

CHAPTER XXIII. MANUFACTURING INDUSTRY.

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

§ 1. Number of Factories.

1. Number of Factories in each State.—The following table gives the number of factories in each State for the years specified :—

FACTORIES : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1933-34 ..	7,818	8,896	2,345	1,733	1,606	899	23,297
1934-35 ..	8,254	9,100	2,470	1,803	1,658	926	24,211
1935-36 ..	8,486	9,160	2,482	1,895	1,946	925	24,894
1936-37 ..	8,726	9,165	2,883	1,916	2,032	946	25,668
1937-38 ..	9,097	9,241	3,063	1,980	2,066	948	26,395

2. Number of Factories in Industrial Classes.—(i) *Australia.* The next table shows the number of factories in Australia for the years specified, classified in the industrial groups agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during the year 1930-31, superseded the grouping which had been in use since 1902.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, viz., "Any factory, workshop or mill where four or more persons are employed or power is used." Details in regard to some of the principal industries included in the table will be found in § 9 hereinafter.

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
I. Treatment of Non-metalliferous Mine and Quarry Products	404	433	462	517	548
II. Bricks, Pottery, Glass, etc.	409	431	450	436	459
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	589	596	630	655	652
IV. Industrial Metals, Machines, Implements and Conveyances	5,789	6,100	6,393	6,788	7,102
V. Precious Metals, Jewellery and Plate	255	270	277	282	290
VI. Textiles and Textile Goods	588	588	589	577	591
VII. Skins and Leather	511	518	525	537	536
VIII. Clothing	4,952	4,229	4,260	4,259	4,334
IX. Food, Drink and Tobacco	4,583	4,657	4,721	4,842	4,982
X. Woodworking and Basketware	2,243	2,446	2,541	2,715	2,771
XI. Furniture, Bedding, etc.	995	1,020	1,057	1,092	1,113
XII. Paper, Stationery, Printing, Bookbinding, etc.	1,712	1,750	1,781	1,774	1,790
XIII. Rubber	305	292	290	289	302
XIV. Musical Instruments	32	29	31	34	34
XV. Miscellaneous Products	333	349	371	390	398
Total, Classes I. to XV.	22,800	23,708	24,378	25,187	25,902
XVI. Heat, Light and Power	497	503	516	481	493
Grand Total	23,297	24,211	24,894	25,668	26,395

The number of factories in operation declined each year from 1928-29 to 1931-32 as the result of the economic depression, but the returns since the last-mentioned year reveal substantial annual increases, the number recorded in 1937-38 being the highest to date.

CLASSIFICATION OF FACTORIES ACCORDING TO NUMBER OF EMPLOYEES. 705

(ii) States, 1937-38. The following table shows the number of factories in each State in 1937-38, classified according to the nature of the industry:—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, STATES, 1937-38.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
	No.	No.	No.	No.	No.	No.	No.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	186	188	51	46	62	15	548
II. Bricks, Pottery, Glass, etc. ..	215	110	41	43	36	14	459
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	273	232	41	49	36	21	652
IV. Industrial Metals, Machines, Im- plements and Conveyances ..	2,545	2,531	707	509	626	184	7,102
V. Precious Metals, Jewellery and Plate ..	88	138	23	20	15	6	290
VI. Textiles and Textile Goods ..	153	363	22	31	13	9	591
VII. Skins and Leather ..	216	206	51	27	28	8	536
VIII. Clothing ..	1,605	1,860	298	281	236	54	4,334
IX. Food, Drink and Tobacco ..	1,553	1,438	775	533	429	254	4,982
X. Woodworking and Basketware ..	832	705	590	153	210	281	2,771
XI. Furniture, Bedding, etc. ..	346	394	142	84	95	52	1,113
XII. Paper, Stationery, Printing, Book- binding, etc. ..	671	670	178	112	131	28	1,790
XIII. Rubber ..	95	107	35	28	25	12	302
XIV. Musical Instruments ..	11	14	3	3	3	..	34
XV. Miscellaneous Products ..	158	165	38	16	18	3	398
Total, Classes I. to XV. ..	8,947	9,121	2,995	1,935	1,963	941	25,902
XVI. Heat, Light and Power ..	150	120	68	45	103	7	493
Grand Total ..	9,097	9,241	3,063	1,980	2,066	948	26,395

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

i. States, 1937-38.—The following table shows, for each State, the number of factories classified according to the number of persons engaged in 1937-38:—

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1937-38.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	2,616	3,229	1,081	481	979	257	8,643
4 ..	878	741	309	211	104	133	2,376
5 to 10 ..	2,431	2,221	812	625	508	355	6,952
11 to 20 ..	1,289	1,267	385	280	215	107	3,543
21 to 50 ..	1,054	1,008	266	237	180	66	2,811
51 to 100 ..	435	405	109	90	55	16	1,110
Over 100 ..	394	370	101	56	25	14	960
Total ..	9,097	9,241	3,063	1,980	2,066	948	26,395

Some marked changes have taken place in the distribution of factories according to the number of persons engaged during the past decade. In 1926-27 of a total of 21,579 factories reported, 7,644, or 35.42 per cent. had less than five persons engaged whereas in 1937-38 the number of such factories had increased to 11,019, representing 41.74 per cent. of the total of 26,395 factories. The increase in the number of small factories was probably due to the multiplication of small repair establishments (boots and shoes, cycles and motors, etc.) which are technically accounted as factories by the installation of some power machine.

In the other groups, the effect of the economic depression during the middle years of the decade is clearly noticeable, but since 1931-32 the improvement has been very steady. Factories with more than 100 persons engaged advanced from 733 in 1926-27 to a new high level of 960 in 1937-38, the persons engaged in these factories increasing from 204,363 or 43.74 per cent. of the total number to 273,502 or 48.3 per cent. during the same period.

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

FACTORIES : CLASSIFICATION OF PERSONS ENGAGED ACCORDING TO SIZE OF FACTORY, 1937-38.

No. of Persons Employed in Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER ENGAGED DURING PERIOD WORKED.							
Under 4 ..	5,336	6,156	2,301	1,075	1,880	562	17,310
4 ..	3,512	2,964	1,236	844	416	532	9,504
5 to 10 ..	16,827	15,530	5,496	4,322	3,316	2,425	47,916
11 to 20 ..	18,736	18,704	5,712	4,096	3,054	1,553	51,855
21 to 50 ..	33,558	32,284	8,128	7,246	5,625	2,085	88,926
51 to 100 ..	30,161	28,119	7,851	6,068	3,920	1,019	77,138
Over 100 ..	119,753	99,326	22,154	21,087	5,509	5,673	273,502
Total ..	227,883	203,083	52,878	44,738	23,720	13,849	566,151
Av. per F'cty	25.05	21.98	17.26	22.60	11.48	14.61	21.45

2. Australia, 1933-34 to 1937-38.—In the following table the numbers of factories in Australia are classified according to the numbers engaged during the past five years.

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.
1933-34—								
Number ..	19,576	108,125	3,052	127,068	669	181,634	23,297	416,827
Average per establishment ..	..	5.52	..	41.63	..	271.50	..	17.89
Percentage on total ..	84.03	25.94	13.10	30.48	2.87	43.58	100.00	100.00
1934-35—								
Number ..	20,012	112,708	3,457	143,157	742	204,502	24,211	460,367
Average per establishment ..	..	5.63	..	41.41	..	275.61	..	19.01
Percentage on total ..	82.66	24.48	14.28	31.10	3.06	44.42	100.00	100.00
1935-36—								
Number ..	20,413	117,443	3,646	153,603	835	230,889	24,894	501,935
Average per establishment ..	..	5.75	..	42.13	..	276.51	..	20.16
Percentage on total ..	82.00	23.40	14.65	30.60	3.35	46.00	100.00	100.00
1936-37—								
Number ..	21,017	122,179	3,756	158,007	895	250,764	25,668	530,950
Average per establishment ..	..	5.81	..	42.07	..	280.18	..	20.69
Percentage on total ..	81.88	23.01	14.63	29.76	3.49	47.23	100.00	100.00
1937-38—								
Number ..	21,514	126,585	3,921	166,064	960	273,502	26,395	566,151
Average per establishment ..	..	5.88	..	42.35	..	284.90	..	21.45
Percentage on total ..	81.50	22.36	14.86	29.33	3.64	48.31	100.00	100.00

§ 3. Power Equipment in Factories.

1. **General.**—As a result of the decisions of the Conference of Australian Statisticians in March, 1937, statistics of power equipment in factories are now collected on a different basis from that used in 1935-36 and previous years. In those years the statistics represented the "average horse-power used" in all factories, including Central Electric Stations. In 1936-37 information was obtained in respect of the "rated horse-power" of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition, the power equipment of Central Electric Stations was collected in greater detail. In any analysis of the statistics of power equipment it is essential that some distinction should be made between Central Electric Stations and other classes of industries if duplication is to be avoided. In the following tables Central Electric Stations have been treated separately from other factories.

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, and the rated horse-power of engines ordinarily in use and in reserve or idle during 1937-38 :—

FACTORIES(a) : RATED HORSE-POWER OF ENGINES, 1937-38.

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 ..	8,605	385	8,990	604,522	76,560
Victoria ..	8,584	576	9,160	353,189	102,775
Queensland ..	2,824	187	3,011	178,344	11,059
South Australia ..	1,742	197	1,939	96,285	9,609
Western Australia ..	1,793	174	1,967	61,554	6,380
Tasmania ..	886	57	943	42,367	7,034
Australia ..	24,434	1,576	26,010	1,336,261	214,617

(a), Not including Central Electric Stations.

3. **Rated Horse-power of Engines Ordinarily in Use.**—(i) *According to Type.* 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, 1937-38.

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.	H.P.
N.S.W. ..	129,328	46,577	5,363	3,562	12,614	801	466,277	82,580	604,522
Victoria ..	37,520	29,208	6,180	3,072	10,652	516	266,041	36,602	353,189
Queensland ..	79,740	7,631	9,210	3,625	13,852	..	64,286	34,723	178,344
S. Australia ..	8,234	..	5,003	2,758	7,377	..	73,513	6,361	96,285
W. Australia ..	8,101	46	2,612	1,487	6,261	..	43,047	4,957	61,554
Tasmania ..	4,016	80	4	2,022	297	193	35,755	6,907	42,367
Australia ..	266,939	83,542	28,372	15,926	51,053	1,510	888,919	172,130	1,336,261

(a) Excluding Central Electric Stations.

(b) Excluding particulars in column (c).

(ii) *In Classes of Industry, 1937-38.* The next table shows the rated horse-power of engines ordinarily in use in the various classes of industry in each State during 1937-38 :—

FACTORIES(a) : RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	34,704	25,161	4,840	4,147	4,533	8,797	82,182
II. Bricks, Pottery, Glass, etc. . .	22,963	18,196	3,294	3,793	2,939	633	51,818
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	20,760	19,464	2,275	6,522	5,377	438	54,836
IV. Industrial Metals, Machines, Implements and Conveyances ..	284,581	69,708	27,571	38,353	13,224	14,571	448,008
V. Precious Metals, Jewellery and Plate ..	1,323	2,314	117	302	56	21	4,133
VI. Textiles and Textile Goods ..	18,353	38,092	2,367	2,843	612	2,807	65,074
VII. Skins and Leather ..	8,203	8,062	2,046	359	709	26	19,405
VIII. Clothing ..	8,031	11,020	1,168	928	726	150	22,023
IX. Food, Drink and Tobacco ..	100,556	75,017	95,855	22,276	17,309	6,211	317,224
X. Woodworking and Basket-ware ..	37,099	26,866	29,344	8,345	10,805	6,859	119,318
XI. Furniture, Bedding, etc. ..	7,781	7,125	2,743	2,580	1,636	729	22,594
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	25,936	27,188	4,817	2,822	2,837	793	64,393
XIII. Rubber ..	21,435	17,655	1,032	176	90	73	40,461
XIV. Musical Instruments ..	759	73	13	15	23	..	883
XV. Miscellaneous Products ..	4,456	3,098	124	310	191	159	8,338
Total, Classes I. to XV. ..	596,940	349,039	177,606	93,771	61,067	42,267	1,320,690
XVI. Gas Works ..	7,582	4,150	738	2,514	487	100	15,571
Grand Total ..	604,522	353,189	178,344	96,285	61,554	42,367	1,336,261

(a) Excluding Central Electric Stations.

4. *Capacity of Engines and Generators installed in Central Electric Stations.*—
(i) *According to Type.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1937-38 are given below :—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA.

Particulars.	Capacity of Engines and Generators.							Total.
	Steam.		Internal Combustion.			Water.		
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.			
Engines Installed—								
Total installed Rated H.P. ..	30,432	1,676,779	19,897	2,126	123,445	201,022		2,053,701
Generators Installed—								
Kilowatt capacity—								
Total installed .. K.W. ..	20,376	1,189,501	12,332	900	93,162	145,557		1,461,828
Effective capacity .. K.W. ..	16,648	1,016,896	11,459	793	86,897	141,637		1,274,330
Maximum load .. K.W. ..	12,911	876,556	8,838	757	65,566	122,464		1,087,092
Horse-power equivalent—								
Total installed .. H.P. ..	27,314	1,594,584	16,531	1,206	124,889	195,127		1,959,651
Effective capacity .. H.P. ..	22,317	1,303,199	15,362	1,062	116,490	189,871		1,708,301
Maximum load .. H.P. ..	17,308	1,175,067	11,848	1,014	87,894	164,170		1,457,301

(ii) *In States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State are given in the next table for 1937-38.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT IN STATES, 1937-38.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Engines installed	Rated H.P.	929,331	505,027	217,698	175,211	105,570	120,864	2,053,701
Generators installed—								
Kilowatt capacity—								
Total installed	.. K.W.	682,111	348,782	147,274	118,920	73,455	91,286	1,461,828
Effective capacity	.. K.W.	573,927	314,685	113,428	118,287	66,096	87,907	1,274,330
Maximum load	.. K.W.	459,077	293,777	81,156	110,958	58,664	83,460	1,087,092
Horse-power equivalent—								
Total installed	.. H.P.	914,404	467,559	197,428	159,417	98,470	122,373	1,959,651
Effective capacity	.. H.P.	769,377	421,851	152,056	158,569	88,605	117,843	1,708,301
Maximum load	.. H.P.	615,416	393,822	108,794	148,745	78,642	111,882	1,457,301

§ 4. Employment in Factories.

I. Number Engaged.—All persons engaged in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see paragraph 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. Employment has been classified as follows:—(i) Working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) skilled and unskilled workers in the factories, mills, or workshops; (vi) carters and messengers; and (vii) others.

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.

The following table shows, for each year from 1933-34 to 1937-38 inclusive (a) the average number of persons (including both sexes of all ages) engaged in manufacturing industries in each State; (b) the percentage of the number engaged in each State on the total number engaged in Australia; and (c) the number engaged per ten thousand of the mean population in each State and Australia.

The number of persons engaged in factories in Australia reached its highest point before the depression during the years 1926-27 to 1928-29 when the average for those years was slightly in excess of 450,000. The downward trend in manufacturing operations which began early in 1930 continued with increasing force until the number engaged had fallen to 336,658 in 1931-32, a decline of 25 per cent. on the average already quoted. In 1932-33 employment began to increase and gains were recorded in each year thereafter until a new high level of 559,160 was reached in 1937-38. Stated in relation to population, the number engaged in 1937-38 was 46,500 in excess of the previous maximum in 1926-27.

FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
AVERAGE NUMBER ENGAGED DURING FULL YEAR (52 WEEKS).							
1933-34 ..	154,061	156,334	40,083	29,486	16,163	9,782	405,909
1934-35 ..	175,933	169,691	43,048	33,497	17,774	10,555	449,598
1935-36 ..	193,200	183,390	45,128	38,471	20,993	11,589	492,771
1936-37 ..	208,497	191,383	48,216	40,710	22,711	12,431	523,948
1937-38 ..	224,861	201,793	52,119	44,084	23,133	13,170	559,160

PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
1933-34 ..	37.96	38.52	9.87	7.26	3.98	2.41	100.00
1934-35 ..	38.93	37.74	9.58	7.45	3.95	2.35	100.00
1935-36 ..	39.21	37.21	9.16	7.81	4.26	2.35	100.00
1936-37 ..	39.79	36.53	9.20	7.77	4.34	2.37	100.00
1937-38 ..	40.21	36.09	9.32	7.88	4.14	2.36	100.00

PER 10,000 OF POPULATION.

1933-34 ..	590	857	422	506	367	427	610
1934-35 ..	664	924	448	573	401	461	671
1935-36 ..	727	995	464	656	469	503	730
1936-37 ..	778	1,033	490	692	503	535	770
1937-38 ..	830	1,084	524	746	506	553	815

2. Rates of Increase, 1933-34 to 1937-38.—The percentage of increase on the average number of persons engaged in the preceding year is shown below for each State from 1933-34 onwards :—

FACTORIES : ANNUAL PERCENTAGE INCREASES OF PERSONS ENGAGED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	%	%	%	%	%	%	%
1933-34 ..	11.22	8.24	3.45	11.91	9.10	5.95	9.49
1934-35 ..	13.61	8.54	7.40	13.60	9.97	7.90	10.76
1935-36 ..	10.38	8.07	4.83	14.85	18.11	9.80	9.60
1936-37 ..	7.92	4.36	6.84	5.82	8.18	7.27	6.33
1937-38 ..	7.85	5.44	8.09	8.29	1.86	5.94	6.72

3. Persons Engaged in Classes of Industry.—(i) *Australia*. The table hereunder gives the average number of persons engaged in factories under each industrial group in Australia for the years 1933-34 to 1937-38 inclusive :—

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1933-34.	1934-35.	1935-36.	1936 37.	1937-38.
I. Treatment of Non-metalliferous Mine and Quarry Products	5,507	6,550	7,571	8,736	9,952
II. Bricks, Pottery, Glass, etc. . .	9,020	11,483	13,088	14,262	15,142
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	13,310	14,846	16,217	17,614	18,835
IV. Industrial Metals, Machines, Implements and Conveyances	107,398	125,640	145,481	161,512	178,019
V. Precious Metals, Jewellery and Plate	2,371	2,737	3,210	3,482	3,761
VI. Textiles and Textile Goods	36,790	38,042	42,031	43,370	45,224
VII. Skins and Leather	9,513	9,779	10,440	10,872	10,437
VIII. Clothing	72,260	78,074	81,400	82,138	85,371
IX. Food, Drink and Tobacco	67,668	70,517	73,265	77,492	81,785
X. Woodworking and Basketware	19,927	24,192	27,478	29,311	31,117
XI. Furniture, Bedding, etc. . .	9,562	11,306	13,443	14,707	15,612
XII. Paper, Stationery, Printing, Book-binding, etc. . .	31,937	34,018	35,952	37,309	39,062
XIII. Rubber	6,561	7,369	6,797	6,455	7,534
XIV. Musical Instruments	572	460	451	422	441
XV. Miscellaneous Products	5,122	5,786	6,591	7,370	7,798
Total, Classes I. to XV. ..	397,518	440,799	483,413	515,058	550,290
XVI. Heat, Light and Power	8,391	8,799	9,356	8,890	9,070
Grand Total ..	405,909	449,598	492,771	523,948	559,160

In comparison with the employment levels reached in the pre-depression year of 1928-29 all classes of industries have shown considerable gains with the exception of "Musical Instruments" and "Heat, Light and Power." In these classes reductions of 76 per cent. and 12 per cent. respectively were recorded. The greatest actual gain was 48,000 persons in "Industrial Metal, etc.," while the greatest relative gain was in "Miscellaneous Products" where the numbers engaged rose by 167 per cent. The lowest relative gains occurred in "Clothing" and "Rubber."

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

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, STATES, 1937-38.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus-tralia.
I. Treatment of Non-metalliferous Mine and Quarry Products	4,438	3,050	743	597	765	359	9,952
II. Bricks, Pottery, Glass, etc. . .	7,845	4,486	864	1,080	664	203	15,142
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	7,948	7,856	598	1,517	793	123	18,835
IV. Industrial Metals, Machines, Implements and Conveyances	81,472	52,570	12,945	20,183	7,005	3,844	178,019
V. Precious Metals, Jewellery and Plate	1,043	2,273	158	192	76	19	3,761
VI. Textiles and Textile Goods	14,744	26,487	963	1,153	380	1,497	45,224
VII. Skins and Leather	4,149	4,608	867	439	342	32	10,437
VIII. Clothing	31,392	39,204	6,513	4,627	3,082	553	85,371
IX. Food, Drink and Tobacco	27,582	27,009	14,400	6,249	3,569	2,976	81,785
X. Woodworking and Basketware	9,894	7,720	6,876	1,854	2,761	2,012	31,117
XI. Furniture, Bedding, etc. . .	6,512	4,853	1,793	1,191	884	379	15,612
XII. Paper, Stationery, Printing, Bookbinding, etc. . .	16,876	13,817	3,598	2,270	1,718	783	39,062
XIII. Rubber	3,454	3,042	736	150	91	61	7,534
XIV. Musical Instruments	265	100	35	14	27	..	441
XV. Miscellaneous Products	4,076	2,693	302	328	195	204	7,798
Total, Classes I. to XV. ..	221,690	199,768	51,391	41,844	22,352	13,045	550,090
XVI. Heat, Light and Power	3,171	2,025	728	2,240	781	125	9,070
Grand Total ..	224,861	201,793	52,119	44,084	23,133	13,170	559,160

4. Persons Engaged According to Nature of Employment.—(i) *General*. In the following table the numbers of persons engaged in the States during 1937-38 are classified according to the nature of their employment :—

PERSONS ENGAGED : NATURE OF EMPLOYMENT, 1937-38.

State.	Average Number of Persons Engaged.						
	Working Proprietors.	Managers and Overseers.	Accountants and Clerks.	Engine-drivers and Firemen.	Workers, Skilled & Unskilled. (a)	Carters, Messengers and Others.	Total.
New South Wales ..	7,548	7,513	14,367	2,784	190,247	2,402	224,861
Victoria	7,919	6,749	10,382	1,823	172,847	2,073	201,793
Queensland	2,440	1,987	3,399	1,857	41,119	1,317	52,119
South Australia ..	1,551	1,559	3,207	434	36,761	572	44,084
Western Australia ..	1,227	979	1,352	514	18,657	404	23,133
Tasmania	666	565	846	284	10,694	115	13,170
Australia	21,351	19,352	33,553	7,696	470,325	6,883	559,160

(a) Including Outworkers.

(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 connected with factories in each State during the last five years :—

FACTORIES : OUTWORKERS.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1933-34	261	164	37	11	2	15	490
1934-35	296	143	11	12	3	10	475
1935-36	235	142	10	6	..	29	422
1936-37	264	176	14	17	3	17	491
1937-38	234	152	8	23	6	12	435

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

The Factories Acts in each State contain provisions regulating the employment of outworkers. Records of outwork, specifying the names and remuneration of workers, and stating the places where the work is done, must be kept by factory proprietors. Fuller information regarding the operation of the Factories Acts will be found in Official Year Book No. 16, pp. 540 to 566.

5. *Distribution of Employees According to Age*.—The extension of statistics of employment in factories, which arose from the decisions of the Conference of Australian Statisticians held in March, 1937, now permits of a distribution of employees (excluding working proprietors) into three age groups. The particulars are collected in June of each year and details for 1938 are given below. These details, together with those for the previous year, are also published in the *Production Bulletin* where the figures are further distributed into sexes.

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1938.

(Excluding Working Proprietors.)

State.	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	%	No.	%	No.	%	No.	%
New South Wales ..	13,531	6.16	57,252	26.07	148,818	67.77	219,601	100
Victoria ..	11,296	5.83	48,873	25.22	133,616	68.95	193,785	100
Queensland ..	3,173	6.27	11,034	21.79	36,429	71.94	50,636	100
South Australia ..	2,474	5.96	9,136	22.00	29,912	72.04	41,522	100
Western Australia ..	1,181	5.35	5,149	23.34	15,732	71.31	22,062	100
Tasmania ..	800	6.40	2,586	20.68	9,116	72.92	12,502	100
Australia ..	32,455	6.01	134,030	24.81	373,623	69.18	540,108	100

§ 5. Sex Distribution in Factories.

1. **Employment of Females.**—In all the States the employment of female labour in factories is regulated by Acts of Parliament. More extended reference to this matter will be found in Official Year Book No. 16, pp. 540 to 566.

2. **Distribution of Persons Engaged According to Sex.**—(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 is now more than one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and is now almost one to two. In the remaining States the ratio is roughly one female engaged to every four males, while for Australia as a whole it is more than one to three. The employment of women is, however, mainly confined to a few trades.

(ii) *Average Number of Males and Females Engaged, 1933-34 to 1937-38.* The next table shows the average number of males and females engaged in factories in each State during the last five years:—

FACTORIES : MALES AND FEMALES ENGAGED.

State.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
MALES.					
New South Wales ..	111,653	127,114	140,896	152,064	164,391
Victoria ..	100,959	110,910	121,734	128,457	136,160
Queensland ..	32,248	34,596	36,411	38,970	42,337
South Australia ..	23,743	27,271	31,391	33,400	36,274
Western Australia ..	12,930	14,253	16,911	18,466	18,760
Tasmania ..	7,716	8,321	9,211	10,055	10,680
Australia ..	289,249	322,465	356,554	381,412	408,602
FEMALES.					
New South Wales ..	42,408	47,919	52,304	56,433	60,470
Victoria ..	55,375	58,781	61,656	62,926	65,633
Queensland ..	7,835	8,452	8,717	9,246	9,782
South Australia ..	5,743	6,226	7,080	7,310	7,810
Western Australia ..	3,233	3,521	4,082	4,245	4,373
Tasmania ..	2,066	2,234	2,378	2,376	2,490
Australia ..	116,660	127,133	136,217	142,536	150,558

3. 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 indicated:—

ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES ENGAGED.

State.	1932-33— 1933-34.	1933-34— 1934-35.	1934-35— 1935-36.	1935-36— 1936-37.	1936-37— 1937-38.
MALES.					
New South Wales	11.97	13.85	10.84	7.93	8.11
Victoria	9.86	9.86	8.98	5.52	5.98
Queensland	7.14	7.28	5.25	6.98	8.64
South Australia	13.60	14.86	15.11	6.40	8.60
Western Australia	10.06	10.23	18.65	9.20	1.59
Tasmania	7.96	7.84	10.70	9.16	6.22
Total	10.61	11.48	10.57	6.97	7.13
FEMALES.					
New South Wales	9.32	13.00	9.15	7.89	7.15
Victoria	5.42	6.15	4.90	2.05	4.30
Queensland	7.49	7.87	3.14	6.07	5.80
South Australia	5.43	8.41	13.72	3.25	6.84
Western Australia	5.41	8.90	15.93	3.99	3.02
Tasmania	- 0.96	8.13	6.45	- 0.08	4.80
Total	6.82	8.98	7.15	4.64	5.63

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

4. 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 for each State for a series of years. The following table furnishes particulars for the years 1933-34 to 1937-38:—

FACTORIES : MASCULINITY^(a) OF PERSONS ENGAGED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1933-34	263	182	412	413	400	373	248
1934-35	275	189	409	438	405	372	254
1935-36	269	197	418	443	414	387	262
1936-37	269	204	421	457	435	423	268
1937-38	272	207	431	464	429	429	271

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 100 females engaged in factories for every 300 males, but in that year, the proportion of females began to rise with increasing activity in the clothing and textile industries in which the number of females to males is relatively high. As these trades were not as seriously affected by the depression as the heavier industries the proportion continued to rise 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 had declined to 271 males in 1937-38.

5. Employment of Females in Particular Industries.—The greater number of females in manufacturing industries is engaged in four classes, namely:—VI., Textiles; VIII., Clothing; IX., Food and Drink; and XII., Paper, Stationery, etc. In 1937-38 these industries accounted for 81.95 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 147 females to every 100 males and in Class VIII., Clothing, with 285 females per 100 males. The following tables show the average number of males and females engaged in each of these classes in 1937-38 :-

MALES AND FEMALES ENGAGED IN PARTICULAR INDUSTRIES, 1937-38.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
VI. Textiles and Textile Goods ..	5,564	10,938	414	729	132	569	18,346
VIII. Clothing ..	8,096	10,679	1,427	1,004	752	208	22,166
IX. Food and Drink ..	18,036	19,255	12,806	5,080	2,847	2,148	60,172
XII. Paper, Stationery, etc. ..	11,538	9,710	2,598	1,613	1,290	625	27,374
All Other Classes ..	121,157	85,578	25,092	27,848	13,739	7,130	280,544
Total ..	164,391	136,160	42,337	36,274	18,760	10,680	408,602

FEMALES.							
VI. Textiles and Textile Goods	9,180	15,549	549	424	248	928	26,878
VIII. Clothing ..	23,296	28,525	5,086	3,623	2,330	345	63,205
IX. Food and Drink ..	9,546	7,754	1,594	1,169	722	828	21,613
XII. Paper, Stationery, etc. ..	5,338	4,107	1,000	657	428	158	11,688
All Other Classes ..	13,110	9,695	1,553	1,937	645	231	27,174
Total ..	60,470	65,633	9,782	7,810	4,373	2,490	150,558

The employment of females in the several industries of Class VIII., Clothing, which is the most important group, 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., 1937-38.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femininity. (a)	Males.	Females.	Femininity. (a)	Males.	Females.	Femininity. (a)
Tailoring and Slop									
Clothing ..	2,183	9,853	451	2,013	5,500	323	1,347	4,869	361
Waterproof and Oil-skin Clothing ..	7	31	443	77	216	281	7	13	186
Dressmaking ..	29	1,509	5,203	645	7,752	1,202	74	2,423	3,274
Millinery ..	154	1,556	1,010	107	1,257	1,175	48	872	1,817
Shirts, Collars and Underclothing ..	350	4,113	1,175	434	4,329	997	144	1,764	1,225
Stays and Corsets ..	40	604	1,510	173	941	544	(b)	(b)	(b)
Handkerchiefs, Ties and Scarves ..	123	927	754	45	532	1,182	(b)	(b)	(b)
Hats and Caps ..	669	989	148	685	825	120	31	142	458
Gloves ..	10	38	380	34	87	256	..	..	..
Boots and Shoes ..	2,616	2,816	108	4,637	4,860	105	1,017	807	794
Boot Repairing (including Bespoke Work) ..	1,075	35	3	678	15	2	462	29	6
Boot Accessories ..	158	130	82	506	237	47	(b)	(b)	(b)
Umbrellas and Walking Sticks ..	36	84	233	18	33	183	11	19	173
Dyeworks and Cleaning (including Renovating and Repairing) ..	582	398	68	536	543	101	233	355	152
Other ..	64	213	333	91	393	437	17	91	535
Total ..	8,096	23,296	288	10,679	28,525	267	3,391	11,384	336

(a) Number of females per 100 males.

(b) Included with Other.

§ 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. Reference to the legislation regarding the employment of child labour in factories will be found in Official Year Book No. 16, pp. 540 to 566. The object of

the restrictions imposed is to assure amongst other things that a proper period shall be devoted to primary education, and that the early years of toil shall not exhaust the worker before the attainment of full growth.

2. Average Number of Children Engaged, 1933-34 to 1937-38.—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The following table shows the average number of children of each sex employed in manufacturing industries in the years 1933-34 to 1937-38 :—

FACTORIES : CHILDREN ENGAGED.

State.	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37. (b)	1937-38. (b)
MALES.					
New South Wales	3,040	3,990	4,887	5,888	6,032
Victoria	4,248	5,194	6,118	6,213	6,017
Queensland	1,135	1,146	1,543	1,680	1,835
South Australia	799	1,025	1,352	1,422	1,424
Western Australia	427	574	777	786	731
Tasmania	219	255	330	364	441
Australia	9,868	12,184	15,007	16,353	16,480
FEMALES.					
New South Wales	4,422	5,571	6,485	7,539	7,499
Victoria	5,634	6,015	6,002	5,298	5,279
Queensland	981	1,048	1,281	1,224	1,338
South Australia	644	738	876	988	1,050
Western Australia	235	426	473	432	450
Tasmania	202	294	310	289	359
Australia	12,118	14,092	15,427	15,770	15,975
TOTAL					
New South Wales	7,462	9,561	11,372	13,427	13,531
Victoria	9,882	11,209	12,120	11,511	11,296
Queensland	2,116	2,194	2,824	2,904	3,173
South Australia	1,443	1,763	2,228	2,410	2,474
Western Australia	662	1,000	1,250	1,218	1,181
Tasmania	421	549	640	653	800
Australia	21,986	26,276	30,434	32,123	32,455

(a) Average during year.

(b) As at June of year stated.

3. Percentage of Children on Total Number of Persons Engaged.—Juvenile employment in factories reached its maximum in 1937-38 when the numbers were: Males 16,480 and females 15,975, a slight increase compared with 16,353 males and 15,770 females in 1936-37, the previous highest points.

PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF PERSONS ENGAGED.

State.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
	%	%	%	%	%
New South Wales	4.84	5.46	5.89	6.44	6.02
Victoria	6.32	6.61	6.61	6.01	5.60
Queensland	5.28	5.10	6.26	6.02	6.09
South Australia	4.89	5.26	5.79	5.92	5.61
Western Australia	4.10	5.63	5.95	5.36	5.11
Tasmania	4.30	5.20	5.52	5.25	6.07
Australia	5.42	5.84	6.18	6.13	5.80

4. Industries Employing Child Labour.—The employment of children is practically confined to a limited number of industries, the most important of which are specified in the next table, which shows the number engaged in June, 1938.

CHILDREN EMPLOYED IN VARIOUS INDUSTRIES, JUNE, 1938.

Class.	Industry.	N.S.W.		Victoria.		Q'land.		S. Aust.		W. Aust.		Tas.		Australia.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
II.	Bricks and Tiles, Firebricks and Fireclay Goods	148	1	40	9	22	..	24	..	4	..	4	..	242	10
..	Glass Bottles	40	..	18	5	1	..	5	..	..	..	..	..	64	5
III.	Chemicals, Drugs and Medicines	67	135	16	65	2	6	8	16	10	3	1	2	104	227
IV.	Smelting, Converting Refining and Rolling of Iron and Steel ..	306	20	273	4	..	..	138	28	3	..	..	..	720	52
..	Engineering (not Marine or Electrical) ..	367	16	381	21	139	6	101	15	51	2	10	..	1049	60
..	Electrical Installations, Cables and Apparatus ..	367	79	220	42	10	1	36	19	9	2	3	..	645	143
..	Motor Vehicles and Cycles (ii) Repairs ..	327	49	213	3	84	9	103	5	63	5	40	..	830	71
..	Motor Bodies	23	1	112	2	29	1	98	2	15	..	..	..	277	6
..	Brass and Copper Galvanized Ironworking and Tinsmithing ..	68	1	140	3	23	..	25	4	13	2	5	..	274	10
..	Wireless Apparatus ..	378	54	252	66	45	12	52	3	60	..	7	..	794	135
..	Cotton	283	104	120	8	27	..	..	..	2	..	..	..	432	114
VI.	Wool, Worsted and Shoddy	68	168	56	124	..	1	..	..	..	..	..	..	124	293
..	Hosiery and Other Knitted Goods ..	227	496	344	381	21	57	33	29	1	15	60	122	686	1100
..	Rope and Cordage ..	57	692	105	992	1	14	..	12	2	16	2	10	257	1736
VII.	Tanning, Currying and Leather Dressing ..	20	15	88	20	10	..	13	1	9	..	..	..	140	36
..	Bags, Trunks and Other Leather Goods ..	56	1	104	3	15	..	2	..	4	..	..	..	181	4
VIII.	Tailoring and Slop Clothing	104	1184	95	430	42	320	9	176	8	47	4	36	262	2193
..	Dressmaking	1	212	32	698	7	122	3	193	3	99	..	6	46	1330
..	Millinery	16	284	5	113	4	85	..	36	..	11	..	..	25	529
..	Shirts, Collars and Underclothing ..	22	697	17	265	9	184	1	93	3	77	..	..	52	1316
..	Stays and Corsets ..	3	104	11	44	..	8	..	..	..	..	..	..	14	156
..	Hats and Caps	31	85	26	43	1	5	..	2	..	12	..	..	58	147
..	Boots and Shoes ..	178	513	154	354	27	73	19	65	37	17	2	3	417	1025
IX.	Bakeries (including Cakes and Pastry) ..	62	34	95	36	17	17	32	1	9	3	27	3	242	94
..	Biscuits	136	338	117	98	5	10	5	32	15	19	17	17	295	514
..	Sugar Confectionery (including Chocolates) ..	77	437	26	132	21	70	13	49	3	15	(a)	(a)	140	703
..	Condiments, Coffee and Spices	47	88	29	49	3	9	27	14	18	2	1	..	125	162
XI.	Billiard Tables, Cabinet and Furnituremaking and Upholstery ..	137	25	269	17	82	13	77	6	43	2	19	..	627	63
XII.	Manufactured Stationery	40	114	22	67	3	7	3	16	..	3	..	..	68	207
..	Cardboard Boxes, Cartons, etc.	59	287	34	107	1	9	..	11	..	..	..	..	94	414
..	Paper Bags	2	24	9	26	6	18	..	1	3	2	..	..	20	71
..	Papermaking	3	5	13	..	..	..	..	..	..	..	..	..	16	5
..	Newspapers (including Weekly Publications) ..	142	29	29	2	58	7	22	2	20	6	5	1	276	47
..	General Printing and Bookbinding (not including Government)	226	230	259	145	58	46	39	37	52	18	11	8	645	484

(a) Not available for publication.

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 given are exclusive of sums drawn by working proprietors.

1. **General.**—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1937–38 was £498,779,141, of which amount the sum of £287,243,412 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £15,047,705 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, viz., £196,488,024 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 1937–38 was £102,078,550. This figure, which is exclusive of amounts drawn by working proprietors, shows an increase of £11,955,418 or 13.3 per cent., as compared with the total for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1937–38.* 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, 1937–38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,038,206	628,937	163,534	124,538	143,228	74,264	2,172,707
II. Bricks, Pottery, Glass etc. ..	1,624,578	866,625	170,420	197,514	134,690	36,682	3,030,509
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,576,215	1,571,664	118,134	291,444	178,257	20,710	3,756,424
IV. Industrial Metals, Machines, Implements and Conveyances ..	17,451,468	10,553,351	2,706,271	4,079,890	1,467,719	842,197	37,100,896
V. Precious Metals, Jewellery and Plate ..	171,378	365,265	23,961	23,979	13,502	3,100	601,185
VI. Textiles and Textile Goods ..	2,024,569	3,571,757	124,193	159,849	50,713	211,175	6,142,256
VII. Skins and Leather ..	755,450	802,209	138,220	58,085	52,677	3,490	1,830,131
VIII. Clothing ..	3,670,441	4,864,894	666,794	429,601	323,395	58,398	10,013,526
IX. Food, Drink and Tobacco ..	5,197,083	5,309,055	3,498,079	1,092,174	736,714	459,855	16,292,960
X. Woodworking and Basketware ..	1,890,134	1,479,759	1,172,512	323,161	549,764	202,796	5,708,126
XI. Furniture, Bedding, etc. ..	1,200,613	728,407	316,821	180,891	144,793	52,470	2,623,995
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,371,492	2,665,206	701,861	434,238	356,888	169,741	7,699,426
XIII. Rubber ..	712,883	599,398	89,198	18,156	11,309	7,002	1,437,946
XIV. Musical Instruments ..	51,658	20,411	8,534	1,277	4,859	..	86,739
XV. Miscellaneous Products ..	600,530	390,634	40,910	46,347	23,519	25,873	1,127,813
Total, Classes I. to XV.	41,336,698	34,417,572	9,959,442	7,461,144	4,192,030	2,257,753	99,624,639
XVI. Heat, Light and Power ..	873,177	543,339	211,358	582,016	209,413	34,608	2,453,911
Grand Total	42,209,875	34,960,911	10,170,800	8,043,160	4,401,443	2,292,361	103,078,550

(ii) *Totals and Averages, 1933–34 to 1937–38.* 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 1933–34 to 1937–38. The average wage paid is not comparable with that shown in similar tables in Official Year Books issued prior to No. 23,

SALARIES AND WAGES PAID AND VALUE OF PRODUCTION.

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1930, on account of the change in the method of computing the average number of hands employed, as explained earlier. The figures are exclusive of working proprietors and of 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.
		£	£	£	£	£	£	£
1933-34	Total amount paid ..	25,748,547	22,851,649	6,995,340	4,615,081	2,752,540	1,481,503	64,444,660
	Average per employee ..	174.23	153.62	182.82	163.98	181.03	160.58	166.36
1934-35	Total amount paid ..	29,514,013	25,275,014	7,889,535	5,433,531	3,111,239	1,601,217	72,824,549
	Average per employee ..	175.22	156.33	192.38	169.22	185.05	160.36	169.34
1935-36	Total amount paid ..	33,314,534	28,456,028	8,394,909	6,375,354	3,703,995	1,853,468	82,098,288
	Average per employee ..	178.66	162.28	194.66	172.21	187.09	168.33	173.65
1936-37	Total amount paid ..	36,642,444	30,986,895	9,088,637	7,172,638	4,157,733	2,074,785	90,123,132
	Average per employee ..	181.93	169.00	198.02	182.78	193.46	175.72	179.10
1937-38	Total amount paid ..	42,209,875	34,960,911	10,170,800	8,043,160	4,401,443	2,292,361	102,078,550
	Average per employee ..	194.24	180.33	204.73	189.10	200.92	183.33	189.80

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., comprising a heavy percentage of women and children. The highest average wages per employee in 1937-38 were paid in Queensland, Western Australia and South Australia in that order.

The average rate of salaries and wages reached its maximum in 1927-28 when it amounted to £212.12. After that year there was an almost continuous decline to 1933-34 when the average rate dropped to £166.36. The figure has risen during each of the last four years.

(iii) *Earnings of Males and Females, 1937-38.* 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 1937-38:—

SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES, 1937-38.

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 ..	1,030,353	620,847	160,927	123,947	140,933	73,574	2,150,581
II. Bricks, Pottery, Glass, etc. ..	1,596,793	837,010	165,153	194,566	133,288	36,323	2,963,133
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,312,649	1,322,452	103,178	269,179	169,917	19,771	3,197,146
IV. Industrial Metals, Machines, Implements and Conveyances ..	16,936,542	10,243,076	2,665,958	3,988,986	1,445,935	831,595	36,112,092
V. Precious Metals, Jewellery and Plate ..	156,434	333,032	22,614	23,163	12,936	3,100	551,279
VI. Textiles and Textile Goods ..	1,128,209	2,085,678	75,287	127,144	29,854	118,968	3,565,140
VII. Skins and Leather ..	673,722	710,261	147,023	41,398	44,632	3,082	1,620,118
VIII. Clothing ..	1,468,694	1,909,806	238,854	135,176	111,849	28,906	3,896,285
IX. Food, Drink and Tobacco ..	4,172,843	4,461,303	3,347,077	990,536	671,595	390,836	14,034,190
X. Woodworking and Basketware ..	1,855,590	1,456,125	1,150,013	317,526	547,791	289,412	5,616,457
XI. Furniture, Bedding etc. ..	1,075,758	634,507	296,917	168,649	133,991	50,471	2,360,293
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,847,705	2,237,457	598,344	376,042	311,981	154,843	6,526,372
XIII. Rubber ..	590,959	505,007	59,165	16,873	11,097	6,811	1,189,912
XIV. Musical Instruments ..	44,979	20,128	8,534	1,163	4,859	..	79,663
XV. Miscellaneous Products ..	486,742	322,178	36,917	38,989	19,116	25,231	929,173
Total, Classes I. to XV.	35,377,972	27,698,867	9,075,961	6,816,337	3,789,774	2,032,923	84,791,834
XVI. Heat, Light and Power ..	869,115	542,191	211,358	564,804	207,423	34,308	2,420,199
Grand Total ..	36,247,087	28,241,058	9,287,319	7,381,141	3,997,197	2,067,231	87,212,033

SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES,
1937-38—*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 ..	7,853	8,090	2,607	591	2,295	690	22,126
II. Bricks, Pottery, Glass, etc. ..	27,785	29,615	5,267	2,948	1,402	359	67,376
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	263,566	249,212	14,956	22,265	8,340	939	559,278
IV. Industrial Metals, Machines, Implements and Conveyances ..	514,926	310,275	40,313	90,904	21,784	10,602	988,804
V. Precious Metals, Jewellery and Plate ..	14,944	32,233	1,347	816	566	..	49,906
VI. Textiles and Textile Goods ..	896,360	1,486,079	48,906	32,705	20,859	92,207	2,577,116
VII. Skins and Leather ..	81,728	91,948	11,197	16,687	8,045	408	210,013
VIII. Clothing ..	2,201,747	2,955,088	427,940	291,425	211,549	29,492	6,117,241
IX. Food, Drink and Tobacco ..	1,024,240	847,752	151,002	101,638	65,119	69,019	2,258,770
X. Woodworking and Basketware ..	34,544	23,634	22,499	5,635	1,973	3,384	91,669
XI. Furniture, Bedding, etc. ..	124,855	93,900	19,904	12,242	10,802	1,999	263,702
XII. Paper, Stationery, Printing, Book-binding, etc. ..	523,787	427,749	103,517	58,196	44,907	14,898	1,173,054
XIII. Rubber ..	121,924	94,391	30,033	1,283	212	191	248,034
XIV. Musical Instruments ..	6,679	283	..	114	..	..	7,076
XV. Miscellaneous Products ..	113,788	68,456	3,993	7,358	4,493	642	198,640
Total, Classes I. to XV.	5,958,726	6,718,705	883,481	644,807	402,256	224,830	14,832,805
XVI. Heat, Light and Power ..	4,062	1,148	..	17,212	1,990	300	24,712
Total ..	5,962,788	6,719,853	883,481	662,019	404,246	225,130	14,857,517

(iv) *Total and Average Earnings of Males and Females, 1933-34 to 1937-38.* Particulars for the last five 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.							
1933-34. Amount paid ..	21,885,356	18,009,598	6,353,917	4,170,047	2,475,698	1,315,417	54,210,033
Per cent. on total ..	85.00	78.81	90.83	90.36	89.94	88.79	84.12
Average per employee £	206.98	191.45	208.03	185.58	206.27	182.05	199.32
1934-35. Amount paid ..	25,215,937	20,036,314	7,184,443	4,937,285	2,806,476	1,429,620	61,610,075
Per cent. on total ..	85.44	79.27	91.06	90.87	90.20	89.28	84.60
Average per employee £	208.57	193.31	219.93	190.22	210.66	183.68	202.48
1935-36. Amount paid ..	28,576,202	22,755,111	7,654,082	5,810,399	3,353,526	1,652,851	69,802,171
Per cent. on total ..	85.78	79.97	91.18	91.14	90.54	89.18	85.02
Average per employee £	212.35	198.85	221.90	193.56	212.76	190.86	206.55
1936-37. Amount paid ..	31,450,699	24,963,887	8,296,214	6,570,225	3,777,064	1,872,019	76,930,108
Per cent. on total ..	85.83	80.56	91.28	91.60	90.84	90.23	85.36
Average per employee £	216.29	205.93	225.78	205.31	218.47	198.05	212.44
1937-38. Amount paid ..	36,247,087	28,241,058	9,287,319	7,331,141	3,997,197	2,067,231	87,221,033
Per cent. on total ..	85.87	80.78	91.31	91.77	90.82	90.18	85.45
Average per employee £	230.39	218.89	232.20	212.08	227.42	205.96	224.35

TOTAL AND AVERAGE SALARIES AND WAGES: MALES AND FEMALES
—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
1933-34. Amount paid ..£	3,863,191	4,842,051	641,423	445,034	276,842	166,086	10,234,627
Per cent. on total ..	15.00	21.19	9.17	9.64	10.06	11.21	15.88
Average per employee £	91.88	88.54	82.77	78.43	86.43	81.41	86.69
1934-35. Amount paid ..£	4,298,076	5,238,700	705,092	496,246	304,763	171,597	11,214,474
Per cent. on total ..	14.56	20.73	8.94	9.13	9.80	10.72	15.40
Average per employee £	90.40	90.27	84.51	80.64	87.30	77.93	89.17
1935-36. Amount paid ..£	4,738,332	5,700,917	740,827	564,955	350,469	200,617	12,296,117
Per cent. on total ..	14.22	20.03	8.82	8.86	9.46	10.82	14.98
Average per employee £	91.30	93.58	85.80	80.70	86.84	85.33	91.19
1936-37. Amount paid ..£	5,191,743	6,023,008	792,423	602,413	380,669	202,766	13,193,224
Per cent. on total ..	14.17	19.44	8.72	8.40	9.16	9.77	14.64
Average per employee £	92.71	96.95	86.57	82.21	90.59	86.10	93.52
1937-38. Amount paid ..£	5,962,788	6,719,853	883,481	662,019	404,246	225,130	14,857,517
Per cent. on total ..	14.13	19.22	8.69	8.23	9.18	9.82	14.55
Average per employee £	99.41	103.62	91.25	85.65	93.36	91.26	99.69

(v) *Managers, Overseers and Other Employees.* A further analysis of salaries and wages paid is given in the following table, the amounts paid to managers, overseers, etc., being differentiated from those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

SALARIES AND WAGES: MANAGERS, OVERSEERS, ETC., AND OTHER EMPLOYEES, 1937-38.

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Overseers, Accountants and Clerks.		All Other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	286,139	21,082	1,864,442	1,044	2,150,581	22,126	2,172,707
II. Bricks, Pottery, Glass, etc. ..	324,645	32,698	2,638,488	34,678	2,963,133	67,376	3,030,509
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	728,711	141,756	2,468,435	417,522	3,197,146	559,278	3,756,424
IV. Industrial Metals, Machines, Implements and Conveyances ..	4,407,195	506,962	31,704,897	481,842	36,112,092	988,804	37,100,896
V. Precious Metals, Jewellery and Plate ..	50,378	13,983	500,901	35,923	551,279	49,906	601,185
VI. Textiles and Textile Goods ..	650,116	148,300	2,915,024	2,428,816	3,565,140	2,577,116	6,142,256
VII. Skins and Leather ..	208,960	26,957	1,411,158	183,056	1,620,118	210,013	1,830,131
VIII. Clothing ..	585,346	334,874	3,310,939	5,782,367	3,896,285	6,117,241	10,013,526
IX. Food, Drink and Tobacco ..	2,717,871	428,351	11,316,319	1,830,419	14,034,190	2,258,770	16,292,960
X. Woodworking and Basketware ..	597,737	70,486	5,018,720	21,183	5,616,457	91,669	5,708,126
XI. Furniture, Bedding etc. ..	192,669	49,403	2,167,624	214,299	2,360,293	263,702	2,623,995
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,081,661	269,538	5,444,711	903,516	6,526,372	1,173,054	7,699,426
XIII. Rubber ..	225,831	34,104	964,081	213,930	1,189,912	248,034	1,437,946
XIV. Musical Instruments ..	11,713	1,984	67,950	5,092	79,663	7,076	86,739
XV. Miscellaneous Products ..	163,112	39,505	766,061	159,135	929,173	198,640	1,127,813
Total, Classes I. to XV.	12,232,084	2,119,983	72,559,750	12,712,822	84,791,834	14,832,805	99,624,639
XVI. Heat, Light and Power ..	530,131	21,840	1,899,068	2,872	2,429,199	24,712	2,453,911
Grand Total ..	12,762,215	2,141,823	74,458,818	12,715,694	87,221,033	14,857,517	102,078,550
Average paid per employee	348.58	131.46	211.44	95.79	224.35	99.69	189.80

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1937-38.* The expenditure by factories on power, fuel and light is of considerable importance; in 1937-38 it amounted to £15,047,705, an increase of £1,481,975 as compared with the previous year. The following table shows the value of power, fuel and light used in the different classes of industry in 1937-38:—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED (a), 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	339,335	228,371	62,636	45,359	93,777	68,486	837,964
II. Bricks, Pottery, Glass, etc. ..	471,919	298,758	45,144	68,949	59,044	12,647	956,461
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	222,959	242,097	14,213	47,582	41,327	3,101	571,279
IV. Industrial Metals, Machines, Implements and Conveyances ..	3,017,407	630,912	278,132	260,568	94,775	214,980	4,496,774
V. Precious Metals, Jewellery and Plate ..	10,191	17,072	840	1,922	441	129	30,595
VI. Textiles and Textile Goods ..	192,920	347,660	10,583	22,031	7,701	21,634	602,529
VII. Skins and Leather ..	68,579	74,527	17,150	1,882	6,483	155	168,776
VIII. Clothing ..	104,513	138,433	16,716	14,325	8,968	1,378	284,333
IX. Food, Drink and Tobacco ..	888,966	842,753	517,820	207,052	164,941	55,286	2,676,818
X. Woodworking and Basketware ..	98,771	86,194	69,265	17,170	41,971	19,200	332,571
XI. Furniture, Bedding, etc. ..	31,958	29,439	9,874	8,939	4,378	1,879	86,467
XII. Paper, Stationery, Printing, Book-binding, etc. ..	158,934	217,735	32,746	18,254	18,818	5,462	451,949
XIII. Rubber ..	93,457	134,786	10,018	2,293	1,608	840	243,002
XIV. Musical Instruments ..	4,213	302	36	15	58	..	4,624
XV. Miscellaneous Products ..	37,751	26,283	1,020	1,926	893	544	68,417
Total, Classes I. to XV.	5,741,873	3,315,322	1,086,193	718,267	545,183	405,721	11,812,559
XVI. Heat, Light and Power ..	1,382,088	716,868	354,557	231,591	550,042	..	3,235,146
Grand Total ..	7,123,961	4,032,190	1,440,750	949,858	1,095,225	405,721	15,047,705

(a) Including lubricants and water.

(ii) *Values of Items, 1937-38.* The following table shows the values of the various items of power, fuel and light used in factories in each State during the year 1937-38:—

FACTORIES : VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED, 1937-38.

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Coal ..	2,280,595	1,459,639	617,594	297,050	316,073	88,502	5,059,453
Coke ..	1,321,091	278,488	31,143	36,636	29,797	3,312	1,700,467
Wood ..	129,596	187,835	144,221	75,212	169,410	28,360	734,634
Other (Charcoal, etc.) ..	68,793	75,638	97,121	32,630	7,737	143	282,062
Fuel Oil ..	456,451	277,449	99,992	83,916	240,027	23,311	1,181,146
Gas ..	525,659	108,839	24,959	24,450	12,848	2,897	699,652
Electricity ..	1,794,332	1,239,218	267,214	320,767	221,297	237,132	4,079,960
Water and Lubricating Oil ..	547,444	405,084	158,506	79,197	98,036	22,064	1,310,331
Total ..	7,123,961	4,032,190	1,440,750	949,858	1,095,225	405,721	15,047,705

(iii) *Quantities, 1937-38.* The following table shows the quantities of certain items of power, fuel and light used in factories in each State during the year 1937-38:—

FACTORIES : QUANTITY OF POWER, FUEL AND LIGHT USED, 1937-38.

Particulars.	Unit.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
Coal ..	Ton	2,488,672	3,443,781	451,266	219,653	254,746	70,337	6,928,455
Coke ..	Ton	1,161,165	175,731	21,410	19,697	12,957	1,547	1,392,507
Wood ..	Ton	163,694	436,023	247,482	110,619	318,795	59,598	1,336,211
Fuel Oil ..	Gal.	20,870,992	12,549,185	2,883,420	3,543,684	7,890,737	1,164,344	48,902,371

(iv) *Total Value, 1933-34 to 1937-38.* The next table gives the sums expended on power, fuel and light during the last five years :—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
1933-34 ..	5,239,416	3,069,749	971,680	827,049	641,324	165,663	11,214,881
1934-35 ..	5,906,307	3,323,892	1,051,474	866,567	702,375	487,592	12,338,207
1935-36 ..	6,273,485	3,505,321	1,080,525	972,636	852,327	592,001	13,276,295
1936-37 ..	6,464,942	3,677,488	1,225,255	856,808	939,166	402,071	13,505,730
1937-38 ..	7,123,961	4,032,190	1,440,750	949,858	1,095,225	405,721	15,047,705

4. *Value of Materials Used.—(i) In Classes of Industry, 1937-38.* 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 1937-38 was £287,243,412, representing 57.59 per cent. of the value of the final output. (See par. 5.) The table hereunder shows the value of the materials used in various classes of industry in each State :—

FACTORIES : VALUE OF MATERIALS USED, 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,548,644	1,120,791	321,055	128,152	208,986	142,745	4,470,373
II. Bricks, Pottery, Glass, etc. ..	981,990	450,200	74,724	188,057	77,372	26,438	1,798,781
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	7,652,008	5,324,805	586,631	1,343,636	1,022,485	115,102	16,044,670
IV. Industrial Metals, Machines, Implements and Conveyances ..	44,684,065	14,465,566	4,055,030	8,786,799	1,686,469	1,731,809	75,409,738
V. Precious Metals, Jewellery and Plate ..	180,576	451,029	11,374	22,405	8,938	692	675,014
VI. Textiles and Textile Goods ..	5,486,513	8,889,042	464,366	978,216	1,41,617	601,948	16,561,702
VII. Skins and Leather ..	3,005,606	2,839,763	1,279,457	119,314	150,268	6,398	7,409,806
VIII. Clothing ..	6,450,530	9,541,185	909,668	533,498	440,964	66,893	17,942,738
IX. Food, Drink and Tobacco ..	35,169,793	32,380,459	27,660,364	7,292,297	4,542,393	2,051,912	109,097,218
X. Woodworking and Basketware ..	5,000,244	3,075,147	2,681,578	996,272	887,606	450,776	13,091,623
XI. Furniture, Bedding, etc. ..	2,270,059	1,535,366	485,917	338,557	265,488	62,137	4,957,524
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,947,704	3,919,693	654,875	477,131	339,553	109,596	10,448,552
XIII. Rubber ..	2,133,826	2,592,733	180,624	37,598	22,530	13,545	4,980,856
XIV. Musical Instruments ..	37,195	8,268	2,004	424	659	..	48,550
XV. Miscellaneous Products ..	1,133,796	825,486	37,955	79,551	33,195	24,384	2,134,367
Total, Classes I. to XV.	121,682,549	87,419,533	39,405,625	21,321,907	9,837,523	5,404,375	285,071,512
XVI. Heat, Light and Power ..	908,914	709,612	190,070	148,017	143,918	66,369	2,171,900
Grand Total ..	122,591,463	88,129,145	39,595,695	21,469,924	9,986,441	5,470,744	287,243,412

(ii) *Total Amount, 1933-34 to 1937-38.* The following table gives the values of materials used in factories for the last five years :—

FACTORIES : VALUE OF MATERIALS USED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1933-34 ..	77,330,401	61,224,916	27,758,597	13,450,771	6,791,684	3,270,895	189,827,264
1934-35 ..	87,096,873	65,096,374	30,346,510	15,275,492	7,654,382	3,577,386	209,047,017
1935-36 ..	98,950,321	76,494,159	30,991,341	19,261,750	9,172,205	4,195,021	238,974,797
1936-37 ..	109,593,494	80,302,423	34,612,231	21,399,805	9,427,259	5,243,691	260,578,903
1937-38 ..	122,591,463	88,129,145	39,595,695	21,469,924	9,986,441	5,470,744	287,243,412

5. Value of Output.—(i) *In Classes of Industry, 1937-38.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1937-38 is shown in the following table. The figures given represent not only the increase in value due to the process of manufacture, but include 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 the fuel and light used, and the output is the real value of factory production (see par. 6).

FACTORIES : VALUE OF OUTPUT, 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	5,189,424	2,808,306	713,786	392,024	622,908	431,928	10,158,376
II. Bricks, Pottery, Glass, etc. ..	4,429,081	2,241,357	374,021	676,115	372,184	99,796	8,192,554
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	13,851,955	9,970,909	930,861	2,050,036	1,546,740	175,387	28,525,888
IV. Industrial Metals, Machines, Implements and Conveyances ..	76,808,406	31,140,916	8,907,794	14,993,264	4,210,628	3,989,186	140,050,194
V. Precious Metals, Jewellery and Plate ..	481,506	1,022,471	52,899	67,336	32,983	5,066	1,662,261
VI. Textiles and Textile Goods ..	9,019,451	15,298,559	656,986	1,228,113	233,841	989,344	27,426,297
VII. Skins and Leather ..	4,289,226	4,237,259	1,566,862	212,403	260,077	13,811	10,579,638
VIII. Clothing ..	12,449,127	17,281,253	2,017,780	1,220,202	967,121	158,980	34,094,463
IX. Food, Drink and Tobacco ..	51,296,623	45,912,799	35,194,331	9,975,875	6,729,383	3,058,439	152,167,950
X. Woodworking and Basketware ..	8,244,563	5,527,505	4,702,998	1,526,468	1,804,429	931,152	22,737,115
XI. Furniture, Bedding etc. ..	4,208,301	2,825,221	1,004,086	625,406	506,671	144,905	9,314,590
XII. Paper, Stationery, Printing, Book-binding, etc. ..	11,423,717	9,141,044	1,862,815	1,211,242	946,697	503,123	25,088,638
XIII. Rubber ..	3,106,542	4,094,017	322,938	79,662	51,515	31,146	7,685,820
XIV. Musical Instruments ..	135,170	38,052	13,251	2,686	8,418	..	197,577
XV. Miscellaneous Products ..	2,369,877	1,591,388	104,162	179,728	71,122	66,945	4,383,222
Total, Classes I. to XV. ..	207,302,972	153,131,056	58,425,570	34,440,560	18,365,217	10,599,208	482,264,583
XVI. Heat, Light and Power ..	7,580,585	3,919,669	1,213,833	1,799,377	1,278,743	722,351	16,514,558
Grand Total ..	214,883,557	157,050,725	59,639,403	36,239,937	19,643,960	11,321,559	498,779,141

(ii) *Total, 1933-34 to 1937-38.* The following statement shows the value of output in each State during the five years ended 1937-38 :—

FACTORIES : VALUE OF OUTPUT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1933-34 ..	136,611,971	108,496,310	42,442,785	22,919,297	12,877,288	6,786,409	330,134,060
1934-35 ..	154,433,248	117,182,857	46,021,303	25,699,172	14,641,680	7,223,124	365,201,384
1935-36 ..	174,693,761	134,043,170	47,664,810	31,904,091	17,528,741	8,853,882	414,688,455
1936-37 ..	192,812,414	142,692,192	53,022,008	34,528,176	18,313,122	10,461,366	451,829,278
1937-38 ..	214,883,557	157,050,725	59,639,403	36,239,937	19,643,960	11,321,559	498,779,141

6. Value of Production.—(i) *In Classes of Industry, 1937-38.* The value of production for any industry was defined by 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 £10,316,910 for 1937-38. Many miscellaneous expenses, also, such as insurance and advertising, have not been taken into account. Hence, 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 1937-38 in each State for the various classes of factories:—

FACTORIES : VALUE OF PRODUCTION, 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,301,445	1,459,144	330,095	218,513	320,145	220,697	4,850,039
II. Bricks, Pottery, Glass, etc. ..	2,975,172	1,492,399	254,153	419,109	235,768	60,711	5,437,312
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,976,988	4,404,007	330,014	658,818	482,928	57,184	11,909,939
IV. Industrial Metals, Machines, Implements and Conveyances ..	29,106,934	16,044,438	4,574,632	5,945,897	2,429,384	2,042,397	60,143,682
V. Precious Metals, Jewellery and Plate ..	290,739	554,370	40,685	43,009	23,604	4,245	956,652
VI. Textiles and Textile Goods ..	3,340,021	6,061,857	182,037	227,866	84,523	365,762	10,262,066
VII. Skins and Leather ..	1,215,041	1,322,969	270,255	91,207	94,326	7,258	3,001,056
VIII. Clothing ..	5,894,084	7,601,635	1,091,396	672,379	517,189	90,709	15,867,392
IX. Food, Drink and Tobacco ..	15,237,864	12,689,587	7,016,147	2,476,526	2,022,549	951,241	40,393,914
X. Woodworking and Basketware ..	3,145,548	2,366,164	1,952,155	513,026	874,852	461,176	9,312,921
XI. Furniture, Bedding, etc. ..	1,906,284	1,260,416	508,295	277,910	236,805	80,889	4,270,599
XII. Paper, Stationery, Printing, Book-binding, etc. ..	6,317,079	5,003,616	1,175,194	715,857	588,326	388,065	14,188,137
XIII. Rubber ..	879,259	1,366,498	132,296	39,771	27,377	16,761	2,461,962
XIV. Musical Instruments ..	93,762	29,482	11,211	2,247	7,701	..	144,403
XV. Miscellaneous Products ..	1,198,330	739,619	65,187	98,251	37,034	42,017	2,180,438
Total, Classes I. to XV.	79,878,550	62,396,201	17,933,752	12,400,386	7,982,511	4,789,112	185,380,512
XVI. Heat, Light and Power ..	5,289,583	2,493,189	669,206	1,419,769	579,783	655,982	11,107,512
Grand Total ..	85,168,133	64,889,390	18,602,958	13,820,155	8,562,294	5,445,094	196,488,024

(ii) *Total and Averages, 1933-34 to 1937-38.* The value of production and the amount per person engaged and per head of population are shown in the following table for the years specified:—

FACTORIES : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
	£	£	£	£	£	£	£
1933-34 ..	54,042,154	44,201,645	13,712,508	8,641,477	5,444,280	3,049,851	129,091,915
1934-35 ..	61,430,068	48,762,591	14,623,319	9,557,113	6,284,923	3,158,146	143,816,160
1935-36 ..	69,469,955	54,043,690	15,682,944	11,669,705	7,504,209	4,066,860	162,437,363
1936-37 ..	76,753,978	58,712,281	17,184,522	12,271,563	7,946,697	4,815,604	177,634,645
1937-38 ..	85,168,133	64,889,390	18,602,958	13,820,155	8,562,294	5,445,094	196,488,024

PER PERSON ENGAGED.

	£	£	£	£	£	£	£
1933-34 ..	351	283	342	293	337	312	318
1934-35 ..	351	287	340	285	354	299	320
1935-36 ..	360	295	348	303	357	351	330
1936-37 ..	368	307	356	301	350	387	339
1937-38 ..	379	322	357	313	370	413	351

PER HEAD OF POPULATION.

	£	£	£	£	£	£	£
1933-34 ..	20.68	24.22	14.43	14.84	12.36	13.32	19.40
1934-35 ..	23.62	26.55	15.22	16.36	14.18	13.78	21.46
1935-36 ..	26.15	29.32	16.13	19.91	16.76	17.66	24.06
1936-37 ..	28.63	31.70	17.46	20.86	17.59	20.74	26.11
1937-38 ..	31.44	34.87	18.69	23.40	18.73	22.87	28.62

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1937-38 was estimated at £498,779,141, there remained, after payment of £287,243,412, the value of the materials used, of £102,078,550 for salaries and wages, and of £15,047,705 for fuel, the sum of £94,409,474 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 1937-38:—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1937-38.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
New South Wales	£122,591,463	£7,123,961	£42,209,875	£42,958,258	£214,883,557
Victoria	£88,129,145	£4,032,190	£34,960,911	£29,928,479	£157,050,725
Queensland	£39,595,695	£1,440,750	£10,170,800	£8,432,158	£59,639,403
South Australia	£21,469,924	£949,858	£8,043,160	£5,776,995	£36,239,937
Western Australia	£9,986,441	£1,095,225	£4,401,443	£4,160,851	£19,643,960
Tasmania	£5,470,744	£405,721	£2,292,361	£3,152,733	£11,321,559
Australia	£287,243,412	£15,047,705	£102,078,550	£94,409,474	£498,779,141

VALUE AND COST, ETC.

	£	£	£	£	£
New South Wales	£122,591,463	£7,123,961	£42,209,875	£42,958,258	£214,883,557
Victoria	£88,129,145	£4,032,190	£34,960,911	£29,928,479	£157,050,725
Queensland	£39,595,695	£1,440,750	£10,170,800	£8,432,158	£59,639,403
South Australia	£21,469,924	£949,858	£8,043,160	£5,776,995	£36,239,937
Western Australia	£9,986,441	£1,095,225	£4,401,443	£4,160,851	£19,643,960
Tasmania	£5,470,744	£405,721	£2,292,361	£3,152,733	£11,321,559
Australia	£287,243,412	£15,047,705	£102,078,550	£94,409,474	£498,779,141

(a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.

(b) Including lubricants and water.

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1937-38—
continued.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.					
	%	%	%	%	%
New South Wales ..	57.05	3.32	19.64	19.99	100.00
Victoria ..	56.11	2.57	22.26	19.06	100.00
Queensland ..	66.39	2.42	17.05	14.14	100.00
South Australia ..	59.24	2.62	22.20	15.94	100.00
Western Australia ..	50.84	5.57	22.41	21.18	100.00
Tasmania ..	48.32	3.58	20.25	27.85	100.00
Australia ..	57.59	3.02	20.46	18.93	100.00

(a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
(b) Including 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 1937-38:—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY, 1937-38.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	54,471,643	40,339,541	11,982,620	8,379,334	6,471,367	2,989,509	124,634,014
Plant and machinery	57,222,693	36,868,289	17,734,600	9,402,792	7,459,525	4,676,687	133,364,586
Total ..	111,694,336	77,207,830	29,717,220	17,782,126	13,930,892	7,666,196	257,998,600

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. 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, 1933-34 to 1937-38.* The appended table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1933-34 to 1937-38 inclusive:—

FACTORIES : VALUE OF LAND AND BUILDINGS, AUSTRALIA.

Class of Industry.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,415,120	2,409,200	2,412,145	2,617,765	2,728,772
II. Bricks, Pottery, Glass, etc.	2,376,697	2,558,791	2,706,575	2,686,930	2,790,201
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,903,867	6,129,529	6,398,332	6,596,554	6,843,335
IV. Industrial Metals, Machines, Implements and Conveyances ..	25,877,989	26,718,722	27,873,261	30,061,037	32,420,428
V. Precious Metals, Jewellery and Plate ..	518,293	536,745	561,735	602,685	616,934
VI. Textiles and Textile Goods ..	5,106,496	5,169,116	5,447,503	5,558,420	5,754,347
VII. Skins and Leather ..	1,789,880	1,790,607	1,833,333	2,008,167	1,990,451
VIII. Clothing ..	9,059,219	9,571,442	9,750,735	10,282,902	10,350,944
IX. Food, Drink and Tobacco ..	27,006,548	27,949,389	28,928,977	30,166,301	31,953,396
X. Woodworking and Basketware ..	3,486,892	3,694,166	3,769,305	3,838,701	3,904,773
XI. Furniture, Bedding, etc.	1,963,269	2,056,019	2,196,782	2,370,393	2,440,997
XII. Paper, Stationery, Printing, Bookbinding, etc.	9,093,698	9,221,909	9,564,871	9,668,602	9,956,433
XIII. Rubber ..	1,893,051	1,849,493	1,842,048	1,751,707	1,790,590
XIV. Musical Instruments ..	144,215	122,887	115,948	109,531	98,947
XV. Miscellaneous Products ..	1,063,804	1,114,681	1,213,697	1,323,085	1,396,371
Total, Classes I. to XV.	97,699,038	100,892,696	104,615,247	109,642,780	115,036,919
XVI. Heat, Light and Power ..	9,838,768	9,947,961	9,994,655	9,883,357	9,597,095
Grand Total ..	107,537,806	110,840,657	114,609,902	119,526,137	124,634,014

(ii) *In Classes of Industry in States, 1937-38.* The following table gives particulars for the various classes of industry in each State.

FACTORIES : VALUE OF LAND AND BUILDINGS, STATES, 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,326,876	774,488	199,029	154,888	113,142	160,349	2,728,772
II. Bricks, Pottery, Glass, etc.	1,592,794	768,536	122,559	176,444	109,055	20,813	2,790,201
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,597,521	2,875,452	174,154	469,879	643,250	83,079	6,843,335
IV. Industrial Metals, Machines, Implements and Conveyances ..	16,136,742	9,018,778	2,312,136	2,436,593	1,618,981	897,198	32,420,428
V. Precious Metals, Jewellery and Plate ..	206,071	314,995	30,148	35,785	21,150	8,785	616,934
VI. Textiles and Textile Goods ..	1,943,232	3,217,239	126,783	172,026	62,229	232,838	5,754,347
VII. Skins and Leather ..	747,414	931,532	121,182	58,360	121,707	10,256	1,990,451
VIII. Clothing ..	4,261,271	4,323,372	623,676	530,295	511,428	100,902	10,350,944
IX. Food, Drink and Tobacco ..	11,683,832	9,506,708	5,608,830	2,439,688	1,846,035	868,303	31,953,396
X. Woodworking and Basketware ..	1,615,808	1,003,408	538,595	300,254	290,843	155,865	3,904,773
XI. Furniture, Bedding, etc.	971,652	850,102	273,935	170,616	131,438	43,254	2,440,997
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	4,282,826	3,341,972	990,085	697,124	535,911	108,515	9,956,433
XIII. Rubber ..	816,805	734,051	114,883	60,725	39,256	24,870	1,790,590
XIV. Musical Instruments ..	53,906	29,101	7,460	1,770	6,710	..	98,947
XV. Miscellaneous Products ..	766,289	460,419	57,401	61,154	41,929	9,179	1,396,371
Total, Classes I. to XV.	49,003,039	38,150,153	11,300,856	7,765,601	6,093,064	2,724,206	115,036,919
XVI. Heat, Light and Power ..	5,468,604	2,189,388	681,764	613,733	378,303	265,303	9,597,095
Grand Total ..	54,471,643	40,339,541	11,982,620	8,379,334	6,471,367	2,989,509	124,634,014

(iii) *Totals in each State.* The total value of land and buildings in each State from 1933-34 to 1937-38 is given hereunder:—

FACTORIES : VALUE OF LAND AND BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1933-34 ..	46,310,925	35,563,879	9,461,870	7,989,314	5,581,057	2,630,761	107,537,806
1934-35 ..	47,937,192	36,644,621	9,942,803	7,947,825	5,673,461	2,694,755	110,840,657
1935-36 ..	49,494,222	37,678,298	10,514,513	8,268,807	5,978,111	2,675,951	114,609,902
1936-37 ..	51,629,598	38,948,268	11,483,161	8,133,147	6,279,305	3,052,658	119,526,137
1937-38 ..	54,471,643	40,339,541	11,982,620	8,379,334	6,471,367	2,989,509	124,634,034

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 ending 1932-33, however, there was a decline of £12 million to £105.8 million, but during the next five years the value has risen to £124.6 million.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1933-34 to 1937-38.* The following table shows for Australia the approximate value of plant and machinery used in factories in each of the years specified:—

FACTORIES : VALUE OF PLANT AND MACHINERY, AUSTRALIA.

Class of Industry.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	5,373,802	5,279,528	5,249,528	4,881,743	6,504,872
II. Bricks, Pottery, Glass, etc. ..	2,414,175	2,649,482	2,865,499	2,858,777	3,019,476
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,386,426	5,638,866	5,722,327	5,923,776	6,251,926
IV. Industrial Metals, Machines, Implements and Conveyances ..	24,611,820	24,976,454	25,604,490	26,940,963	29,285,995
V. Precious Metals, Jewellery and Plate ..	148,402	162,129	175,884	187,373	196,652
VI. Textiles and Textile Goods ..	5,751,145	5,799,227	6,052,307	6,505,668	6,463,604
VII. Skins and Leather ..	913,723	892,370	898,598	902,197	900,239
VIII. Clothing ..	2,061,074	2,180,610	2,256,669	2,326,915	2,431,475
IX. Food, Drink and Tobacco ..	27,305,642	29,207,778	30,041,612	30,244,206	31,198,129
X. Woodworking and Basketware ..	3,326,466	3,490,416	3,629,550	3,597,835	3,759,553
XI. Furniture, Bedding, etc. ..	679,252	661,980	678,710	704,708	725,420
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	7,139,924	7,108,001	7,532,292	7,773,218	8,436,942
XIII. Rubber ..	1,710,597	1,639,724	1,494,225	1,401,645	1,470,300
XIV. Musical Instruments ..	33,582	24,209	18,157	14,800	10,750
XV. Miscellaneous Products ..	560,737	580,623	579,858	671,173	719,309
Total, Classes I. to XV.	87,416,767	90,291,397	92,769,706	94,934,997	101,374,642
XVI. Heat, Light and Power	32,791,361	32,349,558	32,461,385	31,742,098	31,989,944
Grand Total ..	120,208,128	122,640,955	125,231,091	126,677,095	133,364,586

Prior to 1937-38, the maximum amount invested in plant and machinery was £127.6 million in 1929-30. The amount declined to £120.2 million during the next four years, but has since risen to the record figure of £133.4 million.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the last five years. It will be noted that the chief increase during the year 1937-38 was recorded in New South Wales:—

FACTORIES : VALUE OF PLANT AND MACHINERY.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1933-34 ..	49,083,921	33,270,400	16,891,339	9,161,672	5,678,638	6,122,158	120,208,128
1934-35 ..	50,453,590	33,947,056	17,114,417	9,293,448	5,763,428	6,069,016	122,640,955
1935-36 ..	51,964,982	34,194,608	17,736,543	9,280,335	6,063,901	5,990,722	125,231,091
1936-37 ..	51,979,614	36,213,626	17,460,253	9,130,748	7,142,368	4,750,486	126,677,095
1937-38 ..	57,222,693	36,868,289	17,734,600	9,402,792	7,459,525	4,676,687	133,364,586

(iii) *Value according to Industry, 1937-38.* The following table shows the value of plant and machinery used in factories in each State during 1937-38, classified according to industry:—

FACTORIES : VALUE OF PLANT AND MACHINERY, 1937-38.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	4,110,590	1,539,527	267,218	234,786	185,306	167,445	6,504,872
II. Bricks, Pottery, Glass, etc. ..	1,640,039	874,913	142,856	181,556	151,489	28,623	3,019,476
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,652,973	2,753,463	108,795	834,676	855,845	46,174	6,251,926
IV. Industrial Metals, Machines, Implements and Conveyances ..	17,003,176	5,924,531	2,038,962	2,024,943	1,023,964	1,270,419	29,285,995
V. Precious Metals, Jewellery and Plate ..	65,378	112,801	4,799	8,978	3,143	1,553	196,652
VI. Textiles and Textile Goods ..	2,043,047	3,777,497	138,399	200,981	74,446	229,234	6,463,604
VII. Skins and Leather ..	346,297	364,347	102,439	21,913	63,567	1,676	900,239
VIII. Clothing ..	833,679	1,227,337	151,798	112,592	90,471	15,598	2,431,475
IX. Food, Drink and Tobacco ..	9,451,929	6,911,829	10,842,989	1,816,696	1,687,665	487,021	31,198,129
X. Woodworking and Basketware ..	1,039,361	942,945	830,642	201,046	495,624	249,935	3,759,553
XI. Furniture, Bedding, etc. ..	293,142	205,852	85,730	81,851	40,409	18,436	725,420
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,004,846	2,751,915	692,250	510,235	360,441	117,255	8,436,942
XIII. Rubber ..	558,338	831,481	51,573	14,314	8,595	5,999	1,470,300
XIV. Musical Instruments ..	4,932	4,915	243	185	475	..	10,750
XV. Miscellaneous Products ..	404,259	264,439	15,118	17,535	11,582	6,376	719,309
Total, Classes I. to XV.	43,451,986	28,467,792	15,473,811	6,262,287	5,053,022	2,645,744	101,374,642
XVI. Heat, Light and Power ..	13,770,707	8,380,497	2,260,789	3,140,505	2,406,503	2,030,943	31,989,944
Grand Total ..	57,222,693	36,863,289	17,734,600	9,402,792	7,459,525	4,676,687	133,364,586

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 1937-38.

ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1937-38.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	336,553	99,729	25,865	9,405	47,585	38,363	557,500
II. Bricks, Pottery, Glass, etc. ..	202,408	50,500	10,702	19,409	13,162	1,106	297,287
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	221,018	293,087	16,644	29,280	59,331	4,643	624,003
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,129,957	523,259	164,531	231,871	53,134	144,253	2,247,005
V. Precious Metals, Jewellery and Plate ..	9,260	9,263	274	2,494	305	91	21,687
VI. Textiles and Textile Goods ..	185,057	411,556	7,340	18,598	2,129	27,991	652,671
VII. Skins and Leather ..	34,255	39,760	7,935	812	2,281	192	85,235
VIII. Clothing ..	91,364	124,371	11,118	7,094	6,508	846	241,301
IX. Food, Drink and Tobacco ..	722,866	546,778	623,274	155,691	110,881	39,418	2,198,906
X. Woodworking and Basketware ..	109,982	80,340	68,281	23,044	50,015	21,292	352,954
XI. Furniture, Bedding, etc. ..	26,115	21,302	9,798	7,241	4,152	1,297	69,905
XII. Paper, Stationery, Printing, Book-Binding, etc. ..	323,724	292,123	66,557	44,483	36,740	14,649	778,276
XIII. Rubber ..	79,482	77,398	4,553	1,872	1,095	772	165,172
XIV. Musical Instruments ..	4,562	253	11	..	48	..	4,874
XV. Miscellaneous Products ..	68,453	35,935	1,438	2,127	1,391	583	109,927
Total, Classes I. to XV. ..	3,545,056	2,605,654	1,018,321	553,421	388,757	295,496	8,406,705
XVI. Heat, Light and Power ..	565,606	1,006,427	171,910	21,841	92,664	51,757	1,910,205
Grand Total ..	4,110,662	3,612,081	1,190,231	575,262	481,421	347,253	10,316,910

§ 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 in respect of all industries, particular industries which are of special importance by reason of the employment which they provide for labour and capital or other features of special interest are dealt with hereunder. Where there are only one or two establishments of a particular class in any State, returns of output are not published but are combined with some other factory group so that the operations of individual concerns will not be disclosed.

2. Chemicals, Drugs and Medicines.—(i) *Details for each State, 1937–38.* This industry is the most important in Class III. and details for each State during the year 1937–38 are shown in the following table:—

CHEMICALS, DRUGS AND MEDICINES, 1937–38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	121	67	13	11	11	5	228
Number of persons engaged ..	2,706	1,778	201	307	184	34	5,210
Value of land and buildings ..	£ 901,876	575,947	72,182	66,751	43,054	17,675	1,677,485
Value of plant and machinery ..	£ 494,975	379,900	38,948	60,996	139,247	6,436	1,119,602
Wages paid ..	£ 495,427	338,550	37,059	42,669	37,031	4,341	955,677
Value of fuel used ..	£ 64,544	33,137	4,354	7,375	10,351	119	119,880
Value of materials used ..	£ 1,831,484	985,081	107,471	202,395	81,620	11,845	3,219,896
Total value of output ..	£ 4,034,938	2,089,464	216,936	322,650	188,958	20,107	6,873,053
Value of production ..	£ 2,138,910	1,071,246	105,111	112,880	96,987	8,143	3,533,277

(ii) *Total for Australia, 1933–34 to 1937–38.* In the returns for Australia shown in the following table it will be seen that the industry has made consistent progress during each of the last four years:—

CHEMICALS, DRUGS AND MEDICINES: AUSTRALIA.

Items.	1933–34.	1934–35.	1935–36.	1936–37.	1937–38.
Number of factories ..	190	203	214	225	228
Number of persons engaged ..	3,852	4,251	4,619	4,928	5,210
Value of land and buildings ..	£ 1,350,042	1,435,705	1,556,254	1,627,073	1,677,485
Value of plant and machinery ..	£ 832,532	929,216	986,700	1,080,969	1,119,602
Wages paid ..	£ 651,557	713,018	786,211	849,254	955,677
Value of fuel used ..	£ 84,127	90,732	99,376	107,240	119,880
Value of materials used ..	£ 2,287,226	2,441,380	2,751,056	2,948,550	3,219,896
Total value of output ..	£ 4,828,851	5,171,339	5,723,675	6,362,843	6,873,053
Value of production ..	£ 2,457,498	2,639,227	2,873,243	3,307,953	3,533,277

3. Soap and Candle Factories.—(i) *Details for each State, 1937–38.* The manufacture of these products is frequently carried on in the same factory, so that separate returns cannot be obtained; the manufacture of soap is, however, the more important. The following table gives particulars of soap and candle factories in each State for the year 1937–38:—

SOAP AND CANDLE FACTORIES, 1937–38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	27	18	10	4	4	2	65
Number of persons engaged ..	1,399	723	185	140	62	25	2,534
Value of land and buildings ..	£ 325,144	206,326	33,001	58,111	(a)	(a)	b 649,362
Value of plant and machinery ..	£ 198,719	255,201	26,007	51,656	(a)	(a)	b 556,427
Wages paid ..	£ 260,770	140,725	35,614	25,238	(a)	(a)	b 478,065
Value of fuel used ..	£ 25,811	37,997	3,563	2,898	(a)	(a)	b 72,670
Value of materials used ..	£ 902,255	611,824	104,846	93,180	(a)	(a)	b 1,787,068
Total value of output ..	£ 1,832,026	1,323,103	188,888	163,277	(a)	(a)	b 3,627,830
Value of production ..	£ 903,960	673,282	80,479	67,199	(a)	(a)	b 1,768,092

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1933-34 to 1937-38.* The next table gives similar particulars for the last five years for Australia:—

SOAP AND CANDLE FACTORIES : AUSTRALIA.

Items	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	71	67	66	66	65
Number of persons engaged	1,985	2,044	2,183	2,379	2,534
Value of land and buildings	£ 640,603	626,281	613,717	624,162	649,362
Value of plant and machinery	£ 573,905	530,298	514,845	484,225	556,427
Wages paid	£ 338,517	354,011	385,431	441,857	478,065
Value of fuel used	£ 58,741	56,774	56,340	63,368	72,670
Value of materials used	£ 1,365,699	1,445,528	1,689,835	1,858,810	1,787,068
Total value of output	£ 2,696,606	2,917,802	3,107,553	3,551,887	3,627,830
Value of production	£ 1,272,166	1,415,500	1,341,378	1,629,709	1,768,092

(iii) *Raw Material Used, and Production, 1933-34 to 1937-38.* The following statement shows the quantities of certain raw material used and the production in soap and candle factories in Australia for the last five years:—

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

Particulars.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Tallow used cwt.	492,624	511,936	491,423	518,604	511,302
Alkali used "	264,576	264,147	288,461	227,028	218,171
Coco-nut oil used, Refined	80,150	92,952	125,548	124,236	137,134
and Unrefined "	891,832	932,252	954,082	986,578	952,507
Soap made "	51,598	48,398	39,937	37,991	26,964
Candles made "					

The output for the year 1937-38 comprised the following quantities of soap:— Household, 708,602 cwt.; toilet, 124,600 cwt.; sand, 82,685 cwt.; soft, 16,592 cwt.; and other, 20,028 cwt.

4. *Chemical Fertilizers.*—(i) *Details for each State, 1937-38.* The following table gives particulars of the factories engaged in the manufacture of chemical fertilizers in each State during the year 1937-38. Details of the consumption, imports and exports of fertilizers will be found in Chapter XIX. "Agriculture."

CHEMICAL FERTILIZERS, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	5	4	5	6	5	7	32
Number of persons engaged	288	1,022	93	651	385	35	2,474
Value of land and buildings	£ 109,211	543,560	14,062	220,856	499,221	47,145	1,424,055
Value of plant and machinery	£ 126,051	790,338	14,686	613,346	642,044	28,110	2,214,575
Wages paid	£ 77,953	250,754	20,749	141,947	101,913	6,631	599,947
Value of fuel used	£ 14,061	47,331	1,487	22,029	23,138	541	108,587
Value of materials used	£ 436,976	1,191,777	241,518	562,913	730,172	75,966	3,239,322
Total value of output	£ 746,789	1,842,903	318,382	843,552	1,053,517	99,240	4,904,383
Value of production	£ 295,752	603,795	75,377	258,610	300,207	22,733	1,556,474

(ii) *Total for Australia, 1933-34 to 1937-38.* The development of this industry since 1933-34 is set out hereunder:—

CHEMICAL FERTILIZERS: AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	34	33	33	34	32
Number of persons engaged	1,706	1,801	1,996	2,214	2,474
Value of land and buildings	£ 1,446,410	1,365,737	1,378,636	1,368,075	1,424,055
Value of plant and machinery	2,095,142	2,120,628	2,127,113	2,145,237	2,214,575
Wages paid	£ 364,726	386,277	442,052	493,345	599,947
Value of fuel used	86,137	84,028	88,670	94,340	108,587
Value of materials used	2,452,106	2,370,798	2,726,551	2,873,015	3,239,322
Total value of output	£ 3,577,732	3,440,860	3,906,041	4,375,565	4,904,383
Value of production	£ 1,039,489	986,034	1,090,814	1,408,210	1,556,474

5. *Agricultural Implement Works.*—(i) *General.* The manufacture of agricultural implements is of particular interest, owing to the extensive agricultural activities and to the fact that it was one of the first to which it was sought to apply the so-called "New Protection." The articles manufactured include stripper-harvesters, header harvesters or reaper threshers, strippers, reapers and binders, stump-jump and other ploughs, harrows, disc and other cultivators, winnowers, corn-shellers and baggers, drills, kerosene and petrol engines, and other implements employed in agriculture. The stripper harvester, which combines the stripper with a mechanism for winnowing and bagging grain, is an Australian invention, and is universally employed in the larger wheat-growing areas.

(ii) *Details for States, 1937-38.* The following table gives details respecting agricultural implement works in each State for the year 1937-38:—

AGRICULTURAL IMPLEMENT WORKS, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	27	80	9	35	9	..	160
Number of persons engaged	1,244	4,539	439	1,417	117	..	7,756
Value of land and buildings	£ 165,148	405,089	31,450	159,130	43,299	..	804,116
Value of plant and machinery	£ 85,734	401,625	58,397	181,651	2,364	..	729,771
Wages paid	£ 248,709	1,021,178	84,210	250,805	24,869	..	1,629,771
Value of fuel used	£ 12,303	69,417	6,191	16,618	646	..	105,175
Value of materials used	£ 296,312	1,196,131	71,416	320,511	10,756	..	1,904,156
Total value of output	£ 642,509	2,691,479	194,589	651,988	45,093	..	4,225,658
Value of production	£ 333,894	1,425,931	116,982	305,829	33,691	..	2,216,327

(iii) *Total for Australia, 1933-34 to 1937-38.* This industry declined considerably during the war years, but great progress was made thereafter. The fall in world prices of agricultural products resulted in a considerable slackening in employment and output during the years 1929-30 to 1934-35, but the industry has expanded considerably during the past three years. Details for each of the last five years are as follows:—

AGRICULTURAL IMPLEMENT WORKS: AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	139	139	143	148	160
Number of persons engaged	3,924	4,202	5,053	6,253	7,756
Value of land and buildings	£ 607,370	587,962	608,679	689,612	804,116
Value of plant and machinery	£ 562,396	562,345	600,915	683,642	729,771
Wages paid	£ 671,861	730,906	936,350	1,232,838	1,629,771
Value of fuel used	£ 53,365	59,001	66,518	85,229	105,175
Value of materials used	£ 799,197	875,754	1,121,478	1,457,599	1,904,156
Total value of output	£ 1,766,707	1,968,593	2,528,088	3,150,732	4,225,658
Value of production	£ 914,145	1,033,838	1,340,092	1,667,904	2,216,327

6. **Engineering Works.**—Formerly, it was impossible to show separate details for the engineering industry owing to the different classifications among the States, but since 1926-27 substantial uniformity has been attained.

The classification of establishments included in the Industrial Metal Group still presents some difficulty. This arises from the fact that some establishments are engaged in two or more distinct types of industrial activity. In such cases factory proprietors are asked to furnish separate returns for each activity, but this is not always practicable and consequently there is no alternative but to classify such factories according to their predominant activity. This difficulty is most acute in engineering works, but the following figures may be accepted as reasonably representative of the engineering industry, excluding the marine and electrical branches:—

ENGINEERING WORKS,(a) 1937-38.

Items.	N.S.W.	Victoria.	Q'land. (b)	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	353	379	118	73	134	10	1,076
Number of persons engaged ..	10,119	9,621	2,942	1,647	1,651	281	26,261
Value of land and buildings £	1,342,849	1,463,773	341,310	148,141	235,758	47,557	3,579,388
Value of plant and machinery ..	£ 1,088,592	1,324,930	306,482	174,508	217,218	34,407	3,146,137
Wages paid ..	£ 2,288,116	2,101,080	615,090	263,817	359,352	59,277	5,686,732
Value of fuel used ..	£ 102,801	101,141	39,076	18,902	24,756	3,220	289,806
Value of materials used ..	£ 3,263,216	3,100,547	775,771	341,807	481,067	43,727	8,007,935
Total value of output ..	£ 7,000,010	6,594,994	1,748,757	783,349	1,179,887	130,263	17,437,260
Value of production ..	£ 3,633,993	3,393,306	933,910	422,640	673,164	83,316	9,140,329

(a) Excluding marine and electrical.

(b) Including establishments previously included with smelting, converting, refining and rolling of iron and steel.

In addition to engineering works which supply ordinary requirements, many establishments manufacture special classes of machinery and implements. The manufacture of mining, smelting and textile machinery and apparatus forms an important section of this industry.

7. **Smelting, Converting, Refining and Rolling of Iron and Steel.**—The extension of the classification noted in the preceding paragraph has made possible the separate publication of details for the group of industries comprised herein. This grouping includes ironworks, foundries, the making of iron safes and doors, steel castings, iron bedsteads, sash weights, steel window frames and sashes, nuts and bolts, springs, horse-shoes, screws, lifts, tools, brickmakers' implements and oxy-acetylene welding. Particulars for the year 1937-38 are as follows:—

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL, 1937-38.

Items.	N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	167	165	..	32	1	..	365
Number of persons engaged ..	13,643	4,643	..	1,729	102	..	20,117
Value of land and buildings ..	£ 2,467,177	595,912	..	(b)	(b)	..	c 3,192,711
Value of plant and machinery ..	£ 6,511,321	553,648	..	(b)	(b)	..	c 7,171,159
Wages paid ..	£ 3,499,385	943,547	..	(b)	(b)	..	c 4,749,266
Value of fuel used ..	£ 2,005,059	150,064	..	(b)	(b)	..	c 2,195,818
Value of materials used ..	£ 15,759,957	1,292,224	..	(b)	(b)	..	c17,426,485
Total value of output ..	£ 24,974,681	2,887,321	..	(b)	(b)	..	c28,684,124
Value of production ..	£ 7,209,665	1,445,033	..	(b)	(b)	..	c 9,061,821

(a) Now included with Engineering.

(b) Particulars not available for publication.

c) Including South Australia and Western Australia.

8. **Extracting and Refining of Non-ferrous Metals and Alloys.**—The following table gives particulars of metal extraction and ore reduction works, other than those connected with iron and steel. The returns do not include particulars of plants used on mines :—

EXTRACTING AND REFINING OF NON-FERROUS METALS AND ALLOYS, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A. (a)	Tas.	Australia.
Number of factories ..	10	7	18	2	1	4	42
Number of persons engaged ..	1,056	65	1,028	1,226	88	1,867	5,330
Value of land and buildings £	194,428	18,358	294,692	(b)	(b)	468,361	c 1,118,598
Value of plant and machinery ..	£ 687,304	6,000	900,970	(b)	(b)	1,113,207	c 3,259,996
Wages paid ..	£ 298,871	16,967	215,569	(b)	(b)	492,237	c 1,477,235
Value of fuel used ..	£ 187,375	2,636	169,981	(b)	(b)	199,032	c 656,613
Value of materials used ..	£ 8,150,273	171,033	1,522,201	(b)	(b)	1,466,818	c15,291,127
Total value of output ..	£ 9,680,236	209,058	2,575,756	(b)	(b)	3,206,121	c20,613,585
Value of production ..	£ 1,342,588	35,389	883,574	(b)	(b)	1,540,271	c 4,665,845

(a) In Western Australia the majority of the plants are worked on the mines, and are therefore not included. (b) Particulars not available for publication. (c) Including South Australia and Western Australia.

9. **Railway and Tramway Workshops.**—(i) *Details for each State, 1937-38.* The railway and tramway workshops which form an important item in Class IV. are chiefly State-owned institutions. The following table giving details concerning them includes, in addition, municipal establishments for manufacturing and repairing rolling-stock. Private institutions to the number of 9 in 1937-38 have, however, been excluded :—

TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC.(a), 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	37	24	12	16	20	7	116
Number of persons engaged ..	11,763	5,926	3,670	3,321	2,029	498	27,207
Value of land and buildings £	3,037,615	1,494,253	558,424	891,345	475,830	95,055	6,552,522
Value of plant and machinery ..	£ 2,397,036	1,128,458	374,341	767,826	390,739	51,199	5,109,599
Wages paid ..	£ 2,789,791	1,442,434	941,845	778,253	460,194	112,855	6,525,372
Value of fuel used ..	£ 93,152	54,119	27,835	26,110	19,076	6,201	226,493
Value of materials used ..	£ 2,171,180	1,330,683	593,212	598,348	316,105	23,464	5,032,992
Total value of output ..	£ 5,555,691	3,098,327	1,719,200	1,542,982	956,253	156,772	13,029,225
Value of production ..	£ 3,291,359	1,713,525	1,098,153	918,524	621,072	127,107	7,769,740

(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 in regard to this establishment are not included in any of the tables in this chapter.

(ii) *Total for Australia, 1933-34 to 1937-38.* The following table shows the development of railway and tramway workshops in Australia since 1933-34 :—

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

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories ..	109	111	115	117	116
Number of persons engaged ..	23,911	24,487	25,678	26,649	27,207
Value of land and buildings ..	£ 6,294,948	6,414,562	6,436,465	6,533,264	6,552,522
Value of plant and machinery ..	£ 5,038,157	5,012,877	5,041,663	5,058,723	5,109,599
Wages paid ..	£ 4,835,444	5,166,904	5,585,710	5,967,787	6,525,372
Value of fuel used ..	£ 226,143	222,611	236,560	233,560	226,493
Value of materials used ..	£ 3,795,359	4,052,214	4,444,903	4,717,251	5,032,992
Total value of output ..	£ 9,096,428	10,248,401	11,455,618	12,002,430	13,029,225
Value of production ..	£ 5,884,926	5,973,576	6,774,155	7,051,628	7,769,740

(a) Government and Municipal only.

The growth of the railway and tramway systems resulted in corresponding activity in workshops engaged in the manufacture or repair of rolling-stock, etc. The economic depression practically restricted the industry to repair work during recent years, but there has been considerable expansion in the last three years.

10. Motor Vehicles and Cycles.—The industries catering for the motor trade are included in Class IV., "Industrial Metals, Machines, Implements and Conveyances." Returns in regard to assembling and repairing are shown hereunder for the year 1937-38:—

ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,151	1,008	321	172	338	108	3,098
Number of persons engaged ..	8,537	7,223	2,128	1,710	1,518	743	21,859
Value of land and buildings £	2,780,138	1,806,143	596,226	398,540	520,878	222,784	6,324,709
Value of plant and machinery £	543,775	447,423	137,560	92,422	111,880	41,461	1,374,521
Wages paid ..	£ 1,174,601	£ 1,363,495	372,239	272,221	262,433	104,780	3,849,769
Value of fuel used ..	£ 70,682	£ 65,958	17,035	12,714	15,184	3,767	185,340
Value of materials used ..	£ 1,320,442	£ 1,042,007	398,510	230,606	317,192	105,156	3,413,913
Total value of output ..	£ 3,878,700	£ 3,143,036	1,173,401	655,035	881,045	278,180	10,009,397
Value of production ..	£ 2,487,576	£ 2,035,071	757,856	411,715	548,669	169,257	6,410,114

Particulars in regard to motor body building for the year 1937-38 are as follows:—

MOTOR BODY BUILDING, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	54	89	37	13	12	..	205
Number of persons engaged ..	1,597	3,417	597	6,966	218	..	12,795
Value of land and buildings £	272,892	553,857	84,980	297,806	47,632	..	1,257,167
Value of plant and machinery £	47,356	264,909	24,709	136,355	11,919	..	485,248
Wages paid ..	£ 329,650	£ 735,823	106,032	1,493,246	40,545	..	2,710,396
Value of fuel used ..	£ 6,899	£ 15,576	3,029	46,892	1,566	..	73,962
Value of materials used ..	£ 390,264	£ 1,387,753	112,947	2,387,409	49,539	..	4,327,912
Total value of output ..	£ 841,035	£ 2,574,895	273,442	4,576,773	105,814	..	8,371,959
Value of production ..	£ 443,872	£ 1,171,566	157,466	2,142,472	54,709	..	3,970,685

The output of motor bodies for Australia is shown in the next table:—

MOTOR BODIES PRODUCED IN AUSTRALIA.

Items.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Motor Bodies—						
Number ..	13,532	26,302	45,445	67,357	(a) 77,250	(a) 94,091
Value ..	£ 1,100,504	£ 2,112,439	£ 4,180,586	£ 6,043,735	£ 6,461,314	£ 7,411,227

(a) Including Motor Bodies assembled.

The output of motor bodies in 1937-38 exceeded the previous maximum of 88,876 produced in 1926-27.

11. **Electrical Installations, Cables and Apparatus.**—(i) *Details for each State, 1937-38.* The following table shows particulars of this industry for each State during the year 1937-38 :—

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	144	132	16	31	26	5	354
Number of persons engaged ..	6,495	3,592	171	626	142	28	11,054
Value of land and buildings ..	£ 906,752	476,449	37,575	84,444	55,425	9,810	1,570,455
Value of plant and machinery ..	£ 480,380	261,968	7,904	38,637	9,428	971	799,283
Wages paid	£ 1,130,330	622,911	33,411	100,335	24,892	3,469	1,915,348
Value of fuel used	£ 63,442	28,767	752	6,499	1,443	113	101,926
Value of materials used	£ 1,909,594	920,558	43,512	195,625	28,105	3,914	3,101,308
Total value of output	£ 3,967,211	1,973,704	93,650	371,999	76,084	10,873	6,494,421
Value of production	£ 1,994,175	1,023,379	49,386	169,965	47,436	6,846	3,291,187

(ii) *Total for Australia, 1933-34 to 1937-38.* The increased output of electrical energy in Australia during the past five years, referred to in par. 36 below, necessitated a corresponding demand for electrical equipment. As imports declined heavily during the depression years the local industry was called upon to furnish the bulk of the new supplies, and the result of its operations has been a remarkable development in the manufacture of electrical goods in Australia.

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	275	280	294	318	354
Number of persons engaged ..	5,774	7,098	8,137	9,215	11,054
Value of land and buildings ..	£ 1,122,331	1,168,474	1,245,877	1,349,212	1,570,455
Value of plant and machinery ..	£ 666,988	659,005	660,504	687,740	799,283
Wages paid	£ 931,727	1,130,683	1,325,736	1,534,415	1,915,348
Value of fuel used	£ 63,881	67,565	73,780	85,782	101,926
Value of materials used	£ 1,383,137	1,716,974	2,059,502	2,385,154	3,101,308
Total value of output	£ 3,131,080	3,822,333	4,329,150	5,085,776	6,494,421
Value of production	£ 1,684,062	2,037,794	2,195,868	2,614,840	3,291,187

12. **Wireless 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, however, a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined, almost entirely, to the States of New South Wales and Victoria. The number of broadcast listeners' licences has increased from 331,128 in 1930-31 to 1,056,004 in 1937-38, and this increase is reflected in the advancement of the industry during that period :—

WIRELESS APPARATUS : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	57	56	67	67	73
Number of persons engaged ..	2,625	3,366	3,943	4,643	5,519
Value of land and buildings ..	£ 238,940	292,594	378,103	468,164	549,254
Value of plant and machinery ..	£ 97,587	135,208	185,626	261,341	315,325
Wages paid	£ 295,792	400,789	493,314	610,291	791,907
Value of fuel used	£ 10,969	12,503	17,670	21,354	24,022
Value of materials used	£ 958,400	1,172,663	1,398,137	1,590,978	1,949,286
Total value of output	£ 1,589,093	1,859,050	2,243,159	2,640,206	3,247,472
Value of production	£ 619,724	673,884	827,352	1,027,874	1,274,164

The number of domestic receiving sets assembled in 1937-38 was 214,007.

13. **Woollen and Tweed Mills.**—(i) *Details for each State, 1937-38.* The manufacture of woollens and tweeds was established at an early period in Australian history and was under Government control, the first record in New South Wales dating back to 1801, when a few blankets were made by convicts, while manufacture in Victoria dates from 1867. The following table gives particulars for the year 1937-38 :—

WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1937-38.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust. (b)	W.A.	Tas.	Australia.
Number of factories	21	52	3	7	1	3	87
Number of persons engaged ..	6,487	9,813	477	791	140	1,395	19,103
Value of land and buildings ..	£ 769,665	1,284,491	(c)	106,915	(c)	213,008	d 2,435,114
Value of plant and machinery ..	£ 1,106,110	1,777,059	(c)	170,486	(c)	214,121	d 3,416,233
Wages paid	£ 935,364	1,402,586	(c)	119,644	(c)	202,007	d 2,741,729
Value of fuel used	£ 127,795	197,846	(c)	19,288	(c)	20,888	d 379,380
Value of materials used	£ 2,656,712	3,997,134	(c)	688,410	(c)	532,652	d 8,046,352
Total value of output	£ 4,238,429	6,325,824	(c)	854,021	(c)	953,209	d 12,618,132
Value of production	£ 1,453,922	2,130,844	(c)	146,323	(c)	349,669	d 4,192,400

(a) Woollscouring not included. (b) Includes Fellmongery. (c) Particulars not available for publication. (d) Including Queensland and Western Australia.

(ii) *Total for Australia, 1933-34 to 1937-38.* The extent of the woollen and tweed milling industry in Australia during the last five years is shown in the following table :—

WOOLLEN AND TWEED MILLS (INCLUDING WOOLSCOURING) : AUSTRALIA.

Items.	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37. (a)	1937-38. (a)
Number of factories	98	103	94	90	87
Number of persons engaged ..	17,546	17,486	19,693	19,239	19,103
Value of land and buildings ..	£ 2,350,997	2,335,913	2,455,141	2,412,499	2,435,114
Value of plant and machinery ..	£ 3,306,464	3,239,780	3,343,968	3,474,275	3,416,233
Wages paid	£ 2,233,024	2,234,513	2,612,723	2,514,293	2,741,729
Value of fuel used	£ 398,192	380,134	393,775	357,777	379,380
Value of materials used	£ 7,401,246	6,504,841	7,548,122	7,734,520	8,046,352
Total value of output	£ 11,635,920	10,712,076	12,545,067	12,283,298	12,618,132
Value of production	£ 3,836,482	3,827,101	4,603,170	4,191,001	4,192,400

(a) Excluding Woollscouring in New South Wales.

(iii) *Quantity and Value of Production.* The production consists chiefly of tweed cloths, flannels, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability. Detailed particulars for the several States are not available for publication. The total length of tweed and cloth manufactured in Australia in 1937-38 was 24,783,956 square yards. In New South Wales 10,690,302 square yards and in Victoria 12,969,328 square yards of tweed and cloth were manufactured. The production of flannel amounted to 4,621,113 yards, while blankets, shawls and rugs to the number of 1,270,863 were made.

Cotton ginning has been carried on intermittently in the Northern States, and the recent development in cotton growing has led to the establishment of modern ginning plants at convenient centres in Queensland. In New South Wales the first establishment for the manufacture of cotton goods was erected in 1923-24. The number of establishments treating cotton in Australia during 1937-38 was 31, the number of persons engaged 3,380, and the value of the output £2,487,521.

14. **Hosiery and Other Knitted Goods.**—(i) *Details for each State, 1937-38.* In addition to the woollen and tweed factories, there were 306 hosiery and knitting mills operating in Australia during the year 1937-38. The total number of persons engaged

in these establishments was 18,230 of which 12,856 were females. Details for each State are shown hereunder:—

HOSIERY AND OTHER KNITTED GOODS, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	76	216	1	7	3	3	306
Number of persons engaged ..	5,452	12,391	144	65	87	91	18,230
Value of land and buildings ..	£ 660,426	1,157,824	(a)	(a)	8,699	12,330	b1,861,884
Value of plant and machinery ..	£ 624,258	1,265,179	(a)	(a)	8,018	15,000	b2,326,882
Wages paid ..	£ 710,391	1,575,944	(a)	(a)	8,613	7,744	b2,319,355
Value of fuel used ..	£ 35,184	89,823	(a)	(a)	467	740	b 126,949
Value of materials used ..	£ 1,531,525	2,890,513	(a)	(a)	21,260	17,220	b4,508,691
Total value of output ..	£ 2,738,377	5,655,022	(a)	(a)	35,905	30,493	b8,534,886
Value of production ..	£ 1,171,668	2,674,686	(a)	(a)	14,178	12,533	b3,899,246

(a) Particulars not available for publication.

(b) Including Queensland and South Australia.

(ii) *Total for Australia, 1933-34 to 1937-38.* Comparative statistics for the five years are shown in the following table:—

HOSIERY AND OTHER KNITTED GOODS: AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories ..	320	310	314	297	306
Number of persons engaged ..	13,950	14,493	15,692	16,932	18,230
Value of land and buildings ..	£ 1,668,748	1,676,897	1,791,583	1,842,226	1,861,884
Value of plant and machinery ..	£ 1,620,528	1,654,979	1,711,536	1,901,624	1,926,882
Wages paid ..	£ 1,592,378	1,624,414	1,819,265	2,017,903	2,319,355
Value of fuel used ..	£ 100,989	107,812	113,773	110,334	126,949
Value of materials used ..	£ 3,420,858	3,506,659	3,768,336	3,978,863	4,508,691
Total value of output ..	£ 6,651,293	6,561,114	7,327,363	7,700,079	8,534,886
Value of production ..	£ 3,129,446	2,946,643	3,445,254	3,610,382	3,899,246

(iii) *Raw Material used and Production, 1937-38.* The main raw materials consumed in establishments manufacturing hosiery and knitted goods during the year 1937-38 consisted of woollen yarn, 5,849,124 lb.; cotton yarn, 6,220,642 lb.; silk yarn, 1,688,366 lb.; and artificial silk yarn, 5,582,276 lb. Production comprised 32,079,216 garments, valued at £4,040,467; 2,204,344 dozen pairs of stockings, valued at £2,831,293; and 1,664,418 dozen pairs of socks, valued at £1,096,746.

15. *Tanning, Currying and Leather Dressing.*—(i) *Details for each State, 1937-38.* 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, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	61	40	14	8	7	1	131
Number of persons engaged ..	1,587	2,316	330	73	88	6	4,400
Value of land and buildings ..	£ 299,305	420,363	33,443	(a)	38,849	(a)	b 812,051
Value of plant and machinery ..	£ 207,137	241,226	33,220	(a)	25,987	(a)	b 524,125
Wages paid ..	£ 336,196	481,272	65,182	(a)	17,583	(a)	b 911,835
Value of fuel used ..	£ 29,869	51,587	5,612	(a)	1,581	(a)	b 89,699
Value of materials used ..	£ 1,447,800	1,654,513	278,468	(a)	86,172	(a)	b3,502,252
Total value of output ..	£ 2,955,427	2,436,346	391,421	(a)	127,720	(a)	b5,064,188
Value of production ..	£ 577,758	730,246	107,341	(a)	39,964	(a)	b1,472,237

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1933-34 to 1937-38.* The development of the tanning industry during the years stated is shown in the following table :—

TANNING, CURRYING AND LEATHER DRESSING : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	153	143	135	132	131
Number of persons engaged	4,039	4,142	4,433	4,467	4,400
Value of land and buildings	£ 766,014	774,393	748,897	785,191	812,051
Value of plant and machinery	£ 504,314	506,190	513,872	504,296	524,125
Wages paid	£ 659,870	723,711	810,742	858,610	911,835
Value of fuel used	£ 81,615	82,244	84,682	85,330	89,699
Value of materials used	£ 2,818,421	2,764,343	3,099,679	3,478,457	3,502,252
Total value of output	£ 4,110,056	4,080,442	4,632,662	5,091,033	5,064,188
Value of production	£ 1,210,020	1,233,855	1,448,301	1,527,246	1,472,237

(iii) *Raw Material Used and Production, 1937-38.* The quantities of raw material used and leather produced in tanneries in each State are shown in the following table :—

TANNERIES : RAW MATERIAL USED AND PRODUCTION, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides No.	609,415	900,049	142,625	(a)	51,056	(a)	b 1,731,446
Skins—							
Calf	514,977	430,347	150,365	1,232	494	..	1,097,415
Goat	753,874	419,589	7,862	673	442	..	1,182,440
Sheep	1,316,609	110,586	..	..	940	..	1,428,135
Marsupial	(a)	30,856	58,644	(a)	3,334	..	b 102,685
Reptile	(a)	(a)	(a)	..	..	..	b 4,494
Other pelts treated	2,471,676	(a)	(a)	..	157	..	b 3,189,733
Bark used—							
Wattle ton	8,439	7,989	1,752	(a)	293	(a)	b 18,789
Other	348	2,220	..	1	474	..	3,043
Tanning extract used lb.	5,297,600	2,125,455	1,166,643	(a)	769,922	(a)	b 9,379,906
Leather made—							
Sole	10,266,984	13,030,832	2,733,893	(a)	1,394,636	(a)	27,573,241
Harness	809,403	332,069	418,793	71,184	81,110	..	1,712,559
Upholstery sq. ft.	(a)	6,375,558	..	(a)	..	..	b 8,931,936
Dressed and Upper from Hides—							
Sold by Measurement—							
Patent sq. ft.	971,350	2,550,488	..	..	..	..	3,521,838
All Other	5,476,578	10,834,518	1,869,695	337,760	130,204	..	b 18,648,755
Sold by Weight—							
Waxed Kip lb.	(a)	15,060	35,719	(a)	26,406	(a)	b 181,962
All Other	(a)	147,637	93,963	134,133	15,383	(a)	b 525,007
Dressed from skins—							
Calf sq. ft.	4,658,225	3,070,500	1,496,544	6,657	3,232	..	9,235,248
Goat	3,612,915	1,712,564	41,710	4,863	2,329	..	5,374,381
Sheep	7,943,453	(a)	(a)	..	..	..	b 10,612,242
Marsupial	(a)	129,027	264,831	(a)	11,954	..	424,390

(a) Not available for publication. (b) Including particulars for States marked (a).

16. *Boot Factories.*—(i) *Boot and Shoe Factories, 1937-38.* The boot and shoe industry holds an important place both in regard to employment afforded and extent of output. The operations of these factories have been rather obscured in recent years by the inclusion of a large number of repair establishments in the returns, but this difficulty has been overcome by the collection of separate statistics for each industry, and in the following table the details relate to boot and shoe factories as distinct from those devoted to repairing and bespoke work :—

BOOT AND SHOE FACTORIES, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	93	162	23	15	10	4	307
Number of persons engaged	5,432	9,497	849	553	351	71	16,753
Value of land and buildings	£ 435,672	576,676	37,496	57,365	43,459	9,200	1,159,868
Value of plant and machinery	£ 233,678	480,611	68,249	44,932	24,810	6,215	858,504
Wages paid	£ 781,306	1,440,428	115,725	71,142	45,569	10,120	2,404,290
Value of fuel used	£ 15,409	30,059	1,887	1,928	1,147	246	50,676
Value of materials used	£ 1,392,520	2,528,554	189,375	123,881	97,359	15,438	4,347,127
Total value of output	£ 2,563,647	4,603,609	358,219	226,589	169,129	27,579	7,948,772
Value of production	£ 1,155,718	2,044,996	166,957	100,780	70,623	11,895	3,550,969

(ii) *Boot Repairing, including Bespoke Work.* The introduction of small power plants in repairing shops has brought this class of establishment within the meaning of a factory for statistical purposes. Shops using small power plants have spread rapidly throughout Australia, and in 1937-38 the number amounted to 1,312 in which 2,294 persons were engaged in the industry. The sum of £152,709 was distributed in salaries and wages, and the output was valued at £819,255.

(iii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made at factories in each State are shown in the following table:—

BOOT AND SHOE FACTORIES : OUTPUT, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY.							
Boots and shoes pairs	4,617,821	7,877,630	639,014	534,293	374,668	50,672	14,094,098
Slippers	3,234,895	4,378,935	(b)	(b)	222,129	..	8,234,992
Uppers (a)	18,355	14,267	102,012	(b)	152	(b)	141,384
VALUE.							
Boots and shoes	£ 2,215,389	3,931,982	313,780	216,357	133,132	26,822	6,837,462
Slippers	£ 336,527	555,495	(b)	(b)	32,299	..	954,681
Uppers (a)	£ 6,490	7,197	13,125	(b)	79	(b)	29,218

(a) Made for other than factory use.

(b) Not available for publication.

(c) Including particulars for States marked (b).

17. *Tailoring and Slop Clothing Factories.*—(i) *Details for each State, 1937-38.* The importance of this industry in the several States is shown in the following table:—

TAILORING AND SLOP CLOTHING FACTORIES, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	428	394	122	120	82	26	1,172
Number of persons engaged	12,036	8,513	2,872	1,974	969	401	26,765
Value of land and buildings	£ 1,467,942	846,068	287,713	255,409	177,530	65,647	3,100,309
Value of plant and machinery	£ 145,244	126,592	27,304	17,115	12,636	3,923	332,814
Wages paid	£ 1,389,308	1,054,139	302,227	192,432	115,145	41,442	3,094,693
Value of fuel used	£ 26,200	24,771	6,995	5,574	2,570	724	66,834
Value of materials used	£ 2,156,226	2,175,244	393,540	209,179	143,153	45,926	5,123,268
Total value of output	£ 4,258,209	3,688,535	903,195	501,549	337,935	111,890	9,801,313
Value of production	£ 2,075,783	1,488,520	502,660	286,796	192,212	65,240	4,611,211

(ii) *Total for Australia, 1933-34 to 1937-38.* Details for the last five years are as follows:—

TAILORING AND SLOP CLOTHING FACTORIES : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	1,040	1,115	1,157	1,163	1,172
Number of persons engaged	20,951	23,579	24,877	25,546	26,765
Value of land and buildings	£ 2,516,492	2,776,968	2,885,076	3,053,302	3,100,309
Value of plant and machinery	£ 273,000	316,908	327,333	317,812	332,814
Wages paid	£ 2,126,826	2,446,429	2,578,597	2,732,213	3,094,693
Value of fuel used	£ 51,887	56,857	58,556	61,097	66,834
Value of materials used	£ 4,112,707	4,573,477	4,826,010	4,796,324	5,123,268
Total value of output	£ 7,627,067	8,407,294	8,939,837	9,138,302	9,801,313
Value of production	£ 3,462,473	3,776,960	4,055,271	4,280,881	4,611,211

18. Dressmaking and Millinery Establishments.—(i) *Details for each State, 1937-38.* Particulars of dressmaking and millinery establishments are given separately in the following tables:—

DRESSMAKING ESTABLISHMENTS, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	111	476	39	46	41	6	719
Number of persons engaged ..	1,538	8,397	857	882	721	37	12,432
Value of land and buildings ..	£ 244,328	£ 1,128,381	£ 73,586	£ 63,223	£ 74,120	£ 3,580	£ 1,587,218
Value of plant and machinery ..	£ 12,507	£ 100,529	£ 9,991	£ 9,699	£ 13,840	£ 292	£ 146,918
Wages paid ..	£ 141,084	£ 870,532	£ 72,208	£ 59,947	£ 59,105	£ 2,860	£ 1,205,736
Value of fuel used ..	£ 1,989	£ 16,310	£ 1,323	£ 1,703	£ 1,020	£ 31	£ 22,376
Value of materials used ..	£ 120,949	£ 1,784,101	£ 107,325	£ 72,122	£ 78,671	£ 1,438	£ 2,164,606
Total value of output ..	£ 330,875	£ 3,086,234	£ 225,055	£ 168,560	£ 163,272	£ 5,128	£ 3,979,124
Value of production ..	£ 207,937	£ 1,285,823	£ 116,407	£ 94,735	£ 83,581	£ 3,659	£ 1,792,142

(a) Includes Millinery.

MILLINERY ESTABLISHMENTS, 1937-38.

Items	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	59	62	14	8	9	..	152
Number of persons engaged ..	1,710	1,364	520	304	96	..	3,994
Value of land and buildings ..	£ 222,932	£ 137,037	£ 39,334	£ 19,985	£ 16,865	..	£ 436,153
Value of plant and machinery ..	£ 16,405	£ 21,341	£ 5,045	£ 2,232	£ 2,012	..	£ 47,635
Wages paid ..	£ 167,731	£ 136,112	£ 42,270	£ 26,827	£ 9,555	..	£ 382,495
Value of fuel used ..	£ 5,019	£ 3,134	£ 668	£ 750	£ 210	..	£ 9,781
Value of materials used ..	£ 310,474	£ 210,752	£ 55,528	£ 41,812	£ 18,012	..	£ 636,578
Total value of output ..	£ 623,238	£ 460,596	£ 121,468	£ 86,037	£ 32,520	..	£ 1,323,859
Value of production ..	£ 307,745	£ 246,710	£ 65,272	£ 43,475	£ 14,293	..	£ 677,500

(a) Included in Dressmaking.

(ii) *Total for Australia, 1933-34 to 1937-38.* Particulars of dressmaking and millinery establishments in Australia for the last five years are shown in the following table:—

DRESSMAKING AND MILLINERY ESTABLISHMENTS: AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories ..	812	854	863	830	871
Number of persons engaged ..	14,212	15,166	15,683	15,635	16,426
Value of land and buildings ..	£ 1,795,265	£ 1,898,295	£ 1,897,903	£ 2,031,277	£ 2,013,371
Value of plant and machinery ..	£ 176,845	£ 177,241	£ 180,934	£ 179,699	£ 194,553
Wages paid ..	£ 1,237,581	£ 1,316,645	£ 1,391,348	£ 1,441,226	£ 1,588,231
Value of fuel used ..	£ 27,205	£ 28,225	£ 30,245	£ 30,178	£ 32,157
Value of materials used ..	£ 2,327,141	£ 2,439,034	£ 2,559,119	£ 2,557,612	£ 2,801,184
Total value of output ..	£ 4,298,999	£ 4,534,059	£ 4,869,311	£ 4,965,632	£ 5,302,983
Value of production ..	£ 1,944,653	£ 2,066,800	£ 2,279,947	£ 2,377,844	£ 2,469,642

19. Shirts, Collars and Underclothing.—(i) Details for each State, 1937-38. Particulars of this industry are shown in the subjoined table :—

SHIRTS, COLLARS AND UNDERCLOTHING, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories	126	109	17	24	13	..	289
Number of persons engaged ..	4,463	4,763	841	525	542	..	11,134
Value of land and buildings ..	£ 353,348	£ 433,920	£ 51,438	£ 36,755	£ 35,022	..	£ 910,595
Value of plant and machinery ..	£ 74,348	£ 126,311	£ 10,033	£ 7,933	£ 11,172	..	£ 229,797
Wages paid	£ 421,221	£ 513,136	£ 68,371	£ 42,798	£ 50,287	..	£ 1,096,013
Value of fuel used	£ 7,840	£ 12,662	£ 1,379	£ 1,129	£ 835	..	£ 23,845
Value of materials used	£ 1,182,106	£ 1,376,094	£ 110,205	£ 60,216	£ 60,046	..	£ 2,788,667
Total value of output	£ 1,825,993	£ 2,244,038	£ 208,802	£ 122,139	£ 121,907	..	£ 4,522,879
Value of production	£ 636,047	£ 855,282	£ 97,218	£ 60,794	£ 61,026	..	£ 1,710,367

(ii) Total for Australia, 1933-34 to 1937-38. The following table shows the progress of the industry since 1933-34 :—

SHIRTS, COLLARS AND UNDERCLOTHING : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	307	314	308	298	289
Number of persons engaged ..	10,444	10,925	11,214	11,116	11,134
Value of land and buildings ..	£ 836,660	£ 872,923	£ 842,866	£ 871,522	£ 910,595
Value of plant and machinery ..	£ 224,827	£ 235,546	£ 253,736	£ 251,396	£ 229,797
Wages paid	£ 850,459	£ 929,192	£ 1,001,615	£ 1,029,221	£ 1,096,013
Value of fuel used	£ 22,812	£ 22,947	£ 22,844	£ 23,692	£ 23,845
Value of materials used	£ 2,506,226	£ 2,663,522	£ 2,708,887	£ 2,599,519	£ 2,788,667
Total value of output	£ 3,879,571	£ 4,174,304	£ 4,311,566	£ 4,252,677	£ 4,522,879
Value of production	£ 1,350,533	£ 1,487,835	£ 1,579,835	£ 1,629,466	£ 1,710,367

20. Bacon-curing Factories.—(i) Details for each State, 1937-38. The table hereunder gives particulars of factories engaged in bacon-curing in each State for the year 1937-38 :—

BACON-CURING FACTORIES, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	24	19	10	5	9	7	77
Number of persons engaged ..	373	545	704	241	109	53	2,025
Value of land and buildings ..	£ 145,169	£ 234,167	£ 222,702	£ 99,291	£ 27,648	£ 23,484	£ 752,461
Value of plant and machinery ..	£ 57,649	£ 127,766	£ 116,097	£ 31,905	£ 14,766	£ 7,739	£ 355,972
Wages paid	£ 90,749	£ 119,866	£ 158,956	£ 50,344	£ 23,868	£ 10,645	£ 434,928
Value of fuel used	£ 12,597	£ 19,165	£ 27,197	£ 8,010	£ 4,536	£ 1,493	£ 72,318
Value of materials used	£ 864,486	£ 805,189	£ 1,153,300	£ 318,338	£ 241,767	£ 80,182	£ 3,468,262
Total value of output	£ 1,091,006	£ 1,010,253	£ 1,532,218	£ 434,360	£ 282,871	£ 108,768	£ 4,489,976
Value of production	£ 214,013	£ 215,899	£ 346,721	£ 108,512	£ 36,568	£ 27,183	£ 948,896

(ii) *Quantity and Value of Production.* The number of pigs cured and the quantity and value of the production of bacon-curing factories in each State for the year 1937-38 are given hereafter :—

BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PIGS CURED.							
Number	251,843	171,721	234,964	59,634	49,765	20,147	788,074
PRODUCTS.							
Bacon and ham .. '000 lb.	20,796	16,006	19,902	5,851	4,356	2,086	68,997
Lard "	810	842	988	215	258	88	3,201
VALUE.							
Bacon and ham (a) .. £	984,641	782,476	914,786	283,032	210,776	77,723	3,253,434
Lard £	19,390	28,452	25,643	5,751	7,719	2,683	89,638
Other products .. £	200,115	231,371	593,903	146,666	64,343	28,999	1,265,397

(a) Estimated.

Bacon and ham and other pig products are dealt with more fully in Chapter XX. "Farmyard, Dairy and Bee Products."

21. *Butter, Cheese and Condensed Milk Factories.*—(i) *Details for each State, 1937-38.* The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1937-38 :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	132	172	104	47	21	44	520
Number of persons engaged ..	1,477	3,017	1,186	534	201	240	6,655
Value of land and buildings .. £	663,821	1,157,183	620,670	188,829	80,070	69,090	2,779,663
Value of plant and machinery .. £	772,880	1,183,201	731,515	134,785	84,501	70,758	2,977,640
Wages paid £	356,604	684,200	267,088	97,567	43,761	37,560	1,486,780
Value of fuel used £	91,432	172,079	55,991	22,924	12,484	7,307	362,217
Value of materials used .. £	7,214,904	9,919,653	7,061,676	1,540,504	875,283	575,330	27,187,350
Total value of output .. £	7,994,344	12,407,723	7,709,112	1,765,509	1,047,856	731,912	31,656,156
Value of production £	688,008	2,315,991	591,445	201,781	160,089	149,275	4,106,589

(ii) *Total for Australia, 1933-34 to 1937-38.* The progress of this industry during the last five years is set out hereunder :—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	531	544	517	517	520
Number of persons engaged ..	5,967	6,151	6,062	6,226	6,655
Value of land and buildings .. £	2,577,138	2,616,769	2,635,863	2,733,273	2,779,663
Value of plant and machinery .. £	2,775,355	2,779,468	2,849,645	2,938,110	2,977,640
Wages paid £	1,202,397	1,251,418	1,265,898	1,332,911	1,486,780
Value of fuel used £	311,261	320,073	310,260	335,451	362,217
Value of materials used £	17,387,974	20,182,321	22,627,448	21,995,736	27,187,350
Total value of output £	20,809,678	23,376,685	25,869,089	25,434,496	31,656,156
Value of production £	3,110,443	2,874,291	2,931,381	3,103,309	4,106,589

(iii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced in factories and the quantities of milk used in the manufacture of butter, cheese and condensed milk during the year 1937-38:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES: PRODUCTION, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
MILK USED (,000 OMITTED).							
For the manufacture of—							
Butter gals.	230,540	301,621	236,254	34,869	29,256	17,560	850,100
Cheese "	7,710	16,423	10,160	14,822	830	3,466	53,411
Condensed, &c., Milk .. "	4,221	26,789	(a)	(a)	(a)	..	(b) 32,816
PRODUCTS (,000 OMITTED).							
Butter lb.	115,930	137,016	114,941	18,923	13,702	9,207	409,719
Cheese "	7,701	16,032	10,550	15,517	884	3,555	54,239
Condensed and concentrated milk lb.	5,606	32,196	(a)	(a)	(a)	..	(b) 45,549
Powdered milk "	1,951	19,869	..	..	..	..	21,820
VALUE (,000 OMITTED).							
Butter £	7,175	8,496	7,156	1,156	904	586	25,473
Cheese £	337	554	335	503	39	121	1,889
Condensed and concentrated milk £	122	734	(a)	(a)	(a)	..	(b) 1,024
Powdered milk £	100	541	..	..	..	..	641

(a) Particulars not available for publication.

(b) Includes States marked (a).

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XX. "Farmyard, Dairy and Bee Products."

22. *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, while insulated space for the carriage of chilled and frozen produce is provided by steamship companies trading between Australia and other parts of the world. The substitution of the export of chilled for frozen meat has already been referred to in Chapter XVIII. "Pastoral Production."

MEAT AND FISH PRESERVING WORKS,(a) 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	7	8	11	..	2	..	28
Number of persons engaged	213	255	3,068	..	120	..	3,656
Value of land and buildings £	(b)	64,043	1,420,622	..	(b)	..	(c) 1,926,191
Value of plant and machinery £	(b)	24,143	814,034	..	(b)	..	(c) 1,262,995
Wages paid £	(b)	36,792	936,489	..	(b)	..	(c) 1,073,335
Value of fuel used £	(b)	3,691	120,066	..	(b)	..	(c) 138,206
Value of materials used £	(b)	243,777	5,596,588	..	(b)	..	(c) 6,154,338
Total value of output £	(b)	342,400	6,949,014	..	(b)	..	(c) 7,815,029
Value of production £	(b)	94,932	1,232,360	..	(b)	..	(c) 1,522,485

(a) Including meat extracts.
New South Wales and Western Australia.

(b) Particulars not available for publication.

(c) Including

Particulars regarding 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 XVIII. "Pastoral Production."

23. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1937-38 is given in the table below. It should be noted, however, that, as explained in § 1 par. 2 above the details refer to establishments coming within the definition of a factory. For that reason there are 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 of this fact is deemed desirable.

BAKERIES (INCLUDING CAKES AND PASTRY), 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	652	549	253	129	130	73	1,786
Number of persons engaged ..	4,060	3,213	1,301	894	541	1,154	11,223
Value of land and buildings ..	£ 2,171,982	£ 1,184,892	£ 477,113	£ 243,455	£ 183,391	£ 288,802	£ 4,549,635
Value of plant and machinery ..	£ 585,500	£ 376,595	£ 153,979	£ 97,477	£ 50,800	£ 85,293	£ 1,349,644
Wages paid ..	£ 741,726	£ 532,169	£ 207,686	£ 136,941	£ 85,169	£ 157,131	£ 1,860,822
Value of fuel used ..	£ 120,068	£ 87,231	£ 30,528	£ 18,797	£ 13,622	£ 15,691	£ 285,937
Value of materials used ..	£ 2,340,524	£ 1,947,531	£ 784,399	£ 462,096	£ 339,392	£ 517,845	£ 6,391,757
Total value of output ..	£ 4,069,273	£ 3,235,506	£ 1,336,541	£ 789,377	£ 561,611	£ 811,786	£ 10,804,094
Value of production ..	£ 1,608,681	£ 1,200,744	£ 521,644	£ 308,494	£ 208,597	£ 278,250	£ 4,126,400

(a) Includes Confectionery.

24. **Jam and Fruit Preserving Pickles, Sauces and Vinegar Factories.**—(i) *Details for each State, 1937-38.* The subjoined table gives particulars of factories included in this class for the year 1937-38. One establishment engaged in meat preserving has been included in the details shown for Tasmania in order that confidential information may not be disclosed.

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	30	46	13	15	7	10	121
Number of persons engaged ..	1,563	3,225	479	486	68	775	6,596
Value of land and buildings ..	£ 336,183	£ 682,800	£ 38,547	£ 122,006	£ 14,585	£ 114,893	£ 1,309,014
Value of plant and machinery ..	£ 186,996	£ 354,841	£ 32,208	£ 52,247	£ 4,862	£ 34,709	£ 665,863
Wages paid ..	£ 270,756	£ 570,468	£ 78,861	£ 69,999	£ 9,064	£ 144,042	£ 1,143,190
Value of fuel used ..	£ 23,008	£ 45,911	£ 5,486	£ 6,407	£ 864	£ 11,379	£ 93,055
Value of materials used ..	£ 1,047,266	£ 2,328,085	£ 486,010	£ 257,083	£ 33,112	£ 419,663	£ 4,571,219
Total value of output ..	£ 1,717,161	£ 3,533,091	£ 612,114	£ 411,664	£ 59,821	£ 640,440	£ 6,974,291
Value of production ..	£ 646,887	£ 1,159,095	£ 120,618	£ 148,174	£ 25,845	£ 209,398	£ 2,310,017

(ii) *Total for Australia, 1933-34 to 1937-38.* Particulars in connexion with these establishments in Australia for the last five years are given hereunder:—

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES: AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories ..	120	122	125	121	121
Number of persons engaged ..	4,895	5,213	5,773	5,906	6,596
Value of land and buildings ..	£ 1,032,409	£ 1,103,291	£ 1,125,204	£ 1,218,132	£ 1,309,014
Value of plant and machinery ..	£ 525,199	£ 521,800	£ 549,413	£ 598,126	£ 665,863
Wages paid ..	£ 722,265	£ 795,621	£ 929,792	£ 971,768	£ 1,143,190
Value of fuel used ..	£ 65,724	£ 78,144	£ 89,227	£ 87,010	£ 93,055
Value of materials used ..	£ 2,831,602	£ 3,312,257	£ 3,965,338	£ 4,177,792	£ 4,571,219
Total value of output ..	£ 4,634,959	£ 5,428,876	£ 6,276,112	£ 6,298,642	£ 6,974,291
Value of production ..	£ 1,737,033	£ 2,038,475	£ 2,221,547	£ 2,033,831	£ 2,310,017

The progress of the jam-making industry was very marked during the war years of 1914-18, when large quantities were exported overseas for the supply of army requirements. In the year 1918-19 the production amounted to 142,290,000 lb., but on the termination of hostilities in 1918 the quantity declined to 90,140,000 lb. in 1920-21. During the succeeding years the production of jam varied considerably, falling to 66,120,000 lb. in 1930-31 and subsequently improving to 90,302,000 lb. in 1935-36. In 1937-38 the output of preserved fruit reached the record figure of 157,761,000 lb., or more than 30,000,000 lb. in excess of the previous maximum in 1936-37. The production of pickles and sauces again showed a satisfactory improvement.

(iii) *Production.* The following table shows the quantity and value of jams, pickles and sauces manufactured in each State in 1937-38:—

JAMS, PRESERVED FRUIT, PICKLES AND SAUCES: OUTPUT, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Jams and Jellies .. lb.	20,996	30,827	6,561	7,347	965	14,430	81,126
Fruit Pulp—							
Consumed in own works .. lb.	10	29	1	14	5	1	60
For sale or addition to stock .. lb.	14	153	3	21	4	108	303
Tomato Pulp—							
Consumed in own works .. lb.	13	56	..	16	4	..	89
For sale or addition to stock .. lb.	12	173	1	8	6	7	207
Fruit, preserved	27,004	102,487	4,989	18,038	14	5,229	157,761
Pickles pints	1,681	3,031	108	1,443	186	3	6,452
Sauces "	7,096	10,928	822	2,254	678	6	21,784
VALUE.							
Jams and Jellies .. £	463,183	661,122	156,365	128,967	18,222	322,765	1,750,624
Fruit, preserved .. £	468,068	1,674,782	117,355	386,673	338	126,843	2,774,059
Pickles £	68,367	89,667	17,874	56,136	5,177	1,728	238,949
Sauces £	351,423	312,479	23,223	68,236	18,811	537	774,709

25. *Confectionery Factories.*—(i) *Details for each State, 1937-38.* At the close of the year 1900 there were in New South Wales 16 establishments with 706 persons engaged and in Victoria 16 establishments, employing 731 persons, the plant and machinery in the former State being valued at £2,815, and in the latter at £19,070. The figures for the year 1937-38 given hereunder show the remarkable development since 1900:—

SUGAR CONFECTIONERY FACTORIES(b), 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	67	84	21	19	11	2	204
Number of persons engaged ..	3,791	3,194	553	394	295	8	8,235
Value of land and buildings ..	£ 1,034,247	629,997	218,497	81,192	(c)	(c)	(d) 2,042,198
Value of plant and machinery ..	£ 972,104	589,871	128,318	66,637	(c)	(c)	(d) 1,830,166
Wages paid ..	£ 558,943	475,594	68,928	37,966	(c)	(c)	(d) 1,179,223
Value of fuel used ..	£ 64,399	52,781	9,662	9,065	(c)	(c)	(d) 141,459
Value of materials used ..	£ 1,850,213	1,251,166	206,383	142,015	(c)	(c)	(d) 3,555,710
Total value of output ..	£ 3,703,622	2,118,817	409,825	207,633	(c)	(c)	(d) 6,660,655
Value of production ..	£ 1,789,010	814,870	193,780	56,553	(c)	(c)	(d) 2,963,486

(a) Ice Cream factories—Other Confectionery included in Bakeries.
and Ice Cream. (c) Particulars not available for publication.

(b) Including Chocolate
(d) Includes Western Australia
and Tasmania.

(ii) *Total for Australia, 1933-34 to 1937-38.* Particulars of the confectionery industry during the last five years are shown in the following table :—

SUGAR CONFECTIONERY FACTORIES : AUSTRALIA.

Items.	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37. (a)	1937-38. (a)
Number of factories	214	218	217	214	204
Number of persons engaged	6,698	7,158	7,516	7,975	8,235
Value of land and buildings	£ 1,694,606	1,721,645	1,774,452	1,902,059	2,042,198
Value of plant and machinery	£ 1,686,517	1,749,349	1,712,163	1,773,178	1,830,166
Wages paid	£ 898,592	935,214	1,010,775	1,063,421	1,179,223
Value of fuel used	£ 112,681	112,059	117,041	98,771	141,459
Value of materials used	£ 2,518,756	2,743,763	3,023,696	3,202,325	3,555,710
Total value of output	£ 4,734,105	5,120,164	5,662,146	5,573,143	6,660,655
Value of production	£ 2,102,668	2,264,342	2,521,409	2,272,052	2,963,486

(a) See notes to previous table.

The confectionery industry expanded rapidly during the war years largely as a result of the stimulus afforded by the embargo placed on the importation of luxuries during that period. The industry, however, was seriously affected by the business depression but has now regained its former position. Confectionery establishments in Tasmania have been combined with bakeries in order to conceal confidential information. Production is sufficient to supply local requirements, and an export trade is being developed. Several large British manufacturers of confectionery have established branch works in Australia.

26. *Grain Milling.*—(i) *Details for States, 1937-38.* The following table shows the position of the flour-milling industry in each State in 1937-38 :—

GRAIN MILLING, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas. (a)	Australia.
Number of factories	52	38	10	38	21	9	168
Number of persons engaged	1,205	1,101	339	446	389	117	3,597
Value of land and buildings £ ..	839,268	543,861	201,650	164,454	260,928	69,501	2,079,662
Value of plant and machinery £ ..	666,999	493,838	162,866	221,155	228,868	28,627	1,802,353
Wages paid	£ 297,057	260,757	84,354	91,607	91,863	26,635	852,273
Value of fuel used	£ 72,854	60,946	15,160	26,593	37,520	3,743	216,816
Value of materials used	£ 5,575,702	4,837,787	1,113,193	1,359,156	1,382,086	291,348	14,559,272
Total value of output	£ 6,396,629	5,409,048	1,303,748	1,532,632	1,686,424	340,268	16,668,749
Value of production	£ 748,073	510,315	175,395	146,883	266,818	45,177	1,892,661

(a) The manufacture of cornflour, oatmeal, etc., was also carried on in some of these establishments.

(ii) *Productions of Flour and By-products, 1933-34 to 1937-38.* The production of flour by the mills in each State for the years indicated was as follows :—

GRAIN MILLING : PRODUCTION OF FLOUR.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)
1933-34 ..	495,779	395,566	84,159	121,811	122,000	19,253	1,238,568
1934-35 ..	555,173	437,252	86,246	136,716	124,130	19,260	1,358,787
1935-36 ..	523,281	435,340	86,142	124,021	118,340	20,492	1,307,616
1936-37 ..	464,498	420,364	82,423	119,192	122,723	19,579	1,228,779
1937-38 ..	476,881	424,302	81,242	123,878	125,472	19,155	1,250,930

(a) Tons of 2,000 lb.

The production of flour in Australia for the last year, 1,250,930 tons, was valued at £12,811,346. In addition, 525,598 tons of bran and pollard, valued at £3,407,346, were made. The quantity of wheat ground was 60,010,744 bushels.

27. **Sugar Mills.**—(i) *Details for 1937-38.* The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1937-38. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XIX., "Agricultural Production."

SUGAR MILLS, 1937-38.

Items.	N.S.W.	Queensland.	Australia.
Number of factories	3	33	36
Number of persons engaged	260	4,324	4,584
Value of land and buildings	£ 232,755	1,055,256	1,288,011
Value of plant and machinery	£ 938,610	7,508,469	8,447,079
Wages paid	£ 100,634	1,265,163	1,365,797
Value of fuel used	£ 15,845	138,433	154,278
Value of materials used	£ 515,050	8,975,583	9,490,633
Total value of output	£ 766,624	11,418,706	12,185,330
Value of production	£ 235,729	2,304,690	2,540,419

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. Part of the molasses produced is used for distillation, part is prepared for human consumption, part is turned into food-cake for cattle, part is used for manuring land, and the balance is either burnt as fuel or is allowed to run to waste. The latter, however, is a diminishing quantity.

(ii) *Progress of Industry.* (a) *New South Wales.* The following table shows the progress which has been made in this industry in New South Wales since 1911 :—

SUGAR MILLS: NEW SOUTH WALES.

Items.	1911.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	4	3	3	3	3
Number of employees	469	144	198	195	260
Cane crushed tons	147,799	227,424	280,472	275,169	361,724
Sugar produced "	17,299	29,428	36,401	38,158	47,077
Molasses produced gals	796,440	1,059,555	1,390,180	1,329,660	1,754,527

The concentration of cane-crushing in establishments fitted with modern machinery has caused the closing of the small home mill and thereby reduced the number of mills operating. The Government assistance, referred to in the chapter dealing with Agriculture, has resulted in considerable progress in the cultivation of sugar-cane and increased activity in milling. Particulars regarding cane crushed and sugar produced embodied in these tables refer to the quantities treated during the twelve months ending 30th June in each year, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced differ slightly from those given in Chapter XIX. "Agriculture" which relate to harvest years.

(b) *Queensland.* Details for Queensland for 1911 and the last four years are given hereunder:—

SUGAR MILLS: QUEENSLAND, 1911 TO 1937-38.

Items.	1911.	1934-35.	1935-36.	1936-37	1937-38.
Number of factories ..	49	33	33	33	33
Number of persons engaged ..	4,295	4,436	4,176	4,381	4,324
Cane crushed .. tons	1,534,451	4,271,380	4,220,435	5,170,571	5,132,886
Sugar produced .. "	173,296	611,161	610,080	744,676	763,242
Molasses—					
Sold to distillers and others .. gals.	2,393,669	5,017,717	4,792,950	6,086,864	7,071,109
Used as fodder .. "	789,564	3,035,598	3,817,755	4,351,822	3,914,113
Used as manure .. "	223,000	2,227,905	2,559,528	3,211,423	3,363,624
Run to waste .. "	1,847,333	1,162,715	1,214,678	560,326	466,481
Burnt as fuel .. "		5,339,489	4,103,475	6,354,841	5,576,764
Sold or used for other purposes .. "				397,080	157,496
In stock .. "	1,197,626	1,673,607			
Total molasses .. "	6,451,192	18,457,031	16,488,386	20,962,356	20,549,587

28. *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 1937-38 there were two sugar refineries in each of the States of Victoria and Queensland, and one in each of the States of New South Wales, South Australia and Western Australia. The quantity of raw sugar treated amounted to 358,679 tons, for a yield of 346,894 tons of refined sugar, valued at £11,157,352.

29. *Breweries.*—(i) *Details for each State, 1937-38.* The following table gives particulars concerning breweries in each State:—

BREWERIES, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	6	9	6	6	6	4	37
Number of persons engaged ..	976	1,420	393	263	405	85	3,542
Value of land and buildings .. £	924,447	769,562	412,498	188,076	247,412	136,988	2,678,983
Value of plant and machinery .. £	759,557	849,581	340,692	188,173	373,992	139,641	2,642,636
Wages paid ..	287,046	495,043	118,227	90,267	137,728	23,274	1,151,585
Value of fuel used ..	82,271	80,576	27,748	17,666	21,149	6,527	235,937
Value of materials used ..	994,389	1,343,525	295,250	213,200	285,675	100,046	3,232,085
Total value of output ..	3,311,512	2,891,604	806,041	527,137	774,106	216,070	8,526,470
Value of production ..	2,234,852	1,467,503	483,043	296,271	467,282	109,497	5,058,448

(a) Includes Malt Works.

(ii) *Total for Australia 1933-34 to 1937-38.* The next table shows the extent of this industry for the last five years:—

BREWERIES: AUSTRALIA.

Items.	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37. (a)	1937-38. (a)
Number of factories ..	42	41	37	37	37
Number of persons engaged ..	2,995	3,097	3,228	3,389	3,542
Value of land and buildings .. £	2,423,574	2,411,446	2,426,415	2,537,922	2,678,983
Value of plant and machinery ..	2,507,559	2,476,600	2,440,700	2,454,576	2,642,636
Wages paid ..	886,597	952,127	1,018,985	1,072,063	1,151,585
Value of fuel used ..	189,902	104,863	202,367	214,272	235,937
Value of materials used ..	2,011,957	2,262,174	2,552,497	2,642,395	3,232,085
Total value of output ..	5,625,876	6,439,227	7,121,946	7,456,136	8,526,470
Value of production ..	3,424,017	3,892,100	4,367,082	4,599,469	5,058,448

(a) Includes Malt Works in Tasmania.

The quantity of ale and stout brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter the production increased each year to 84,021,184 gallons in 1937-38. For a number of years prior to the depression the consumption of ale and stout exceeded 11 gallons per head of the population; it dropped to 7.32 gallons in 1931-32, but has since risen to 11.62 gallons.

(iii) *Materials Used and Production.* The table below shows the quantities of raw material used and the quantity and value of ale and stout brewed in each State during the year 1937-38.

BREWERIES : MATERIALS USED AND PRODUCTION, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
RAW MATERIAL USED.							
Malt .. bushels	1,010,520	992,860	238,027	(b)	321,980	(b)	c 2,838,906
Hops .. lb.	886,909	854,087	194,354	(b)	190,483	(b)	c 2,303,324
Sugar .. cwt.	128,100	121,480	26,460	(b)	8,380	(b)	c 313,260
RAW MATERIAL USED PER 1,000 GALLONS OF ALE AND STOUT PRODUCED.							
Malt .. bushels	31.95	32.60	34.12	(b)	47.41	(b)	c 33.79
Hops .. lb.	28.04	28.05	27.86	(b)	28.05	(b)	c 28.13
Sugar .. cwt.	4.05	3.99	3.79	(b)	1.23	(b)	c 3.73
ALE AND STOUT BREWED.							
Quantity gallons	31,630,132	30,448,726	6,975,999	(b)	6,792,000	(b)	c 84,021,184
Value (a) £	3,284,751	2,850,841	804,623	(b)	718,791	(b)	c 8,376,577

(a) Exclusive of Excise duty.
 States marked (b).

(b) Particulars not available for publication.

(c) Includes

30. *Distilleries.*—Distilleries are located in all the States with the exception of Western Australia and Tasmania. The following information, which has been extracted from returns furnished by 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 year 1937-38 :—Materials used: barley, 68,238 bushels; barley malt, 76,811 bushels; molasses, 1,311,512 cwt.; wine, 14,277,314 gallons; raisins and currants, 60,432 cwt.; grapes, 171,734 cwt. The quantity of spirits distilled from barley, malt and grain was 437,061 gallons; from molasses, 6,762,014 gallons; and from wine, 2,923,661 gallons; total, 10,122,736 gallons. The quantity of spirits denatured during the year was 3,955,196 gallons.

31. *Tobacco, etc., Factories.*—(i) *Details for each State, 1937-38.* During the year 1937-38 there were thirty-two establishments in which the manufacture of tobacco, cigars, or cigarettes was carried on. There were no tobacco factories in Tasmania.

TOBACCO, CIGAR AND CIGARETTE FACTORIES, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	9	15	6	1	1	32
Number of persons engaged	3,280	2,152	49	11	152	5,644
Value of land and buildings	£ 636,323	351,331	(a)	(a)	(a)	b 1,030,344
Value of plant and machinery	£ 630,060	280,352	(a)	(a)	(a)	b 932,827
Wages paid	£ 627,858	420,939	(a)	(a)	(a)	b 1,074,196
Value of fuel used	£ 24,062	9,604	(a)	(a)	(a)	b 34,344
Value of materials used	£ 4,770,342	2,017,620	(a)	(a)	(a)	b 6,864,305
Total value of output	£ 6,149,544	3,244,604	(a)	(a)	(a)	b 9,510,121
Value of production	£ 1,355,140	1,217,371	(a)	(a)	(a)	b 2,614,472

(a) Not available for publication.
 Australia.

(b) Including Queensland, South Australia and Western

(ii) *Total for Australia.* This industry was among the first to be established in Australia. In 1861 New South Wales had 11 factories, producing 177,744 lb. of manufactured tobacco; in the same year there was one factory in Victoria, but the quantity of tobacco manufactured is not available. The Australian market has for many years been largely supplied with local manufactures from the imported leaf. Imports during 1937-38 comprised—manufactured tobacco 701,312 lb., cigars 9,996 lb., and cigarettes 107,686 lb., while the quantities manufactured in Australian factories were respectively 16,261,872 lb., 255,781 lb., and 6,325,183 lb. The following tables show the extent of the industry in Australia for the last five years:—

TOBACCO, CIGAR AND CIGARETTE FACTORIES : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of factories	31	29	31	32	32
Number of employees	4,395	4,818	5,155	5,447	5,644
Approx. value of land and buildings	£ 916,971	927,122	936,521	1,001,236	1,030,344
Approx. value of plant and machinery	£ 658,850	784,371	726,713	870,430	932,827
Wages paid	£ 838,608	891,064	950,790	996,065	1,074,196
Value of fuel used	£ 18,596	18,661	20,553	29,938	34,344
Value of materials used	£ 5,003,766	5,373,582	6,082,506	6,345,214	6,861,305
Total value of output	£ 6,894,327	7,216,139	8,529,491	8,714,581	9,510,121
Value of production	£ 1,871,965	1,823,896	2,426,432	2,339,429	2,614,472

LEAF USED AND PRODUCTION.

Leaf used {	Australian (Stemmed)	1,000 lb.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
..	3,307	3,352	3,653	4,249	4,231
..	13,718	13,768	14,662	15,040	15,993
Tobacco made	14,656	14,527	15,277	15,733	16,262
Cigars made	259	253	283	262	256
Cigarettes made	4,577	4,813	5,305	5,659	6,325

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 4.2 million lb. In this connexion, see item "Tobacco" in Chapter XIX. "Agricultural Production."

32. *Saw-mills, etc.*—(i) *Details for States, 1937-38.* The most important industry in Class X. is that of saw-milling. As separate particulars of forest saw-mills are not available for some of the States, both forest and other saw-mills, as well as plywood and bark mills have been combined in the following table:—

SAW-MILLS, FOREST AND OTHER ; PLYWOOD AND BARK MILLS, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	436	332	484	54	127	226	1,659
Number of persons engaged	5,271	3,926	5,523	994	2,260	1,591	19,565
Value of land and buildings	£ 740,058	412,142	405,750	186,215	205,744	75,948	2,025,857
Value of plant and machinery	£ 673,027	626,024	713,690	138,565	449,765	201,676	2,807,747
Wages paid	£ 1,020,516	749,836	946,007	190,755	461,565	232,774	3,601,453
Value of fuel used	£ 58,931	49,706	55,103	8,968	37,775	15,054	225,537
Value of materials used	£ 3,196,566	1,683,159	2,289,797	712,228	740,582	352,910	8,975,242
Total value of output	£ 4,946,103	2,958,843	3,937,289	1,007,594	1,504,919	737,340	15,092,088
Value of production	£ 1,690,606	1,225,978	1,592,389	286,398	726,562	369,376	5,891,309

(ii) *Total for Australia, 1933-34 to 1937-38.* The development of forest and other saw-mills, etc., since 1933-34 is shown in the following table :—

SAW-MILLS, FOREST AND OTHER ; PLYWOOD AND BARK MILLS : AUSTRALIA.

Items.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.
Number of establishments	1,276	1,405	1,443	1,591	1,659
Number of persons engaged	12,298	15,333	17,297	18,284	19,565
Value of land and buildings	£ 1,899,729	2,010,001	1,974,918	2,015,040	2,025,857
Value of plant and machinery	£ 2,460,647	2,595,995	2,702,063	2,671,982	2,807,747
Wages paid	£ 1,926,400	2,519,715	2,927,960	3,188,000	3,601,453
Value of fuel used	£ 115,438	139,572	170,705	184,008	225,537
Value of materials used	£ 4,022,263	5,604,845	6,663,907	7,942,375	8,975,242
Total value of output	£ 7,211,573	9,814,197	11,515,591	13,379,054	15,002,088
Value of production	£ 3,073,872	4,069,780	4,680,979	5,252,641	5,891,399

The table furnishes evidence of marked improvement during the past four years. The saw-mill 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 height of the depression, had recovered to 643 million super. feet in 1937-38. Further reference is made to the saw-milling industry in Chapter XXI. "Forestry."

33. **Furniture, Cabinet Making and Upholstery.**—These industries constitute the principal manufactures in Class XI. The following table gives particulars for each State :—

FURNITURE, CABINET MAKING AND UPHOLSTERY FACTORIES, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	252	302	110	67	84	36	851
Number of persons engaged	4,769	3,546	1,507	1,004	743	317	11,946
Value of land and buildings	£ 709,811	619,565	217,616	142,432	108,120	31,958	1,829,502
Value of plant and machinery	£ 244,477	145,993	68,399	76,616	31,301	14,582	581,868
Wages paid	£ 957,686	553,834	283,818	166,111	123,442	47,473	2,132,364
Value of fuel used	£ 25,680	19,455	8,338	7,301	3,634	1,387	65,795
Value of materials used	£ 1,526,391	940,845	405,586	299,346	197,426	48,678	3,418,272
Total value of output	£ 3,035,549	1,885,923	857,915	558,770	396,584	120,108	6,854,843
Value of production	£ 1,483,475	925,625	443,991	252,123	195,524	70,043	3,370,781

34. **Printing and Bookbinding Works.**—Printing and bookbinding works rank high in importance among the industries of Australia, and in 1937-38 afforded employment for about 28,169 employees, and paid more than £5,900,000 in salaries and wages, while the value of output amounted to £17,205,000. The following table gives particulars of establishments engaged in general printing and bookbinding in each State for the year 1937-38. Government printing works are included, but establishments producing newspapers and periodicals are shown separately in the succeeding table :—

GENERAL PRINTING AND BOOKBINDING ESTABLISHMENTS, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	331	430	97	62	82	20	1,022
Number of persons engaged	7,253	6,740	1,772	1,153	887	459	18,264
Value of land and buildings	£ 1,357,018	1,586,989	372,857	217,282	215,436	76,181	3,825,743
Value of plant and machinery	£ 1,238,820	1,117,529	209,396	238,887	171,409	73,909	3,048,650
Wages paid	£ 1,372,130	1,213,500	304,811	208,850	158,300	88,040	3,346,531
Value of fuel used	£ 42,060	39,009	10,186	9,130	4,890	2,427	107,702
Value of materials used	£ 1,606,850	1,383,776	274,512	186,006	160,123	59,542	3,676,809
Total value of output	£ 3,978,122	3,431,321	785,630	518,736	431,612	214,088	9,359,509
Value of production	£ 2,329,212	2,008,536	500,932	323,600	266,599	152,119	5,380,998

ESTABLISHMENTS PRODUCING NEWSPAPERS AND PERIODICALS, 1937-38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	213	113	64	38	36	7	471
Number of persons engaged ..	4,302	2,554	1,458	678	599	319	9,905
Value of land and buildings ..	£ 1,691,514	786,315	543,926	367,158	275,502	29,773	3,694,188
Value of plant and machinery ..	£ 1,404,512	730,174	439,843	195,206	167,363	42,080	3,039,178
Wages paid ..	£ 1,155,813	696,156	338,541	165,646	163,564	79,875	2,599,595
Value of fuel used ..	£ 53,849	29,534	20,009	8,442	12,775	2,991	125,600
Value of materials used ..	£ 1,330,448	898,055	303,030	192,109	138,391	34,282	2,896,315
Total value of output ..	£ 3,414,924	2,050,957	890,838	461,804	403,714	263,486	7,485,723
Value of production ..	£ 2,030,627	1,123,368	567,799	263,253	252,548	226,213	4,463,868

35. Tyres, Motor and Cycle.—(i) *Details for each State, 1937-38.* During the last decade, the number of motor car and cycle users has shown a considerable advance and this necessarily has had a stimulating effect on the industry engaged in the manufacture of motor and cycle tyres. Particulars for each State during 1937-38 are shown hereunder :—

TYRES, MOTOR AND CYCLE, 1937-38.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	84	90	30	28	23	12	267
Number of persons engaged ..	2,879	2,503	1,168	1,150	86	61	5,847
Value of land and buildings ..	£ 746,586	657,477	60,880	60,725	37,270	24,870	1,587,808
Value of plant and machinery ..	£ 499,725	748,635	19,479	14,314	8,163	5,999	1,296,315
Wages paid ..	£ 618,883	511,019	21,589	18,156	10,412	7,002	1,187,061
Value of fuel used ..	£ 83,177	122,133	2,583	2,293	1,507	840	212,533
Value of materials used ..	£ 1,954,559	2,458,290	48,690	37,598	20,965	13,545	4,533,656
Total value of output ..	£ 2,805,629	3,787,197	98,082	79,662	47,970	31,146	6,849,686
Value of production ..	£ 767,893	1,206,765	46,809	39,771	25,498	16,761	2,103,497

(a) Includes Boots and Shoes and Other Rubber Goods.

(ii) *Total for Australia, 1933-34 to 1937-38.* Prior to 1930-31 particulars regarding this industry were included with Rubber Goods but separate details are now available and are shown in the following table for the last five years :—

TYRES, MOTOR AND CYCLE : AUSTRALIA.

Items.	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37. (a)	1937-38. (a)
Number of factories ..	279	261	260	261	267
Number of persons engaged ..	3,489	3,998	4,098	4,907	5,847
Value of land and buildings ..	£ 1,311,366	1,240,749	1,257,800	1,583,004	1,587,808
Value of plant and machinery ..	£ 939,796	895,139	841,815	1,281,468	1,296,315
Wages paid ..	£ 635,547	736,865	786,713	980,567	1,187,061
Value of fuel used ..	£ 126,471	134,335	136,542	192,624	212,533
Value of materials used ..	£ 1,681,151	2,173,447	2,269,954	3,751,258	4,533,656
Total value of output ..	£ 2,859,447	3,499,132	3,788,333	5,851,930	6,849,686
Value of production ..	£ 1,051,825	1,191,350	1,331,837	1,908,948	2,103,497

(a) Includes Boots and Shoes and Other Rubber Goods for Tasmania.

It will be noted that the value of output for the year 1937-38 is the greatest recorded since the manufacture of motor and cycle tyres was shown as a separate industry.

36. **Electric Light and Power Works.**—(i) *Details for each State, 1937–38.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1931–32 the production of electric light and power has increased from 2,507 to 4,353 million British units, or by more than 73 per cent. Particulars for the year 1937–38 are as follows:—

ELECTRIC LIGHT AND POWER WORKS, 1937–38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	107	81	52	41	90	5	385
Number of persons engaged ..	1,970	1,306	501	1,646	688	73	6,184
Value of land and buildings £	4,674,398	1,778,660	492,090	587,154	332,362	224,290	8,088,954
Value of plant and machinery £	10,599,687	6,327,762	1,703,252	1,978,889	2,158,149	1,865,366	24,533,105
Wages paid ..	£ 581,105	344,050	151,482	426,984	183,887	21,525	1,709,033
Value of fuel used ..	£ 1,191,111	573,276	349,725	220,801	534,759	..	2,878,672
Total value of output ..	£ 5,244,866	2,524,503	890,162	1,280,458	1,116,928	630,055	11,686,972

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on p. 708.

(ii) *Production 1933–34 to 1937–38.* The increase in the production of electric light and power in each of the States during the five years is clearly shown in the following table:—

ELECTRIC LIGHT AND POWER WORKS: PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.	1,000 K.W.H.
1933–34 ..	1,227,873	830,910	168,996	165,598	160,130	356,670	2,910,177
1934–35 ..	1,349,248	900,247	202,030	176,434	171,209	399,887	3,190,055
1935–36 ..	1,164,898	974,722	224,014	200,488	204,373	459,408	3,527,903
1936–37 ..	1,626,833	1,049,768	256,784	215,714	237,185	522,491	3,908,775
1937–38 ..	1,816,814	1,128,216	352,258	240,902	272,512	542,767	4,353,469

37. **Gas Works.**—(i) *Details for each State, 1937–38.* Gas works are in operation in the majority of important towns in Australia. New South Wales returned eight coke factories and Queensland three, working as separate industries, but under the new classification these are included in Class I.—Treatment of Non-metalliferous Mine and Quarry Products. The subjoined table gives particulars of gas works in each State for the year 1937–38:—

GAS WORKS, 1937–38.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	43	39	16	4	4	2	108
Number of persons engaged ..	1,201	719	227	594	93	52	2,886
Value of land and buildings £	794,206	410,728	189,674	26,579	(a)	(a)	61,508,141
Value of plant and machinery £	3,171,020	2,052,735	557,537	1,161,616	(a)	(a)	67,356,839
Wages paid ..	£ 292,072	199,289	59,876	155,032	(a)	(a)	744,878
Value of fuel used ..	£ 190,977	143,592	4,832	1,790	(a)	(a)	356,474
Value of materials used ..	£ 712,638	622,537	145,652	122,208	(a)	(a)	61,703,005
Total value of output ..	£ 2,335,719	1,395,160	323,671	518,919	(a)	(a)	64,827,586
Value of production ..	£ 1,432,104	628,987	173,187	394,921	(a)	(a)	62,768,017

(a) Not available for publication.

(b) Includes Western Australia and Tasmania.

(ii) *Coal Used and Production, 1937-38.* The following table gives details for the year 1937-38 :—

GAS WORKS : COAL USED AND PRODUCTION, 1937-38.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
COAL USED.							
Coal tons	577,030	379,960	86,929	74,324	(a)	(a)	b1,156,373
PRODUCTS.							
Gas produced 1,000 cubic ft.	10,677,273	6,939,276	1,396,428	1,154,877	(a)	(a)	b20,946,383
Gas sold 1,000 cubic ft.	9,207,134	6,225,382	1,234,609	929,985	(a)	(a)	b18,275,622
Coke produced .. tons	433,731	212,342	59,790	45,784	(a)	(a)	b 764,215
Coke for sale .. tons	349,371	123,812	28,857	32,365	(a)	(a)	b 659,118
VALUE.							
Gas sold £	1,501,328	1,740,578	483,868	432,761	(a)	(a)	b 4,427,381
Coke for sale £	372,549	177,609	30,564	53,279	(a)	(a)	b 659,118

(a) Particulars not available for publication.

(b) Includes Western Australia and Tasmania.

The output of gas declined from 20,929,569 thousand cubic feet in 1929-30 to an average of 17,800,000 thousand cubic feet during the three years ended June, 1934, but has since risen to a new high level of 20,946,383 thousand cubic feet in 1937-38.