

CHAPTER XXIII.

MANUFACTURING INDUSTRY.

[NOTE].—In all tables relating to employees—except where specially mentioned—“Number of Employees” includes working proprietors.

§ 1. Number and Classification 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.
1928-29 ..	8,465	8,197	2,156	1,844	1,469	785	22,916
1929-30 ..	8,208	8,195	2,172	1,814	1,466	845	22,700
1930-31 ..	7,544	8,199	2,104	1,644	1,455	805	21,751
1931-32 ..	7,397	8,204	2,013	1,662	1,490	891	21,657
1932-33 ..	7,444	8,612	2,155	1,710	1,499	910	22,330

2. Classification of Factories, 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 This classification which was introduced during the year 1930-31 superseded the grouping which had been in use since 1902.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.—CLASSIFICATION, AUSTRALIA.

Class of Industry.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
I. Treatment of Non-metalliferous Mine and Quarry Products	362	374	361	349	374
II. Bricks, Pottery, Glass, &c.	530	520	368	313	362
III. Chemicals, Dyes, Explosives, Paint, Oils, and Grease	495	493	515	544	547
IV. Industrial Metals, Machines, Implements, and Conveyances	5,452	5,469	5,362	5,376	5,529
V. Precious Metals, Jewellery and Plate	273	204	242	240	242
VI. Textiles and Textile Goods	546	557	520	515	555
VII. Skins and Leather	444	451	460	485	487
VIII. Clothing	4,337	4,186	3,915	3,822	3,917
IX. Food, Drink and Tobacco	4,304	4,274	4,251	4,344	4,421
X. Woodworking and Basketware	2,508	2,444	2,144	2,077	2,198
XI. Furniture, Bedding, &c.	1,139	1,071	954	910	947
XII. Paper, Stationery, Printing, Bookbinding, &c.	1,562	1,592	1,601	1,611	1,624
XIII. Rubber	219	245	267	279	304
XIV. Musical Instruments	56	54	46	41	35
XV. Miscellaneous Products	249	256	274	285	312
XVI. Heat, Light and Power	440	450	471	466	476
Total	22,916	22,700	21,751	21,657	22,330

The number of factories in operation declined each year from 1928-29 to 1931-32, but the figures for 1932-33 show a recovery in every State and in all classes of industry except the manufacture of musical instruments. The greatest increase has occurred in Victoria where the number of factories was greater than ever before. The same cannot be said of the number of persons employed though the increase in these numbers has been considerable.

CLASSIFICATION OF FACTORIES ACCORDING TO NUMBER OF EMPLOYEES. 641

3. Classification of Factories, States, 1932-33.—The following table shows the number of factories in each State in 1932-33, classified according to the nature of the industry :—

FACTORIES.—CLASSIFICATION, 1932-33.

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 ..	123	147	31	32	25	16	374
II. Bricks, Pottery, Glass, &c. ..	150	100	29	36	35	12	362
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	224	203	28	45	26	21	547
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,957	2,216	386	399	411	160	5,529
V. Precious Metals, Jewellery and Plate ..	64	125	18	17	12	6	242
VI. Textiles and Textile Goods ..	145	319	36	29	16	10	555
VII. Skins and Leather ..	180	213	40	25	21	8	487
VIII. Clothing ..	1,345	1,844	221	267	180	60	3,917
IX. Food, Drink and Tobacco ..	1,283	1,390	701	465	335	247	4,421
X. Woodworking and Basketware ..	707	638	306	125	143	274	2,198
XI. Furniture, Bedding, &c. ..	287	374	97	66	71	52	947
XII. Paper, Stationery, Printing, Book-binding, &c. ..	598	640	154	109	100	23	1,624
XIII. Rubber ..	99	123	14	31	27	10	304
XIV. Musical Instruments ..	12	15	1	3	4	..	35
XV. Miscellaneous Products ..	108	141	29	13	18	3	312
XVI. Heat, Light, and Power ..	162	124	64	48	70	8	476
Total	7,444	8,612	2,155	1,710	1,499	910	22,330

§ 2. Classification of Factories according to Number of Employees.

1. States, 1932-33.—The following table shows, for each State, the number of factories classified according to the number of hands employed in 1932-33 :—

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1932-33.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	2,769	3,523	611	482	757	296	8,438
4 ..	693	703	235	199	95	120	2,045
5 to 10 ..	1,817	2,033	621	561	355	342	5,729
11 to 20 ..	949	978	318	210	135	81	2,671
21 to 50 ..	736	837	223	164	107	46	2,113
51 to 100 ..	252	293	72	64	34	13	728
Over 100 ..	228	245	75	30	16	12	606
Total ..	7,444	8,612	2,155	1,710	1,499	910	22,330

A marked change has taken place, during the last decade, in the distribution of factories according to the number of employees. In 1922-23 of a total of 19,173 factories reported, 5,891 or 30.7 per cent. employed less than five persons whereas in 1932-33 the number of factories employing less than five persons had increased to 10,483 representing 47 per cent. of a total of 22,330 factories. The increase in the number of small factories is probably due mainly 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. During the later years of the decade there has undoubtedly been a rapid change from larger to smaller factories—measured by the number of employees—in dismissals because of business depression. The figures for 1932-33, however, show a gratifying recovery in the larger factories the number of factories employing upwards of 100 hands having risen to 606 factories employing 163,462 hands from 547 factories employing 145,886 persons. A more extensive analysis on these lines is given in the following tables.

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

FACTORIES.—CLASSIFICATION OF EMPLOYEES, ACCORDING TO SIZE OF FACTORY, 1932-33—continued.

No. of Persons Employed in Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4 ..	5,420	6,162	1,275	1,037	1,382	627	15,903
4 ..	2,772	2,812	940	796	380	480	8,180
5 to 10 ..	12,443	13,933	4,258	3,837	2,375	2,335	39,181
11 to 20 ..	13,962	14,478	4,634	3,045	1,913	1,181	39,213
21 to 50 ..	23,303	26,407	7,046	5,150	3,327	1,454	66,687
51 to 100 ..	17,597	20,069	5,103	4,320	2,430	815	50,334
Over 100 ..	67,301	63,672	16,092	9,205	3,500	3,692	163,462
Total ..	142,798	147,533	39,348	27,390	15,307	10,584	382,960
Av. per F'cty	19.18	17.13	18.26	16.02	10.21	11.63	17.15

2. Australia, 1928-29 to 1932-33.—The percentage of employees in factories with more than 100 hands on the total for all factories, reached its maximum during the years 1926-27 and 1928-29 with 43.7 per cent. In 1930-31 it had declined to 40.8 per cent. but recovered to 42.7 per cent. in 1932-33 :—

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 hands and under.		21 to 100 hands.		101 hands and upwards.		Total.	
	Es-tablish-ments.	Em-ployees.	Es-tablish-ments.	Em-ployees.	Es-tablish-ments.	Em-ployees.	Es-tablish-ments.	Em-ployees.
1928-29—								
Number ..	18,714	115,457	3,477	144,127	725	201,607	22,916	461,191
Average per establishment ..	6.17	..	41.45	..	278.08	..	..	20.13
Percentage on total ..	81.66	25.03	15.17	31.25	3.17	43.72	100.00	100.00
1929-30—								
Number ..	18,688	110,704	3,338	136,457	674	183,386	22,700	430,547
Average per establishment ..	5.92	..	40.88	..	272.09	..	..	18.97
Percentage on total ..	82.33	25.71	14.70	31.69	2.97	42.60	100.00	100.00
1930-31—								
Number ..	18,562	103,077	2,645	106,678	544	144,271	21,751	354,026
Average per establishment ..	5.55	..	40.33	..	265.20	..	..	16.28
Percentage on total ..	85.34	29.12	12.16	30.13	2.50	40.75	100.00	100.00
1931-32—								
Number ..	18,507	98,685	2,603	105,641	547	145,886	21,657	350,212
Average per establishment ..	5.33	..	40.58	..	266.70	..	..	16.17
Percentage on total ..	85.45	28.18	12.02	30.16	2.53	41.66	100.00	100.00
1932-33—								
Number ..	18,883	102,477	2,841	117,021	606	163,462	22,330	382,960
Average per establishment ..	5.43	..	41.19	..	269.74	..	..	17.15
Percentage on total ..	84.57	26.76	12.72	30.56	2.71	42.68	100.00	100.00

§ 3. Power used in Factories.

1. States, 1932-33.—The following table shows the number of factories using steam, gas, oil, electricity, or water power, and the horse-power used in 1932-33 :—

FACTORIES.—HORSE-POWER USED, 1932-33.

State.	Number of Establishments.			Horse-power Used.					
	Using Power.	Others.	Total.	Steam.	Gas.	Oil.	Electricity.	Water.	Total.
	No.	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
N.S.W. ..	7,097	347	7,444	389,997	9,775	42,453	268,338	14,675	725,238
Victoria ..	8,023	589	8,612	211,938	9,002	14,919	169,678	31,428	436,965
Queensland ..	1,890	265	2,155	96,905	10,657	13,059	40,937	307	161,865
S. Australia ..	1,569	141	1,710	116,690	5,706	11,259	45,892	..	179,547
W. Australia ..	1,398	101	1,499	57,143	3,804	18,771	27,149	..	106,867
Tasmania ..	849	61	910	4,491	26	1,775	56,889	80,055	143,236
Australia ..	20,826	1,504	22,330	877,164	38,970	102,236	608,883	126,465	1,753,718

Factories in Australia include electric light and power works. Most of the power in these works is, however, used in generating electric power and light, and the power so produced is counted again under the heading of electricity. The actual amount of duplication cannot be given for all States, but a fair measure of the amount of power used in factories (in the common sense) is given by deducting the total of Class XVI., Heat, Light and Power, from the gross total for all factories. This is done in the last column of the table below. It must not be inferred, however, that the whole of the deduction is a duplication, as portion of it represents the production of light for general purposes, while an appreciable amount of power is used on farms and in private houses.

2. Australia, 1928-29 to 1932-33.—The following table shows the horse-power used in connexion with factories in Australia in each of the last five years :—

FACTORIES.—HORSE-POWER USED, AUSTRALIA.

Year.	Number of Establishments.		Horse-power Used.						
	Using Power.	Others.	Steam.	Gas.	Oil.	Electricity.	Water.	Total (a).	
								Gross.	Less Heat Light and Power Works.
	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
1928-29 ..	20,304	2,612	932,483	49,781	50,197	537,670	109,183	1,679,314	753,991
1929-30 ..	20,456	2,244	1,101,741	43,695	60,629	568,289	114,828	1,889,182	769,576
1930-31 ..	19,976	1,775	1,003,382	41,413	69,774	597,984	115,862	1,828,417	745,689
1931-32 ..	20,135	1,522	976,880	41,706	102,106	590,812	140,375	1,851,879	809,703
1932-33 ..	20,826	1,504	877,164	38,970	102,236	608,883	126,465	1,753,718	824,021

(a) See preceding paragraph.

The last column of the above table, which may be called roughly the net power used in factories, shows an average increase of about 19,000 horse-power per annum or about 2.5 per cent. per annum during the last five years. The net horse-power per employee increased from 1.4 in 1924-25 to 1.6 in 1928-29, but the decline in persons employed in 1932-33 raised the proportion to 2.2 horse-power per employee in that year. The corresponding figure for the United States of America was 4.2 in 1929.

3. *Classes of Industry.*—The next table shows the horse-power used in factories in each State during the year 1932-33 :—

FACTORIES.—HORSE-POWER USED IN EACH CLASS, 1932-33.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metallic ferous Mine and Quarry Products	19,773	24,053	1,498	2,631	2,095	6,165	56,215
II. Bricks, Pottery, Glass, &c. ..	10,638	10,306	1,091	2,533	1,470	483	26,521
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	10,990	11,685	1,697	4,993	2,517	497	32,379
IV. Industrial Metals, Machines, Implements and Con- veyances	136,449	39,204	14,187	14,786	7,187	41,723	253,536
V. Precious Metals, Jewellery and Plate	550	1,089	58	159	17	22	1,895
VI. Textiles and Textile Goods ..	13,399	24,603	2,655	2,147	753	2,453	46,010
VII. Skins and Leather	6,085	6,414	891	405	367	179	14,341
VIII. Clothing	5,719	8,174	929	793	585	116	16,316
IX. Food, Drink and Tobacco ..	72,142	54,423	65,327	16,004	12,691	5,081	225,668
X. Woodworking and Basket- ware	21,875	17,177	11,803	4,819	6,030	5,058	66,762
XI. Furniture, Bedding, etc. ..	5,105	4,573	1,710	1,784	1,007	585	14,764
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	12,445	14,860	2,814	1,657	1,622	517	33,915
XIII. Rubber	16,703	13,116	652	118	139	63	30,791
XIV. Musical Instruments ..	1,396	123	5	93	8	..	1,625
XV. Miscellaneous Products ..	1,171	1,553	91	214	151	103	3,283
Total less Class XVI. ..	334,440	231,353	105,408	53,136	36,639	63,045	824,021
XVI. Heat, Light and Power ..	390,798	205,612	56,457	126,411	70,228	80,191	929,697
Grand Total ..	725,238	436,965	161,865	179,547	106,867	143,236	1,753,718

§ 4. Employment in Factories.

1. *Total Number Employed.*—Each person employed in and about a factory excepting carters engaged entirely in the delivery of manufactured goods is counted as a factory employee, and the figures relating to employment include, therefore, proprietors who work in their own business as well as “outworkers” (*see* subsection 5 (ii) hereinafter). 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 employed each week by the number of weeks worked. The figures, therefore, represented the average number employed 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 employed over a full year of fifty-two weeks. The classification of factories according to the number of employees (*see* § 2 *ante*), however, is still based on the old method; but, for all other purposes the average number employed over the full year is used.

The following table shows, for each year from 1928-29 to 1932-33 inclusive, (a) the average number of persons (including both sexes of all ages) employed in manufacturing industries in each State; (b) the percentage of the number employed in each State on the total number employed in Australia; and (c) the number employed per ten thousand of the mean population in each State and Australia.

The number of persons employed in factories throughout Australia was at its highest in 1926-27 when it reached 452,184 employees. In the year 1928-29, which is the latest year before the depression became general, the number of employees was 450,482, and the lowest point subsequent to that year was 336,658 in 1931-32 or 74.7 per cent. of the 1928-29 figure. In 1932-33 the number of factory employees had recovered to 370,727 representing 82.3 per cent. of the number in 1928-29. Allowing for the increase in the population the relation of the factory employees in 1932-33 to the number in 1928-29 was:—New South Wales, 73.6 per cent.; Victoria, 89.5 per cent.; Queensland, 78.6 per cent.; South Australia, 67.5 per cent.; Tasmania, 83.7 per cent.; and Australia 79.1 per cent.:—

FACTORIES.—EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).							
1928-29 ..	180,806	156,568	45,031	36,807	20,804	10,466	450,482
1929-30 ..	162,913	151,009	42,624	32,185	19,643	10,820	419,194
1930-31 ..	127,591	126,016	37,901	23,886	14,620	8,829	338,843
1931-32 ..	126,368	128,265	35,799	23,834	13,392	9,000	336,658
1932-33 ..	138,515	144,428	37,388	26,348	14,815	9,233	370,727

PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
1928-29 ..	40.14	34.76	9.99	8.17	4.62	2.32	100.00
1929-30 ..	38.86	36.02	10.17	7.68	4.69	2.58	100.00
1930-31 ..	37.65	37.19	11.19	7.05	4.31	2.61	100.00
1931-32 ..	37.54	38.10	10.63	7.08	3.98	2.67	100.00
1932-33 ..	37.36	38.96	10.09	7.10	4.00	2.49	100.00

PER 10,000 OF POPULATION.

1928-29 ..	727	889	505	643	592	484	709
1929-30 ..	647	849	472	562	461	493	652
1930-31 ..	501	703	413	416	339	395	521
1931-32 ..	492	711	385	413	309	398	514
1932-33 ..	535	796	397	455	339	405	561

2. Rates of Increase, 1928-29 to 1932-33.—The percentage of increase or decrease on the average number of persons employed in the preceding year is shown below for each State for each of the years specified:—

FACTORY EMPLOYEES.—ANNUAL INCREASE.—PER CENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	%	%	%	%	%	%	%
1928-29 ..	1.52	0.14	0.72	5.73	1.88	5.81	0.17
1929-30 ..	-9.90	-3.55	-5.35	-12.56	-5.58	3.38	-6.95
1930-31 ..	-21.70	-16.56	-11.08	-25.76	-25.57	-18.40	-19.20
1931-32 ..	-0.96	1.78	-5.55	-0.22	-8.40	1.94	-0.64
1932-33 ..	9.61	12.60	4.44	10.55	10.63	2.59	10.12

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

3. Employees in Classes of Industry, Australia, 1928-29 to 1932-33.—The table hereunder gives the average number of persons employed in factories under each industrial group in Australia in the years 1928-29 to 1932-33 inclusive:—

FACTORY EMPLOYEES.—CLASSES, AUSTRALIA.

Class of Industry.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
I. Treatment of non-metalliferous mine and quarry products ..	7,692	6,889	4,336	3,885	4,534
II. Bricks, pottery, glass, etc. ..	12,990	11,085	5,684	5,200	6,816
III. Chemicals, dyes, explosives, paint, oils and grease ..	14,079	13,364	11,784	12,058	12,655
IV. Industrial metals, machines, implements and conveyances ..	130,321	116,869	89,506	82,688	94,598
V. Precious metals, jewellery and plate ..	2,191	2,073	1,701	1,670	2,029
VI. Textiles and textile goods ..	28,117	29,383	26,228	30,553	34,974
VII. Skins and leather ..	7,879	7,663	6,588	7,846	8,865
VIII. Clothing ..	81,770	74,002	60,069	61,864	67,311
IX. Food, drink and tobacco ..	68,617	67,189	62,294	62,435	64,670
X. Woodworking and basketware ..	26,775	24,169	15,628	14,319	17,044
XI. Furniture, bedding, etc. ..	13,852	11,899	7,770	7,249	8,108
XII. Paper, stationery, printing, book-binding etc. ..	33,837	33,095	29,441	29,052	29,955
XIII. Rubber ..	7,223	6,804	4,592	5,051	5,822
XIV. Musical instruments ..	1,895	1,658	1,067	800	749
XV. Miscellaneous products ..	2,929	3,172	3,388	3,827	4,488
XVI. Heat, light and power ..	10,324	9,880	8,567	8,141	8,109
Total	450,482	419,194	338,843	336,658	370,727

The number employed in factories, after being almost constant for the three years ended 1928-29, thereafter declined rapidly. In 1929-30, the decrease amounted to 31,288, or 7 per cent.; in 1930-31 there was a further decrease of 80,351 or 19 per cent. In 1931-32 the decrease had slowed down to 2,185 or 0.6 per cent. In 1932-33 a considerable improvement was recorded. Compared with 1931-32 it represented an increase of 34,000 persons or 10 per cent. The only other decline in numbers recorded prior to the present depression was in the war years, when there was a decrease of 6 per cent. spread over three years.

Detailed examination of the returns for the years 1932-33 and 1928-29 reveals that the decline in employment was more severe in the industries connected with building i.e., Class II. Bricks, etc., Class X. Woodworking, and Class XI. Furniture, Bedding etc.—where the employment declined approximately 41 per cent. Those least affected were connected with Food, Drink, etc., Chemicals, Dyes, etc., and Paper, Stationery, etc. Class VI. Textile and Textile Goods which showed a considerable improvement in 1931-32, again improved its position in 1932-33. The increase in employment being 4,400. Class VII. Skins and Leather and Class XV. were the other two classes showing slight increases since 1928-29.

4. Employees in Classes of Industry, States, 1932-33.—The following table gives a classification of employees in manufacturing industries in each State in 1932-33:—

FACTORY EMPLOYEES.—CLASSES, 1932-33.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Australia.
I. Treatment of non-metalliferous mine and quarry products ..	1,779	1,511	415	304	304	221	4,534
II. Bricks, pottery, glass, etc. ..	3,122	2,341	396	411	441	105	6,816
III. Chemicals, dyes, explosives, paint, oils and grease ..	5,377	5,017	333	1,126	679	123	12,655
IV. Industrial metals, machines, implements and conveyances ..	43,907	28,782	6,848	9,128	3,805	2,128	94,598
V. Precious metals, jewellery and plate ..	550	1,229	87	99	41	23	2,029
VI. Textiles and textile goods ..	10,820	20,213	1,039	925	459	1,518	34,974
VII. Skins and leather ..	3,595	3,914	636	455	211	54	8,865
VIII. Clothing ..	21,353	34,620	5,003	3,559	2,169	607	67,311
IX. Food, drink, and tobacco ..	20,813	21,013	13,095	4,751	2,915	2,083	64,670
X. Woodworking and basketware ..	5,067	5,146	3,324	1,097	1,307	1,103	17,044
XI. Furniture, bedding, etc. ..	2,890	2,904	1,026	633	412	243	8,108
XII. Paper, stationery, printing, bookbinding, etc. ..	11,833	10,943	3,360	1,857	1,331	631	29,955
XIII. Rubber ..	1,945	3,040	559	146	81	51	5,822
XIV. Musical instruments ..	486	191	12	39	21	..	749
XV. Miscellaneous products ..	2,003	1,621	266	264	159	175	4,488
XVI. Heat, light and power ..	2,975	1,943	989	1,554	480	163	8,109
Total	138,515	144,428	37,388	26,348	14,815	9,231	370,727

5. *Employees According to Nature of Employment.*—(i) *General.* In the following table the average number of persons employed in each State in 1932-33 are classified according to the nature of their employment :—

FACTORY EMPLOYEES.—NATURE OF EMPLOYMENT, 1932-33.

State.	Average Number of Persons Employed.						Total.
	Working Proprietors.	Managers and Overseers.	Accountants and Clerks.	Engine-drivers and Firemen.	Workers, Skilled & Unskilled. (a)	Carters, Messengers and Others.	
New South Wales ..	6,013	5,535	8,739	2,115	114,237	1,876	138,515
Victoria ..	7,097	5,372	6,585	1,612	122,286	1,476	144,428
Queensland ..	1,639	1,635	2,571	1,634	27,721	2,188	37,388
South Australia ..	1,312	1,143	1,953	396	20,969	575	26,348
Western Australia ..	862	720	940	396	11,494	403	14,815
Tasmania ..	538	486	680	186	7,058	285	9,233
Australia ..	17,461	14,891	21,468	6,339	303,765	6,803	370,727

(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 in each of the last five years :—

FACTORIES.—OUTWORKERS.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1928-1929 ..	288	240	44	41	2	22	637
1929-1930 ..	217	182	49	28	2	31	509
1930-1931 ..	122	136	29	15	3	23	328
1931-1932 ..	108	140	27	12	3	2	292
1932-1933 ..	131	178	25	18	3	7	362

(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. 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 Employees according to Sex.**—(i) *General.* In New South Wales the ratio of the number of females employed 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 at present more than half the factory employees are females. In the remaining States the ratio was roughly one female employed to every five males, while that for Australia was two to five. The employment of women is, however, mainly confined to a few trades.

The increased proportion of females in factories during the last five years is due to the fact that those factories in which females are employed in relatively large numbers have been affected less as regards the number of employees than other industries have been by the industrial depression. The industries which employ the largest proportions of females are Classes VI., VIII., IX. and XII., and the numbers engaged in these classes constitute 85.67 per cent. of the total number of female employees as shown in sub-section 5 hereinafter.

(ii) *Average Number of Males and Females Employed, 1928-29 to 1932-33.* The next table shows the average number of male and female employees in factories in each State for the five years ended 1932-33:—

FACTORIES.—MALES AND FEMALES EMPLOYED.

State.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
MALES.					
New South Wales	135,813	122,006	93,868	90,682	99,721
Victoria	104,648	100,135	82,949	81,618	91,899
Queensland	37,107	35,141	31,144	29,149	30,099
South Australia	30,385	26,485	19,332	18,932	20,901
Western Australia	16,993	15,921	11,729	10,535	11,748
Tasmania	8,164	8,547	6,922	6,999	7,147
Australia	333,110	308,235	245,944	237,915	261,515
FEMALES.					
New South Wales	44,993	40,907	33,723	35,686	38,794
Victoria	51,920	50,874	43,067	46,647	52,529
Queensland	7,924	7,483	6,757	6,650	7,289
South Australia	6,422	5,700	4,554	4,902	5,447
Western Australia	3,811	3,722	2,891	2,857	3,067
Tasmania	2,302	2,273	1,907	2,001	2,086
Australia	117,372	110,959	92,899	98,743	109,212

The maximum number of employees in factories was reached in 1926-27, when 452,184 persons were employed, of whom 337,433 were males, and 114,751 were females. The figures for 1932-33 represent 77.5 per cent. of the maximum for males and 95.1 per cent. for females, or 82 per cent. for all persons. In 1931-32 the male employees had been as low as 70.5 per cent. of the maximum and in 1930-31 the females were only 81 per cent.

3. Rate of Variation for each Sex.—The percentages of annual increase or decrease in the years indicated on the average number of males and females employed in factories are shown below :—

PERCENTAGES OF ANNUAL INCREASE, MALE AND FEMALE FACTORY EMPLOYEES.

State.	1927-28— 1928-29.	1928-29— 1929-30.	1929-30— 1930-31.	1930-31— 1931-32.	1931-32— 1932-33.
MALES.					
	%	%	%	%	%
New South Wales ..	0.99	-10.17	-23.06	-3.42	9.97
Victoria ..	-0.68	-4.31	-17.16	-1.60	12.60
Queensland ..	-0.79	-5.30	-11.37	-6.41	3.26
South Australia ..	-5.68	-12.84	-27.01	-2.07	10.40
Western Australia ..	1.69	-6.31	-26.33	-10.18	11.51
Tasmania ..	-6.48	4.69	-19.01	1.10	2.11
Total ..	-0.53	-7.47	-20.21	-3.26	9.92
FEMALES.					
	%	%	%	%	%
New South Wales ..	3.18	-9.08	-17.56	5.82	8.71
Victoria ..	1.84	-2.01	-15.35	8.31	12.61
Queensland ..	8.10	-5.57	-9.70	-1.58	9.61
South Australia ..	-5.97	-11.24	-20.11	7.64	11.12
Western Australia ..	2.72	-2.36	-22.33	-1.18	7.35
Tasmania ..	-3.32	-1.26	-16.10	4.93	4.25
Total ..	2.20	-5.46	-16.28	6.29	10.60

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

4. Masculinity of Employees in Factories.—The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of employees for each State for a series of years. The following table furnishes particulars for the years 1928-29 to 1932-33 :—

MASCULINITY(a) OF FACTORY EMPLOYEES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1928-29 ..	302	202	468	473	446	355	284
1929-30 ..	298	197	470	465	428	376	278
1930-31 ..	278	193	461	425	406	363	265
1931-32 ..	254	175	438	386	369	350	241
1932-33 ..	264	175	413	384	383	343	239

(a) Number of males per 100 females.

During the five years covered by the table above there has been a decrease in masculinity in all the States. The decline was smallest in Victoria, where the greatest number of females is employed, and in Tasmania. A cause of the increasing proportion of women has been referred to in 2 ante.

5. Employment of Females in Particular Industries.—The greater number of females engaged in manufacturing industries are employed in four classes, viz. :—VI., Textiles; VIII., Clothing; IX., Food and Drink; and XII., Paper, Stationery, etc. In 1932-33, these industries, accounted for 85.67 per cent. of all females employed in factories. In two classes only did the number of females exceed the number of males, viz., in Class VI., Textiles, there were 163 females to every 100 males and in Class VIII., Clothing, there were 259 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1932-33 :—

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1932-33.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
AVERAGE NUMBER EMPLOYED—MALES.							
VI. Textiles and textile goods ..	4,006	7,392	539	595	237	531	13,300
VIII. Clothing ..	6,210	9,638	1,280	899	532	195	18,754
IX. Food and drink ..	14,372	15,752	11,806	3,904	2,399	1,665	49,898
XII. Paper, stationery, etc. ..	8,145	7,840	2,541	1,356	1,013	500	21,395
All other classes ..	66,988	51,277	13,933	14,147	7,567	4,256	158,168
Total ..	99,721	91,899	30,099	20,901	11,748	7,147	261,515

AVERAGE NUMBER EMPLOYED—FEMALES.							
VI. Textiles and textile goods ..	6,814	12,821	500	330	222	987	21,674
VIII. Clothing ..	15,143	24,982	3,723	2,660	1,637	412	48,557
IX. Food and drink ..	6,441	5,261	1,289	847	516	418	14,772
XII. Paper, stationery, &c. ..	3,688	3,103	819	501	318	131	8,560
All other classes ..	6,708	6,362	958	1,109	374	138	15,649
Total ..	38,794	52,529	7,289	5,447	3,067	2,086	109,212

The classification of the employment of females in the several industries in Class VIII., Clothing, which is the most important group, and the relation of their number to that of the males so employed, are shown in the following table:—

FEMALES EMPLOYED IN EACH INDUSTRY IN CLASS VIII., 1932-33.

Industry.	New South Wales.			Victoria.			Other States.		
	Males	Females.	Femi- ninity. (a)	Males.	Females.	Femi- ninity. (a)	Males.	Females.	Femi- ninity. (a)
Tailoring and slop clothing ..	1,484	5,721	386	1,577	5,137	326	1,128	3,634	322
Waterproof and oil-skin clothing ..	8	7	88	72	186	258	4	12	300
Dressmaking ..	40	1,240	3,100	501	6,783	1,354	40	1,692	4,230
Millinery ..	64	778	1,216	106	1,582	1,492	29	600	2,069
Shirts, collars and underclothing ..	265	2,980	1,125	428	4,338	1,014	132	1,465	1,110
Stays and corsets ..	33	534	1,618	89	682	766	4	29	725
Handkerchiefs, ties and scarves ..	76	518	682	62	426	687	..	..	..
Hats and caps ..	569	1,030	181	670	725	108	43	44	102
Gloves ..	..	..	..	30	100	333	..	..	..
Boots and shoes ..	2,234	1,958	88	4,767	4,258	89	1,014	724	71
Boot repairing (including bespoke work) ..	951	38	4	552	9	2	337	20	6
Boot accessories ..	89	29	33	414	153	37	..	..	..
Umbrellas and walking sticks ..	26	54	208	29	74	255	11	12	109
Dyeworks and cleaning (including re-novating and repairing) ..	342	199	58	290	236	81	161	196	122
Other ..	29	57	197	51	293	575	3	4	133
Total ..	6,210	15,143	244	9,638	24,982	259	2,906	8,432	290

(a) Number of females per 100 males.

§ 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 Employed, 1928-29 to 1932-33.**—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 1928-29 to 1932-33 :—

CHILDREN EMPLOYED IN FACTORIES.

State.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
MALES.					
New South Wales ..	3,983	3,322	1,851	1,924	2,366
Victoria ..	4,209	3,748	2,543	2,615	3,441
Queensland ..	1,254	1,212	950	920	903
South Australia ..	883	654	411	509	611
Western Australia ..	647	575	324	344	351
Tasmania ..	290	261	203	185	263
Australia ..	11,266	9,772	6,282	6,497	7,935

FEMALES.					
New South Wales ..	5,085	4,196	2,757	3,263	3,561
Victoria ..	4,298	4,019	3,361	4,089	4,643
Queensland ..	921	906	619	631	849
South Australia ..	679	529	399	453	523
Western Australia ..	276	226	149	161	202
Tasmania ..	265	252	205	169	209
Australia ..	11,524	10,128	7,490	8,766	9,987

TOTAL.					
New South Wales ..	9,068	7,518	4,608	5,187	5,927
Victoria ..	8,507	7,767	5,904	6,704	8,084
Queensland ..	2,175	2,118	1,569	1,551	1,752
South Australia ..	1,562	1,183	810	962	1,134
Western Australia ..	923	801	473	505	553
Tasmania ..	555	513	408	354	472
Australia ..	22,790	19,900	13,772	15,263	17,922

3. **Percentage of Children on Total Number of Employees.**—The number of juvenile workers in factories reached its maximum in 1926-27 when the number was 23,903 (12,582 males and 11,321 females), representing 5.29 per cent. of all factory employees. In 1932-33 the number of children employed was 17,922 or 4.83 per cent. of all employees. The latter figures show some increase both actually and relatively over the immediately preceding year. This increase was very largely among females in the textile and clothing industry :—

PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF FACTORY EMPLOYEES.

State.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
	%	%	%	%	%
New South Wales ..	5.02	4.61	3.61	4.10	4.28
Victoria ..	5.43	5.14	4.69	5.23	5.60
Queensland ..	4.81	4.97	4.14	4.33	4.69
South Australia ..	4.24	3.68	3.39	4.04	4.30
Western Australia ..	4.44	4.08	3.24	3.77	3.73
Tasmania ..	5.30	4.74	4.62	3.93	5.11
Australia ..	5.06	4.75	4.06	4.53	4.83

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 average number employed in 1932-33 :—

CHILDREN EMPLOYED.—VARIOUS INDUSTRIES, 1932-33.

Class.	Industry.	N.S.W.		Victoria.		Q'land.		S. Aust.		W. Aust.		Tas.		Australa.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
II.	Earthenware, China, Porcelain, and Terra Cotta ..	18	..	35	12	7	2	8	..	1	1	..	..	69	15
III.	Chemicals, Drugs and Medicines ..	28	69	9	29	..	1	5	14	1	..	..	..	43	113
IV.	Smelting, Converting, Refining and Rolling of Iron and Steel ..	182	5	153	16	33	2	47	..	..	..	..	..	415	23
"	Engineering (not Marine or Electrical) ..	83	1	114	15	18	..	27	1	17	..	7	..	266	17
"	Electrical Installations, Cables and Apparatus ..	56	17	89	30	..	..	6	..	4	..	..	..	155	47
"	Motor Vehicles and Cycles. (ii) Repairs ..	65	2	78	1	28	1	33	..	20	1	17	..	241	5
"	Galvanized Ironworking and Tinsmithing ..	108	22	181	35	20	2	16	..	19	..	3	..	347	59
VI.	Cotton ..	33	64	16	78	1	..	..	..	..	..	..	..	50	142
"	Wool, Worsted and Shoddy ..	129	317	367	684	13	47	63	30	5	5	42	92	619	1175
"	Hosiery and Other Knitted Goods ..	21	237	134	638	5	8	..	6	2	7	2	13	164	909
VII.	Rope and Cordage ..	19	18	83	46	3	..	4	..	..	..	..	..	109	64
"	Tanning, Currying and Leather Dressing ..	38	1	104	5	30	..	2	..	5	..	..	..	179	6
"	Bags, Trunks and Other Leather Goods ..	25	69	21	44	7	7	6	19	1	..	..	..	60	139
VIII.	Tailoring and Slop Clothing ..	38	544	56	410	30	191	9	81	4	21	2	22	139	1269
"	Dressmaking ..	1	128	16	632	1	39	1	87	..	31	..	8	19	925
"	Millinery ..	7	104	6	137	1	26	..	68	..	6	..	..	14	341
"	Shirts, Collars and Underclothing ..	11	510	21	348	15	185	..	41	1	30	..	13	48	1127
"	Hats and Caps ..	31	93	69	63	..	3	..	..	..	..	..	..	100	159
"	Boots and Shoes ..	17	212	168	379	19	51	22	34	26	16	3	7	355	699
"	Boot Repairing ..	18	3	22	..	8	..	5	1	4	1	4	..	61	5
IX.	Bakeries (including Cakes and Pastry) ..	30	8	53	11	37	17	10	1	6	..	38	42	174	79
"	Biscuits ..	53	132	43	46	2	7	18	18	13	7	..	..	129	210
"	Sugar Confectionery (including Chocolate) ..	40	181	30	112	9	28	17	39	2	19	..	..	98	379
"	Butter Factories, Creameries, etc. ..	6	2	31	20	17	1	6	3	..	..	3	..	63	26
"	Condiments, Coffee and Spices ..	22	42	12	8	2	11	24	9	6	..	..	..	66	70
"	Tobacco, Cigars, Cigarettes and Snuff ..	10	6	..	9	..	..	1	..	5	21	..	..	16	36
X.	Sawmills (Town and Forest) ..	31	1	23	1	78	2	9	..	5	..	12	..	158	4
XI.	Billiard Tables, Cabinet and Furniture making and Upholstery ..	49	5	110	6	34	5	24	4	18	2	8	..	243	22
XII.	Papermaking, etc. ..	48	237	3	..	..	..	..	..	..	..	..	..	51	237
"	Envelopes, Stationery, Paper Boxes, Bags, etc. ..	..	..	66	167	13	23	7	19	3	9	..	..	89	218
"	Newspapers and Periodicals ..	55	1	19	2	48	3	..	..	10	1	5	2	137	9
"	General Printing and Bookbinding (not including Government) ..	97	79	168	78	37	28	18	15	15	2	3	2	338	204
XIII.	Tyres, Motor and Cycle ..	10	11	17	21	5	..	4	..	7	..	1	..	44	32

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 1932–33 was £304,697,868 of which amount the sum of £175,148,548 represents the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £10,477,073 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., £119,072,247 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 1932–33 was £59,416,436. This figure which is exclusive of amounts drawn by working proprietors shows an increase of £3,484,618 or 6.2 per cent., as compared with the total for the previous year.

2. *Salaries and Wages Paid.*—(i) *Total Amount, 1932–33.* The total amount of salaries and wages paid in the year 1932–33 in various classes of factories in each State is shown in the following table:—

SALARIES AND WAGES PAID IN FACTORIES, 1932–33.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	
I. Treatment of Non-metalliferous Mine and Quarry Products ..	408,680	274,307	73,057	56,224	57,494	40,411	910,173
II. Bricks, Pottery, Glass, etc. ..	555,751	386,984	58,341	75,171	72,801	16,483	1,165,531
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,037,682	894,108	65,144	204,018	138,581	21,298	2,360,831
IV. Industrial Metals, Machines, Implements and Conveyances ..	8,488,601	4,835,679	1,243,440	1,564,451	695,942	401,990	17,230,103
V. Precious Metals, Jewellery and Plate ..	80,196	167,861	12,564	14,831	6,509	2,788	284,749
VI. Textiles and Textile Goods ..	1,482,626	2,399,251	146,177	110,306	60,254	178,205	4,376,819
VII. Skins and Leather ..	611,033	597,896	93,561	55,451	31,172	7,233	1,396,346
VIII. Clothing ..	2,312,656	3,654,334	454,702	314,818	216,903	54,200	7,007,613
IX. Food, Drink and Tobacco ..	3,879,827	3,794,300	2,514,935	778,533	549,127	327,680	11,844,402
X. Woodworking and Basketware ..	808,620	851,426	541,195	174,411	230,785	148,771	2,755,208
XI. Furniture, Bedding, etc. ..	423,151	357,340	148,419	77,801	60,907	26,844	1,094,462
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,195,355	1,859,795	630,991	313,383	269,405	126,866	5,395,795
XIII. Rubber ..	361,288	461,500	57,242	15,342	9,250	4,669	909,291
XIV. Musical Instruments ..	96,421	26,806	1,599	4,907	4,755	..	134,488
XV. Miscellaneous Products ..	282,972	219,805	31,270	27,738	22,308	18,618	602,711
XVI. Heat, Light and Power ..	757,989	436,879	248,384	349,472	115,235	39,955	1,947,914
Total ..	23,782,848	21,218,271	6,321,021	4,136,857	2,541,428	1,416,011	59,416,436

(ii) *Totals and Averages, 1928–29 to 1932–33.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for the years 1928–29 to 1932–33. The average wage paid is not comparable with that shown in similar tables in Official Year Books issued prior to No. 23, 1930, on account of the change in method of computing the average number of hands employed as explained heretofore. The figures are exclusive of working proprietors and of the amounts drawn by them:—

SALARIES AND WAGES PAID IN FACTORIES.—TOTAL AND AVERAGE PER ANNUM PER EMPLOYEE.

Year.	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
1928-29	Total amount paid ..	38,544,687	29,466,767	9,097,624	7,609,813	4,373,090	1,894,927	90,986,908
	Average per employee ..	221.37	197.41	209.45	215.11	220.87	189.80	210.63
1929-30	Total amount paid ..	34,875,995	28,387,840	8,690,872	6,579,186	4,154,980	2,028,160	84,717,033
	Average per employee ..	222.67	197.07	211.80	213.62	222.32	195.80	210.97
1930-31	Total amount paid ..	25,200,290	21,359,491	7,098,106	4,368,868	2,886,884	1,541,220	62,454,859
	Average per employee ..	206.83	179.29	195.26	192.67	210.26	183.28	193.88
1931-32	Total amount paid ..	22,751,013	19,454,045	6,188,889	3,786,056	2,335,684	1,416,131	55,931,818
	Average per employee ..	188.67	160.15	180.57	167.95	186.23	166.76	174.84
1932-33	Total amount paid ..	23,782,848	21,218,271	6,321,021	4,136,857	2,541,428	1,416,011	59,416,436
	Average per employee ..	179.49	154.50	176.82	165.24	182.14	162.85	168.19

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 1932-33 were paid in Western Australia followed by New South Wales despite the fact that highest average wage for each sex is paid in the latter State.

The average rate of salaries and wages reached its maximum in 1927-28 when it amounted to £212.12, as compared with £210.63 in 1928-29; £210.97 in 1929-30; £193.88 in 1930-31; £174.84 in 1931-32; and £168.19 in 1932-33. The fall in the cost of living on which the rates of wage are chiefly based began in the last quarter of 1929-30, and has since continued, with consequent reductions in the rates of wage. The average salary and wage fell approximately 4 per cent. in 1932-33 as compared with 1931-32 and is 20.7 per cent. below the peak year of 1927-28.

(iii) *Earnings of Males and Females, 1932-33.* The following table shows the approximate amount paid in salaries and wages to males and females in each class of industry in each State in the year 1932-33:—

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES, 1932-33.

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 ..	£ 403,598	£ 269,201	£ 71,676	£ 55,893	£ 56,778	£ 39,872	£ 897,018
II. Bricks, Pottery, Glass, etc. ..	540,298	374,981	56,855	74,713	72,091	16,368	1,135,306
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	866,336	733,568	60,007	187,845	130,015	19,645	1,997,416
IV. Industrial Metals, Machines, Implements and Conveyances ..	8,283,724	4,708,935	1,221,568	1,530,712	688,185	396,168	16,829,292
V. Precious Metals, Jewellery and Plate ..	71,667	151,806	11,813	14,212	6,261	2,788	258,547
VI. Textiles and Textile Goods ..	783,842	1,326,346	105,375	83,928	41,823	99,294	2,440,608
VII. Skins and Leather ..	559,678	506,181	87,046	41,630	27,283	6,997	1,228,815
VIII. Clothing ..	976,938	1,485,016	192,394	113,305	75,328	26,437	2,869,418
IX. Food, Drink and Tobacco ..	3,219,507	3,270,980	2,405,354	715,042	505,083	295,794	10,411,760
X. Woodworking and Basketware ..	793,775	840,603	532,477	170,540	229,915	146,764	2,714,074
XI. Furniture, Bedding, etc. ..	371,280	305,478	138,557	72,335	56,424	26,005	970,079
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,854,067	1,569,939	547,133	270,784	235,742	114,739	4,592,404
XIII. Rubber ..	306,299	374,362	33,565	14,219	8,614	4,373	741,432
XIV. Musical Instruments ..	84,075	25,992	1,599	4,697	4,755	..	121,118
XV. Miscellaneous Products ..	229,816	184,779	27,966	23,071	18,107	18,073	501,812
XVI. Heat, Light and Power ..	754,556	435,850	242,741	336,310	114,499	39,778	1,923,734
Total ..	20,099,456	16,564,017	5,736,126	3,709,236	2,270,903	1,253,095	49,632,833

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES,
1932-33—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
I. Treatment of Non-metalliferous Mine and Quarry Products ..	£ 5,082	£ 5,106	£ 1,381	£ 331	£ 716	£ 539	£ 13,155
II. Bricks, Pottery, Glass, etc. ..	15,453	12,003	1,486	458	710	115	30,225
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	171,346	160,540	5,137	16,173	8,566	1,653	363,415
IV. Industrial Metals, Machines, Implements and Conveyances ..	204,877	126,744	21,872	33,739	7,757	5,822	400,811
V. Precious Metals, Jewellery and Plate ..	8,529	16,055	751	619	248	..	26,202
VI. Textiles and Textile Goods ..	698,784	1,072,905	40,802	26,378	18,431	78,911	1,936,211
VII. Skins and Leather ..	51,355	91,713	6,515	13,821	3,889	236	167,531
VIII. Clothing ..	1,335,718	2,169,318	262,308	201,513	141,575	27,763	4,138,195
IX. Food, Drink and Tobacco ..	660,320	523,320	109,581	63,491	44,044	31,886	1,432,642
X. Woodworking and Basketware ..	14,845	10,823	8,718	3,871	870	2,007	41,134
XI. Furniture, Bedding, etc. ..	51,871	51,862	9,862	5,466	4,483	839	124,383
XII. Paper, Stationery, Printing, Book-binding, etc. ..	341,288	289,856	83,858	42,599	33,663	12,127	803,391
XIII. Rubber ..	54,989	87,138	23,677	1,123	636	296	167,859
XIV. Musical Instruments ..	12,346	814	..	210	..	..	13,370
XV. Miscellaneous Products ..	53,156	35,026	3,304	4,667	4,201	545	100,899
XVI. Heat, Light and Power ..	3,433	1,029	5,643	13,162	736	177	24,180
Total ..	3,683,392	4,654,254	584,895	427,621	270,525	162,916	9,783,603

(iv) *Total and Average Earnings of Males and Females, 1928-29 to 1932-33.*

Particulars for the last five years are given in the table hereunder:—

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
1928-29. Amount paid ..	£ 33,508,975	£ 23,684,594	£ 8,351,045	£ 6,955,931	£ 3,970,744	£ 1,678,420	£ 78,149,709
Per cent. on total ..	86.94	80.38	91.79	91.41	90.80	88.57	85.89
Average per employee ..	£ 258.68	£ 241.51	£ 234.71	£ 239.74	£ 247.57	£ 217.89	£ 247.35
1929-30. Amount paid ..	£ 30,228,967	£ 22,688,606	£ 7,824,824	£ 5,997,151	£ 3,755,353	£ 1,818,960	£ 72,313,861
Per cent. on total ..	86.68	79.92	90.03	91.15	90.38	89.69	85.36
Average per employee ..	£ 260.41	£ 241.87	£ 232.69	£ 238.47	£ 250.17	£ 224.65	£ 247.85
1930-31. Amount paid ..	£ 21,605,432	£ 16,998,124	£ 6,487,633	£ 3,951,464	£ 2,601,295	£ 1,379,849	£ 53,023,797
Per cent. on total ..	85.73	79.58	91.40	90.45	90.11	89.53	84.90
Average per employee ..	£ 244.36	£ 221.68	£ 218.64	£ 217.40	£ 239.04	£ 211.86	£ 230.20
1931-32. Amount paid ..	£ 19,258,969	£ 15,105,354	£ 5,651,908	£ 3,393,638	£ 2,076,239	£ 1,251,161	£ 46,773,269
Per cent. on total ..	84.65	77.65	91.32	89.64	88.89	88.35	83.56
Average per employee ..	£ 225.99	£ 200.27	£ 204.08	£ 191.61	£ 213.43	£ 192.28	£ 210.26
1932-33. Amount paid ..	£ 20,099,456	£ 16,564,017	£ 5,736,126	£ 3,709,236	£ 2,270,903	£ 1,253,095	£ 49,632,833
Per cent. on total ..	84.51	78.06	90.75	89.66	89.36	88.49	83.53
Average per employee ..	£ 213.72	£ 193.84	£ 201.02	£ 188.62	£ 208.05	£ 188.75	£ 202.37

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES—
continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
1928-29. Amount paid .. £	5,035,712	5,782,173	746,579	653,882	402,346	216,507	12,837,199
Per cent. on total ..	13.06	19.62	8.21	8.59	9.20	11.43	14.11
Average per employee £	112.96	112.94	95.05	102.78	107.01	94.92	110.63
1929-30. Amount paid .. £	4,647,028	5,699,234	866,048	582,035	399,627	209,200	12,403,172
Per cent. on total ..	13.32	20.08	9.97	8.85	9.62	10.31	14.64
Average per employee £	114.61	113.44	116.92	103.02	108.65	92.53	112.98
1930-31. Amount paid .. £	3,594,858	4,361,367	610,473	417,404	285,589	161,371	9,431,062
Per cent. on total ..	14.27	20.42	8.60	9.55	9.89	10.47	15.10
Average per employee £	107.56	102.73	91.40	92.78	100.28	85.11	102.74
1931-32. Amount paid .. £	3,492,044	4,348,691	536,981	392,418	259,445	164,970	9,194,549
Per cent. on total ..	15.35	22.35	8.68	10.36	11.11	11.65	16.44
Average per employee £	98.74	94.43	81.61	81.21	92.20	83.11	94.18
1932-33. Amount paid .. £	3,683,392	4,654,254	584,895	427,621	270,525	162,916	9,783,603
Per cent. on total ..	15.49	21.94	9.25	10.34	10.64	11.51	16.47
Average per employee £	95.78	89.71	81.08	79.62	89.05	79.24	90.58

(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, AND OTHER FACTORY EMPLOYEES, AUSTRALIA, 1932-33.

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 ..	174,795	10,058	722,223	3,097	897,018	13,155	910,173
II. Bricks, pottery, glass, etc. ..	197,697	14,550	937,609	15,675	1,135,306	30,225	1,165,531
III. Chemicals, dyes, explosives, paint, oils and grease ..	525,257	94,607	1,472,159	268,808	1,997,416	363,415	2,360,831
IV. Industrial metals, machines, implements and conveyances ..	2,352,258	214,561	14,477,034	186,250	16,829,292	400,811	17,230,103
V. Precious metals, jewellery and plate ..	28,956	7,100	229,591	19,102	258,547	26,202	284,749
VI. Textiles and textile goods ..	522,452	107,399	1,918,156	1,828,812	2,440,608	1,936,211	4,376,819
VII. Skins and leather ..	157,652	17,907	1,071,163	149,624	1,228,815	167,531	1,396,346
VIII. Clothing ..	451,682	266,345	2,417,736	3,871,850	2,869,418	4,138,195	7,007,613
IX. Food, drink and tobacco ..	2,194,028	310,420	8,217,732	1,122,222	10,411,760	1,432,642	11,844,402
X. Woodworking and basketware ..	380,174	33,158	2,333,900	7,976	2,714,074	41,134	2,755,208
XI. Furniture, bedding, etc. ..	123,203	24,397	846,876	99,986	970,079	124,383	1,094,462
XII. Paper, stationery, printing and book-binding, etc. ..	859,394	193,262	3,733,010	610,129	4,592,404	803,391	5,395,795
XIII. Rubber ..	149,275	25,012	592,157	142,847	741,432	167,859	909,291
XIV. Musical instruments ..	32,518	7,366	88,600	6,004	121,118	13,370	134,488
XV. Miscellaneous products ..	97,516	19,801	404,296	81,098	501,812	100,899	602,711
XVI. Heat, light and power ..	460,102	23,465	1,463,632	715	1,923,734	24,180	1,947,914
Total	8,706,959	1,369,408	40,925,874	8,414,195	49,632,833	9,783,603	59,416,436
Average paid per employee ..	338.40	128.84	186.43	86.40	202.37	90.58	168.19

3. Value of Power, Fuel and Light Used.—(i) *Total Amount, 1932-33.* The expenditure by factories on power, fuel and light is of considerable importance; in 1932-33 it amounted to £10,477,073, an increase of £1,012,363 as compared with the previous year. Though the value of power, fuel and light has actually fallen during the depression it represented 8.8 per cent. of the value of production in 1932-33 against 8.3 per cent. in 1928-29. The following table shows the value of power, fuel and light used in the different classes of industry in 1932-33 :—

VALUE OF POWER, FUEL AND LIGHT USED(a) IN FACTORIES, 1932-33.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	128,856	133,097	23,665	23,285	35,369	38,070	382,342
II. Bricks, Pottery, Glass, etc. ..	180,605	136,938	16,443	29,309	20,326	7,227	390,848
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	176,160	160,420	11,243	40,369	28,763	4,378	421,333
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,526,614	376,281	181,967	262,883	48,294	280,789	2,676,828
V. Precious Metals, Jewellery and Plate ..	4,741	9,795	780	1,242	189	116	16,863
VI. Textiles and Textile Goods ..	161,630	327,160	21,378	22,388	11,402	42,125	586,083
VII. Skins and Leather ..	77,378	80,113	7,366	2,523	2,095	1,302	170,777
VIII. Clothing ..	76,895	120,383	13,087	11,430	5,931	2,027	229,753
IX. Food, Drink and Tobacco ..	753,976	700,991	354,375	165,268	115,875	56,160	2,146,645
X. Woodworking and Basketware ..	51,667	52,830	31,047	11,182	12,688	17,243	176,657
XI. Furniture, Bedding, etc. ..	22,025	22,151	7,957	5,404	2,626	1,567	61,730
XII. Paper, Stationery, Printing, Book-binding, etc. ..	119,423	151,463	31,709	14,639	11,511	6,137	334,882
XIII. Rubber ..	75,619	116,539	6,862	2,052	1,497	686	203,255
XIV. Musical Instruments ..	7,846	789	16	136	28	..	8,815
XV. Miscellaneous Products ..	20,016	19,817	936	1,672	1,048	421	43,910
XVI. Heat, Light and Power ..	1,407,930	545,364	197,062	171,148	300,446	4,402	2,626,352
Total ..	4,791,381	2,954,131	905,893	764,930	598,088	462,650	10,477,073

(a) Including lubricants and water.

(ii) *Total Amount, 1928-29 to 1932-33.* The next table gives the sums expended on power, fuel and light during the last five years :—

VALUE OF POWER, FUEL AND LIGHT USED IN FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
1928-29 ..	6,773,214	3,641,148	1,006,627	1,287,729	624,031	550,657	13,883,406
1929-30 ..	6,471,071	3,714,072	950,194	1,255,146	617,758	594,513	13,602,754
1930-31 ..	4,727,673	2,836,126	875,330	855,289	552,100	537,777	10,383,795
1931-32 ..	4,229,325	2,704,791	766,501	748,814	564,057	451,222	9,464,710
1932-33 ..	4,791,381	2,954,131	905,893	764,930	598,088	462,650	10,477,073

4. Value of Materials Used.—(i) *Total Amount, 1932-33.* 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 1932-33 was £175,148,548, representing 57.48 per cent. of the value of the final output. (See next sub-section.) The table

hereunder shows the value of the materials used in various classes of industry in each State :—

VALUE OF MATERIALS USED IN FACTORIES, 1932-33.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I Treatment of Non-metalliferous Mine and Quarry Products ..	939,373	532,732	112,729	77,351	101,576	70,655	1,834,416
II. Bricks, Pottery, Glass, etc. ..	365,639	206,014	30,286	50,940	48,678	10,585	712,142
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	4,852,612	3,595,268	305,573	952,833	1,304,500	116,845	11,127,631
IV. Industrial Metals, Machines, Implements and Conveyances ..	19,348,790	6,158,897	1,596,602	3,271,793	598,438	877,502	31,852,022
V. Precious Metals, Jewellery and Plate ..	61,549	226,955	6,442	11,319	3,088	281	309,634
VI. Textiles and Textile Goods ..	3,636,087	5,579,505	1,386,206	488,821	248,975	375,705	11,715,359
VII. Skins and Leather ..	3,065,913	2,636,933	378,254	120,266	77,081	16,067	6,294,514
VIII. Clothing ..	4,224,379	7,836,014	687,586	387,356	335,030	85,103	13,555,468
IX. Food, Drink and Tobacco ..	24,979,104	23,963,442	18,359,365	5,559,250	3,026,721	1,280,385	77,168,267
X. Woodworking and Basketware ..	2,124,762	1,362,840	935,747	558,404	399,821	208,840	5,590,414
XI. Furniture, Bedding, etc. ..	828,762	738,157	219,133	143,978	117,526	35,667	2,083,223
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,103,432	2,897,549	494,247	410,120	247,427	84,212	7,236,987
XIII. Rubber ..	999,526	1,112,629	87,234	41,469	17,053	4,261	2,262,172
XIV. Musical Instruments ..	114,077	34,046	1,064	3,946	338	..	153,441
XV. Miscellaneous Products ..	553,226	502,416	30,484	54,811	35,713	22,104	1,198,754
XVI. Heat, Light and Power ..	887,725	697,640	141,661	188,641	105,653	32,784	2,054,104
Total ..	70,084,956	58,081,097	24,772,613	12,321,268	6,667,618	3,220,996	175,148,548

(ii) *Total Amount, 1928-29 to 1932-33.* The following table gives the value of materials used in factories for the last five years :—

VALUE OF MATERIALS USED IN FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1928-29 ..	104,897,920	71,231,036	29,882,434	19,821,262	8,736,849	4,369,065	238,938,566
1929-30 ..	93,931,937	67,837,659	28,005,241	18,080,989	8,685,647	4,403,714	220,945,187
1930-31 ..	64,232,090	51,175,701	26,018,866	11,387,054	6,520,142	2,770,793	162,104,646
1931-32 ..	63,556,701	52,864,198	24,015,316	11,581,708	6,017,750	3,163,572	161,199,245
1932-33 ..	70,084,956	58,081,097	24,772,613	12,321,268	6,667,618	3,220,996	175,148,548

5. *Total Value of Output.*—(i) *Total, 1932-33.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1932-33 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 value 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 total output (see subsection 6 hereof) is the real value of factory production.

TOTAL VALUE OF OUTPUT.

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TOTAL VALUE OF OUTPUT OF FACTORIES, 1932-33.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of non-metalliferous mine and quarry products ..	1,919,273	1,349,749	284,842	232,260	266,209	242,777	4,295,110
II. Bricks, pottery, glass, etc. ..	1,537,626	1,054,693	155,231	215,355	183,411	40,478	3,186,794
III. Chemicals, dyes, explosives, paint, oils, and grease ..	9,467,553	6,382,992	512,864	1,492,163	1,712,226	173,922	19,741,720
IV. Industrial metals, machines, implements and conveyances ..	33,774,163	14,069,424	3,727,347	5,717,060	1,681,212	1,842,473	60,811,679
V. Precious metals, jewellery and plate ..	206,123	523,765	28,650	39,920	14,776	4,047	817,281
VI. Textiles and textile goods ..	6,325,897	10,282,202	1,677,319	659,494	370,053	817,366	20,132,325
VII. Skins and leather ..	4,146,436	3,859,066	573,419	198,194	135,402	27,266	8,939,783
VIII. Clothing ..	7,998,161	13,961,676	1,449,235	875,172	692,023	172,441	25,148,708
IX. Food, drink and tobacco ..	36,437,474	33,481,795	24,463,990	7,634,388	4,584,695	1,989,020	108,591,362
X. Woodworking and basketware ..	3,527,357	2,792,163	1,782,219	869,252	785,609	462,792	10,219,392
XI. Furniture, bedding, etc. ..	1,521,803	1,411,764	464,240	272,226	229,008	77,672	3,976,713
XII. Paper, stationery, printing, book-binding, etc. ..	7,249,759	6,537,980	1,540,239	969,260	721,892	275,206	17,294,336
XIII. Rubber ..	1,772,022	2,382,523	197,380	73,860	39,755	14,095	4,479,635
XIV. Musical instruments ..	241,589	69,329	3,748	10,670	6,874	..	332,210
XV. Miscellaneous products ..	1,143,485	1,005,673	83,269	126,242	77,103	61,501	2,497,273
XVI. Heat, light and power ..	7,177,046	2,820,635	1,491,351	1,555,182	827,300	362,033	14,233,547
Total ..	124,445,767	101,985,429	38,435,343	20,940,698	12,327,548	6,563,083	304,697,868

(ii) *Total 1928-29 to 1932-33.* The following statement shows the value of output of factories in each State in the five years ended 1932-33:—

TOTAL VALUE OF OUTPUT OF FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1928-29 ..	185,298,575	127,897,463	47,641,536	33,677,368	17,454,430	8,475,916	420,145,288
1929-30 ..	167,250,618	122,811,099	45,085,938	30,312,784	16,891,482	8,560,452	390,912,371
1930-31 ..	118,483,536	93,425,795	40,422,858	19,997,455	12,353,353	6,115,567	290,798,564
1931-32 ..	114,439,507	93,388,617	36,915,173	19,292,370	11,186,941	6,423,177	281,645,783
1932-33 ..	124,445,767	101,985,429	38,435,343	20,940,698	12,327,548	6,563,083	304,697,868

6. *Value of Production.*—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, a rule was adopted for the valuation of factory production by deducting from the value of the output the cost of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation. All these, except depreciation, are included in the items “Value of materials used” and “Value of fuel used” as defined above. On account of the difficulty in obtaining accurate figures for depreciation, it was agreed that no deduction should be made on this account until more satisfactory data were available. 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 should probably be about 8 per cent. on the capital value, or approximately £18,100,000 in 1932-33. Many miscellaneous expenses, also, such as insurance and advertising, were not taken into account. Hence, it must not be inferred that when wages and salaries are deducted from value of production, the whole of the “surplus” is available for interest and profit.

(i) *Total in Classes, 1932-33.* The following table shows the value of production in 1932-33 in each State for the various classes of factories :—

VALUE OF PRODUCTION, 1932-33.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	851,044	683,920	148,448	131,624	129,264	134,052	2,078,352
II. Bricks, Pottery, Glass, etc. ..	991,382	711,741	108,502	135,106	114,407	22,666	2,083,804
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	4,438,781	2,627,304	196,048	498,961	378,963	52,699	8,192,756
IV. Industrial Metals, Machines, Implements and Conveyances ..	12,898,759	7,534,246	1,948,778	2,182,384	1,034,480	684,182	26,282,829
V. Precious Metals, Jewellery and Plate ..	139,833	287,015	21,428	27,359	11,499	3,650	490,784
VI. Textiles and Textile Goods ..	2,528,180	4,375,477	269,735	148,285	109,676	399,530	7,830,883
VII. Skins and Leather ..	1,003,145	1,142,020	187,799	75,405	56,226	9,897	2,474,492
VIII. Clothing ..	3,696,887	6,005,279	748,562	476,386	351,062	85,311	11,363,487
IX. Food, Drink and Tobacco ..	10,704,394	8,817,362	5,750,250	1,909,870	1,442,099	652,475	29,276,450
X. Woodworking and Basketware ..	1,350,928	1,376,493	815,425	299,666	373,100	236,709	4,452,321
XI. Furniture, Bedding, etc. ..	671,016	651,456	237,150	122,844	108,856	40,438	1,831,760
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,026,904	3,488,968	1,014,283	544,501	462,954	184,857	9,722,467
XIII. Rubber ..	696,877	1,153,355	103,284	30,339	21,205	9,148	2,014,208
XIV. Musical Instruments ..	119,666	34,494	2,668	6,618	6,508	..	169,954
XV. Miscellaneous Products ..	570,243	483,440	51,849	69,759	40,342	38,976	1,254,609
XVI. Heat, Light and Power ..	4,881,391	1,577,631	1,152,628	1,195,393	421,201	324,847	9,553,091
Total ..	49,569,430	40,950,201	12,756,837	7,854,500	5,061,842	2,879,437	119,072,247

(ii) *Total and Averages, 1928-29 to 1932-33.* The value of production and the amount per employee 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.							
	£	£	£	£	£	£	£
1928-29 ..	73,627,441	53,025,279	16,752,475	12,568,377	8,093,550	3,556,194	167,623,316
1929-30 ..	66,847,610	51,259,368	16,130,503	10,976,649	7,588,077	3,562,225	156,364,432
1930-31 ..	49,533,773	39,413,968	13,528,662	7,755,112	5,281,111	2,807,497	118,310,123
1931-32 ..	46,653,481	37,870,628	12,133,356	6,961,848	4,605,134	2,808,383	110,981,830
1932-33 ..	49,569,430	40,950,201	12,750,837	7,854,500	5,061,842	2,879,437	119,072,247
PER EMPLOYEE.(a)							
	£	£	£	£	£	£	£
1928-29 ..	407	339	372	341	389	340	372
1929-30 ..	410	339	378	341	386	329	373
1930-31 ..	388	313	357	325	361	318	349
1931-32 ..	369	295	339	292	344	312	330
1932-33 ..	358	284	341	298	342	312	321
PER HEAD OF POPULATION.							
	£	£	£	£	£	£	£
1928-29 ..	29.64	30.11	18.79	21.97	19.52	16.43	26.39
1929-30 ..	26.54	28.82	17.85	19.17	17.82	16.25	24.31
1930-31 ..	19.46	21.98	14.74	13.50	12.25	12.60	18.21
1931-32 ..	18.17	20.95	13.04	12.07	10.62	12.42	16.94
1932-33 ..	19.13	22.56	13.56	13.55	11.59	12.63	18.03

(a) Including Working Proprietors.

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1932-33 was estimated at £304,697,868, there remained, after payment of £175,148,548, the value of the materials used, of £59,416,436 for salaries and wages, and of £10,477,073 for fuel, the sum of £59,655,811 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 1932-33 :—

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1932-33.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total value of Output.
VALUE AND COST, ETC.					
	£	£	£	£	£
New South Wales ..	70,084,956	4,791,381	23,782,848	25,786,582	124,445,767
Victoria ..	58,081,097	2,954,131	21,218,271	19,731,930	101,985,429
Queensland ..	24,772,613	905,893	6,321,021	6,435,816	38,435,343
South Australia ..	12,321,268	764,930	4,136,857	3,717,643	20,940,698
Western Australia ..	6,667,618	598,088	2,541,428	2,520,414	12,327,548
Tasmania ..	3,220,996	462,650	1,416,011	1,463,426	6,563,083
Australia ..	175,148,548	10,477,073	59,416,436	59,655,811	304,697,868

PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

	%	%	%	%	%
New South Wales ..	56.32	3.85	19.11	20.72	100.00
Victoria ..	56.95	2.90	20.81	19.34	100.00
Queensland ..	64.45	2.36	16.45	16.74	100.00
South Australia ..	58.84	3.65	19.76	17.75	100.00
Western Australia ..	54.09	4.85	20.62	20.44	100.00
Tasmania ..	49.08	7.05	21.57	22.30	100.00
Australia ..	57.48	3.44	19.50	19.58	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.—For some years prior to 1929-30 the capital value of land, buildings, plant and machinery had increased rapidly, but latterly these values have contracted from £245,695,920 in 1929-30 to £226,386,729 in 1932-33.

The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1932-33:—

VALUE OF LAND, BUILDINGS, PLANT, AND MACHINERY, 1932-33.

Value of—	N.S.W.	Victoria.	Q'land.	S.A.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	45,873,565	34,804,987	9,075,596	7,915,965	5,537,227	2,629,532	105,836,872
Plant and machinery	49,903,177	33,022,441	16,408,197	9,450,517	5,733,638	6,031,887	120,549,857
Total	95,776,742	67,827,428	25,483,793	17,366,482	11,270,865	8,661,419	226,386,729

The values recorded in this section are generally the values apportioned in the books of the individual firms. Depreciation on a generous scale has been allowed for in most cases. 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, Australia, 1928-29 to 1932-33.* The appended table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1928-29 to 1932-33 inclusive:—

VALUE OF LAND AND BUILDINGS.—AUSTRALIA.

Class of Industry	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
	£	£	£	£	£
I. Treatment of non-metalliferous mine and quarry products ..	2,545,729	2,565,373	2,561,418	2,392,522	2,396,967
II. Bricks, pottery, glass, etc. ..	3,019,723	3,020,979	2,405,960	1,992,755	2,214,761
III. Chemicals, dyes, explosives, paint, oils and grease ..	5,687,978	5,986,996	5,866,714	5,779,483	5,832,064
IV. Industrial metals, machines, implements and conveyances ..	28,293,793	28,957,846	27,679,331	25,582,740	25,632,777
V. Precious metals, jewellery and plate ..	659,734	658,936	557,662	510,746	490,511
VI. Textiles and textile goods ..	4,879,036	5,065,228	4,884,218	4,739,366	4,993,710
VII. Skins and leather ..	1,862,509	1,936,107	1,873,402	1,778,219	1,768,577
VIII. Clothing ..	13,094,838	12,539,163	10,697,755	9,334,049	8,894,673
IX. Food, drink and tobacco	26,385,520	26,996,483	26,760,444	26,676,269	26,645,408
X. Woodworking and basketware ..	4,633,459	4,514,789	3,866,980	3,601,684	3,506,606
XI. Furniture, bedding, etc.	2,955,609	2,733,336	2,283,528	1,978,384	1,869,195
XII. Paper, stationery, printing, bookbinding, etc.	9,526,079	9,974,734	9,764,623	9,187,481	9,048,534
XIII. Rubber ..	1,878,848	2,250,302	2,213,432	2,078,335	1,853,590
XIV. Musical instruments ..	466,710	444,875	391,144	313,313	212,112
XV. Miscellaneous products ..	895,617	923,403	1,037,221	1,028,693	1,014,793
XVI. Heat, light and power ..	7,870,879	9,499,679	9,366,777	9,616,285	9,462,594
Total ..	114,656,061	118,068,229	112,210,609	106,590,324	105,836,872

(ii) *Value in each State, 1932-33.* The following table gives similar information for each State for 1932-33 :—

VALUE OF LAND AND BUILDINGS, 1932-33.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of non-metalliferous mine and quarry products ..	1,099,589	781,670	111,070	152,880	61,764	189,994	2,396,967
II. Bricks, pottery, glass, etc. ..	1,203,620	648,700	76,225	154,567	117,662	13,987	2,214,761
III. Chemicals, dyes, explosives, paint, oils and grease ..	2,205,831	2,336,537	124,266	436,727	636,851	91,852	5,832,064
IV. Industrial metals, machines, implements and conveyances ..	12,646,570	7,131,439	1,652,651	2,326,255	1,212,164	663,698	25,632,777
V. Precious metals, jewellery and plate ..	155,028	251,994	24,826	27,443	16,605	14,615	490,511
VI. Textiles and textile goods ..	1,619,945	2,692,795	175,071	130,547	91,507	283,845	4,993,710
VII. Skins and leather ..	654,260	879,347	73,825	55,573	91,297	14,275	1,768,577
VIII. Clothing ..	3,263,046	4,127,764	475,597	548,791	360,030	119,445	8,894,672
IX. Food, drink and tobacco ..	9,797,549	7,971,288	4,230,630	2,262,877	1,529,277	853,787	26,645,408
X. Woodworking and basketware ..	1,448,060	955,135	417,184	264,859	287,604	133,764	3,506,606
XI. Furniture, bedding, etc. ..	697,680	711,243	184,278	128,505	110,797	36,692	1,869,195
XII. Paper, stationery, printing, book-binding, etc. ..	3,848,763	2,926,629	908,049	639,599	614,378	111,116	9,048,534
XIII. Rubber ..	890,586	760,920	76,288	65,860	43,916	16,020	1,853,590
XIV. Musical instruments ..	119,175	71,284	1,560	13,023	7,070	..	212,112
XV. Miscellaneous products ..	482,603	365,076	57,223	65,510	35,114	9,267	1,014,793
XVI. Heat, light and power ..	5,741,260	2,193,166	486,853	642,949	321,191	77,175	9,462,594
Total ..	45,873,565	34,804,987	9,075,596	7,915,965	5,537,227	2,629,532	105,836,872

(iii) *Value in each State, 1928-29 to 1932-33.* The total value of factory land and buildings for each year from 1928-29 to 1932-33 is given hereunder :—

VALUE OF LAND AND BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1928-29 ..	51,375,003	36,184,460	9,665,239	8,934,405	5,808,539	2,688,415	114,656,061
1929-30 ..	53,785,319	36,988,485	9,690,313	8,937,039	5,702,214	2,996,859	118,068,229
1930-31 ..	49,822,312	36,218,384	9,355,106	8,418,702	5,656,333	2,739,272	112,210,609
1931-32 ..	46,462,828	34,868,960	8,980,620	8,032,264	5,470,954	2,774,698	106,590,324
1932-33 ..	45,873,565	34,804,987	9,075,596	7,915,965	5,537,227	2,629,532	105,836,872

The decline of £750,000 during 1932-33 was not as marked as that shown for the two years immediately preceding. 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 last three years, however, there was a decline of £13 million, i.e., to £105.8 million.

3. Value of Plant and Machinery.—(i) *Total, Australia, 1928-29 to 1932-33.* The following table shows for Australia the approximate value of plant and machinery used in factories in each of the years specified :—

VALUE OF PLANT AND MACHINERY.—AUSTRALIA.

Class of Industry.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
	£	£	£	£	£
I. Treatment of non-metalliferous mine and quarry products ..	5,029,438	4,926,370	5,959,537	5,773,446	5,517,010
II. Bricks, pottery, glass, etc.	3,158,347	3,093,832	2,331,332	1,974,507	2,291,788
III. Chemicals, dyes, explosives, paint, oils and grease ..	5,566,514	5,814,275	5,738,555	5,729,195	5,537,025
IV. Industrial .. metals, machines, implements and conveyances ..	26,528,636	26,797,812	25,385,254	24,665,290	24,916,610
V. Precious metals, jewellery and plate ..	136,632	150,733	139,827	139,441	141,446
VI. Textiles and textile goods ..	5,986,828	6,181,931	5,935,393	5,638,054	5,743,596
VII. Skins and leather ..	783,886	902,544	862,012	916,685	905,709
VIII. Clothing ..	2,456,949	2,399,668	2,174,238	2,211,284	2,054,915
IX. Food, drink and tobacco ..	28,281,311	28,261,873	28,948,702	28,176,453	27,618,639
X. Woodworking and basketware ..	4,650,821	4,384,656	3,762,029	3,498,591	3,318,657
XI. Furniture, bedding, etc.	895,732	898,333	732,590	672,169	645,200
XII. Paper, stationery printing, bookbinding, etc.	8,422,027	8,317,935	7,768,633	7,310,058	7,111,322
XIII. Rubber ..	1,871,976	2,275,808	2,175,851	2,029,401	1,749,634
XIV. Musical instruments ..	218,124	210,365	189,854	162,496	93,230
XV. Miscellaneous products ..	326,758	349,512	493,597	507,754	545,511
XVI. Heat, light and power ..	30,378,809	32,662,044	31,900,293	32,124,553	32,359,565
Total ..	124,692,788	127,627,691	124,497,697	121,529,377	120,549,857

Up to the year 1929-30 there had been a steady and substantial net increase amounting in all to £15 million for the previous four years, or an annual average of £3.8 million. In 1930-31, however, there was a decrease of £3.2 million, and in 1931-32 a further decline of £2.9 million, while that of 1932-33 was reduced to £1.0 million.

(ii) *Value in each State, 1928-29 to 1932-33.* The figures in the previous table refer to Australia. In the following table results are shown for each State, and until 1929-30 the increase was general throughout the States. During the last three years, however, as pointed out above a total decrease of £7.1 million was recorded, the chief losses being in New South Wales and Victoria :—

VALUE OF PLANT AND MACHINERY.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1928-29 ..	51,365,710	33,724,910	16,719,349	10,382,257	6,154,115	6,346,447	124,692,788
1929-30 ..	53,515,368	35,022,535	15,723,983	10,286,674	6,112,186	6,966,945	127,627,691
1930-31 ..	50,865,884	34,771,687	16,100,004	10,182,855	6,134,766	6,442,501	124,497,697
1931-32 ..	50,277,992	33,481,615	15,743,919	9,624,637	5,945,468	6,455,746	121,529,377
1932-33 ..	49,903,177	33,022,441	16,408,197	9,450,517	5,733,638	6,031,887	120,549,857

(iii) *Value according to Industry, 1932-33.* The following table shows the value of plant and machinery used in factories in each State during 1932-33, classified according to industry :—

VALUE OF PLANT AND MACHINERY.—1932-33.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of non-metalliferous mine and quarry products ..	3,057,738	1,522,115	181,389	352,607	137,841	265,320	5,517,010
II. Bricks, pottery, glass, etc. ..	1,240,491	613,330	93,864	192,657	120,662	30,784	2,291,788
III. Chemicals, dyes, explosives, paint, oils and grease ..	1,491,438	2,346,017	94,383	798,623	750,206	56,358	5,537,025
IV. Industrial metals, machines, implements and conveyances ..	14,577,288	4,739,410	1,549,705	2,180,235	777,872	1,092,100	24,916,610
V. Precious metals, jewellery and plate ..	46,149	77,022	4,956	9,082	2,346	1,891	141,446
VI. Textiles and textile goods ..	1,808,224	3,161,604	189,481	174,295	99,474	310,518	5,743,596
VII. Skins and leather ..	331,397	456,028	56,231	21,638	33,341	7,074	905,709
VIII. Clothing ..	694,490	1,084,070	121,437	85,481	56,428	13,009	2,054,915
IX. Food, drink and tobacco ..	8,330,910	6,342,582	9,382,162	1,630,706	1,504,813	427,466	27,618,639
X. Woodworking and basketware ..	892,806	892,121	588,158	177,588	572,490	195,494	3,318,657
XI. Furniture, bedding, etc. ..	225,964	203,807	86,637	69,330	38,650	20,812	645,200
XII. Paper, stationery, printing, book-binding, etc. ..	2,954,811	2,507,379	603,869	550,593	394,004	100,666	7,111,322
XIII. Rubber ..	728,884	969,814	23,600	12,516	9,764	5,056	1,749,634
XIV. Musical instruments ..	74,361	13,601	113	4,312	843	..	93,230
XV. Miscellaneous products ..	215,165	278,634	14,480	16,971	13,900	6,361	545,511
XVI. Heat, light and power ..	13,233,061	7,814,907	3,417,732	3,173,883	1,221,004	3,498,978	32,359,565
Total ..	49,903,177	33,022,441	16,408,197	9,450,517	5,733,638	6,031,887	120,549,857

§ 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, so that the operations of individual concerns will not be disclosed.

The figures presented hereafter show, for nearly all the industries reviewed, some indication of recovery from the depression of the last few years.

2. Tanning, Currying and Leather Dressing.—(i) *Details for each State, 1932-33.* 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, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Aus- tralia.
Number of factories	62	53	15	9	6	2	147
Number of employees	1,250	1,956	318	121	86	35	3,766
Actual horse-power of engines used	3,114	4,371	615	356	(a)	(a)	8,945
Approx. value of land and buildings	£ 243,663	£ 435,737	£ 32,758	£ 19,961	(a)	(a)	£ 776,532
Approx. value of plant and machinery	£ 153,439	£ 274,604	£ 30,622	£ 16,062	(a)	(a)	£ 506,920
Wages paid	£ 233,199	£ 333,954	£ 46,332	£ 19,599	(a)	(a)	£ 652,574
Value of fuel used	£ 29,964	£ 41,786	£ 4,692	£ 1,074	(a)	(a)	£ 81,116
Value of materials used	£ 953,761	£ 1,200,988	£ 185,532	£ 45,164	(a)	(a)	£ 2,451,725
Total value of output	£ 1,395,781	£ 1,841,544	£ 277,989	£ 68,559	(a)	(a)	£ 3,688,550
Value of production	£ 412,056	£ 598,770	£ 87,765	£ 22,121	(a)	(a)	£ 1,155,709

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1928-29 to 1932-33.* The development of the tanning industry during the years stated is shown in the following table:—

TANNING, CURRYING AND LEATHER DRESSING.—AUSTRALIA.

Items.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories	142	143	148	146	147
Number of employees	3,688	3,572	2,885	3,336	3,766
Actual horse-power of engines used	8,379	8,224	7,948	8,312	8,945
Approx. value of land and buildings	£ 835,135	£ 824,415	£ 804,063	£ 763,950	£ 776,532
Approx. value of plant and machinery	£ 628,295	£ 603,083	£ 545,250	£ 519,579	£ 506,920
Wages paid	£ 828,078	£ 812,772	£ 595,155	£ 609,305	£ 652,574
Value of fuel used	£ 82,788	£ 81,660	£ 68,733	£ 74,653	£ 81,116
Value of materials used	£ 4,027,700	£ 3,071,761	£ 2,132,437	£ 2,359,842	£ 2,451,725
Total value of output	£ 5,593,736	£ 4,467,175	£ 3,183,138	£ 3,509,078	£ 3,688,550
Value of production	£ 1,483,268	£ 1,313,754	£ 981,968	£ 1,074,583	£ 1,155,709

A slight improvement is recorded for the years 1931-32 and 1932-33 as compared with 1930-31. The number employed increased by 450 and 430 respectively, while the value of output and production also showed small advances.

(iii) *Raw Material Used and Production, 1932-33.* 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, 1932-33.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides.. .. No.	454,631	754,828	104,565	40,544	40,496	6,600	1,401,664
Skins—							
Calf	464,414	573,040	120,951	1,478	362	..	1,160,245
Goat	405,079	380,200	16,660	616	636	..	803,191
Sheep	1,767,741	661,759	193,074	173,809	4,597	7,513	2,808,493
Marsupial .. ..	..	97,182	50,050	3,636	16,645	..	167,513
Reptile	9,820	49,992	..	..	..	..	59,812
Other	2,032,734	253,138	6	72	4,240	..	2,290,190
Bark used—							
Wattle ton	9,271	8,614	1,644	652	194	170	20,545
Other	114	2,167	61	107	482	..	2,931
Tanning extract used .. lb.	1,780,618	865,254	(a)	72,559	531,085	(a)	3,249,516
Leather made—							
Sole	9,092,689	12,674,369	2,634,064	836,187	1,110,967	252,190	26,600,466
Harness	1,096,160	470,052	613,713	301,013	153,830	..	2,634,768
Upholstery sq. ft.	..	1,162,206	..	8,735	..	..	1,170,941
Patent and other	6,275,183	11,529,905	1,410,528	276,783	48,240	..	19,540,639
Waxed kip and other .. lb.	52,335	68,292	89,271	99,870	88,799	..	358,567
Dressed from skins—							
Calf sq. ft.	3,528,796	4,472,125	978,501	7,446	1,404	..	8,988,272
Goat	1,671,402	1,389,524	89,488	2,066	4,610	..	3,157,090
Sheep	9,203,362	3,742,863	542,430	121,663	17,112	..	13,627,430
Marsupial .. ..	..	390,058	209,404	4,386	115,000	..	718,848

(a) Not available.

(b) Incomplete.

3. Soap and Candle Factories.—(i) *Details for each State, 1932-33.* 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 1932-33 :—

SOAP AND CANDLE FACTORIES, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories	25	19	10	4	4	2	64
Number of employees	938	657	166	163	56	30	2,010
Actual horse-power of engines used	1,251	677	156	278	(a)	(a)	2,453
Approx. value of land and buildings	£ 322,868	206,815	38,135	60,722	(a)	(a)	£ 656,181
Approx. value of plant and machinery	£ 253,555	242,830	24,063	68,148	(a)	(a)	£ 618,337
Wages paid	£ 184,281	111,949	30,724	27, 62	(a)	(a)	£ 309,397
Value of fuel used	£ 24,565	30,045	2,399	2,937	(a)	(a)	£ 62,545
Value of materials used	£ 682,601	469,737	87,258	93,413	(a)	(a)	£ 1,408,015
Total value of output	£ 1,259,828	962,194	164,120	173,292	(a)	(a)	£ 2,664,778
Value of production	£ 552,662	462,412	74,463	76,942	(a)	(a)	£ 1,194,218

(a) Particulars not available for publication. (b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1928-29 to 1932-33.* The next table gives similar particulars for the last five years for Australia :—

SOAP AND CANDLE FACTORIES.—AUSTRALIA.

Items.	1928-29. ^a	1929-30. ^a	1930-31. ^b	1931-32.	1932-33.
Number of factories	67	62	56	68	64
Number of employees	2,333	2,148	1,985	2,106	2,010
Actual horse-power and engines used	3,550	2,595	2,202	2,579	2,453
Approx. value of land and buildings	£ 701,125	681,818	650,000	667,948	656,181
Approx. value of plant and machinery	£ 718,611	654,647	604,717	617,932	618,337
Wages paid	£ 489,341	426,608	388,558	384,410	369,397
Value of fuel used	£ 100,555	82,239	71,395	72,439	62,545
Value of materials used	£ 2,133,004	1,797,688	1,448,411	1,486,457	1,408,015
Total value of output	£ 3,661,958	3,143,838	2,768,214	2,875,670	2,664,778
Value of production	£ 1,428,399	1,263,911	1,248,408	1,316,774	1,194,218

(a) Including other small establishments in Western Australia. (b) Excluding Western Australia.

(iii) *Raw Material Used and Production, 1928-29 to 1932-33.* 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.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
Tallow used cwt.	548,112	491,603	467,446	505,501	499,188
Alkali used	226,156	219,648	187,408	245,858	236,937
Coconut oil used	83,470	75,908	74,646	79,147	74,362
Soap made	1,130,947	1,026,373	976,771	964,476	924,403
Candles made	70,526	49,812	51,582	55,110	49,562

The output for the year 1932-33 comprised the following quantities of soap :—
Household, 755,283 cwt. ; toilet, 88,574 cwt. ; sand, 58,558 cwt. ; soft, 12,992 cwt. ;
and other, 8,996 cwt.

4. Saw-mills, etc.—(i) *Details for States, 1932-33.* 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, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	377	286	225	36	86	219	1,229
Number of employees ..	2,320	2,759	2,588	572	1,050	813	10,102
Actual horse-power of engines used ..	13,513	10,473	9,848	2,143	5,170	3,953	45,100
Approximate value of land and buildings .. £	696,860	444,910	312,771	151,452	222,951	68,989	1,897,933
Approximate value of plant and machinery .. £	541,505	602,965	503,254	109,165	540,350	152,669	2,449,908
Wages paid .. £	360,638	456,575	421,290	101,781	196,337	106,589	1,643,210
Value of fuel used .. £	26,808	25,072	22,870	5,144	10,181	12,386	103,361
Value of materials used .. £	1,134,356	594,449	750,515	343,933	320,124	141,825	3,285,202
Total value of output ..	1,789,706	1,333,061	1,375,991	509,423	639,598	320,301	5,968,080
Value of production .. £	628,542	712,640	602,606	160,346	309,293	166,090	2,579,517

(ii) *Total for Australia, 1928-29 to 1932-33.* The development of forest and other saw-mills, etc., since 1928-29 is shown in the following table. Joinery works have been excluded for the last three years :—

SAW-MILLS, FOREST AND OTHER.—AUSTRALIA.

Items.	1928-29. (a)	1929-30. (a)	1930-31.	1931-32.	1932-33.
Number of establishments ..	2,164	2,109	1,160	1,161	1,229
Number of employees ..	24,975	20,957	9,079	8,338	10,102
Actual horse-power of engines used ..	68,330	69,301	44,024	42,557	45,100
Approx. value of land and buildings .. £	3,877,292	3,802,885	1,989,580	1,902,367	1,897,933
Approx. value of plant and machinery .. £	4,184,260	3,950,279	2,821,431	2,611,864	2,449,908
Wages paid .. £	5,017,539	4,477,491	1,675,640	1,358,351	1,643,210
Value of fuel used .. £	204,033	202,329	99,321	95,573	103,361
Value of materials used .. £	10,139,429	8,471,366	2,955,028	2,651,895	3,285,202
Total value of output ..	18,178,153	15,605,706	5,512,150	4,820,537	5,968,080
Value of production ..	7,834,691	6,932,011	2,457,801	2,073,089	2,579,517

(a) Including joinery works.

The returns for 1932-33 show a slight improvement but the effect of the depression is reflected in the decreases in the returns for the previous four years. The saw-mill output of native timber declined from 740 million super. feet in 1925-26 to 485 million super. feet in 1929-30; to 267 million super. feet in 1930-31; and to 237 million super. feet in 1931-32; recovering in 1932-33 to 307 million super. feet. Further reference is made to the saw-milling industry in Chapter XXI.—Forestry.

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-shellors 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, 1932-33. The following table gives details respecting agricultural implement works in each State for the year 1932-33 :—

AGRICULTURAL IMPLEMENT WORKS, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	27	72	5	31	7	..	142
Number of employees	460	2,426	194	623	67	..	3,770
Actual horse-power of engines used ..	426	2,857	23	1,237	249	..	4,792
Approx. value of land and buildings £	101,851	285,085	41,325	142,737	42,221	..	613,219
Approx. value of plant and machinery £	54,536	295,095	12,022	180,174	10,469	..	552,296
Wages paid	£ 87,687	407,403	32,200	85,315	13,609	..	626,214
Value of fuel used	£ 4,384	37,066	3,522	7,633	629	..	53,234
Value of materials used	£ 101,538	537,588	52,393	83,527	4,913	..	779,959
Total value of output	£ 227,838	1,129,500	105,911	208,234	28,040	..	1,699,523
Value of production	£ 121,916	554,846	49,996	117,074	22,498	..	866,330

(iii) Total for Australia, 1928-29 to 1932-33. This industry declined considerably during the war years, but great progress was made thereafter. The fall in world prices of agricultural products resulted, however, in a considerable slackening in employment and output during the three years ended 1931-32 as compared with 1928-29. Details for the last five years are as follow :—

AGRICULTURAL IMPLEMENT WORKS.—AUSTRALIA.

Items.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories	150	148	148	139	142
Number of employees	5,480	4,463	3,043	2,634	3,770
Actual horse-power of engines used ..	4,808	4,737	4,349	4,094	4,792
Approx. value of land and buildings £	771,805	756,954	694,049	632,971	613,219
Approx. value of plant and machinery £	662,119	640,800	602,018	571,277	552,296
Wages paid	£ 1,227,720	985,369	607,421	441,102	626,214
Value of fuel used	£ 77,642	68,320	44,280	38,781	53,234
Value of materials used	£ 1,266,128	919,842	596,002	506,074	779,959
Total value of output	£ 3,167,332	2,397,562	1,473,173	1,146,849	1,699,523
Value of production	£ 1,823,562	1,409,406	832,891	601,994	866,330

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, and with one or two duplications of minor importance, the following figures may be accepted as reasonably accurate for the engineering industry, excluding the marine and electrical branches :—

ENGINEERING WORKS, (a) 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	256	329	44	52	84	19	784
Number of employees ..	4,399	4,732	847	745	751	163	11,637
Actual horse-power of engines used ..	7,661	7,710	1,480	1,288	608	336	19,083
Approximate value of land and buildings ..	£ 1,262,428	£ 1,185,685	£ 185,811	£ 110,938	£ 204,620	£ 61,560	£ 3,011,042
Approximate value of plant and machinery ..	£ 1,121,858	£ 1,238,609	£ 242,641	£ 127,609	£ 188,469	£ 35,217	£ 2,954,403
Wages paid ..	£ 842,471	£ 868,433	£ 162,941	£ 99,474	£ 144,075	£ 25,025	£ 2,142,419
Value of fuel used ..	£ 33,711	£ 61,098	£ 10,718	£ 10,092	£ 19,045	£ 3,259	£ 157,923
Value of materials used ..	£ 811,070	£ 1,030,530	£ 167,339	£ 133,827	£ 148,249	£ 18,765	£ 2,309,780
Total value of output ..	£ 2,120,938	£ 2,432,998	£ 445,887	£ 302,525	£ 391,279	£ 59,205	£ 5,752,832
Value of production ..	£ 1,256,157	£ 1,341,370	£ 267,830	£ 158,606	£ 223,983	£ 37,181	£ 3,285,129

(a) Excluding marine and electrical.

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 sub-section 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 1932-33 are as follow :—

SMELTING, CONVERTING, REFINING, AND ROLLING OF IRON AND STEEL, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	154	191	32	28	..	..	405
Number of employees ..	6,018	3,207	506	780	..	..	10,511
Actual horse-power of engines used ..	70,992	9,530	962	1,887	..	..	83,371
Approximate value of land and buildings ..	£ 1,820,440	£ 630,331	£ 74,266	£ 118,090	..	..	£ 2,643,127
Approximate value of plant and machinery ..	£ 5,246,766	£ 602,605	£ 128,147	£ 93,341	..	..	£ 6,070,859
Wages paid ..	£ 1,372,105	£ 520,162	£ 80,439	£ 111,813	..	..	£ 2,084,519
Value of fuel used ..	£ 849,985	£ 75,562	£ 11,693	£ 12,028	..	..	£ 949,274
Value of materials used ..	£ 6,647,996	£ 642,750	£ 91,697	£ 129,775	..	..	£ 7,512,218
Total value of output ..	£ 9,973,079	£ 1,562,820	£ 223,091	£ 281,606	..	..	£ 12,040,596
Value of production ..	£ 2,475,098	£ 844,508	£ 119,695	£ 139,803	..	..	£ 3,579,104

8. Railway and Tramway Workshops.—(i) *Details for each State, 1932-33.* 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 1932-33, have, however, been excluded :—

TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC.,(a) 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	35	21	12	14	20	5	107
Number of employees ..	11,631	5,226	2,735	2,529	1,563	285	23,969
Actual horse-power of engines used ..	12,922	5,493	3,177	3,620	4,260	360	29,832
Approximate value of land and buildings .. £	2,859,698	1,454,147	573,119	874,874	479,791	17,733	6,259,362
Approximate value of plant and machinery .. £	2,357,494	1,104,044	373,155	709,775	391,350	88,233	5,024,051
Wages paid .. £	2,351,277	1,068,850	532,047	471,328	319,086	60,356	4,802,944
Value of fuel used .. £	95,132	71,779	16,220	21,928	12,936	4,457	222,452
Value of materials used .. £	1,616,365	1,274,194	286,371	306,520	173,682	16,028	3,733,160
Total value of output .. £	4,468,937	2,777,045	924,912	945,754	585,061	76,549	9,778,258
Value of production .. £	2,757,440	1,431,072	622,321	557,306	398,443	56,064	5,822,646

(a) Government and Municipal.

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, 1928-29 to 1932-33.* The following table shows the development of railway and tramway workshops in Australia since 1928-29 :—

**TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC.—
AUSTRALIA.**

Items.	1928-29.	1929-30.	1930-31. (a)	1931-32. (a)	1932-33. (a)
Number of factories ..	122	120	112	108	107
Number of employees ..	31,658	29,339	26,055	24,017	23,969
Actual horse-power of engines used ..	32,316	31,600	31,952	34,050	29,832
Approx. value of land and buildings .. £	5,836,151	6,230,511	6,393,435	6,027,378	6,259,362
Approx. value of plant and machinery .. £	5,726,039	5,872,138	5,329,478	4,939,144	5,024,051
Wages paid ..	£ 8,058,200	7,599,005	6,033,954	5,095,173	4,802,944
Value of fuel used ..	£ 322,936	295,415	239,782	218,795	222,452
Value of materials used ..	£ 6,667,634	5,709,328	3,930,083	3,476,207	3,733,160
Total value of output ..	£ 17,072,699	15,615,590	11,626,861	9,782,841	9,778,258
Value of production ..	£ 10,082,129	9,610,847	7,456,996	6,087,839	5,822,646

(a) Government and Municipal only.

Up to recent years the growth of the railway and tramway systems resulted in corresponding activity in workshops engaged in the manufacture or repair of rolling-stock, etc. During the five years prior to 1929-30, the number of employees increased by more than 5,000, and the output rose from £12,384,177 to £17,072,699, but since that year there has been a decrease of over 5,000 employees, with a consequent heavy fall in output.

9. **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 classification of these works is not uniform throughout the States, and the tabulation is, therefore, somewhat unsatisfactory. The returns do not include particulars of plants used on mines :—

EXTRACTING AND REFINING OF NON-FERROUS METALS AND ALLOYS, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A. (a)	Tas.	Australia.
Number of factories	9	8	9	1	..	2	29
Number of employees	738	55	450	951	..	1,017	3,211
Actual horse-power of engines used ..	7,924	76	6,736	(b)	..	(b)	58,119
Approx. value of land and buildings £	201,427	20,595	176,602	(b)	..	(b)	846,128
Approx. value of plant and machinery £	511,149	9,025	513,762	(b)	..	(b)	2,507,091
Wages paid	£ 200,767	8,028	120,017	(b)	..	(b)	827,706
Value of fuel used	£ 172,683	1,697	122,636	(b)	..	(b)	744,939
Value of materials used	£ 3,528,584	98,214	666,066	(b)	..	(b)	6,943,476
Total value of output	£ 4,312,357	122,230	1,107,568	(b)	..	(b)	9,533,090
Value of production	£ 611,090	22,319	316,866	(b)	..	(b)	1,844,675

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

10. **Bacon-curing Factories.**—(i) *Details for each State, 1932-33.* The table hereunder gives particulars of factories engaged in bacon-curing in each State for the year 1932-33 :—

BACON-CURING FACTORIES, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	21	20	8	8	7	7	71
Number of employees	296	516	575	205	57	39	1,688
Actual horse-power of engines used ..	991	2,162	1,122	437	440	143	5,295
Approximate value of land and buildings ..	£ 119,107	232,415	168,946	59,987	24,758	11,732	616,945
Approximate value of plant and machinery ..	£ 41,196	115,395	97,353	31,185	10,861	6,789	302,779
Wages paid	£ 75,689	106,334	119,561	40,843	12,476	6,101	361,054
Value of fuel used	£ 12,646	19,297	17,296	3,943	2,459	2,496	56,137
Value of materials used	£ 585,721	564,829	565,323	237,275	110,637	32,918	2,096,703
Total value of output	£ 743,075	812,793	819,847	322,415	138,795	48,156	2,885,081
Value of production	£ 144,708	228,667	237,228	81,197	25,699	12,742	730,241

(ii) *Quantity and Value of Production.* The number of pigs killed and the quantity and value of the production of bacon-curing factories in each State for the year 1932-33 are given hereafter :—

BACON-CURING FACTORIES.—PIGS KILLED, AND PRODUCTION, 1932-33.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PIGS KILLED.							
Number	216,975	196,937	235,187	76,856	45,133	13,360	784,448
PRODUCTS.							
Bacon and ham .. lb.	19,250,875	16,425,732	16,701,874	6,593,717	3,453,994	1,108,954	63,535,146
Lard	519,978	905,067	893,216	243,630	161,760	67,851	2,791,502
VALUE.							
Bacon and ham .. £	636,595	609,306	601,413	219,591	109,710	39,816	2,216,431
Lard	10,038	27,728	17,093	5,230	3,341	1,651	65,081
Other products .. £	78,261	79,032	201,341	97,594	11,853	6,442	474,523

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

II. Butter, Cheese, and Condensed Milk Factories.—(i) Details for each State, 1932-33. The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1932-33 :—

BUTTER, CHEESE, AND CONDENSED MILK FACTORIES, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories	131	174	118	44	18	35	520
Number of employees	1,335	2,455	1,164	383	170	196	5,703
Actual horse-power of engines used	10,647	7,963	7,791	1,284	748	595	29,023
Approximate value of land and buildings £	646,729	1,033,145	542,878	171,459	87,499	51,760	2,533,470
Approximate value of plant and machinery £	777,147	1,028,545	683,378	120,230	83,766	56,152	2,749,218
Wages paid £	312,675	506,057	231,278	67,424	33,826	27,147	1,179,007
Value of fuel used £	83,156	145,473	45,741	17,079	10,178	9,627	311,254
Value of materials used £	5,426,582	6,730,394	4,170,204	887,452	436,546	345,040	17,996,224
Total value of output £	6,090,490	7,998,432	4,860,442	1,049,495	604,923	432,186	21,035,968
Value of production £	580,752	1,122,565	644,497	144,964	158,199	77,513	2,728,490

(ii) *Total for Australia, 1928-29 to 1932-33.* The progress of this industry during the last five years is set out hereunder :—

BUTTER, CHEESE, AND CONDENSED MILK FACTORIES.—AUSTRALIA.

Items.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories	523	509	506	513	520
Number of employees	5,441	5,276	5,129	5,488	5,703
Actual horse-power of engines used	24,219	25,223	26,843	29,131	29,023
Approx. value of land and buildings £	2,366,789	2,538,589	2,530,661	2,545,245	2,533,470
Approx. value of plant and machinery £	2,598,702	2,735,185	2,766,227	2,715,729	2,749,218
Wages paid £	1,289,000	1,291,259	1,228,100	1,202,209	1,179,007
Value of fuel used £	334,556	355,811	328,229	303,547	311,254
Value of materials used £	22,623,740	21,791,835	19,925,013	19,926,816	17,996,224
Total value of output £	26,365,690	25,153,846	23,200,709	22,743,620	21,035,968
Value of production £	3,407,394	3,006,200	2,947,467	2,519,257	2,728,490

(iii) *Quantity and Value of Production.* The next table shows the quantity and value of butter, cheese, and condensed milk produced, and the quantity of milk used in butter, cheese, and condensed milk factories in each State for the year 1932-33:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES.—PRODUCTION, 1932-33.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
MILK USED (,000 OMITTED).							
Butter factories .. gals.	233,551	317,382	204,271	33,791	19,256	19,942	828,193
Cheese factories .. "	7,478	8,854	12,860	5,689	150	1,105	36,136
Condensed milk factories .. "	(a)	13,827	(a)	..	(a)	..	(b) 17,316

PRODUCTS (,000 OMITTED).							
Butter lb.	123,625	139,920	100,028	17,162	9,461	8,479	398,675
Cheese "	7,054	9,074	13,080	6,092	135	1,107	36,542
Condensed and concentrated milk lb.	(a)	31,888	(a)	..	(a)	..	(b) 40,793
Powdered milk .. "	..	12,299	..	..	..	..	12,299

VALUE (,000 OMITTED).							
Butter £	5,569	6,518	4,512	865	541	401	18,406
Cheese £	234	323	322	165	4	27	1,075
Condensed and concentrated milk £	(a)	662	(a)	..	(a)	..	(b) 916
Powdered milk .. £	..	332	..	..	..	..	332

(a) Information 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.

12. 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 frozen beef, lamb, and mutton for export, while insulated space for the carriage of frozen produce is provided by steamship companies trading between Australia and other parts of the world. The attempt to export chilled meat instead of frozen meat has already been referred to in Chapter XVIII.—Pastoral Production.

MEAT AND FISH PRESERVING WORKS,(c) 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	6	24	8	1	4	2	45
Number of employees ..	275	1,221	1,550	(a)	237	2	3,285
Actual horse-power of engines used ..	278	5,242	6,543	(a)	637	(a)	b 12,705
Approximate value of land and buildings .. £	56,865	726,115	1,019,515	(a)	368,562	(a)	b2,172,323
Approximate value of plant and machinery .. £	19,519	398,460	566,862	(a)	383,529	(a)	b1,368,917
Wages paid .. £	57,810	255,163	453,350	(a)	60,368	(a)	b 826,661
Value of fuel used .. £	7,992	49,987	72,902	(a)	6,724	(a)	b 137,661
Value of materials used .. £	173,624	2,058,357	2,348,688	(a)	86,656	(a)	b4,668,848
Total value of output .. £	264,998	2,536,899	3,211,597	(a)	184,667	(a)	b6,200,914
Value of production .. £	83,382	428,555	790,007	(a)	91,287	(a)	b1,394,405

(a) Not available for publication.
meat extracts.

(b) Including South Australia and Tasmania.

(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.

13. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1932–33 is given in the table below :—

BAKERIES (INCLUDING CAKES AND PASTRY), 1932–33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories	427	509	226	106	81	66	1,415
Number of employees	2,938	2,843	1,498	697	367	842	9,185
Actual horse-power of engines used	3,164	2,078	869	697	441	589	7,838
Approximate value of land and buildings	£ 1,600,295	£ 1,049,848	£ 387,591	£ 238,675	£ 126,329	£ 321,956	£ 3,724,694
Approximate value of plant and machinery	£ 491,932	£ 378,451	£ 160,416	£ 81,501	£ 41,596	£ 56,645	£ 1,210,541
Wages paid	£ 545,809	£ 424,851	£ 222,567	£ 100,363	£ 56,082	£ 113,043	£ 1,462,715
Value of fuel used	£ 96,898	£ 81,792	£ 27,020	£ 15,108	£ 8,094	£ 15,665	£ 244,577
Value of materials used	£ 1,661,160	£ 1,425,518	£ 611,879	£ 298,654	£ 161,238	£ 250,592	£ 4,409,041
Total value of output	£ 2,819,752	£ 2,382,547	£ 1,216,775	£ 507,308	£ 296,336	£ 450,094	£ 7,672,812
Value of production	£ 1,061,694	£ 875,237	£ 577,876	£ 193,546	£ 127,004	£ 183,837	£ 3,019,194

(a) Includes Biscuits and Confectionery.

14. **Jam and Fruit Preserving, Pickles, Sauces, and Vinegar Factories.**—(i) *Details for each State, 1932–33.* The subjoined table gives particulars of factories included in this class for the year 1932–33 :—

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1932–33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	33	42	11	14	7	8	115
Number of employees	1,100	2,141	582	427	58	478	4,786
Actual horse-power of engines used	1,764	2,150	251	305	43	1,217	5,730
Approximate value of land and buildings	£ 275,141	£ 484,350	£ 37,372	£ 110,982	£ 16,232	£ 101,233	£ 1,025,310
Approximate value of plant and machinery	£ 128,070	£ 276,690	£ 28,856	£ 56,601	£ 4,283	£ 30,557	£ 525,057
Wages paid	£ 180,264	£ 327,027	£ 46,644	£ 55,014	£ 8,044	£ 92,579	£ 709,572
Value of fuel used	£ 18,386	£ 30,617	£ 2,888	£ 5,605	£ 603	£ 8,132	£ 66,231
Value of materials used	£ 707,414	£ 1,560,175	£ 269,066	£ 248,577	£ 33,874	£ 366,179	£ 3,185,285
Total value of output	£ 1,197,482	£ 2,360,398	£ 409,242	£ 364,005	£ 50,987	£ 536,923	£ 4,919,037
Value of production	£ 471,682	£ 769,606	£ 137,288	£ 109,823	£ 16,510	£ 162,612	£ 1,667,521

(ii) *Total for Australia, 1928–29 to 1932–33.* 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.	1928–29.	1929–30.	1930–31.	1931–32.	1932–33.
Number of factories	121	121	111	121	115
Number of employees	5,478	4,780	3,803	4,130	4,786
Actual horse-power of engines used	5,198	6,101	5,308	5,711	5,730
Approx. value of land and buildings	£ 1,058,445	£ 1,064,661	£ 984,464	£ 1,037,911	£ 1,025,310
Approx. value of plant and machinery	£ 601,229	£ 567,833	£ 546,362	£ 548,062	£ 525,057
Wages paid	£ 869,144	£ 873,508	£ 627,209	£ 617,912	£ 709,572
Value of fuel used	£ 78,422	£ 83,634	£ 61,588	£ 61,832	£ 66,231
Value of materials used	£ 3,030,762	£ 3,290,268	£ 2,354,034	£ 2,785,669	£ 3,185,285
Total value of output	£ 5,054,595	£ 5,178,438	£ 3,686,333	£ 4,210,988	£ 4,919,037
Value of production	£ 1,945,411	£ 1,804,536	£ 1,270,711	£ 1,363,487	£ 1,667,521

The progress of the jam-making industry was very marked during the war years, when large quantities were exported overseas for the supply of army requirements. With the loss of this trade on the termination of the war, production declined considerably, and in 1932-33 amounted to only 78,994,633 lb., compared with 142,290,204 lb. in 1918-19. The output of preserved fruit has greatly increased, and in 1932-33, 104,206,650 lb., a record quantity, were processed. The production of pickles and sauces showed a slight recovery after a period of low output.

(iii) *Production.* The following table shows the quantity and value of jams, pickles and sauces manufactured in each State in 1932-33 :—

JAMS, PRESERVED FRUIT, PICKLES AND SAUCES.—OUTPUT, 1932-33.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Jams lb.	14,834	34,983	6,561	7,046	671	14,900	78,995
Pulp "	1,346	19,027	690	4,958	399	5,573	31,993
Fruit, preserved ..	18,954	67,807	8,273	5,122	7	4,044	104,207
Pickles pints	708	855	236	636	(a)	(a)	(b) 2,596
Sauces "	5,591	6,105	476	1,930	(a)	(a)	(b) 14,619

VALUE.

Jams £	405,503	668,312	144,356	145,497	13,348	334,026	1,711,042
Pulp £	8,505	85,749	4,369	35,580	1,661	80,872	216,736
Fruit, preserved ..	323,905	1,093,375	209,695	84,328	140	104,453	1,815,896
Pickles £	28,719	28,333	8,924	22,569	(a)	(a)	(b) 94,014
Sauces £	258,878	194,518	14,694	61,521	(a)	(a)	(b) 544,932

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

15. *Confectionery Factories.*—(i) *Details for each State, 1932-33.* At the close of the year 1900 there were in New South Wales 16 establishments, with 706 employees, 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 1932-33 given hereunder show the remarkable development since 1900 :—

SUGAR CONFECTIONERY FACTORIES,(b) 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	66	114	10	18	9	4	221
Number of employees ..	2,718	2,624	436	350	231	16	6,375
Actual horse-power of engines used ..	3,968	5,952	886	579	249	57	11,691
Approximate value of land and buildings .. £	999,998	417,120	160,063	93,057	56,612	10,700	1,737,550
Approximate value of plant and machinery .. £	947,731	555,591	79,971	76,839	71,747	6,618	1,738,497
Wages paid .. £	375,967	355,673	54,694	36,197	34,061	911	857,503
Value of fuel used .. £	44,945	44,436	5,989	9,112	3,718	289	108,489
Value of materials used .. £	1,137,951	975,725	119,030	106,764	67,122	2,553	2,409,145
Total value of output .. £	2,194,652	1,687,066	249,274	171,054	166,210	4,819	4,473,075
Value of production .. £	1,011,756	666,905	124,255	55,178	95,370	1,977	1,955,441

(a) Ice Cream factories—Other Confectionery included in Bakeries. and Ice Cream.

(b) Including Chocolate

(ii) *Total for Australia, 1928-29 to 1932-33.* Particulars of the confectionery industry during the last five years are exhibited in the following table :—

SUGAR CONFECTIONERY FACTORIES.—AUSTRALIA.

Items.	1928-29. (a)	1929-30. (b)	1930-31. (c)	1931-32. (c)	1932-33. (c)
Number of factories	320	254	220	223	221
Number of employees	8,386	7,260	6,241	6,270	6,375
Actual horse-power of engines used	12,737	12,432	11,014	12,574	11,691
Approx. value of land and buildings £	2,201,885	2,007,492	1,788,358	1,797,490	1,737,550
Approx. value of plant and machinery £	2,368,208	2,248,470	1,987,197	1,882,742	1,738,497
Wages paid	£ 1,335,997	1,167,654	931,991	861,562	857,503
Value of fuel used	£ 183,787	167,526	118,245	111,789	108,489
Value of materials used	£ 3,998,006	3,549,673	2,590,032	2,276,592	2,409,145
Total value of output	£ 7,455,428	6,567,759	4,832,952	4,398,656	4,473,075
Value of production	£ 3,272,735	2,850,560	2,124,675	2,010,275	1,955,441

(a) Including Biscuits and Bakeries in Tasmania.

(b) Figures for Tasmania included in Bakeries.

(c) See note (a) in 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 so that notwithstanding some slight recovery in the last two years the number of persons employed in 1932-33 was less by 12 per cent., than in 1929-30. A similar comparison with the year 1928-29 is not possible because in this year bakeries and confectionery establishments in Tasmania were combined 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.

16. *Grain Milling.*—(i) *Details for States, 1932-33.* The following table shows the position of the flour-milling industry in each State in 1932-33 :—

GRAIN MILLING, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas. (a)	Australia.
Number of factories ..	52	39	10	37	21	9	168
Number of employees ..	1,251	1,049	358	404	389	104	3,533
Actual horse-power of engines used ..	7,676	6,066	1,530	3,352	3,452	540	22,616
Approximate value of land and buildings ..	£ 785,345	489,920	175,688	205,902	232,390	55,847	1,945,092
Approximate value of plant and machinery ..	£ 752,760	497,825	227,664	243,037	266,205	39,427	2,026,918
Wages paid ..	£ 288,993	227,850	81,512	76,185	77,552	23,096	775,188
Value of fuel used ..	£ 80,286	60,738	16,005	24,069	21,690	4,295	207,083
Value of materials used ..	£ 3,947,751	3,168,112	887,304	927,868	941,768	213,879	10,086,682
Total value of output ..	£ 4,979,890	3,800,975	1,176,470	1,157,273	1,162,560	264,274	12,541,442
Value of production ..	£ 951,853	572,125	273,161	205,336	199,102	46,100	2,247,677

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

(ii) *Production of Flour and By-products, 1928-29 to 1932-33.* 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)
1928-29 ..	449,011	390,286	54,433	137,202	119,550	21,277	1,171,759
1929-30 ..	432,472	364,682	61,102	138,115	120,595	19,899	1,136,865
1930-31 ..	449,439	369,966	71,994	136,346	132,090	19,863	1,179,698
1931-32 ..	490,662	396,257	77,376	155,215	131,165	19,540	1,270,215
1932-33 ..	525,651	425,930	91,498	129,225	127,574	19,372	1,319,250

(a) Tons of 2,000 lb.

The production of flour in Australia for the last year, viz., 1,319,250 tons, was valued at £9,747,770. In addition, 554,773 tons of bran and pollard, valued at £2,704,288, were made. The quantity of wheat ground was 63,139,635 bushels.

17. **Sugar Mills.**—(i) *Details for 1932-33.* The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1932-33. 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, 1932-33.

Items.	N.S.W.	Queensland.	Australia.
Number of factories	3	33	36
Number of employees	118	4,916	5,034
Actual horse-power of engines used ..	2,879	39,177	42,056
Approximate value of land and buildings £	134,000	806,574	940,574
Approximate value of plant and machinery £	535,823	6,625,262	7,161,085
Wages paid	£ 54,989	999,369	1,054,358
Value of fuel used	£ 8,324	82,778	91,102
Value of materials used	£ 254,676	7,470,533	7,725,209
Total value of output	£ 391,417	9,531,404	9,922,821
Value of production	£ 128,417	1,978,093	2,106,510

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. This latter quantity, however, is being reduced each year.

(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 compared with 1911:—

SUGAR MILLS.—NEW SOUTH WALES.

Items.	1911.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories ..	4	3	3	3	3
Number of employees ..	469	170	135	124	118
Cane crushed .. tons	147,799	174,110	160,209	179,153	156,818
Sugar produced ..	17,299	19,568	18,841	22,459	18,567
Molasses produced gals.	796,440	1,064,405	918,800	940,600	899,100

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. The figures relating to cane crushed and sugar produced shown hereunder, differ therefore from those given in Chapter XIX.—Agriculture, which refer to harvest years.

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

SUGAR MILLS.—QUEENSLAND, 1911 TO 1932-33.

Items.	1911.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories ..	49	35	35	35	33
Number of employees ..	4,295	5,459	5,138	5,114	4,916
Cane crushed .. tons	1,534,451	3,572,068	3,539,475	4,033,889	3,546,373
Sugar produced ..	173,296	513,551	514,296	579,222	512,781
Molasses—					
Sold to distillers					
and others .. gals.	2,393,669	5,854,398	4,529,352	3,282,351	2,904,242
Used as fodder ..	789,564	2,382,192	2,342,609	2,940,551	2,988,905
Used as manure ..	223,000	298,395	714,670	1,753,086	1,414,338
Run to waste ..	1,847,333	2,253,083	1,311,453	910,418	1,402,483
Burnt as fuel ..		4,202,588	4,354,350	7,075,965	6,182,769
In stock ..	1,197,626	871,292	1,206,050	1,350,769	898,524
Total Molasses ..	6,451,192	15,861,948	14,458,484	17,313,140	15,791,261

18. *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 1932-33 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 325,974 tons, for a yield of 324,812 tons of refined sugar, valued at £11,105,297.

19. *Breweries.*—(i) *Details for each State, 1932-33.* The following table gives particulars concerning breweries in each State:—

BREWERIES, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of breweries ..	5	9	8	7	8	4	41
Number of employees ..	778	1,081	328	236	384	81	2,888
Actual horse-power of engines used ..	5,489	4,011	1,652	1,497	2,023	643	15,315
Approx. value of land and buildings .. £	848,827	715,975	292,644	183,006	171,422	166,543	2,378,417
Approx. value of plant and machinery .. £	834,484	906,130	273,627	167,477	234,090	119,623	2,535,431
Wages paid .. £	211,132	349,544	91,515	75,157	109,909	21,114	858,371
Value of fuel used .. £	63,006	56,945	23,702	16,388	16,178	7,209	183,428
Value of materials used .. £	558,424	784,754	171,711	139,597	208,970	41,691	1,905,147
Total value of output .. £	1,931,357	1,809,977	468,222	356,009	536,830	133,528	5,235,923
Value of production .. £	1,309,927	968,278	272,809	200,024	311,682	84,628	3,147,348

(a) Includes Malt Works.

(ii) *Total for Australia, 1928-29 to 1932-33.* The next table shows the extent of this industry for the last five years :—

BREWERIES.—AUSTRALIA.

Items.	1928-29.	1929-30.	1930-31.	1931-32. (a)	1932-33. (a)
Number of breweries	45	45	43	41	41
Number of employees	3,874	3,590	3,109	2,882	2,888
Actual horse-power of engines used ..	14,217	14,800	15,558	15,347	15,315
Approx. value of land and buildings £	2,476,207	2,457,428	2,447,642	2,400,715	2,378,417
Approx. value of plant and machinery £	2,912,078	2,956,907	2,865,987	2,639,383	2,535,431
Wages paid	1,208,669	1,165,380	992,698	889,639	858,371
Value of fuel used	295,908	276,199	230,938	187,452	183,428
Value of materials used	3,310,659	2,887,251	2,146,331	1,889,923	1,905,147
Total value of output	7,921,010	7,258,933	5,828,193	5,133,025	5,235,923
Value of production	4,314,443	4,095,483	3,450,904	3,055,650	3,147,348

(a) Includes Malt Works in Tasmania.

During the period embraced in the above table, the reduction in the number of establishments was mainly due to amalgamations. The value of the output of breweries in Australia decreased from £7,921,010 in 1928-29 to £5,235,923 in 1932-33, and the quantity of ale and stout brewed fell from 73,723,234 to 52,519,329 gallons during the same period. During 1932-33 the industry slightly improved its position compared with the previous year. The consumption of ale and stout per head of the population remained fairly steady for several years at about 11.25 gallons. In 1929-30 the average fell to 10.25 gallons, in 1930-31 to 8.12 gallons, in 1931-32 to 7.32 gallons, and in 1932-33 increased slightly to 7.43 gallons.

(iii) *Materials Used and Production.* The table below shows the quantity of raw material used and the quantity and value of ale and stout brewed in each State as furnished by the Excise Branch of the Department of Trade and Customs during the year 1932-33.

BREWERIES.—MATERIALS USED AND PRODUCTION, 1932-33.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
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RAW MATERIAL USED.

Malt .. bushels	593,238	631,945	176,692	125,913	181,832	35,012	1,744,632
Hops .. lb.	542,768	600,744	148,968	126,724	152,843	26,134	1,598,181
Sugar .. cwt.	62,320	70,835	18,720	15,282	11,827	3,362	182,346

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

Malt .. bushels	32.86	31.51	33.74	32.82	41.39	37.24	33.22
Hops .. lb.	30.06	29.95	28.45	33.03	34.79	27.80	30.43
Sugar .. cwt.	3.45	3.53	3.57	3.98	2.69	3.58	3.47

ALE AND STOUT BREWED.

Quantity gallons	18,055,029	20,057,330	5,236,646	3,836,832	4,393,262	940,230	52,519,329
Value (a) £	1,931,187	1,844,416	468,222	351,565	498,628	124,197	5,218,215

(a) Exclusive of Excise duty.

20. 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 1932–33:—Materials used: barley 60,682 bushels; rye 1,179 bushels; molasses 602,350 cwt.; wine 8,904,671 gallons; raisins and currants 11,024 cwt.; spirits distilled from barley, malt and grain 445,545 gallons; from molasses 3,033,068 gallons; and from wine 1,492,582 gallons; Total 4,976,195 gallons. The quantity of spirits denatured during the year was 1,913,472 gallons.

21. Tobacco, etc., Factories.—(i) *Details for each State, 1932–33.* During the year 1932–33 there were thirty establishments in which the manufacture of tobacco, cigars, or cigarettes was carried on. There were no factories engaged in this industry in Tasmania.

TOBACCO, CIGAR, AND CIGARETTE FACTORIES, 1932–33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	8	13	6	2	1	30
Number of employees	2,232	1,685	60	14	151	4,142
Actual horse-power of engines used ..	1,164	904	(a)	(a)	(a)	2,143
Approx. value of land and buildings £	564,174	322,855	(a)	(a)	(a)	910,547
Approx. value of plant and machinery £	425,623	217,090	(a)	(a)	(a)	663,069
Wages paid	455,806	330,849	(a)	(a)	(a)	812,220
Value of fuel used	13,185	9,255	(a)	(a)	(a)	23,088
Value of materials used	3,392,469	1,365,769	(a)	(a)	(a)	4,823,564
Total value of output	4,342,083	2,123,016	(a)	(a)	(a)	6,659,780
Value of production	936,429	747,992	(a)	(a)	(a)	1,745,128

(a) Not available for publication. (b) Including Queensland, South Australia and Western Australia.

(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 1932–33 comprised—manufactured tobacco 53,340 lb., cigars 4,455 lb., and cigarettes 31,861 lb., while the quantities manufactured in Australian factories were respectively 14,788,145 lb., 253,985 lb., and 4,362,198 lb. The following tables show the extent of the industry in Australia for the last five years:—

TOBACCO, CIGAR, AND CIGARETTE FACTORIES.—AUSTRALIA.

Items.	1928–29.	1929–30.	1930–31.	1931–32.	1932–33.
Number of factories	23	23	22	24	30
Number of employees	4,137	4,096	4,154	4,110	4,142
Actual horse-power of engines used ..	1,946	1,986	2,009	2,133	2,143
Approx. value of land and buildings £	794,421	857,787	857,540	912,541	910,547
Approx. value of plant and machinery £	543,462	565,556	618,377	656,862	663,069
Wages paid	808,865	818,342	807,348	800,702	812,220
Value of fuel used	24,115	24,941	24,685	26,013	23,088
Value of materials used	4,427,806	5,111,443	4,831,775	5,448,396	4,823,564
Total value of output	6,812,701	7,523,114	6,842,394	7,299,324	6,591,780
Value of production	2,360,870	2,386,730	1,985,934	1,824,915	1,745,128

LEAF USED AND PRODUCTION.

Leaf used { Australian	1,000 lb.	978	1,192	3,129	2,349	2,722
{ Imported	"	18,158	17,983	13,327	14,076	14,103
Tobacco made	"	15,678	16,064	14,242	14,084	14,788
Cigars made	"	339	307	224	225	254
Cigarettes made	"	5,358	5,371	4,225	4,191	4,362

The production of locally-grown leaf for many years 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, with a resultant decrease in the amount of imported leaf used. In 1932-33, however, the quantity of local leaf used fell to 2.7 million lb. In this connexion, see item "Tobacco" in Chapter XIX.—Agricultural Production. The respective quantities of Australian and imported leaf used during 1932-33 were 2,721,893 lb., and 14,103,436 lb.

22. **Woollen and Tweed Mills.**—(i) *Details for each State, 1932-33.* 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 1932-33:—

WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1932-33.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories	18	35	16	9	5	6	89
Number of employees	4,777	8,417	698	712	172	1,430	16,206
Actual horse-power of engines used	8,213	16,726	1,897	1,788	555	2,407	31,586
Approx. value of land and buildings £	647,859	1,144,705	83,755	86,676	49,580	261,379	2,273,954
Approx. value of plant and machinery £	1,058,863	1,630,507	143,566	146,884	77,084	297,820	3,354,724
Wages paid £	701,125	1,106,309	103,124	86,953	28,249	170,402	2,196,162
Value of fuel used £	104,864	231,594	18,832	20,552	9,267	41,222	426,331
Value of materials used £	1,702,393	2,459,563	1,097,349	341,658	122,955	360,720	6,084,638
Total value of output £	2,968,106	4,600,520	1,300,988	470,469	181,102	786,740	10,307,925
Value of production £	1,160,849	1,909,363	184,807	108,259	48,880	384,798	3,796,956

(a) Woolscouring not included.

(ii) *Total for Australia, 1928-29 to 1932-33.* 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.	1928-29. (a)	1929-30. (a)	1930-31.	1931-32.	1932-33.
Number of factories	53	58	91	81	89
Number of employees	11,430	11,843	11,551	13,607	16,206
Actual horse-power of engines used	21,748	26,407	27,453	30,298	31,586
Approx. value of land and buildings	£ 1,984,124	2,124,486	2,305,858	2,232,015	2,273,954
Approx. value of plant and machinery	£ 3,487,795	3,553,493	3,567,670	3,381,308	3,354,724
Wages paid £	1,766,820	1,780,514	1,633,432	1,945,879	2,196,162
Value of fuel used £	270,995	298,212	301,428	322,532	426,331
Value of materials used £	4,363,482	3,758,577	3,756,418	4,893,757	6,084,638
Total value of output £	7,477,295	6,664,160	6,758,788	8,452,029	10,307,925
Value of production £	2,842,818	2,907,371	2,700,942	3,235,740	3,796,956

(a) Excluding Woolscouring.

(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 1932-33 was 21,127,415 yards. In New South Wales 7,177,751 yards, and in Victoria 12,756,182 yards of tweed and cloth were manufactured. The production of flannel amounted to 9,610,272 yards, while blankets, shawls, and rugs to the number of 1,141,008 were made. The output of yarn reported was 10,186,903 lb., most of which was produced in Victoria.

In addition to the woollen and tweed factories, there were 290 hosiery and knitting mills operating in Australia in 1932-33. These establishments provided employment for 13,884 persons, of whom 10,099 were females, and the value of their output amounted to £6,272,318.

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. There were twenty-six establishments treating cotton in Australia in 1932-33, and these employed 1,783 hands, while the value of the output was £1,187,246.

23. *Boot Factories.*—(i) *Boot and Shoe Factories, 1932-33.* The boot and shoe industry holds an important place 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 avoided 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, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	92	172	18	14	8	4	308
Number of employees ..	4,192	9,025	881	433	323	101	14,955
Actual horse-power of engines used ..	1,675	2,862	272	296	226	52	5,383
Approx. value of land and buildings .. £	381,309	702,380	66,380	72,585	37,011	11,495	1,271,160
Approx. value of plant and machinery .. £	228,326	395,145	39,943	23,193	18,750	4,153	709,510
Wages paid .. £	549,676	1,160,032	107,015	51,909	40,436	12,698	1,921,766
Value of fuel used .. £	14,357	32,806	2,117	1,461	1,145	572	52,458
Value of materials used .. £	929,561	1,978,374	125,671	79,620	85,150	21,899	3,220,275
Total value of output .. £	1,711,463	3,718,635	278,099	146,472	138,654	39,524	6,032,847
Value of production .. £	767,545	1,707,455	150,311	65,391	52,359	17,053	2,760,114

(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 1932-33 the number amounted to 1,210, in which 1,907 hands were employed. The sum of £103,664 was distributed in salaries and wages, and the output was valued at £597,322.

(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, 1932-33.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Boots and shoes pairs	3,826	8,057	548	395	346	68	13,240
Slippers ..	1,819	2,666	3	31	71	1	4,591
Uppers (a) ..	50	29	132	5	..	..	216
VALUE.							
Boots and shoes £	1,516,266	3,345,555	262,106	138,536	127,290	38,122	5,427,875
Slippers .. £	171,901	313,744	840	3,170	10,413	778	506,846
Uppers (a) .. £	12,451	8,661	14,853	2,446	280	52	38,743

(a) Made for other than factory use.

24. *Tailoring, and Slop Clothing Factories.*—(i) *Details for each State, 1932-33.* The importance of this industry in the several States is shown in the following table :—

TAILORING AND SLOP CLOTHING FACTORIES, 1932-1933.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	321	400	98	106	69	25	1,019
Number of employees ..	7,205	6,714	2,240	1,406	809	307	18,681
Actual horse-power of engines used ..	737	652	203	157	79	19	1,847
Approx. value of land and buildings .. £	1,029,584	812,956	207,538	221,278	148,106	73,718	2,493,180
Approx. value of plant and machinery .. £	93,052	101,074	28,636	19,354	11,654	3,646	257,416
Wages paid .. £	764,890	689,490	195,059	128,082	88,192	29,636	1,895,349
Value of fuel used .. £	16,600	19,662	5,641	4,155	1,968	805	48,831
Value of materials used .. £	1,313,437	1,707,164	307,289	143,783	121,104	42,996	3,635,773
Total value of output .. £	2,398,612	2,895,060	661,610	337,149	271,039	89,786	6,653,256
Value of production .. £	1,068,575	1,168,234	348,680	189,211	147,967	45,985	2,968,652

(ii) *Total for Australia, 1928-29 to 1932-33.* Details for the last five years are as follow :—

TAILORING, AND SLOP CLOTHING FACTORIES.—AUSTRALIA.

Items.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories ..	1,440	1,327	1,112	1,006	1,019
Number of employees ..	26,953	23,016	17,664	17,470	18,681
Actual horse-power of engines used ..	1,802	2,062	1,683	1,647	1,847
Approx. value of land and buildings .. £	4,389,473	4,151,355	3,272,248	2,654,382	2,493,180
Approx. value of plant and machinery .. £	337,057	328,676	278,696	256,976	257,416
Wages paid .. £	3,524,994	3,190,686	2,058,597	1,859,268	1,895,349
Value of fuel used .. £	65,100	63,011	50,717	47,798	48,831
Value of materials used .. £	5,092,739	4,473,949	3,119,083	3,253,800	3,635,773
Total value of output .. £	10,602,874	9,222,505	6,307,261	6,158,613	6,653,256
Value of production .. £	5,445,035	4,685,545	3,137,461	2,852,035	2,968,652

25. Dressmaking and Millinery Establishments.—(i) *Details for each State, 1932-33.* Particulars of dressmaking and millinery establishments are given separately in the following tables :—

DRESSMAKING ESTABLISHMENTS, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories	87	417	28	44	30	15	621
Number of employees	1,280	7,284	496	682	449	105	10,296
Actual horse-power of engines used	66	674	29	56	46	8	879
Approx. value of land and buildings £	191,061	966,273	42,968	66,152	57,954	13,965	1,338,373
Approx. value of plant and machinery £	10,528	96,859	8,312	7,145	5,599	1,075	129,518
Wages paid £	118,433	667,171	37,216	48,476	33,837	5,775	910,908
Value of fuel used £	1,654	13,693	584	1,209	737	181	18,058
Value of materials used £	122,172	1,572,750	49,069	57,132	48,207	6,333	1,855,663
Total value of output £	296,792	2,640,861	103,229	130,334	102,077	15,392	3,288,685
Value of production £	172,966	1,054,418	53,576	71,993	53,133	8,878	1,414,964

(a) Includes Millinery.

MILLINERY ESTABLISHMENTS, 1932-33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	42	72	12	9	8	(a)	143
Number of employees	842	1,688	219	340	70	(a)	3,159
Actual horse-power of engines used	75	148	15	17	5	(a)	260
Approx. value of land and buildings £	131,425	185,198	21,346	26,140	8,000	(a)	372,109
Approx. value of plant and machinery £	8,113	24,955	6,190	2,002	439	(a)	41,699
Wages paid £	77,976	148,475	20,054	23,580	6,882	(a)	276,967
Value of fuel used £	1,789	3,850	257	645	118	(a)	6,659
Value of materials used £	155,717	274,422	26,639	31,111	10,589	(a)	438,478
Total value of output £	292,179	515,294	53,584	68,878	19,839	(a)	949,824
Value of production £	134,673	237,022	26,688	37,122	9,782	(a)	444,687

(a) Included in Dressmaking.

(ii) *Total for Australia, 1928-29 to 1932-33.* 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.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.
Number of factories	807	816	724	731	764
Number of employees	14,778	12,709	10,300	11,347	13,455
Actual horse-power of engines used	1,182	971	907	1,049	1,139
Approx. value of land and buildings £	2,570,963	2,310,358	1,904,845	1,667,553	1,710,482
Approx. value of plant and machinery £	175,151	157,051	151,460	163,200	171,217
Wages paid £	1,532,734	1,399,256	1,066,438	1,045,554	1,187,875
Value of fuel used £	24,056	23,842	20,637	22,508	24,717
Value of materials used £	2,724,974	2,501,600	1,993,968	2,061,912	2,354,141
Total value of output £	5,227,620	4,753,906	3,680,918	3,770,217	4,238,509
Value of production £	2,478,590	2,228,464	1,666,293	1,685,797	1,859,651

26. **Printing and Binding Works.**—(i) *Details for each State, 1932–33.* Printing and binding works rank high in importance among the industries of Australia, and in 1932–33 afforded employment for about 22,000 employees, and paid more than £4,153,000 in salaries and wages, while the value of output amounted to £12,021,000.

The following table gives particulars of establishments engaged in general printing and bookbinding in each State for the year 1932–33. Government printing works are included, but establishments producing newspapers and periodicals are shown separately in the next table :—

GENERAL PRINTING AND BOOKBINDING ESTABLISHMENTS, 1932–33.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Australia.
Number of factories ..	258	371	68	89	60	16	862
Number of employees ..	5,087	5,135	1,542	1,402	637	253	14,056
Actual horse-power of engines used	3,882	4,033	705	1,304	609	184	10,717
Approx. value of land and buildings ..	£ 1,216,472	£ 1,332,215	£ 335,538	£ 511,244	£ 199,980	£ 39,458	£ 3,634,907
Approx. value of plant and machinery ..	£ 1,072,464	£ 953,317	£ 183,720	£ 430,927	£ 164,264	£ 35,133	£ 2,839,825
Wages paid ..	£ 853,957	£ 798,406	£ 260,227	£ 242,732	£ 106,315	£ 41,661	£ 2,303,298
Value of fuel used ..	£ 31,011	£ 29,621	£ 8,570	£ 10,414	£ 3,493	£ 1,886	£ 84,995
Value of materials used	£ 992,032	£ 982,397	£ 192,886	£ 305,451	£ 102,511	£ 24,154	£ 2,599,431
Total value of output	£ 2,489,585	£ 2,427,643	£ 601,158	£ 723,727	£ 285,055	£ 90,915	£ 6,618,083
Value of production ..	£ 1,466,542	£ 1,415,625	£ 399,702	£ 407,862	£ 179,051	£ 64,875	£ 3,933,657

(a) Includes Newspapers and Periodicals.

ESTABLISHMENTS PRODUCING NEWSPAPERS AND PERIODICALS, 1932–33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W.A.	Tas.	Australia.
Number of establishments ..	216	121	68	..	29	7	441
Number of employees ..	3,127	2,044	1,480	..	536	378	7,565
Actual horse-power of engines used	5,473	3,012	1,861	..	934	333	11,613
Approx. value of land and buildings ..	£ 1,624,745	£ 763,765	£ 489,033	..	£ 381,219	£ 71,658	£ 3,330,420
Approx. value of plant and machinery ..	£ 1,200,919	£ 764,137	£ 375,866	..	£ 216,397	£ 65,533	£ 2,622,852
Wages paid ..	£ 787,441	£ 514,227	£ 322,954	..	£ 140,493	£ 85,205	£ 1,850,320
Value of fuel used ..	£ 40,268	£ 23,306	£ 20,338	..	£ 7,328	£ 4,251	£ 95,491
Value of materials used	£ 922,321	£ 748,081	£ 245,796	..	£ 128,202	£ 60,058	£ 2,104,458
Total value of output	£ 2,367,117	£ 1,680,901	£ 790,631	..	£ 380,056	£ 184,291	£ 5,402,996
Value of production ..	£ 1,404,528	£ 909,514	£ 524,497	..	£ 244,526	£ 119,982	£ 3,203,047

(a) Included in General Printing and Bookbinding.

27. **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 1932-33 :—

ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	840	841	128	118	192	88	2,207
Number of employees ..	3,430	3,480	713	716	530	362	9,231
Actual horse-power of engines used	3,093	2,658	531	564	643	275	7,764
Approx. value of land and buildings ..	£ 1,644,524	£ 1,292,305	£ 310,283	£ 324,812	£ 263,237	£ 180,078	£ 4,015,239
Approx. value of plant and machinery ..	£ 326,355	£ 286,191	£ 60,156	£ 63,955	£ 63,637	£ 24,335	£ 824,629
Wages paid ..	£ 491,557	£ 504,330	£ 109,195	£ 90,661	£ 76,428	£ 40,953	£ 1,313,124
Value of fuel used ..	£ 33,382	£ 34,315	£ 6,471	£ 6,373	£ 5,568	£ 3,282	£ 89,391
Value of materials used ..	£ 506,466	£ 71,986	£ 21,064	£ 90,341	£ 76,126	£ 39,462	£ 805,445
Total value of output ..	£ 1,410,427	£ 937,883	£ 237,112	£ 252,252	£ 231,950	£ 116,970	£ 3,186,594
Value of production ..	£ 870,579	£ 831,582	£ 209,577	£ 155,538	£ 150,256	£ 74,226	£ 2,291,785

Particulars in regard to motor body building for the year 1932-33 are as follow :—

MOTOR BODY BUILDING, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	46	64	14	11	24	..	159
Number of employees ..	524	1,243	187	1,596	124	..	3,654
Actual horse-power of engines used	539	1,261	136	1,785	164	..	3,885
Approx. value of land and buildings ..	£ 195,713	£ 444,915	£ 44,516	£ 401,342	£ 44,776	..	£ 1,131,262
Approx. value of plant and machinery ..	£ 22,499	£ 184,590	£ 5,755	£ 303,920	£ 11,469	..	£ 528,233
Wages paid ..	£ 78,460	£ 233,755	£ 26,198	£ 297,460	£ 17,316	..	£ 653,189
Value of fuel used ..	£ 3,177	£ 7,387	£ 728	£ 13,124	£ 1,160	..	£ 25,576
Value of materials used ..	£ 85,800	£ 256,676	£ 27,962	£ 321,912	£ 18,304	..	£ 710,654
Total value of output ..	£ 195,426	£ 601,755	£ 67,134	£ 707,766	£ 51,277	..	£ 1,623,358
Value of production ..	£ 106,449	£ 337,692	£ 38,444	£ 372,730	£ 31,813	..	£ 887,128

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

MOTOR BODIES PRODUCED IN AUSTRALIA.

Items.	1927-28. (a)	1928-29. (a)	1929-30. (a)	1930-31. (a)	1931-32. (b)	1932-33. (b)
Motor Bodies—						
Number ..	58,955	72,193	46,409	10,417	6,323	13,532
Value ..	£ 3,436,674	£ 4,357,841	£ 3,118,987	£ 864,209	£ 450,510	£ 1,100,504

(a) Excluding Queensland and Tasmania.

(b) Excluding Tasmania.

28. 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, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	205	300	72	50	64	41	732
Number of employees ..	1,995	2,074	852	544	354	211	6,030
Actual horse-power of engines used ..	4,183	3,343	1,429	1,532	858	489	11,834
Approx. value of land and buildings ..	£ 468,432	£ 515,525	£ 148,212	£ 98,484	£ 100,760	£ 29,618	£ 1,361,111
Approx. value of plant and machinery ..	£ 180,522	£ 143,555	£ 71,764	£ 63,701	£ 33,338	£ 17,512	£ 510,392
Wages paid ..	£ 312,490	£ 253,981	£ 128,906	£ 70,364	£ 52,591	£ 23,797	£ 842,129
Value of fuel used ..	£ 17,006	£ 14,728	£ 6,659	£ 4,356	£ 2,204	£ 1,294	£ 46,447
Value of materials used ..	£ 488,690	£ 433,541	£ 181,675	£ 125,004	£ 91,777	£ 28,868	£ 1,349,495
Total value of output ..	£ 985,090	£ 896,012	£ 390,174	£ 237,024	£ 185,633	£ 64,172	£ 2,758,105
Value of production ..	£ 479,394	£ 447,743	£ 201,840	£ 107,464	£ 91,652	£ 34,070	£ 1,362,163

29. Electric Light and Power Works.—The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1928-29 the production of electric light and power has increased from 2,286,000,000 to 2,715,000,000 British units, or by more than 18 per cent. The value of land and buildings and plant and machinery remained practically the same as for the year 1929-30, indicating that no new works of importance were completed during 1932-33. Particulars for the year 1932-33 are as follow :—

ELECTRIC LIGHT AND POWER WORKS, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	116	87	48	42	66	6	365
Number of employees ..	1,890	1,244	705	1,019	382	92	5,332
Actual horse-power of engines used ..	385,692	202,656	55,576	124,508	70,014	80,013	918,459
Approx. value of land and buildings ..	£ 4,858,498	£ 1,833,246	£ 341,095	£ 600,009	£ 238,111	£ 27,427	£ 7,898,386
Approx. value of plant and machinery ..	£ 10,204,219	£ 6,262,802	£ 2,906,355	£ 1,987,175	£ 1,053,534	£ 3,340,195	£ 25,754,280
Wages paid ..	£ 504,071	£ 275,249	£ 179,708	£ 223,068	£ 92,761	£ 21,515	£ 1,296,372
Value of fuel used ..	£ 1,186,426	£ 424,145	£ 183,020	£ 135,965	£ 284,498	£ 256	£ 2,214,310
Total value of output ..	£ 5,097,863	£ 1,422,938	£ 920,412	£ 1,015,152	£ 698,264	£ 296,221	£ 9,450,850

30. Gas Works.—(i) *Details for each State, 1932-33.* Gas works are in operation in the majority of important towns in Australia. New South Wales returned seven coke factories and Queensland one, working as separate industries, but under the 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 1932-33 :—

GAS WORKS, 1932-33.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	46	37	16	6	4	2	111
Number of employees ..	1,085	699	284	535	98	76	2,777
Actual horse-power of engines used ..	5,106	2,956	881	1,903	(a)	(a)	b. 11,238
Approx. value of land and buildings ..	£ 882,762	359,920	145,758	42,940	(a)	(a)	b1,564,208
Approx. value of plant and machinery ..	£ 3,028,842	1,552,105	511,377	1,186,708	(a)	(a)	b6,605,285
Wages paid ..	£ 253,918	161,630	68,676	126,404	(a)	(a)	b. 651,542
Value of fuel used ..	£ 221,504	122,219	14,042	35,183	(a)	(a)	b. 412,042
Value of materials used ..	£ 719,136	629,789	118,129	143,295	(a)	(a)	b1,698,758
Total value of output ..	£ 2,079,183	1,397,697	570,939	540,030	(a)	(a)	b4,782,697
Value of production ..	£ 1,138,543	646,689	438,768	361,552	(a)	(a)	b2,671,897

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Coal Used and Production, 1932-33.* The following table gives details for the year 1932-33 :--

GAS WORKS.—COAL USED AND PRODUCTION, 1932-33.

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

Coal tons	502,252	298,536	78,979	73,887	19,772	10,966	984,392
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PRODUCTS.

Gas .. 1,000 cubic feet	9,366,507	5,550,860	1,224,747	1,120,686	389,157	172,750	17,824,707
Coke tons	325,322	180,950	45,876	40,556	10,555	3,304	612,623

VALUE.

Gas £	1,403,580	991,125	522,361	422,065	107,912	54,147	3,501,190
Coke £	352,804	273,716	33,607	77,493	16,119	6,181	759,920

The production of gas increased from 20,618,915,000 cubic feet in 1928-29 to 20,929,569,000 cubic feet in 1929-30, fell to 17,761,521,000 cubic feet in 1931-32, and rose slightly to 17,825,000,000 cubic feet in 1932-33.