122	114
Number of persons engaged	19,608	26,436	24,858	23,095	21,536
Value of land and buildings	£ 2,380,009	2,816,658	2,867,297	2,996,246	3,028,066
Value of plant and machinery	£ 3,369,517	3,178,704	2,995,835	2,967,911	2,925,811
Salaries and wages paid	£ 2,887,907	5,967,770	5,896,320	5,484,589	5,324,388
Value of power, fuel, etc., used	£ 392,537	655,981	658,800	609,139	511,416
Value of materials used	£ 7,331,117	16,604,441	15,455,106	13,780,546	12,314,413
Total value of output	£ 12,514,610	27,335,695	25,433,289	23,250,907	21,776,979
Value of production	£ 4,790,956	10,075,273	9,319,383	8,861,222	8,951,150
Woollen cloth and tweed	sq. yd. 8,336,226	14,516,085	13,055,199	12,679,864	16,707,262
Worsted cloth	17,986,091	23,767,429	19,944,042	17,296,854	12,643,557
Serge	792,314	1,462,887	1,840,316	1,395,201	1,022,388
Flannel—					
For outer clothing	2,143,835	1,276,814	2,611,476	2,205,174	2,192,849
For underwear (pure)	1,557,373	3,813,354	2,704,382	2,020,022	1,566,932
For underwear (mixtures)	813,530	552,144	218,431	185,630	655,803
Blankets	pair 573,795	1,768,557	1,687,729	1,597,395	981,036

(a) Includes Wool Scouring Works in Victoria and Tasmania and Wool Scouring Works and Fellmongeries in South Australia.

16. **Hosiery and Other Knitted Goods.**—(i) *Details for each State.* In addition to the woollen mills there were 376 hosiery and knitting mills operating in Australia during 1945-46. The total number of persons engaged in these establishments was 17,091, of whom 12,502 were females. Details for each State are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	104	255	1	7	5	4	376
Number of persons engaged ..	5,949	11,536	211	88	127	80	17,091
Value of land and buildings £	835,283	1,546,500	(a)	16,040	16,167	(a)	2,444,369
Value of plant and machinery £	432,830	892,739	(a)	2,916	8,082	(a)	1,358,482
Salaries and wages paid ..	1,086,069	2,501,753	(a)	15,799	20,895	(a)	3,687,445
Value of power, fuel, etc., used£	41,278	139,026	(a)	580	1,308	(a)	185,159
Value of materials used ..	2,403,706	4,606,556	(a)	23,118	60,817	(a)	7,202,997
Total value of output ..	4,279,576	8,615,732	(a)	51,409	104,935	(a)	13,252,876
Value of production ..	£ 1,834,592	3,870,150	(a)	27,711	42,810	(a)	5,864,720

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

(ii) *Total for Australia.* Comparative statistics for 1938-39 and the years 1942-43 to 1945-46 are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	313	326	341	363	376
Number of persons engaged ..	18,159	15,654	16,017	16,691	17,091
Value of land and buildings ..	£ 1,962,336	2,172,979	2,243,181	2,354,232	2,444,369
Value of plant and machinery ..	£ 1,930,564	1,455,583	1,367,754	1,295,962	1,358,482
Salaries and wages paid ..	£ 2,331,536	2,930,842	3,187,545	3,290,370	3,687,445
Value of power, fuel, etc., used ..	£ 133,154	164,534	168,218	169,935	185,159
Value of materials used ..	£ 4,284,216	7,599,088	7,873,375	7,141,525	7,202,997
Total value of output ..	£ 8,226,468	13,095,997	13,771,177	13,038,366	13,252,876
Value of production ..	£ 3,809,098	5,332,375	5,729,584	5,726,906	5,864,720

(iii) *Raw Materials used and Production, 1945-46.* The main raw materials consumed in establishments manufacturing hosiery and other knitted goods during 1945-46 consisted of woollen yarn, 8,203,549 lb; cotton yarn, 5,954,517 lb.; and rayon yarn, 5,984,051 lb. Production comprised 30,142,339 garments, valued at £6,983,517; 1,194,839 dozen pairs of stockings, valued at £2,164,264; and 1,692,714 dozen pairs of socks, valued at £1,900,357.

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, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia
Number of factories ..	76	44	14	11	5	2	152
Number of persons engaged ..	1,945	2,257	499	146	154	21	5,022
Value of land and buildings £	424,259	497,837	51,678	(a)	40,729	(a)	1,048,240
Value of plant and machinery £	294,795	298,080	61,702	(a)	30,506	(a)	704,551
Salaries and wages paid ..	£ 631,168	778,865	152,560	(a)	46,968	(a)	1,662,156
Value of power, fuel, etc., used£	49,153	60,094	11,359	(a)	3,909	(a)	127,824
Value of materials used ..	£ 2,214,699	2,142,697	569,530	(a)	170,556	(a)	5,237,697
Total value of output ..	£ 3,293,731	3,430,200	845,379	(a)	263,007	(a)	8,055,696
Value of production ..	£ 1,029,879	1,227,409	264,490	(a)	88,542	(a)	2,690,175

(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 to 1945-46 is shown in the following table :—

TANNING, CURRYING AND LEATHER DRESSING : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46
Number of factories	132	138	142	147	152
Number of persons engaged	4,375	4,647	4,631	4,668	5,022
Value of land and buildings	£ 813,713	906,896	919,016	952,161	1,048,240
Value of plant and machinery	£ 523,538	531,661	543,796	605,625	704,551
Salaries and wages paid	£ 919,781	1,453,026	1,495,549	1,520,672	1,662,156
Value of power, fuel, etc., used	£ 87,670	124,261	135,568	131,818	127,824
Value of materials used	£ 2,983,041	5,001,880	5,007,149	4,959,660	5,237,697
Total value of output	£ 4,592,642	7,461,144	7,569,327	7,552,095	8,055,696
Value of production	£ 1,521,931	2,335,003	2,426,610	2,460,617	2,690,175

(iii) *Raw Material Used and Production.* The quantities of raw material used and leather produced in tanneries in each State in 1945-46 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, 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides No.	789,430	942,669	310,791	(a)	95,577	(a)	2,218,114
Skins—							
Calf "	687,047	699,480	170,096	3,783	1,060	..	1,561,466
Goat "	731,162	(a)	(a)	(a)	..	..	840,816
Sheep "	1,638,537	576,619	(a)	(a)	180	(a)	2,506,207
Marsupial "	30,782	26,239	(a)	(a)	(a)	..	67,926
Pelts treated "	1,529,887	462,330	..	..	1,560	..	1,993,777
Bark used—							
Wattle tons	3,314	4,854	1,936	(a)	(a)	(a)	11,036
Other "	588	911	(a)	..	(a)	..	1,922
Tanning extract used lb.	12,328,159	8,535,861	3,401,346	(a)	1,921,559	(a)	26,404,544
Leather made—							
Sole and Beiting "	11,753,271	13,039,543	6,774,438	866,790	(a)	(a)	34,790,814
Harness "	763,862	533,430	580,762	50,041	30,922	..	1,959,017
Upholstery sq. ft.	3,835,039	(a)	..	(a)	..	..	5,877,062
Dressed and Upper from Hides—							
Sold by Measurement—							
Patent sq. ft.	1,281,945	1,177,753	..	..	..	..	2,459,698
All Other "	10,123,522	14,911,458	3,868,158	1,411,838	(a)	(a)	31,035,897
Sold by Weight—							
Waxed Kip lb.	(a)	(a)	(a)	63,362	8,718	(a)	106,060
All Other "	749,561	864,694	(a)	51,914	(a)	(a)	1,673,343
Dressed from skins—							
Calf sq. ft.	5,112,853	5,053,542	(a)	(a)	(a)	..	11,185,486
Goat "	3,369,440	(a)	(a)	(a)	..	..	3,848,830
Sheep "	11,588,469	3,009,100	(a)	(a)	(a)	..	15,005,699
Marsupial "	77,249	517,662	31,601	3,000	2,503	..	632,015

(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 1945-46 of this industry between States are shown in the following table :—

TAILORING AND READY-MADE CLOTHING FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	664	388	125	122	96	25	1,420
Number of persons engaged	15,167	8,432	2,756	2,223	1,000	460	30,047
Value of land and buildings	£ 2,264,241	1,058,076	272,336	315,917	164,767	66,247	4,141,584
Value of plant and machinery	£ 443,286	263,292	48,470	40,635	20,136	12,876	828,695
Salaries and wages paid	£ 2,796,896	1,675,620	453,417	351,925	150,330	78,426	5,506,614
Value of power, fuel, etc., used	£ 53,747	41,520	8,863	7,724	3,409	1,353	116,616
Value of materials used	£ 4,689,717	3,566,734	758,193	319,359	203,729	79,069	9,616,801
Total value of output	£ 9,198,299	6,403,713	1,535,989	834,629	452,320	188,799	18,614,368
Value of production	£ 4,454,835	2,795,459	768,933	507,546	245,801	108,377	8,880,951

(ii) *Total for Australia.* Details for the four years 1942-43 to 1945-46 compared with 1938-39 are as follows:—

TAILORING AND READY-MADE CLOTHING FACTORIES: AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	1,177	1,101	1,160	1,268	1,420
Number of persons engaged	26,499	26,043	25,872	28,108	30,047
Value of land and buildings	£ 3,175,748	£ 3,269,725	£ 3,453,279	£ 3,728,531	£ 4,141,564
Value of plant and machinery	£ 355,503	£ 506,188	£ 567,800	£ 689,437	£ 828,695
Salaries and wages paid	£ 3,168,472	£ 4,280,349	£ 4,543,027	£ 4,970,774	£ 5,506,614
Value of power, fuel, etc., used	£ 72,431	£ 90,722	£ 98,915	£ 104,945	£ 116,616
Value of materials used	£ 4,946,519	£ 9,207,864	£ 8,843,064	£ 9,416,961	£ 9,616,801
Total value of output	£ 9,830,646	£ 15,855,802	£ 16,189,527	£ 17,588,937	£ 18,614,368
Value of production	£ 4,811,696	£ 6,557,216	£ 7,247,548	£ 8,067,031	£ 8,880,951

19. Dressmaking, Hemstitching and Millinery Establishments.—(i) *Details for each State.* Particulars of dressmaking (including hemstitching) and millinery establishments are given separately in the following tables for 1945-46.

DRESSMAKING, HEMSTITCHING ESTABLISHMENTS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas. (a)	Australia.
Number of factories	154	483	43	65	63	11	819
Number of persons engaged	1,856	9,880	903	1,180	1,113	105	15,037
Value of land and buildings	£ 264,916	£ 1,513,003	£ 80,902	£ 115,877	£ 136,486	£ 14,594	£ 2,125,778
Value of plant and machinery	£ 29,880	£ 105,433	£ 19,122	£ 23,094	£ 27,498	£ 2,705	£ 297,432
Salaries and wages paid	£ 262,865	£ 1,782,477	£ 125,448	£ 153,715	£ 134,801	£ 13,536	£ 2,472,844
Value of power, fuel, etc., used	£ 3,145	£ 31,669	£ 2,245	£ 3,145	£ 2,424	£ 364	£ 42,992
Value of materials used	£ 265,295	£ 3,487,894	£ 138,967	£ 142,308	£ 183,023	£ 13,552	£ 4,231,939
Total value of output	£ 682,012	£ 6,408,703	£ 348,252	£ 383,678	£ 417,841	£ 36,376	£ 8,276,862
Value of production	£ 413,372	£ 2,889,140	£ 207,040	£ 238,225	£ 231,494	£ 22,460	£ 4,001,931

(a) Includes Millinery.

MILLINERY ESTABLISHMENTS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas. (a)	Australia.
Number of factories	79	69	15	13	3	..	179
Number of persons engaged	1,265	1,152	365	195	37	..	3,014
Value of land and buildings	£ 294,080	£ 231,880	£ 44,309	£ 25,040	£ 1,930	..	£ 597,839
Value of plant and machinery	£ 16,406	£ 40,149	£ 6,552	£ 1,438	£ 88	..	£ 64,633
Salaries and wages paid	£ 226,202	£ 239,235	£ 63,496	£ 31,240	£ 4,683	..	£ 564,856
Value of power, fuel, etc., used	£ 3,143	£ 7,500	£ 954	£ 682	£ 108	..	£ 14,387
Value of materials used	£ 420,509	£ 481,919	£ 84,520	£ 51,716	£ 9,830	..	£ 1,048,494
Total value of output	£ 874,671	£ 1,006,135	£ 229,287	£ 103,430	£ 17,409	..	£ 2,230,930
Value of production	£ 449,019	£ 516,714	£ 143,813	£ 51,032	£ 7,471	..	£ 1,168,049

(a) Included in Dressmaking.

(ii) *Total for Australia.* Particulars of dressmaking, hemstitching and millinery establishments in Australia for the four years ended 1945-46 compared with 1938-39 are shown in the following table:—

DRESSMAKING, HEMSTITCHING AND MILLINERY ESTABLISHMENTS: AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	869	814	838	904	998
Number of persons engaged	16,398	13,398	13,822	15,604	18,051
Value of land and buildings	£ 2,051,611	£ 2,029,915	£ 2,149,258	£ 2,335,994	£ 2,723,617
Value of plant and machinery	£ 189,263	£ 212,289	£ 237,809	£ 279,771	£ 362,065
Salaries and wages paid	£ 1,652,808	£ 1,913,297	£ 2,134,257	£ 2,436,294	£ 3,037,698
Value of power, fuel, etc., used	£ 33,067	£ 36,320	£ 39,699	£ 45,088	£ 57,379
Value of materials used	£ 2,609,363	£ 3,563,197	£ 4,093,738	£ 4,601,884	£ 5,280,433
Total value of output	£ 5,234,727	£ 6,869,242	£ 7,874,479	£ 8,806,159	£ 10,507,792
Value of production	£ 2,592,297	£ 3,269,725	£ 3,741,042	£ 4,159,187	£ 5,169,980

20. Shirts, Collars and Underclothing.—(i) *Details for each State.* Particulars of this industry are shown for 1945-46 in the following table:—

SHIRTS, COLLARS AND UNDERCLOTHING, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	178	108	18	27	16	..	347
Number of persons engaged ..	4,888	3,266	872	478	398	..	9,904
Value of land and buildings £	691,693	482,659	54,333	38,056	44,122	..	1,310,863
Value of plant and machinery £	215,397	132,677	27,860	12,020	8,643	..	396,597
Salaries and wages paid £	873,950	583,571	142,509	72,782	55,701	..	1,728,513
Value of power, fuel, etc., used £	14,525	12,455	2,354	1,445	847	..	31,626
Value of materials used £	2,249,802	1,856,752	149,165	88,008	102,014	..	4,445,741
Total value of output £	3,595,513	2,762,321	336,350	198,901	185,736	..	7,078,821
Value of production ..	£ 1,331,186	893,114	184,831	109,448	82,875	..	2,601,434

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

SHIRTS, COLLARS AND UNDERCLOTHING: AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	283	293	298	320	347
Number of persons engaged ..	11,081	9,851	9,716	9,984	9,904
Value of land and buildings ..	£ 945,972	1,028,651	1,079,603	1,145,703	1,310,863
Value of plant and machinery ..	£ 230,579	259,913	275,596	315,196	396,597
Salaries and wages paid ..	£ 1,142,855	1,443,680	1,574,283	1,673,929	1,728,513
Value of power, fuel, etc., used ..	£ 23,639	25,858	26,162	27,707	31,626
Value of materials used ..	£ 2,650,779	4,353,022	4,874,577	4,968,808	4,445,741
Total value of output ..	£ 4,435,209	6,605,309	7,339,928	7,697,154	7,078,821
Value of production ..	£ 1,760,791	2,226,429	2,439,189	2,700,639	2,601,434

21. Boot and Shoe Making and Repairing.—(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 1945-46 and refers to boot and shoe factories as distinct from those devoted to repairing and bespoke work. Factories engaged in the manufacture of rubber boots and shoes are excluded, being classified under Rubber Goods (Including Tyres made); *vide* para. 38.

BOOT AND SHOE (NOT RUBBER) FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	134	195	22	18	10	4	383
Number of persons engaged ..	6,053	9,464	956	1,180	515	96	18,264
Value of land and buildings £	593,134	742,870	47,417	74,924	53,571	6,395	1,518,311
Value of plant and machinery £	354,487	630,515	76,802	106,764	47,466	6,342	1,222,376
Salaries and wages paid ..	£ 1,432,430	2,353,753	222,316	260,456	116,655	22,004	4,407,614
Value of power, fuel, etc., used £	23,682	41,482	3,023	3,990	2,411	320	74,908
Value of materials used ..	£ 2,347,191	4,150,012	396,397	390,202	191,861	43,849	7,519,512
Total value of output ..	£ 4,437,680	7,765,401	723,572	714,959	350,227	74,542	14,066,381
Value of production ..	£ 2,066,807	3,573,907	324,152	320,767	155,955	30,373	6,471,961

(ii) *Boot and Shoe Repairing, including Bespoke Work.* The introduction of small power plants in repairing shops brought this class of establishment within the meaning of a factory for statistical purposes. Shops using small power plants are widely distributed throughout Australia, and in 1945-46 numbered 1,477 employing 2,981 persons. The sum of £341,217 was distributed in salaries and wages, and the output was valued at £1,470,103.

(iii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made at factories in each State are shown for 1945-46 in the following table. Particulars relating to the output of rubber boots and shoes are not included :—

BOOT AND SHOE (NOT RUBBER) FACTORIES OUTPUT, 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY.							
Boots and shoes .. pairs	5,016,504	7,031,105	692,563	889,683	318,629	93,350	14,041,834
Slippers	2,196,603	3,246,022	674,048	325,418	337,359	..	6,779,450
Uppers (b)	(a)	44,916	(a)	(a)	35,470	(a)	89,358
VALUE.							
Boots and shoes	£ 3,608,453	5,566,946	472,910	625,446	212,813	67,325	10,553,893
Slippers	£ 440,738	666,839	176,469	49,280	75,233	..	1,408,559
Uppers (b)	£ (a)	26,456	(a)	(a)	2,443	(a)	36,500

(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 1945-46.

FLOUR-MILLING, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	54	40	10	39	19	8	170
Number of persons engaged ..	1,403	1,021	424	622	487	142	4,099
Value of land and buildings ..	£ 854,211	688,849	183,664	203,404	239,774	74,079	2,243,981
Value of plant and machinery ..	£ 725,274	497,473	152,318	231,746	198,660	29,955	1,835,426
Salaries and wages paid ..	£ 487,008	343,275	132,177	204,284	166,582	42,622	1,375,948
Value of power, fuel, etc., used ..	£ 99,166	69,630	22,757	49,660	53,106	5,278	299,597
Value of materials used ..	£ 5,267,808	3,552,902	1,231,062	1,863,323	1,879,284	385,749	14,180,128
Total value of output ..	£ 6,276,225	4,222,476	1,466,727	2,208,836	2,228,391	444,431	16,847,086
Value of production ..	£ 909,251	599,944	212,908	295,853	296,001	53,404	2,367,361

(ii) *Production of Flour and By-products.* The production of flour by the mills in each State for the years 1938-39 and 1942-43 to 1945-46 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
1942-43 ..	363,452	288,134	102,864	97,826	126,274	16,812	995,362
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	96,984	164,986	166,791	22,657	1,218,838

The 1945-46 production of 1,218,838 tons of flour in Australia was valued at £12,083,745. In addition, 493,878 tons of bran and pollard, valued at £2,881,914, were made. The quantity of wheat ground was 63,416,122 bushels.

23. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1945-46 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 1039. 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), 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia
Number of factories ..	975	746	320	171	190	92	2,494
Number of persons engaged ..	5,478	4,112	1,918	1,171	695	1,161	14,535
Value of land and buildings £	3,044,142	1,667,986	545,682	335,847	269,763	358,182	6,221,602
Value of plant and machinery £	758,439	477,092	202,976	175,996	85,272	104,508	1,804,283
Salaries and wages paid £	1,303,470	930,304	404,209	273,351	140,982	262,062	3,314,378
Value of power, fuel, etc., used £	234,401	169,129	64,368	44,178	27,684	33,996	573,756
Value of materials used £	4,278,895	3,044,713	1,550,260	850,657	514,660	848,338	11,087,517
Total value of output £	7,431,375	5,247,154	2,599,161	1,409,299	876,349	1,362,691	18,926,029
Value of production .. £	2,918,079	2,033,312	984,533	514,464	334,005	480,363	7,264,756

(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 years 1911, 1938-39, and each year 1943-44 to 1945-46:—

SUGAR-MILLS: NEW SOUTH WALES.

Items.	1911.	1938-39.	1943-44.	1944-45.	1945-46.
Number of factories ..	4	3	3	3	3
Number of employees ..	469	212	317	248	283
Cane crushed .. tons	147,799	337,038	290,364	200,050	166,069
Raw sugar produced (94 net titre) .. tons	17,299	45,106	37,442	26,423	21,220
Molasses produced gals.	796,440	1,489,090	1,350,400	1,037,600	1,110,000

(iii) *Details for Queensland.* Particulars relating to the operations of sugar-mills in Queensland are shown in the following table for the years 1911 and 1938-39 and each year 1943-44 to 1945-46. Particulars of the production and distribution of molasses as recorded by the mills are also shown.

SUGAR-MILLS : QUEENSLAND.

Items.	1911.	1938-39.	1943-44.	1944-45.	1945-46.
Number of factories ..	49	33	33	32	32
Number of persons engaged	4,295	4,419	3,834	4,276	4,665
Cane crushed .. tons	1,534,451	5,432,193	3,397,617	4,398,268	4,551,971
Raw sugar produced (94 net titre) .. tons	173,296	775,064	486,423	643,520	644,661
Molasses—					
Sold to distillers and others .. gals.	2,393,669	8,275,887	7,345,596	9,136,862	9,380,679
Used as fodder ..	789,564	4,237,196	3,055,728	4,719,517	4,675,909
Used as manure ..	223,000	3,293,543	2,122,220	2,745,617	3,074,755
Run to waste ..		498,926	97,643	16,660	50,902
Burnt as fuel ..	1,847,333	3,748,590	2,176,926	2,251,737	1,748,299
Sold or used for other purposes ..		232,049	441,522	254,358	423,085
In stock ..	1,197,626				
Total molasses ..	6,451,192	20,286,191	15,239,635	19,124,751	19,353,629

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 1945-46 there were two sugar refineries in the State of Queensland, and one in each of the States of New South Wales, Victoria, South Australia and Western Australia. The quantity of raw sugar treated amounted to 446,550 tons, for a yield of 428,130 tons of refined sugar, valued at £13,612,455.

26. *Confectionery Factories.*—(i) *Details for each State.* The figures for 1945-46 are given hereunder:—

SUGAR CONFECTIONERY FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia (b)
Number of factories ..	73	76	18	22	9	(a)	198
Number of persons engaged ..	2,693	2,270	348	324	330	(a)	5,965
Value of land and buildings £	795,067	525,911	81,267	96,916	57,160	(a)	1,556,321
Value of plant and machinery £	609,017	423,422	21,575	37,925	59,545	(a)	1,142,484
Salaries and wages paid £	670,711	541,361	63,572	58,363	55,442	(a)	1,389,479
Value of power, fuel, etc., used £	59,680	54,838	5,562	7,668	10,764	(a)	138,512
Value of materials used £	2,412,284	1,752,250	193,790	174,994	135,610	(a)	4,668,928
Total value of output £	4,066,895	3,176,177	336,820	289,593	252,168	(a)	8,121,623
Value of production ..	£ 1,594,931	1,369,089	137,468	106,901	105,794	(a)	3,314,183

(a) Not available for publication.

(b) Excluding Tasmania.

(ii) *Total for Australia, excluding Tasmania.* Particulars of the confectionery industry during the last four 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.	1942-43.	1943-44.	1944-45.	1945-46
Number of factories	148	141	163	182	198
Number of persons engaged	7,256	5,497	5,796	5,795	5,963
Value of land and buildings	£ 1,423,406	1,400,581	1,451,329	1,480,439	1,550,321
Value of plant and machinery	£ 1,363,619	1,230,627	1,194,194	1,160,005	1,142,484
Salaries and wages paid	£ 1,040,984	1,142,331	1,258,561	1,298,281	1,389,479
Value of power, fuel, etc., used	£ 106,869	123,729	129,175	134,914	138,512
Value of materials used	£ 3,101,955	3,618,711	4,305,338	4,504,124	4,668,928
Total value of output	£ 5,627,247	6,559,961	7,642,694	7,933,135	8,121,623
Value of production	£ 2,418,423	2,817,521	3,208,181	3,294,097	3,314,183

(a) Excluding 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 1945-46 :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, ETC., FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories	55	52	13	13	10	14	157
Number of persons engaged	3,596	4,864	430	944	233	1,336	11,403
Value of land and buildings	£ 663,570	1,046,513	62,556	131,783	57,528	221,704	2,183,654
Value of plant and machinery	£ 542,228	683,355	53,870	122,911	57,162	170,453	1,629,979
Salaries and wages paid	£ 956,757	1,267,550	110,175	221,198	52,221	339,465	2,947,366
Value of power, fuel, etc., used	£ 88,184	110,409	8,295	17,997	4,876	30,318	260,079
Value of materials used	£ 3,590,791	5,865,362	524,485	829,867	215,305	1,299,948	12,325,758
Total value of output	£ 5,370,604	8,172,809	734,850	1,222,995	326,507	1,836,766	17,664,531
Value of production	£ 1,691,629	2,197,038	202,070	375,131	106,326	506,500	5,078,694

(ii) *Total for Australia.* Particulars of these establishments in Australia for the four years 1942-43 to 1945-46 compared with 1938-39 are given hereunder :—

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

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	123	143	152	168	157
Number of persons engaged	6,476	9,868	11,416	12,858	11,403
Value of land and buildings	£ 1,382,150	1,667,493	2,055,850	2,409,005	2,183,654
Value of plant and machinery	£ 720,639	913,917	1,195,954	1,652,407	1,629,979
Salaries and wages paid	£ 1,148,991	2,225,581	2,740,715	3,065,087	2,947,366
Value of power, fuel, etc., used	£ 97,521	206,461	269,996	327,558	260,079
Value of materials used	£ 4,799,515	9,605,024	11,886,635	13,141,842	12,325,758
Total value of output	£ 7,230,914	14,009,177	16,985,506	19,169,509	17,664,531
Value of production	£ 2,333,878	4,197,692	4,828,875	5,700,109	5,078,694

During the 1939-45 War production of jams and jellies expanded greatly and a record output of 171 million lb. was attained in 1943-44. Production has since receded and stood at 148 million lb. in 1945-46. The peak output of fruit preserved in liquid occurred in 1940-41 when 161.1 million lb. were produced compared with the previous highest level of 157.8 million lb. attained in 1937-38. Production in 1945-46 was lower at

107,079,000 lb. On the other hand, there has 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 high level of 106,962,000 lb. in 1945-46, a figure a little below the record of 119,149,000 lb. in 1944-45.

(iii) *Production.* The following table shows the quantity and value of jams, pickles, sauces and other items manufactured in each State in 1945-46 :—

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : OUTPUT, 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY							
Jams and Jellies .. '000 lb.	45,725	(a)84,842	6,816	9,794	1,146	(b)	148,323
Fruit Pulp— Consumed in own works .. cwt.	22,541	31,390	(c)	8,789	4,200	(c)	89,433
For sale or addition to stock .. cwt.	32,929	110,257	(c)	10,778	21,040	(c)	283,425
Tomato Pulp— Consumed in own works .. cwt.	19,540	114,795	(c)	21,195	(c)	(c)	161,420
For sale or addition to stock .. cwt.	41,113	195,289	..	12,810	10,558	10,156	269,926
Fruit, preserved in liquid .. '000 lb.	21,762	62,931	8,871	10,417	(c)	(c)	107,079
Vegetables, preserved in liquid .. '000 lb.	36,926	36,316	(c)	14,180	(c)	(c)	106,962
Pickles .. '000 pints	4,591	4,196	(c)	1,620	(c)	..	10,775
Sauces .. " "	10,832	16,660	834	2,623	(c)	(c)	32,038

VALUE.

Jams and Jellies ..	£ 1,388,182	£2,353,122	£281,440	£233,006	£32,823	(b)	£4,288,573
Fruit, preserved in liquid	£ 581,618	£1,465,811	£263,027	£227,830	(c)	(c)	£2,612,106
Vegetables, preserved in liquid ..	£ 1,278,471	£1,172,698	(c)	£366,911	(c)	(c)	£3,414,909
Pickles ..	£ 214,985	£163,795	(c)	£69,660	(c)	..	£464,289
Sauces ..	£ 656,881	£946,870	£36,660	£100,730	(c)	(c)	£1,783,176

(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 1945-46 :—

BACON-CURING FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	32	20	7	12	6	10	87
Number of persons engaged ..	653	715	792	321	333	65	2,879
Value of land and buildings ..	£ 240,032	£242,331	£204,345	£117,175	£56,356	£29,536	£889,775
Value of plant and machinery ..	£ 71,653	£104,248	£126,962	£51,004	£31,914	£9,180	£394,961
Salaries and wages paid ..	£ 206,130	£218,321	£242,619	£97,865	£95,202	£18,999	£879,136
Value of power, fuel, etc., used ..	£ 26,941	£30,420	£25,547	£21,899	£18,615	£2,753	£126,175
Value of materials used ..	£ 2,454,806	£1,824,376	£2,661,399	£990,460	£1,253,130	£225,513	£9,409,690
Total value of output ..	£ 3,027,720	£2,256,837	£3,029,624	£1,134,800	£1,437,215	£277,353	£11,163,549
Value of production ..	£ 545,973	£402,041	£342,678	£122,441	£165,464	£49,087	£1,627,684

(ii) *Quantity and Value of Production.* The number of pigs cured and the quantity and value of production of factories in each State for 1945-46 are shown in the following table :—

BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
PIGS CURED.							
Pigs cured on own account	No. 329,256	201,697	270,480	103,421	104,900	26,771	1,036,525
Pigs cured on commission	" 419	4,146	(b)	4,016	(b)	231	8,995
Total	" 329,675	205,843	(b)	107,437	(b)	27,002	1,045,520
PRODUCTS.							
Bacon and ham .. '000 lb.	38,852	20,961	23,879	10,903	10,243	2,667	107,505
Lard "	1,176	1,536	2,903	593	1,021	145	7,374
VALUE.							
Bacon and ham (a) ..	£ 2,832,434	1,432,830	1,613,480	717,803	638,147	173,376	7,408,070
Lard "	£ 31,095	44,020	67,639	15,660	31,432	4,340	194,186

(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 1945-46 :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	117	148	100	46	17	34	462
Number of persons engaged ..	2,025	3,874	1,653	729	292	323	8,896
Value of land and buildings ..	£ 747,178	1,525,425	739,970	237,472	88,337	167,638	3,506,020
Value of plant and machinery ..	£ 998,757	1,344,427	849,635	174,123	95,738	134,686	3,597,366
Salaries and wages paid ..	£ 640,714	1,235,307	486,993	207,002	83,843	83,358	2,737,217
Value of power, fuel, etc., used ..	£ 198,974	356,025	111,311	46,023	24,480	18,942	755,755
Value of materials used ..	£ 6,852,096	13,647,632	10,620,490	2,097,649	989,826	783,217	34,990,910
Total value of output ..	£ 8,042,150	16,458,087	11,562,062	2,483,192	1,209,169	1,016,467	40,771,127
Value of production ..	£ 991,080	2,454,430	830,261	339,520	194,863	214,308	5,024,462

(ii) *Total for Australia.* The progress of industries included in this group during the four years 1942-43 to 1945-46 is compared with 1938-39 in the following table :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	523	487	472	469	462
Number of persons engaged ..	6,851	8,584	8,712	8,694	8,896
Value of land and buildings ..	£ 2,880,323	3,345,560	3,360,498	3,429,238	3,506,020
Value of plant and machinery ..	£ 3,066,840	3,521,161	3,499,065	3,487,660	3,597,366
Salaries and wages paid ..	£ 1,569,531	2,367,324	2,326,017	2,366,477	2,737,217
Value of power, fuel, etc., used ..	£ 389,501	671,072	708,211	701,016	755,755
Value of materials used ..	£ 29,161,983	33,372,425	35,300,830	31,535,021	34,990,910
Total value of output ..	£ 33,094,851	37,708,383	40,703,304	37,100,708	40,771,127
Value of production ..	£ 3,543,367	4,664,886	4,694,263	4,864,671	5,024,462

(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 1945-46. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED MILK FACTORIES: PRODUCTION, 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
MILK USED ('000 OMITTED).							
For the manufacture of—							
Butter .. gals.	154,131	238,155	204,631	33,302	25,914	19,283	675,414
Cheese .. "	5,122	32,875	25,021	20,884	1,600	2,330	87,832
Condensed, &c., Milk .. "	17,130	(a)	..	(a)	(a)	..	61,215
PRODUCTS ('000 OMITTED).							
Butter .. lb.	74,280	112,180	101,243	17,360	12,553	8,464	326,080
Cheese .. "	4,858	33,406	(b) 26,932	22,478	1,817	2,268	91,759
Condensed and concentrated milk .. lb.	(a)	80,663	..	(a)	(a)	..	116,782
Powdered milk .. "	9,882	33,616	..	..	..	..	43,498
VALUE ('000 OMITTED).							
Butter .. £	5,599	8,243	(b) 7,579	1,258	919	632	24,231
Cheese .. £	277	1,538	(b) 1,202	998	92	104	4,211
Condensed and concentrated milk .. £	(a)	2,369	..	(a)	(a)	..	3,310
Powdered Milk .. £	650	1,680	..	..	..	..	2,331

(a) Not available for publication; figures are included in total for Australia. (b) Includes 1,127,206 lb. of cheese, valued at £48,921, 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".

MEAT AND FISH PRESERVING WORKS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	12	12	14	5	8	6	57
Number of persons engaged ..	911	1,089	4,181	238	224	98	6,741
Value of land and buildings £	134,886	190,646	1,604,466	32,685	409,209	40,575	2,412,458
Value of plant and machinery £	105,254	139,945	833,624	20,044	416,488	25,288	1,540,643
Salaries and wages paid £	264,799	319,686	1,521,861	64,388	111,927	24,292	2,297,323
Value of power, fuel, etc., used £	35,187	33,060	166,286	4,683	15,231	2,313	256,760
Value of materials used £	1,492,444	2,182,448	7,341,389	350,060	337,316	96,885	11,800,542
Total value of output £	2,005,593	2,963,365	9,416,743	421,365	524,671	168,198	15,495,935
Value of production .. £	473,962	747,857	1,909,068	66,622	172,124	69,000	3,438,633

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.—(1) *Details for each State.* The following table gives particulars of breweries in each State for the year 1945-46. 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, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia
Number of factories ..	6	8	6	5	6	2	33
Number of persons engaged ..	1,162	1,526	475	379	490	89	4,121
Value of land and buildings £	1,168,491	748,895	505,778	(a)	276,614	(a)	3,185,582
Value of plant and machinery £	614,491	815,857	341,895	(a)	226,573	(a)	2,484,442
Salaries and wages paid £	426,156	621,716	169,076	(a)	189,355	(a)	1,586,366
Value of power, fuel, etc., used £	108,736	95,413	44,970	(a)	49,803	(a)	351,184
Value of materials used £	1,337,219	1,469,782	419,486	(a)	542,042	(a)	4,255,684
Total value of output (b) £	3,836,829	3,013,132	1,191,054	(a)	1,316,156	(a)	10,476,344
Value of production ..	£ 2,390,874	1,447,937	726,598	(a)	724,311	(a)	5,869,472

(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 four years 1942-43 to 1945-46 :-

BREWERIES : AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories ..	34	33	33	33	33
Number of persons engaged ..	3,698	3,910	3,873	3,919	4,121
Value of land and buildings ..	£ 2,801,147	3,201,121	3,196,938	3,188,239	3,185,582
Value of plant and machinery ..	£ 2,737,042	2,762,038	2,595,508	2,458,703	2,484,442
Salaries and wages paid ..	£ 1,215,473	1,424,451	1,444,363	1,496,658	1,586,366
Value of power, fuel, etc., used ..	£ 251,286	317,256	339,482	338,913	351,184
Value of materials used ..	£ 3,406,572	4,060,863	4,015,503	4,142,863	4,255,684
Total value of output ..	£ 9,030,309	9,736,720	9,969,828	10,151,935	10,476,344
Value of production ..	£ 5,372,451	5,418,601	5,614,843	5,670,159	5,869,472

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 107 million gallons in 1945-46 and to 128 million gallons in 1946-47.

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 1945-46 the consumption per head increased to 13.45 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 1945-46.

BREWERIES : MATERIALS USED AND PRODUCTION, 1945-46.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
RAW MATERIALS USED.							
Malt .. bushels	1,132,611	1,016,854	353,371	(b)	366,462	(b)	3,239,735
Hops .. lb.	811,001	879,377	272,512	(b)	238,367	(b)	2,512,865
Sugar .. cwt.	168,560	139,100	43,860	(b)	30,780	(b)	421,520

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

Malt .. bushels	28.99	28.81	31.16	32.09	34.73	40.18	30.22
Hops .. lb.	20.76	24.92	24.03	30.41	22.59	21.59	23.44
Sugar .. cwt.	4.31	3.94	3.87	3.89	2.92	2.48	3.93

ALE, STOUT AND BEER BREWED.

Quantity .. gallons	39,073,817	35,292,111	11,338,922	(b)	10,552,015	(b)	107,196,702
Value (a) .. £	3,760,604	2,904,397	1,186,731	(b)	1,277,336	(b)	10,236,295

(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 Western Australia and 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 1942-43 to 1945-46 compared with the year 1938-39.

DISTILLERIES : AUSTRALIA.

Particulars.	Unit of Quantity.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
PRINCIPAL MATERIALS USED.						
Barley Malt	bushel	89,528	220,081	240,386	245,306	296,002
Barley	"	80,548	143,637	170,954	145,993	208,847
Wheat	"	"	41,432	706,712	683,350	108,590
Malted Wheat	"	"	10,633	11,495	14,209	46,912
Maize	"	7,643	27,832	18,208	55,625	58,688
Molasses	cwt.	1,405,271	1,418,002	1,086,747	1,158,870	1,158,439
Sugar	"	"	1,330,034	1,078,714	477,906	522,982
Sugar Syrup	"	"	423,146	321,183	268,509	240,216
Wine	gal.	11,364,208	11,407,752	12,631,059	10,420,236	15,749,146
Grapes, Skins and Seeds	cwt.	170,818	169,846	203,028	112,221	244,786
Raisins	"	19,521	22,279	15,031	44,455	14,477

SPIRITS DISTILLED FROM—

	proof gal.	proof gal.	proof gal.	proof gal.	proof gal.
Barley and other Grain Malt	434,578	1,122,660	3,710,810	3,778,128	1,836,659
Molasses and Sugar	7,025,416	22,199,638	18,566,633	12,463,738	11,842,105
Wine and Wine Lees	2,249,265	2,851,301	2,365,028	1,872,533	2,879,030
Other	7,305	53,614	76,304	158,079	105,117
Total	9,716,564	26,227,213	24,718,775	18,272,578	16,662,911
Spirits denatured	4,553,152	19,416,985	18,391,976	12,219,648	8,780,290

33. **Tobacco, etc., Factories.**—(i) *Details for each State.* During 1945-46 there were 26 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, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	8	12	4	1	1	26
Number of persons engaged	2,997	2,087	39	9	123	5,255
Value of land and buildings £	588,640	341,747	(a)	(a)	(a)	959,192
Value of plant and machinery £	432,248	273,015	(a)	(a)	(a)	723,962
Salaries and wages paid £	749,800	516,643	(a)	(a)	(a)	1,300,481
Value of power, fuel, etc., used £	36,547	14,038	(a)	(a)	(a)	52,174
Value of materials used £	7,022,802	3,491,123	(a)	(a)	(a)	10,602,035
Total value of output £	8,260,290	4,630,306	(a)	(a)	(a)	13,042,558
Value of production	£ 1,200,941	1,125,145	(a)	(a)	(a)	2,388,349

(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 1945-46 comprised—manufactured tobacco 129,417 lb., cigars 199 lb., and cigarettes 55,488 lb., and the quantities manufactured in Australian

factories were respectively 17,866,000 lb., 125,000 lb., and 8,482,000 lb. The following tables show the extent of the industry in Australia for the four years 1942-43 to 1945-46 compared with 1938-39:—

TOBACCO, CIGAR AND CIGARETTE FACTORIES: AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	30	24	25	25	26
Number of employees	5,544	5,376	5,112	5,203	5,255
Value of land and buildings	£ 1,041,798	984,398	968,985	952,066	959,192
Value of plant and machinery	£ 942,644	832,620	789,755	752,361	723,962
Salaries and wages paid	£ 1,095,912	1,288,898	1,243,646	1,230,863	1,300,481
Value of power, fuel, etc., used	£ 34,483	56,107	44,366	44,389	52,174
Value of materials used	£ 7,080,574	9,141,931	10,087,241	10,436,032	10,602,035
Total value of output	£ 9,800,413	12,803,771	12,934,104	12,851,221	13,042,558
Value of production	£ 2,685,356	3,605,733	2,802,497	2,370,800	2,388,349

LEAF USED AND PRODUCTION.

Leaf used	Australian (Stemmed) '000 lb.	Imported (")	Total	1942-43.	1943-44.	1944-45.	1945-46.
Tobacco made	4,489	4,974	4,951	4,658	4,685	4,685	4,685
Cigars made	16,011	19,374	19,202	18,704	18,822	18,704	18,822
Cigarettes made	16,305	19,186	18,187	17,448	17,866	17,448	17,866
	238	175	134	122	125	122	125
	6,731	8,681	8,929	8,740	8,482	8,740	8,482

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 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; in 1932-33 the quantity of local leaf used fell to 2.7 million lb., but it has since risen to 4.68 million lb. in 1945-46. 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, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W'Aust.	Tas.	Australia.
Number of factories	665	337	316	60	119	268	1,765
Number of persons engaged	6,782	4,627	5,648	1,487	2,166	1,861	22,591
Value of land and buildings	£ 988,361	526,943	413,120	275,392	198,500	120,933	2,523,249
Value of plant and machinery	£ 1,025,102	812,599	692,029	194,334	389,096	347,785	3,460,945
Salaries and wages paid	£ 1,718,175	1,263,603	1,454,702	385,417	565,701	454,370	5,841,968
Value of power, fuel, etc., used	£ 113,591	92,623	68,367	21,302	45,484	34,070	375,437
Value of materials used	£ 4,302,235	2,612,644	2,425,018	1,201,766	850,435	781,918	12,174,016
Total value of output	£ 7,261,796	4,693,586	4,607,743	1,921,242	1,740,725	1,482,880	21,707,972
Value of production	£ 2,845,970	1,988,319	2,114,358	698,174	844,806	666,892	9,158,519

(ii) *Total for Australia.* Comparative statistics for 1938-39 and 1942-43 to 1945-46 are shown in the following table:—

SAWMILLS, PLYWOOD AND BARK MILLS: AUSTRALIA.

Items.	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	1,660	1,558	1,622	1,645	1,765
Number of persons engaged	19,104	19,900	20,023	20,668	22,591
Value of land and buildings	£ 2,054,611	2,093,726	2,163,399	2,256,446	2,523,249
Value of plant and machinery	£ 2,785,716	2,979,732	3,162,761	3,165,992	3,460,945
Salaries and wages paid	£ 3,634,627	4,839,413	5,087,183	5,315,207	5,841,968
Value of power, fuel, etc., used	£ 225,782	308,868	325,212	344,560	375,437
Value of materials used	£ 8,522,895	9,485,003	10,871,168	11,016,417	12,174,016
Total value of output	£ 14,537,888	17,395,542	19,278,114	20,033,902	21,707,972
Value of production	£ 5,789,211	7,601,671	8,081,734	8,672,925	9,158,519

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 895 million super. feet in 1945-46. 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 1945-46:—

CABINET AND FURNITURE MAKING AND UPHOLSTERY FACTORIES, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	269	284	89	85	105	42	874
Number of persons engaged ..	3,547	2,832	1,439	1,139	708	394	10,059
Value of land and buildings £	805,831	740,025	236,032	155,804	153,663	48,136	2,139,491
Value of plant and machinery £	211,441	169,455	64,097	74,989	45,375	16,574	581,931
Salaries and wages paid £	1,032,111	654,993	343,746	245,404	151,434	71,883	2,499,571
Value of power, fuel, etc., used£	29,419	18,905	8,745	7,847	3,162	1,834	69,012
Value of materials used, etc., used£	1,584,715	997,026	587,815	400,535	245,190	98,075	3,913,356
Total value of output £	3,167,110	2,159,572	1,155,456	804,817	523,827	214,850	8,025,632
Value of production ..	£ 1,552,976	1,144,541	558,896	396,435	275,475	114,941	4,043,264

36. Printing Works.—Printing and bookbinding works rank high in importance among the industries of Australia, and in 1945-46 afforded employment for about 26,000 employees, and paid nearly £7,469,000 in salaries and wages, while the value of output amounted to £23,853,000. The first table below gives particulars of establishments engaged in general printing in each State for 1945-46. 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, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	340	367	76	62	64	18	927
Number of persons engaged ..	6,498	6,030	1,846	1,231	896	437	16,941
Value of land and buildings £	1,562,762	1,674,218	350,208	225,369	222,161	81,523	4,116,241
Value of plant and machinery £	1,088,975	902,220	168,993	170,491	131,897	62,311	2,524,887
Salaries and wages paid £	1,711,415	1,599,859	436,446	277,554	200,576	117,294	4,343,144
Value of power, fuel, etc., used£	42,391	46,681	11,852	8,134	6,335	2,652	118,045
Value of materials used £	2,223,181	2,213,462	539,535	291,976	273,158	98,440	5,639,752
Total value of output £	5,133,386	4,925,852	1,313,428	736,713	661,045	292,894	13,063,318
Value of production ..	£ 2,867,814	2,665,709	762,041	436,603	381,552	191,802	7,305,521

NEWSPAPERS AND PERIODICALS, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	181	118	54	34	31	7	425
Number of persons engaged ..	4,595	2,185	1,184	624	434	254	9,276
Value of land and buildings £	1,752,692	776,005	484,184	348,822	244,049	40,611	3,646,903
Value of plant and machinery £	1,419,862	413,428	252,158	133,604	73,943	43,297	2,336,292
Salaries and wages paid £	1,573,625	709,210	388,739	201,185	170,612	82,942	3,126,313
Value of power, fuel, etc., used£	58,673	30,823	20,988	8,016	11,609	3,011	133,120
Value of materials used £	2,538,554	1,393,309	431,938	285,684	236,400	63,026	4,968,911
Total value of output £	5,518,095	2,632,677	1,198,316	620,140	583,625	236,756	10,780,609
Value of production ..	£ 2,900,868	1,208,545	745,390	326,440	335,616	170,719	5,687,578

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 has risen from 6,000 tons in 1938-39 to nearly 83,000 tons in 1945-46.

The number of factories operating in 1945-46 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 1942-43 to 1945-46.

PAPER MAKING, INCLUDING PULP MILLS : AUSTRALIA.

Items . .	1938-39.	1942-43.	1943-44.	1944-45.	1945-46.
Number of factories	7	12	12	12	12
Number of persons engaged	1,961	4,887	4,758	4,625	4,705
Value of land and buildings	£ 849,578	£ 1,525,537	£ 1,491,848	£ 1,521,419	£ 1,525,187
Value of plant and machinery	£ 1,712,662	£ 3,326,730	£ 3,178,251	£ 2,920,885	£ 2,509,426
Salaries and wages paid	£ 466,548	£ 1,479,907	£ 1,526,609	£ 1,525,871	£ 1,577,146
Value of power, fuel, etc., used	£ 200,998	£ 560,924	£ 536,710	£ 596,399	£ 598,979
Value of materials used	£ 1,095,318	£ 3,869,161	£ 4,047,788	£ 4,081,491	£ 3,802,205
Total value of output	£ 2,301,531	£ 7,549,622	£ 7,954,232	£ 8,094,486	£ 7,417,772
Value of production	£ 1,005,215	£ 3,119,537	£ 3,319,734	£ 3,416,596	£ 3,016,588

38. Rubber Goods (Including Tyres made).—The following table gives particulars of this industry for each State during 1945-46 :—

RUBBER GOODS (INCLUDING TYRES MADE), 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories	* 12	26	2	5	2	..	47
Number of persons engaged	3,405	3,263	258	137	5	..	7,068
Value of land and buildings £	627,897	584,332	(a)129,471	15,828	(a)47,834	..	1,260,036
Value of plant and machinery £	401,737	545,690	(a)57,572	19,265	(a)13,098	..	980,215
Salaries and wages paid £	1,108,723	1,053,775	(a)143,492	31,314	(a)30,075	..	2,270,664
Value of power, fuel, etc., used £	135,169	182,369	(a)14,546	3,810	(a)3,171	..	327,006
Value of materials used £	3,413,631	3,574,583	(a)316,817	34,833	(a)63,266	..	7,188,123
Total value of output £	4,814,553	5,642,682	(a)573,716	87,576	(a)131,870	..	10,832,431
Value of production	£ 1,265,753	£ 1,885,730	(a)242,353	48,933	(a)65,433	..	3,316,400

(a) Includes values recorded in Tyre Retreading and Repairing which are omitted from total.

39. Tyre Retreading and Repairing.—Particulars of the tyre retreading and repairing industry in each State during 1945-46 are shown below :—

TYRE RETREADING AND REPAIRING, 1945-46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories	106	66	38	22	16	13	261
Number of persons engaged	585	381	277	146	130	112	1,631
Value of land and buildings £	228,484	137,913	(a)	59,295	(a)	34,990	596,008
Value of plant and machinery £	93,297	64,855	(a)	13,870	(a)	9,477	238,646
Salaries and wages paid £	146,440	104,295	(a)	40,204	(a)	23,573	411,227
Value of power, fuel, etc., used £	14,039	12,060	(a)	3,970	(a)	3,181	44,409
Value of materials used £	343,418	238,306	(a)	98,838	(a)	47,917	937,484
Total value of output £	677,510	488,550	(a)	172,674	(a)	90,469	1,347,169
Value of production	£ 320,053	£ 238,184	(a)	69,866	(a)	45,371	865,276

(a) Included with Rubber Goods above, but these figures have been included with the total for Australia.

40. **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 6,910 million K.W.H. in 1945–46, or by 45 per cent. Particulars for the year 1945–46 are as follows:—

ELECTRIC LIGHT AND POWER WORKS, 1945–46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	100	69	47	44	109	3	372
Number of persons engaged ..	2,859	1,760	797	845	687	123	7,071
Value of land and buildings £	4,181,042	2,644,944	682,372	670,205	464,130	591,980	9,234,673
Value of plant and machinery £	10,874,564	10,233,183	2,193,987	3,160,287	2,097,516	3,571,212	32,130,749
Salaries and wages paid £	1,071,363	681,761	276,731	261,971	252,820	43,098	2,587,744
Value of power, fuel, etc., used £	2,692,513	1,294,295	764,580	714,594	932,244	148	6,398,374
Value of materials used £	496,049	168,045	192,668	94,014	61,016	17,561	1,029,353
Total value of output £	8,749,030	4,167,493	1,736,661	1,648,935	1,506,985	181,251	17,990,355
Value of production ..	£ 5,560,468	2,705,153	779,413	840,327	513,725	163,542	10,564,628

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 1044.

(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.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.	'000 K.W.H.
1938–39 ..	1,948,490	1,222,505	387,368	256,283	307,002	566,691	4,688,339
1942–43 ..	2,844,180	1,776,699	515,254	417,873	317,338	771,282	6,642,626
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

41. **Gas-works.**—(i) *Details for each State.* Gas-works are in operation in the majority of important towns in Australia. New South Wales returned eight coke factories and Queensland two, 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 1945–46:—

GAS-WORKS, 1945–46.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	39	39	16	4	4	2	104
Number of persons engaged ..	1,289	1,253	351	357	193	59	3,502
Value of land and buildings £	800,378	443,842	182,686	25,300	(a)	(a)	1,571,427
Value of plant and machinery £	3,323,226	3,839,795	612,387	1,108,010	(a)	(a)	9,475,328
Salaries and wages paid £	451,690	425,899	119,687	117,607	(a)	(a)	1,193,684
Value of power, fuel, etc., used £	350,811	39,841	9,338	2,098	(a)	(a)	443,484
Value of materials used £	1,593,659	1,549,585	330,170	319,799	(a)	(a)	3,965,119
Total value of output £	3,605,536	2,439,024	724,806	508,479	(a)	(a)	7,726,391
Value of production ..	£ 1,741,066	846,598	384,798	186,582	(a)	(a)	3,312,788

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

(ii) *Coal Used and Production.* The following table gives details for 1945-46 :-**GAS-WORKS : COAL USED AND PRODUCTION, 1945-46.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
COAL USED.							
Coal tons	795,961	608,942	163,897	121,907	(a)	(a)	1,759,429
PRODUCTS.							
Gas produced '000 cubic ft.	15,301,710	10,863,665	2,451,388	1,848,371	(a)	(a)	31,954,138
Gas sold '000 cubic ft.	13,353,932	9,637,297	2,171,894	1,614,687	(a)	(a)	28,087,865
Coke produced .. tons	499,165	347,149	72,658	75,400	(a)	(a)	1,027,157
Coke for sale .. tons	288,655	215,311	36,553	50,823	(a)	(a)	602,655
VALUE.							
Gas sold .. £	2,586,724	2,749,779	874,382	710,005	(a)	(a)	7,415,941
Coke for sale .. £	377,408	426,476	49,060	134,781	(a)	(a)	1,014,362

(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 almost 32 thousand million cubic feet in 1945-46.