

## CHAPTER XXV.

## 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.

I. 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.
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
1933-34 ..	7,818	8,896	2,345	1,733	1,606	899	23,297

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 This classification which was introduced during the year 1930-31 superseded the grouping which had been in use since 1902.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.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	374	361	349	374	404
II. Bricks, Pottery, Glass, &c. . . . .	520	368	313	362	409
III. Chemicals, Dyes, Explosives, Paint, Oils, and Grease .. .. .	493	515	544	547	589
IV. Industrial Metals, Machines, Implements, and Conveyances .. .. .	5,469	5,362	5,376	5,520	5,789
V. Precious Metals, Jewellery and Plate .. .. .	264	242	240	242	255
VI. Textiles and Textile Goods .. .. .	557	520	515	555	588
VII. Skins and Leather .. .. .	451	460	485	487	511
VIII. Clothing .. .. .	4,186	3,915	3,822	3,917	4,052
IX. Food, Drink and Tobacco .. .. .	4,274	4,251	4,344	4,421	4,583
X. Woodworking and Basketware .. .. .	2,444	2,144	2,077	2,198	2,243
XI. Furniture, Bedding, &c. .. .. .	1,071	954	910	947	995
XII. Paper, Stationery, Printing, Bookbinding, &c. .. .. .	1,592	1,601	1,611	1,624	1,712
XIII. Rubber .. .. .	245	267	279	304	305
XIV. Musical Instruments .. .. .	54	46	41	35	32
XV. Miscellaneous Products .. .. .	256	274	285	312	333
XVI. Heat, Light and Power .. .. .	450	471	466	476	497
Total .. .. .	22,700	21,751	21,657	22,330	23,297

The number of factories in operation declined each year from 1928-29 to 1931-32, but the figures for 1932-33 and 1933-34 show a recovery in every State except Tasmania in the last-named year and in all classes of industry except the manufacture of musical instruments. The number of factories in Australia during 1933-34, viz., 23,297 is the greatest number yet recorded. Although not a true index, this expansion following the economic depression must be regarded as an indication of confidence in the future. The number of persons employed, however, is still below that of more prosperous times as mentioned hereafter.

3. Classification of Factories, States, 1933-34.—The following table shows the number of factories in each State in 1933-34, classified according to the nature of the industry :—

FACTORIES.—CLASSIFICATION, 1933-34.

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 ..	130	161	34	32	30	17	404
II. Bricks, Pottery, Glass, &c. ..	183	104	33	39	38	12	409
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	235	223	39	43	27	22	589
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,059	2,278	442	410	436	164	5,789
V. Precious Metals, Jewellery and Plate ..	67	131	21	17	13	6	255
VI. Textiles and Textile Goods ..	150	342	39	31	17	9	588
VII. Skins and Leather ..	188	228	38	26	23	8	511
VIII. Clothing ..	1,406	1,893	241	269	188	55	4,052
IX. Food, Drink and Tobacco ..	1,336	1,438	727	468	362	252	4,583
X. Woodworking and Basketware ..	748	643	319	127	147	259	2,243
XI. Furniture, Bedding, &c. ..	306	383	110	68	78	50	995
XII. Paper, Stationery, Printing, Book-binding, &c. ..	613	661	176	109	128	25	1,712
XIII. Rubber ..	104	120	17	30	24	10	305
XIV. Musical Instruments ..	10	13	3	3	3	..	32
XV. Miscellaneous Products ..	116	146	37	13	17	4	333
XVI. Heat, Light, and Power ..	167	132	69	48	75	6	497
Total .. ..	7,818	8,896	2,345	1,733	1,606	899	23,297

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

i. States, 1933-34.—The following table shows, for each State, the number of factories classified according to the number of hands employed in 1933-34 :—

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1933-34.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	2,789	3,471	695	480	816	318	8,569
4 ..	699	746	267	197	83	120	2,112
5 to 10 ..	1,941	2,188	672	551	376	289	6,017
11 to 20 ..	1,040	1,030	318	233	163	94	2,878
21 to 50 ..	799	877	223	176	115	52	2,242
51 to 100 ..	298	314	86	62	37	13	810
Over 100 ..	252	270	84	34	16	13	669
Total .. ..	7,818	8,896	2,345	1,733	1,606	899	23,297

A marked change has taken place, during the last decade, in the distribution of factories according to the number of employees. In 1923-24 of a total of 20,189 factories reported, 6,451 or 32.0 per cent. employed less than five persons whereas in 1933-34 the number of factories employing less than five persons had increased to 10,681 representing 46 per cent. of a total of 23,297 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

CLASSIFICATION OF FACTORIES ACCORDING TO NUMBER OF EMPLOYEES. 797

number of employees—owing to dismissals because of business depression. The figures for 1933-34, however, show a gratifying recovery in the larger factories, the number of factories employing upwards of 100 hands having risen to 669 factories employing 181,634 hands from 606 factories employing 163,462 persons in 1932-33. 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, 1933-34.

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 ..	5,454	6,136	1,447	1,039	1,513	683	16,272
4 ..	2,796	2,984	1,068	788	332	480	8,448
5 to 10 ..	13,296	15,004	4,589	3,733	2,498	1,987	41,107
11 to 20 ..	15,263	15,280	4,681	3,362	2,352	1,360	42,298
21 to 50 ..	25,430	27,832	6,938	5,593	3,623	1,604	71,020
51 to 100 ..	20,557	21,736	6,017	4,290	2,606	842	56,048
Over 100 ..	74,995	69,864	17,461	11,481	3,829	4,004	181,634
Total ..	157,791	158,836	42,201	30,286	16,753	10,960	416,827
Av. per F'cty	20.18	17.85	18.00	17.48	10.43	12.19	17.89

2. Australia, 1929-30 to 1933-34.—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 declined to 40.8 per cent. but during 1933-34 it had recovered to 43.6 per cent.

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.
1929-30—								
Number ..	18,688	110,704	3,338	136,457	674	183,386	22,700	430,547
Average per establishment ..	5.92	5.92	40.88	40.88	272.09	272.09	16.28	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	5.55	40.33	40.33	265.20	265.20	16.28	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	5.33	40.58	40.58	266.70	266.70	16.17	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	5.43	41.19	41.19	269.74	269.74	17.15	17.15
Percentage on total ..	84.57	26.76	12.72	30.56	2.71	42.68	100.00	100.00
1933-34—								
Number ..	19,576	108,125	3,052	127,068	669	181,634	23,297	416,827
Average per establishment ..	5.52	5.52	41.63	41.63	271.50	271.50	17.89	17.89
Percentage on total ..	84.03	25.94	13.10	30.48	2.87	43.58	100.00	100.00

## § 3. Power used in Factories.

1. States, 1933-34.—The following table shows the number of factories using steam, gas, oil, electricity, or water power, and the average horse-power used in 1933-34 :—

## FACTORIES.—AVERAGE HORSE-POWER USED, 1933-34.

State.	Number of Establishments.			Average Horse-power Used.					
	Using Power.	Others.	Total.	Steam.	Gas.	Oil.	Elec- tricity.	Water.	Total.
	No.	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
N.S.W. ..	7,467	351	7,818	486,945	9,786	43,407	312,721	16,150	869,009
Victoria ..	8,238	658	8,896	190,247	7,878	15,097	184,004	15,960	413,186
Queensland ..	2,038	267	2,345	112,040	11,214	14,417	46,243	125	184,039
S. Australia ..	1,576	157	1,733	131,541	5,930	10,849	47,893	..	196,213
W. Australia ..	1,491	115	1,606	58,215	4,048	15,520	30,194	..	107,977
Tasmania ..	846	53	899	5,714	41	1,535	60,498	78,903	146,691
Australia ..	21,696	1,601	23,297	984,702	38,897	100,825	681,553	111,138	1,917,115

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, 1929-30 to 1933-34.—The following table shows the average horse-power used in factories in Australia in each of the last five years :—

## FACTORIES.—AVERAGE HORSE-POWER USED, AUSTRALIA.

Year.	Number of Establishments.		Average Horse-power Used.						Total (a).	
	Using Power.	Others.	Steam.	Gas.	Oil.	Elec- tricity.	Water.	Gross.	Less Heat Light and Power Works.	
	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	
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	41,415	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	
1933-34 ..	21,696	1,601	984,702	38,897	100,825	681,553	111,138	1,917,115	884,094	

(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 26,000 horse-power per annum or about 3.5 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 1933-34 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 average horse-power<sup>1</sup> used in factories, by classes, in each State during the year 1933-34:—

**FACTORIES.—HORSE-POWER USED IN EACH CLASS, 1933-34.**

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus-tralia.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	24,044	15,521	3,881	2,646	2,229	8,977	57,298
II. Bricks, Pottery, Glass, &c. ..	13,122	11,264	1,386	2,693	1,695	483	30,643
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	11,754	12,233	1,770	4,929	2,410	436	33,532
IV. Industrial Metals, Machines, Implements and Conveyances ..	155,962	40,713	20,806	16,128	8,939	42,125	284,673
V. Precious Metals, Jewellery and Plate ..	650	1,143	72	168	41	22	2,096
VI. Textiles and Textile Goods ..	13,349	25,693	2,443	2,196	867	2,475	47,023
VII. Skins and Leather ..	6,504	7,025	951	415	457	172	15,524
VIII. Clothing ..	5,956	8,517	824	730	631	106	16,764
IX. Food, Drink and Tobacco ..	74,094	57,079	65,822	15,943	12,940	6,104	231,982
X. Woodworking and Basket-ware ..	23,950	18,133	12,031	4,989	6,595	5,691	71,389
XI. Furniture, Bedding, etc. ..	6,394	4,609	1,872	1,980	1,118	607	16,580
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	13,117	17,286	3,158	1,828	2,201	534	38,124
XIII. Rubber ..	17,197	15,657	665	152	68	72	33,811
XIV. Musical Instruments ..	490	124	12	99	2	..	727
XV. Miscellaneous Products ..	1,666	1,637	116	232	160	117	3,928
Total less Class XVI. ..	368,249	236,634	115,809	55,128	40,353	67,921	884,094
XVI. Heat, Light and Power ..	500,760	176,552	68,230	141,085	67,624	78,770	1,033,021
Grand Total. . .	869,009	413,186	184,039	196,213	107,977	146,691	1,917,115

**§ 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 paragraph 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 1929-30 to 1933-34 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, followed by a further increase in 1933-34 to 405,909. Allowing for the increase in the population the relation of the factory employees in 1933-34 to the number in 1929-30 was:—New South Wales, 91.2 per cent.; Victoria, 100.9 per cent.; Queensland, 89.4 per cent.; South Australia, 90.0 per cent.; Western Australia, 79.6 per cent.; Tasmania, 86.6 per cent.; and Australia 93.6 per cent.:—

#### FACTORIES.—EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
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#### AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).

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
1933-34 ..	154,061	156,334	40,083	29,486	16,163	9,782	405,909

#### PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
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
1933-34 ..	37.96	38.52	9.87	7.26	3.98	2.41	100.00

#### PER 10,000 OF POPULATION.

1929-30 ..	647	849	472	562	461	493	652
1930-31 ..	501	703	413	416	339	396	521
1931-32 ..	492	711	385	413	309	398	514
1932-33 ..	535	796	397	455	339	405	561
1933-34 ..	590	857	422	506	367	427	610

2. Rates of Increase, 1929-30 to 1933-34.—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.
	%	%	%	%	%	%	%
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
1933-34 .. ..	11.22	8.24	3.45	11.91	9.10	5.95	9.49

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

3. Employees in Classes of Industry, Australia, 1929-30 to 1933-34.—The table hereunder gives the average number of persons employed in factories under each industrial group in Australia in the years 1929-30 to 1933-34 inclusive :—

FACTORY EMPLOYEES.—CLASSES, AUSTRALIA.

Class of Industry.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
I. Treatment of non-metalliferous mine and quarry products ..	6,889	4,536	3,885	4,534	5,507
II. Bricks, pottery, glass, etc. ..	11,085	5,684	5,200	6,816	9,020
III. Chemicals, dyes, explosives, paint, oils and grease .. ..	13,364	11,784	12,058	12,655	13,310
IV. Industrial metals, machines, implements and conveyances ..	116,869	89,506	82,688	94,598	107,398
V. Precious metals, jewellery and plate ..	2,073	1,701	1,670	2,029	2,371
VI. Textiles and textile goods .. ..	29,383	26,228	30,553	34,974	36,790
VII. Skins and leather .. ..	7,663	6,588	7,846	8,865	9,513
VIII. Clothing .. ..	74,002	60,069	61,864	67,311	72,260
IX. Food, drink and tobacco .. ..	67,189	62,294	62,455	64,670	67,668
X. Woodworking and basketware .. ..	24,169	15,628	14,319	17,044	19,927
XI. Furniture, bedding, &c. .. ..	11,899	7,770	7,249	8,108	9,562
XII. Paper, stationery, printing, book-binding, etc. .. ..	33,095	29,441	29,052	29,955	31,937
XIII. Rubber .. ..	6,804	4,592	5,051	5,822	6,561
XIV. Musical instruments .. ..	1,658	1,067	800	749	572
XV. Miscellaneous products .. ..	3,172	3,388	3,827	4,488	5,122
XVI. Heat, light and power .. ..	9,880	8,567	8,141	8,109	8,391
Total .. ..	419,194	338,843	336,658	370,727	405,909

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, representing an increase of 34,000 persons compared with 1931-32. This improvement continued during 1933-34, when the number of persons employed increased by 35,000 or a total increase of 69,000 or 20 per cent. for the two years. 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 1933-34 and 1929-30 reveals that the industries connected with building, i.e., Class II. Bricks, etc., Class X. Woodworking, and Class XI. Furniture, Bedding etc., which were severely affected by the economic crisis, are now showing considerable improvement in the number of persons employed. Industries least affected were those connected with Food, Drink, etc., Chemicals, Dyes, etc., and Paper, Stationery, etc. Class VI. Textiles and Textile Goods, which showed a considerable improvement in 1931-32 and 1932-33, again improved in 1933-34, the increase in employment being 1,700. Class V. Precious Metals, etc., Class VII. Skins and Leather and Class XV. also show slight increases since 1929-30.

4. Employees in Classes of Industry, States, 1933-34.—The following table gives a classification of employees in manufacturing industries in each State in 1933-34 :—

FACTORY EMPLOYEES.—CLASSES, 1933-34.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia.
I. Treatment of non-metalliferous mine and quarry products ..	2,391	1,800	407	333	322	254	5,507
II. Bricks, pottery, glass, etc. ..	4,452	2,922	434	548	567	97	9,052
III. Chemicals, dyes, explosives, paint, oils and grease ..	5,588	5,393	461	1,114	626	128	13,310
IV. Industrial metals, machines, implements and conveyances ..	49,810	32,174	7,488	11,275	4,378	2,273	107,398
V. Precious metals, jewellery and plate ..	615	1,445	104	134	49	24	2,371
VI. Textiles and textile goods ..	11,344	21,460	1,070	1,003	465	1,448	36,790
VII. Skins and leather ..	3,727	4,415	652	423	246	50	9,513
VIII. Clothing ..	23,788	36,432	5,491	3,748	2,248	553	72,260
IX. Food, drink, and tobacco ..	21,945	22,014	13,298	4,952	3,135	2,324	67,668
X. Woodworking and basketware ..	5,956	5,851	4,085	1,302	1,461	1,272	19,927
XI. Furniture, bedding, etc. ..	3,669	3,359	1,099	682	491	262	9,562
XII. Paper, stationery, printing, bookbinding, etc. ..	12,851	11,677	3,422	1,927	1,401	659	31,937
XIII. Rubber ..	2,246	3,427	629	144	72	43	6,561
XIV. Musical instruments ..	258	192	51	50	21	..	572
XV. Miscellaneous products ..	2,358	1,782	312	274	166	230	5,122
XVI. Heat, light and power ..	3,063	1,991	1,080	1,577	515	165	8,391
Total ..	154,061	156,334	40,083	29,486	16,163	9,782	405,909

5. Employees According to Nature of Employment.—(i) *General*. In the following table the average number of persons employed in each State in 1933-34 are classified according to the nature of their employment :—

FACTORY EMPLOYEES.—NATURE OF EMPLOYMENT, 1933-34.

State.	Average Number of Persons Employed.						Total.
	Working Pro- priators.	Managers and Overseers.	Account- ants and Clerks.	Engine- drivers and Firemen.	Workers, Skilled & Unskilled. (a)	Carters, Messen- gers and Others.	
New South Wales ..	6,277	5,818	9,572	2,211	128,233	1,950	154,061
Victoria ..	7,579	5,557	7,059	1,693	132,743	1,703	156,334
Queensland ..	1,820	1,715	2,645	1,744	30,151	2,008	40,083
South Australia ..	1,342	1,192	2,062	401	23,931	558	29,486
Western Australia	958	731	968	390	12,722	394	16,163
Tasmania ..	556	497	685	199	7,567	278	9,782
Australia ..	18,532	15,510	22,991	6,638	335,347	6,891	405,909

(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.
1929-30 ..	217	182	49	28	2	31	509
1930-31 ..	122	136	29	15	3	23	328
1931-32 ..	108	140	27	12	3	2	292
1932-33 ..	131	178	25	18	3	7	362
1933-34 ..	261	164	37	11	2	15	490

(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 four 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 85.39 per cent. of the total number of female employees as shown in paragraph 5 hereinafter.

(ii) *Average Number of Males and Females Employed, 1929-30 to 1933-34.* The next table shows the average number of male and female employees in factories in each State for the five years ended 1933-34:—

#### FACTORIES.—MALES AND FEMALES EMPLOYED.

State.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
MALES.					
New South Wales ..	122,006	93,868	90,682	99,721	111,653
Victoria .. .. .	100,135	82,949	81,618	91,899	100,959
Queensland .. ..	35,141	31,144	29,149	30,099	32,248
South Australia ..	26,485	19,332	18,932	20,901	23,743
Western Australia ..	15,921	11,729	10,535	11,748	12,930
Tasmania .. .. .	8,547	6,922	6,999	7,147	7,716
Australia .. .. .	308,235	245,944	237,915	261,515	289,249
FEMALES.					
New South Wales ..	40,907	33,723	35,686	38,794	42,408
Victoria .. .. .	50,874	43,067	46,647	52,529	55,375
Queensland .. ..	7,483	6,757	6,650	7,289	7,835
South Australia ..	5,700	4,554	4,902	5,447	5,743
Western Australia ..	3,722	2,891	2,857	3,067	3,233
Tasmania .. .. .	2,273	1,907	2,001	2,086	2,066
Australia .. .. .	110,959	92,899	98,743	109,212	116,660

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 1933-34 represent 85.7 per cent. of the maximum for males and 89.8 per cent. for all persons. The number of females employed, however, exceeds that of

1926-27 by 1.67 per cent., though it is less than for the year 1928-29. In 1931-32 the male employees were as low as 70.5 per cent. of the maximum and in 1930-31 the females were only 79 per cent. of the maximum which was in 1928-29.

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.	1928-29— 1929-30.	1929-30— 1930-31.	1930-31— 1931-32.	1931-32— 1932-33.	1932-33— 1933-34.
<b>MALES.</b>					
	%	%	%	%	%
New South Wales .. .. .	-10.17	-23.06	- 3.42	9.97	11.97
Victoria .. .. .	- 4.31	-17.16	- 1.60	12.60	9.86
Queensland .. .. .	- 5.30	-11.37	- 6.41	3.26	7.14
South Australia .. .. .	-12.84	-27.01	- 2.07	10.40	13.60
Western Australia .. .. .	- 6.31	-26.33	-10.18	11.51	10.06
Tasmania .. .. .	4.69	-19.01	1.10	2.11	7.96
Total .. .. .	- 7.47	-20.21	- 3.26	9.92	10.61
<b>FEMALES.</b>					
New South Wales .. .. .	- 9.08	-17.56	5.82	8.71	9.32
Victoria .. .. .	- 2.01	-15.35	8.31	12.61	5.42
Queensland .. .. .	- 5.57	- 9.70	- 1.58	9.61	7.49
South Australia .. .. .	-11.24	-20.11	7.64	11.12	5.43
Western Australia .. .. .	- 2.36	-22.33	- 1.18	7.35	5.41
Tasmania .. .. .	- 1.26	-16.10	4.93	4.25	- 0.96
Total .. .. .	- 5.46	-16.28	6.29	10.60	6.82

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 1929-30 to 1933-34 :—

**MASCULINITY<sup>(a)</sup> OF FACTORY EMPLOYEES.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
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
1933-34 .. .. .	263	182	412	413	400	373	248

(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 par. 2 *ante*.

5. **Employment of Females in Particular Industries.**—The greater number of females engaged in manufacturing industries is employed in four classes, viz. :—VI., Textiles ; VIII., Clothing ; IX., Food and Drink ; and XII., Paper, Stationery, etc. In 1933-34 these industries accounted for 85.39 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, where there were 152 females to every 100 males and in Class VIII., Clothing, with 267 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1933-34 :—

**MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1933-34.**

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>AVERAGE NUMBER EMPLOYED—MALES.</b>							
VI. Textiles and textile goods ..	4,401	8,174	595	656	238	549	14,613
VIII. Clothing ..	6,591	10,162	1,304	911	536	186	19,690
IX. Food and drink ..	14,978	16,430	12,051	4,125	2,580	1,810	51,974
XII. Paper, stationery, etc. ..	8,807	8,325	2,619	1,410	1,080	525	22,766
All other classes ..	76,876	57,868	15,679	16,641	8,496	4,646	180,206
Total ..	111,653	100,959	32,248	23,743	12,930	7,716	289,249
<b>AVERAGE NUMBER EMPLOYED—FEMALES.</b>							
VI. Textiles and textile goods ..	6,943	13,286	475	347	227	899	22,177
VIII. Clothing ..	17,197	26,270	4,187	2,837	1,712	367	52,570
IX. Food and Drink ..	6,967	5,584	1,247	827	555	514	15,694
XII. Paper, stationery, etc. ..	4,044	3,352	803	517	321	134	9,171
All other classes ..	7,257	6,883	1,123	1,215	418	152	17,048
Total ..	42,408	55,375	7,835	5,743	3,233	2,066	116,660

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., 1933-34.**

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)
Tailoring and slop clothing ..	1,648	6,764	410	1,796	5,688	317	1,167	3,888	333
Waterproof and oil-skin clothing ..	15	8	53	71	175	246	5	10	200
Dressmaking ..	30	1,211	4,937	563	7,226	1,283	37	1,821	4,922
Millinery ..	73	848	1,162	118	1,547	1,311	36	702	1,950
Shirts, collars and underclothing ..	306	3,601	1,177	461	4,355	945	142	1,579	1,112
Stays and corsets ..	34	557	1,638	110	677	615	7	48	686
Handkerchiefs, ties and scarves ..	91	627	689	51	431	845	4	9	225
Hats and caps ..	553	992	179	599	676	113	41	51	124
Gloves ..	..	..	..	33	110	333	..	..	..
Boots and shoes ..	2,386	2,161	91	4,886	4,534	93	985	738	75
Boot repairing (in- cluding bespoke work) ..	921	35	4	609	7	1	334	17	5
Boot accessories ..	98	33	34	459	185	40	..	..	..
Umbrellas and walk- ing sticks ..	34	68	200	29	93	321	13	18	138
Dyeworks and clean- ing (including re- novating and repairing) ..	367	216	59	329	273	83	163	218	134
Other ..	35	76	217	48	293	610	3	4	133
Total ..	6,591	17,197	261	10,162	26,270	259	2,937	9,103	310

(a) Number of females per 100 males.

**§ 6. Child Labour in Factories.**

I. Conditions of Child Labour.—The employment of young persons in factories in the State 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, 1929-30 to 1933-34.—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 1929-30 to 1933-34 :—

## CHILDREN EMPLOYED IN FACTORIES.

State.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
MALES.					
New South Wales .. .. .	3,322	1,851	1,924	2,366	3,040
Victoria.. .. .	3,748	2,543	2,615	3,441	4,248
Queensland .. .. .	1,212	950	920	903	1,135
South Australia .. .. .	654	411	509	611	799
Western Australia .. .. .	575	324	344	351	427
Tasmania .. .. .	261	203	185	263	219
Australia .. .. .	9,772	6,282	6,497	7,935	9,868
FEMALES.					
New South Wales .. .. .	4,196	2,757	3,263	3,561	4,422
Victoria.. .. .	4,019	3,361	4,089	4,643	5,634
Queensland .. .. .	906	619	631	849	981
South Australia .. .. .	529	399	453	523	644
Western Australia .. .. .	226	149	161	202	235
Tasmania .. .. .	252	205	169	209	202
Australia .. .. .	10,128	7,490	8,766	9,987	12,118
TOTAL.					
New South Wales .. .. .	7,518	4,608	5,187	5,927	7,462
Victoria.. .. .	7,767	5,904	6,704	8,084	9,882
Queensland .. .. .	2,118	1,569	1,551	1,752	2,116
South Australia .. .. .	1,183	810	962	1,134	1,443
Western Australia .. .. .	801	473	505	553	662
Tasmania .. .. .	513	408	354	472	421
Australia .. .. .	19,900	13,772	15,263	17,922	21,986

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 1933-34 the number of children employed was 21,986 or 5.42 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.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
	%	%	%	%	%
New South Wales .. .. .	4.61	3.61	4.10	4.28	4.84
Victoria .. .. .	5.14	4.69	5.23	5.60	6.32
Queensland .. .. .	4.97	4.14	4.33	4.69	5.28
South Australia .. .. .	3.68	3.39	4.04	4.30	4.89
Western Australia .. .. .	4.08	3.24	3.77	3.73	4.10
Tasmania .. .. .	4.74	4.62	3.93	5.11	4.30
Australia .. .. .	4.75	4.06	4.53	4.83	5.42

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 1933-34 :—

## CHILDREN EMPLOYED.—VARIOUS INDUSTRIES, 1933-34.

Class.	Industry.	N.S.W.		Victoria.		Q'land.		S. Aust.		W. Aust.		Tas.		Australia.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
II.	Earthenware, China, Porcelain, and Terra-Cotta ..	26	1	45	12	9	3	9	..	3	..	..	..	92	16
III.	Chemicals, Drugs and Medicines ..	38	66	17	37	1	25	7	15	4	4	1	..	68	147
IV.	Smelting, Converting, Refining and Rolling of Iron and Steel ..	161	6	235	29	42	..	62	9	..	..	..	..	500	44
"	Engineering (not Marine or Electrical) ..	144	1	157	8	30	2	57	6	21	..	3	..	412	17
"	Electrical Installations, Cables and Apparatus ..	101	41	148	61	5	..	14	1	1	..	1	..	270	103
"	Motor Vehicles and Cycles. (ii) Repairs ..	91	3	118	2	40	..	33	1	19	1	12	..	313	7
"	Galvanized Ironworking and Tinsmithing ..	143	35	204	53	19	..	31	..	33	..	1	..	431	88
VI.	Cotton ..	23	71	15	60	2	..	..	..	..	..	..	..	40	131
"	Wool, Worsted and Shoddy ..	98	315	451	906	8	31	53	31	3	10	45	59	658	1352
"	Hosiery and Other Knitted Goods ..	33	353	147	710	6	12	..	7	1	11	..	10	137	1103
"	Rope and Cordage ..	27	18	96	33	9	..	10	..	..	..	..	..	142	51
VII.	Tanning, Currying and Leather Dressing ..	55	2	121	200	30	..	1	..	1	..	1	..	209	202
"	Bags, Trucks and Other Leather Goods ..	26	43	32	33	12	16	5	21	6	..	..	..	81	113
VIII.	Tailoring and Slop Clothing ..	60	638	66	515	28	286	8	90	5	31	1	17	168	1577
"	Dressmaking ..	1	139	21	715	2	77	..	128	1	48	..	6	25	1113
"	Millinery ..	4	101	6	176	5	37	..	74	..	10	..	..	15	398
"	Shirts, Collars and Underclothing ..	21	682	15	336	12	120	..	64	1	20	..	12	49	1234
"	Hats and Caps ..	29	122	46	50	..	2	..	1	..	..	..	..	75	175
"	Boots and Shoes ..	185	257	175	411	31	68	22	32	28	7	3	2	444	777
"	Boot Repairing ..	18	..	4	..	16	..	4	1	4	..	1	..	47	1
IX.	Bakeries (including Cakes and Pastry) ..	37	12	54	13	26	18	18	3	8	1	34	86	177	133
"	Biscuits ..	51	151	85	49	4	5	11	19	9	13	..	..	160	237
"	Sugar Confectionery (including Chocolate) ..	44	210	32	115	15	52	14	38	1	10	..	..	106	425
"	Butter Factories, Creameries, etc. ..	13	1	29	23	15	3	3	..	5	1	2	..	67	28
"	Condiments, Coffee and Spices ..	22	54	12	12	2	1	33	6	8	..	..	..	77	73
"	Tobacco, Cigars, Cigarettes and Snuff ..	13	119	3	5	3	5	..	..	6	15	..	..	25	144
X.	Sawmills ('Town' and Forest) ..	33	2	15	..	83	..	11	..	..	..	11	..	153	2
XI.	Billiard Tables, Cabinet and Furniture making and Upholstery ..	81	15	176	14	41	7	36	6	25	4	8	..	367	46
XII.	Papermaking, etc. ..	53	270	5	..	..	..	..	..	..	..	..	..	58	270
"	Envelopes, Stationery, Paper Boxes, Bags, etc. ..	..	..	63	196	6	23	10	33	2	7	1	..	82	259
"	Newspapers and Periodicals ..	96	9	16	1	52	3	..	..	14	..	4	5	182	18
"	General Printing and Bookbinding (not including Government) ..	148	122	199	105	50	37	35	18	23	10	5	2	460	294
XIII.	Tyres, Motor and Cycle ..	16	1	13	17	2	..	7	1	4	..	1	..	43	19

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 1933-34 was £330,134,060 of which amount the sum of £189,827,264 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £11,214,881 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., £129,091,915 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 1933-34 was £64,444,660. This figure which is exclusive of amounts drawn by working proprietors shows an increase of £5,028,224 or 8.46 per cent., as compared with the total for the previous year.

2. *Salaries and Wages Paid.*—(i) *Total Amount, 1933-34.* The total amount of salaries and wages paid in the year 1933-34 in various classes of factories in each State is shown in the following table:—

#### SALARIES AND WAGES PAID IN FACTORIES, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	514,019	322,931	70,618	60,908	55,522	46,835	1,070,833
II. Bricks, Pottery, Glass, etc. ..	754,588	479,738	67,847	84,661	93,286	15,685	1,495,805
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,025,709	928,033	84,796	198,619	123,092	21,725	2,381,974
IV. Industrial Metals, Machines, Implements and Conveyances ..	9,416,439	5,428,710	1,425,116	1,929,992	803,126	430,835	19,434,218
V. Precious Metals, Jewellery and Plate ..	96,157	206,200	14,262	15,330	7,162	2,825	341,936
VI. Textiles and Textile Goods ..	1,479,575	2,471,321	156,901	116,091	61,421	172,515	4,457,824
VII. Skins and Leather ..	624,981	642,005	99,206	50,389	32,077	6,344	1,455,002
VIII. Clothing ..	2,485,340	3,831,897	502,901	332,279	215,714	48,813	7,416,944
IX. Food, Drink and Tobacco ..	3,967,686	3,900,097	2,803,341	795,946	583,032	342,266	12,392,368
X. Woodworking and Basketware ..	951,621	964,248	592,429	184,182	266,346	164,350	3,123,176
XI. Furniture, Bedding, etc. ..	534,280	412,290	164,874	87,165	76,380	29,606	1,304,595
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,358,812	2,020,747	613,796	320,602	275,166	131,390	5,720,513
XIII. Rubber ..	443,317	526,814	75,276	15,401	8,648	4,408	1,073,804
XIV. Musical Instruments ..	43,923	27,571	8,872	5,661	4,624	..	90,651
XV. Miscellaneous Products ..	311,242	246,010	37,252	34,628	22,716	23,983	675,831
XVI. Heat, Light and Power ..	740,858	443,037	277,853	383,227	124,228	39,923	2,009,126
Total ..	25,748,547	22,851,649	6,995,340	4,615,081	2,752,540	1,481,503	64,444,660

(ii) *Totals and Averages, 1929-30 to 1933-34.* 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 1929-30 to 1933-34. 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

SALARIES AND WAGES PAID AND VALUE OF PRODUCTION.

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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.
		£	£	£	£	£	£	£
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	193.80	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
1933-34	Total amount paid ..	25,748,547	22,851,649	6,995,340	4,615,081	2,752,540	1,481,503	64,444,660
	Average per employee ..	174.23	153.62	182.82	163.98	181.03	160.58	166.36

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 1933-34 were paid in Queensland, followed by Western Australia.

The average rate of salaries and wages reached its maximum in 1927-28 when it amounted to £212.12. Since that year there has been an almost continuous decline to 1933-34 when the average rate amounted to £166.36. This represents a decrease of £45.76 or 21.6 per cent. since the peak year abovementioned. 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.

(iii) *Earnings of Males and Females, 1933-34.* 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 1933-34 :—

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>MALES.</b>							
I. Treatment of Non-metalliferous Mine and Quarry Products ..	£	£	£	£	£	£	£
II. Bricks, Pottery, Glass, etc. ..	508,815	316,626	69,898	60,487	54,683	46,297	1,056,806
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	736,720	464,814	65,632	84,186	91,810	15,570	1,458,732
IV. Industrial Metals, Machines, Implements and Conveyances ..	855,081	760,669	72,382	182,683	115,537	20,072	2,006,424
V. Precious Metals, Jewellery and Plate ..	9,197,284	5,285,846	1,402,092	1,889,198	794,290	424,485	18,993,195
VI. Textiles and Textile Goods ..	88,027	189,014	13,672	14,698	6,923	2,776	315,110
VII. Skins and Leather ..	809,630	1,371,440	115,992	89,329	42,615	98,010	2,527,016
VIII. Clothing ..	578,694	579,734	92,837	35,285	26,384	6,117	1,319,051
IX. Food, Drink and Tobacco ..	1,036,048	1,558,944	197,958	119,011	73,577	23,907	3,009,445
X. Woodworking and Basketware ..	3,274,348	3,361,353	2,691,645	736,268	537,108	301,853	10,902,575
XI. Furniture, Bedding, etc. ..	932,923	952,148	582,329	179,644	265,326	162,270	3,074,640
XII. Paper, Stationery, Printing, Book-binding, etc. ..	469,647	358,690	153,820	81,051	70,975	28,815	1,162,998
XIII. Rubber ..	1,987,118	1,705,280	532,049	278,392	241,302	118,069	4,862,210
XIV. Musical Instruments ..	385,950	425,825	48,510	14,316	8,447	4,089	887,137
XV. Miscellaneous Products ..	35,060	26,943	8,872	5,322	4,624	..	80,821
XVI. Heat, Light and Power ..	252,888	210,234	33,705	29,419	18,460	23,344	568,050
	737,123	442,038	272,524	370,758	123,637	39,743	1,985,823
Total ..	21,885,356	18,009,598	6,353,917	4,170,047	2,475,698	1,315,417	54,210,033

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES,  
1933-34—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>FEMALES.</b>							
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	5,204	6,305	720	421	839	538	14,027
II. Bricks, Pottery, Glass, etc. ..	17,868	14,924	2,215	475	1,476	115	37,073
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	170,628	167,364	12,414	15,936	7,555	1,653	375,550
IV. Industrial Metals, Machines, Implements and Conveyances ..	219,155	142,864	23,024	40,794	8,836	6,350	441,023
V. Precious Metals, Jewellery and Plate ..	8,130	17,186	590	632	239	49	26,826
VI. Textiles and Textile Goods ..	669,945	1,099,881	40,909	26,762	18,806	74,505	1,930,808
VII. Skins and Leather ..	46,287	62,271	6,369	15,104	5,693	227	135,951
VIII. Clothing ..	1,449,292	2,272,953	304,943	213,268	142,137	24,906	4,407,499
IX. Food, Drink and Tobacco ..	693,338	538,744	111,696	59,678	45,924	40,413	1,489,793
X. Woodworking and Basketware ..	18,698	12,100	10,100	4,538	1,020	2,080	48,536
XI. Furniture, Bedding, etc. ..	64,633	53,600	11,054	6,114	5,405	791	141,597
XII. Paper, Stationery, Printing, Book-binding, etc. ..	371,694	315,467	81,747	42,210	33,864	13,321	858,303
XIII. Rubber ..	57,367	100,989	26,766	1,085	201	319	186,727
XIV. Musical Instruments ..	8,863	628	..	339	..	..	9,830
XV. Miscellaneous Products ..	58,354	35,776	3,547	5,209	4,256	639	107,781
XVI. Heat, Light and Power ..	3,735	999	5,329	12,469	591	180	23,303
Total ..	3,863,191	4,842,051	641,423	445,034	276,842	166,086	10,234,627

(iv) Total and Average Earnings of Males and Females, 1929-30 to 1933-34. 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.
<b>MALES.</b>							
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	3,951,404	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	217.49	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	46,737,269
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 ..	£ 20,092,456	16,597,017	5,736,126	3,709,236	2,270,903	1,253,095	49,665,833
Per cent. on total ..	84.51	78.19	90.75	89.66	89.36	88.49	83.59
Average per employee ..	£ 213.72	194.25	201.02	188.62	208.05	188.75	202.51
1933-34. Amount paid ..	£ 21,885,356	18,009,508	6,353,917	4,170,042	2,475,608	1,315,417	54,210,331
Per cent. on total ..	85.00	78.81	92.83	90.36	89.94	88.79	84.12
Average per employee ..	£ 206.98	191.45	208.03	185.58	206.27	182.05	199.32



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

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>FEMALES.</b>							
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	8.83	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	4,621,254	584,895	427,621	270,525	162,916	9,750,603
Per cent. on total ..	15.49	21.81	9.25	10.34	10.64	11.51	16.41
Average per employee .. £	95.78	89.07	81.08	79.62	89.05	79.24	90.27
1933-34. Amount paid .. £	3,863,191	4,842,051	641,423	445,034	276,842	166,086	10,234,627
Per cent. on total ..	15.00	21.19	9.17	9.64	10.06	11.21	15.83
Average per employee .. £	91.88	88.54	82.77	78.43	86.43	81.41	86.69

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

SALARIES AND WAGES.—MANAGERS, OVERSEERS, AND OTHER FACTORY EMPLOYEES, AUSTRALIA, 1933-34.

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-metalliferous Mine and Quarry Products ..	181,700	9,889	875,106	4,138	1,056,806	14,027	1,070,833
II. Bricks, Pottery, Glass, etc. ..	225,686	17,131	1,233,046	19,942	1,458,732	37,073	1,495,805
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	543,083	99,050	1,463,341	276,500	2,006,424	375,550	2,381,974
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,502,498	233,014	16,490,697	208,009	18,993,195	441,023	19,434,218
V. Precious Metals, Jewellery and Plate ..	38,009	7,727	277,101	19,099	315,110	26,826	341,936
VI. Textiles and Textile Goods ..	538,055	109,243	1,088,961	1,821,565	2,527,016	1,930,808	4,457,824
VII. Skins and Leather ..	161,805	18,509	1,157,246	17,442	1,319,051	135,951	1,455,002
VIII. Clothing ..	468,741	269,152	2,540,704	4,138,347	3,009,445	4,407,499	7,416,944
IX. Food, Drink and Tobacco ..	2,276,539	317,888	8,626,036	1,171,905	10,902,575	1,489,793	12,392,368
X. Woodworking and Basketware ..	393,669	39,390	2,680,971	9,146	3,074,640	48,536	3,123,176
XI. Furniture, Bedding, etc. ..	131,059	28,302	1,031,939	113,295	1,162,998	141,597	1,304,595
XII. Paper, Stationery, Printing, Book-binding, etc. ..	887,865	205,267	3,974,345	653,036	4,862,210	858,303	5,720,513
XIII. Rubber ..	173,113	28,362	714,024	158,365	887,137	186,727	1,073,864
XIV. Musical Instruments ..	18,750	4,879	62,071	4,951	80,821	9,830	90,651
XV. Miscellaneous Products ..	109,414	23,066	458,636	84,715	568,050	107,781	675,831
XVI. Heat, Light and Power ..	471,591	22,539	1,514,232	764	1,985,823	23,303	2,009,126
Total ..	9,121,577	1,433,408	45,088,456	8,801,219	54,210,033	10,234,627	64,444,660
Average paid per employee ..	334.80	127.35	184.24	84.43	199.32	88.69	166.36

3. Value of Power, Fuel and Light Used.—(i) *Total Amount, 1933-34.* The expenditure by factories on power, fuel and light is of considerable importance; in 1933-34 it amounted to £11,214,881, an increase of £768,709 as compared with the previous year. Though the value of power, fuel and light has actually fallen during the depression it represented 8.7 per cent. of the value of production in 1933-34 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 1933-34 :—

VALUE OF POWER, FUEL AND LIGHT USED<sup>(a)</sup> IN FACTORIES, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	176,428	126,424	25,789	22,031	40,655	46,423	437,750
II. Bricks, Pottery, Glass, etc.	270,486	165,616	16,715	32,420	31,380	6,219	522,836
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	175,032	163,364	14,543	38,834	25,080	3,492	420,345
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,789,513	412,946	161,852	305,297	55,273	282,515	3,007,396
V. Precious Metals, Jewellery and Plate	5,909	11,168	843	1,468	485	151	20,024
VI. Textiles and Textile Goods ..	166,522	297,248	22,780	21,784	11,853	41,382	561,569
VII. Skins and Leather ..	76,832	87,392	7,661	1,613	1,797	1,010	176,305
VIII. Clothing ..	84,446	124,688	14,571	12,063	5,972	1,679	243,419
IX. Food, Drink and Tobacco	749,172	713,320	371,349	168,174	120,578	54,919	2,177,512
X. Woodworking and Basketware ..	57,796	57,919	35,460	11,112	14,386	14,438	191,111
XI. Furniture, Bedding, etc.	26,509	22,774	7,998	5,924	2,789	1,774	67,768
XII. Paper, Stationery, Printing, Book-binding, etc. ..	126,000	155,857	30,032	13,798	14,174	6,284	346,145
XIII. Rubber ..	83,455	125,843	6,787	2,184	1,266	572	220,107
XIV. Musical Instruments	3,788	769	130	201	18	..	4,906
XV. Miscellaneous Products ..	22,263	24,980	1,343	1,601	1,160	518	51,865
XVI. Heat, Light and Power ..	1,425,265	579,441	253,827	188,545	314,458	4,287	2,765,823
<b>Total</b> ..	<b>5,239,416</b>	<b>3,069,749</b>	<b>971,680</b>	<b>827,049</b>	<b>641,324</b>	<b>465,663</b>	<b>11,214,881</b>

(a) Including lubricants and water.

(ii) *Total Amount, 1929-30 to 1933-34.* 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.
	£	£	£	£	£	£	£
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	537,277	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	2,923,230	905,893	764,930	598,088	462,650	10,446,172
1933-34 ..	5,239,416	3,069,749	971,680	827,049	641,324	465,663	11,214,881

4. Value of Materials Used.—(i) *Total Amount, 1933-34.* 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 1933-34 was £189,827,264, representing 37.50 per cent. of the value of the final output. (See paragraph 5.) The table

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

## VALUE OF MATERIALS USED IN FACTORIES, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,226,306	643,092	139,404	78,664	111,532	78,868	2,277,866
II. Bricks, Pottery, Glass, etc. ..	509,864	251,569	28,618	63,850	63,545	9,785	927,231
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	4,945,113	3,594,867	422,785	913,008	995,176	122,697	10,993,646
IV. Industrial Metals, Machines, Implements and Conveyances ..	23,144,748	6,819,810	1,853,439	4,403,956	738,326	1,024,295	37,984,574
V. Precious Metals, Jewellery and Plate ..	81,494	250,758	7,121	13,436	4,484	427	357,720
VI. Textiles and Textile Goods ..	3,817,824	6,134,243	2,041,511	692,755	296,197	326,150	13,308,680
VII. Skins and Leather ..	4,208,575	3,771,266	478,319	111,874	90,284	18,205	8,678,523
VIII. Clothing ..	4,686,315	8,318,713	831,579	418,452	303,468	64,856	14,623,383
IX. Food, Drink and Tobacco ..	25,091,354	23,254,886	19,837,572	5,353,089	3,151,296	1,187,306	77,875,503
X. Woodworking and Basketware ..	2,511,466	1,491,885	1,075,190	597,334	494,788	253,256	6,423,919
XI. Furniture, Bedding, etc. ..	1,166,898	878,603	258,521	154,883	145,646	32,100	2,636,651
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,198,984	2,999,474	481,768	388,052	249,983	90,467	7,408,728
XIII. Rubber ..	1,155,453	1,468,893	118,018	35,309	16,760	3,909	2,798,342
XIV. Musical Instruments ..	45,198	32,055	4,152	6,506	349	..	88,260
XV. Miscellaneous Products ..	647,673	609,393	33,881	56,502	41,320	27,642	1,416,411
XVI. Heat, Light and Power ..	893,136	705,409	146,719	163,101	88,530	30,932	2,027,827
Total ..	77,330,401	61,224,916	27,758,597	13,450,771	6,791,684	3,270,895	189,827,264

(ii) *Total Amount, 1929-30 to 1933-34.* 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.
	£	£	£	£	£	£	£
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
1933-34 ..	77,330,401	61,224,916	27,758,597	13,450,771	6,791,684	3,270,895	189,827,264

5. *Total Value of Output.*—(i) *Total, 1933-34.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1933-34 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 paragraph 6) is the real value of factory production.

## TOTAL VALUE OF OUTPUT OF FACTORIES, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	2,515,499	1,609,828	339,147	229,188	278,905	279,677	5,252,244
II. Bricks, Pottery, Glass, etc. .. ..	2,051,831	1,250,330	186,155	247,486	246,539	40,420	4,022,761
III. Chemicals, Dyes, Explosives, Paint, Oils, and Grease ..	9,268,192	6,584,564	702,632	1,439,518	1,322,035	179,918	19,496,859
IV. Industrial Metals, Machines, Implements and Conveyances .. ..	40,230,039	15,715,541	4,264,612	7,556,350	2,023,156	2,097,922	71,887,620
V. Precious Metals, Jewellery and Plate .. ..	243,535	600,207	34,895	41,926	18,528	4,646	943,737
VI. Textiles and Textile Goods .. ..	6,568,563	11,161,963	2,315,754	880,389	429,718	756,936	22,113,323
VII. Skins and Leather ..	5,389,756	5,188,915	659,605	178,906	147,332	28,368	11,592,882
VIII. Clothing .. ..	8,800,275	14,672,976	1,691,693	947,830	656,806	139,936	26,909,516
IX. Food, Drink and Tobacco .. ..	37,032,500	33,049,707	26,279,954	7,434,144	4,789,099	1,861,889	110,447,293
X. Woodworking and Basketware .. ..	4,122,168	3,070,356	2,032,853	958,057	944,604	539,909	11,667,947
XI. Furniture, Bedding, etc. .. ..	2,104,593	1,642,817	546,614	297,385	284,652	86,151	4,962,212
XII. Paper, Stationery, Printing, Book-binding, etc. .. ..	7,806,479	6,979,377	1,559,526	938,986	734,194	298,030	18,316,592
XIII. Rubber .. ..	2,009,058	2,807,433	234,883	70,017	39,171	13,048	5,173,610
XIV. Musical Instruments ..	106,417	68,787	25,103	14,022	6,766	..	221,095
XV. Miscellaneous Products .. ..	1,292,303	1,207,074	100,497	131,055	89,107	67,274	2,887,310
XVI. Heat, Light and Power .. ..	7,070,763	2,886,435	1,468,862	1,554,038	866,676	392,285	14,239,059
Total .. ..	136,611,971	108,496,310	42,442,785	22,919,297	12,877,288	6,786,409	330,134,060

(ii) Total 1929-30 to 1933-34. The following statement shows the value of output of factories in each State in the five years ended 1933-34:—

## TOTAL VALUE OF OUTPUT OF FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1929-30 ..	167,250,618	122,811,099	45,085,938	30,312,784	16,891,482	8,560,452	300,912,373
1930-31 ..	118,483,536	93,425,795	40,422,858	19,097,455	12,353,353	6,115,567	200,798,564
1931-32 ..	114,439,507	93,388,617	36,915,173	19,292,370	11,186,941	6,423,177	281,645,785
1932-33 ..	124,445,767	102,085,429	38,435,343	20,940,698	12,327,548	6,563,083	304,797,868
1933-34 ..	136,611,971	108,496,310	42,442,785	22,919,297	12,877,288	6,786,409	330,134,060

6. Value of Production.—(i) Total in Classes, 1933-34. 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 £18,200,000 in 1933-34. Many miscellaneous expenses, also, such as insurance and advertising, have not been taken into account. Hence, it must not be inferred that when wages and salaries are deducted from value of production, the whole of the "surplus" is available for interest and profit.

The following table shows the value of production in 1933-34 in each State for the various classes of factories :—

VALUE OF PRODUCTION, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,112,765	840,312	173,954	128,493	126,718	154,386	2,536,628
II. Bricks, Pottery, Glass, etc. ..	1,271,481	833,145	140,822	151,216	151,614	24,416	2,572,694
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	4,148,047	2,826,333	265,304	487,676	301,779	53,729	8,082,868
IV. Industrial Metals, Machines, Implements and Conveyances ..	15,295,778	8,482,785	2,249,321	2,847,097	1,229,557	791,112	30,895,650
V. Precious Metals, Jewellery and Plate ..	156,132	338,281	26,931	27,022	13,559	4,068	565,993
VI. Textiles and Textile Goods ..	2,584,217	4,730,472	251,463	165,850	121,668	389,404	8,243,074
VII. Skins and Leather ..	1,104,349	1,330,257	173,625	65,419	55,251	9,153	2,738,054
VIII. Clothing ..	4,029,514	6,229,575	845,543	517,315	347,366	73,401	12,042,714
IX. Food, Drink and Tobacco ..	11,191,974	9,081,501	6,071,033	1,912,881	1,517,225	619,664	30,394,278
X. Woodworking and Basketware ..	1,552,906	1,520,552	922,203	349,611	435,430	272,215	5,052,917
XI. Furniture, Bedding, etc. ..	911,186	741,440	280,095	136,578	136,217	52,277	2,257,793
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,481,495	3,824,046	1,047,726	537,136	470,037	201,279	10,561,719
XIII. Rubber ..	770,150	1,212,697	110,078	32,524	21,145	8,567	2,155,161
XIV. Musical Instruments ..	57,431	35,963	20,821	7,315	6,399	..	127,929
XV. Miscellaneous Products ..	622,367	572,701	65,273	72,952	46,627	39,114	1,419,034
XVI. Heat, Light and Power ..	4,752,362	1,601,585	1,068,316	1,202,392	463,688	357,066	9,445,409
Total ..	54,042,154	44,201,645	13,712,508	8,641,477	5,444,280	3,049,851	129,091,915

(ii) Total and Averages, 1929-30 to 1933-34. 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.							
	£	£	£	£	£	£	£
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 ..	49,523,773	39,413,968	13,528,662	7,755,112	5,281,111	2,807,497	118,310,123
1931-32 ..	46,653,481	37,810,628	12,133,356	6,961,848	4,605,134	2,308,383	110,981,830
1932-33 ..	49,569,430	41,081,102	12,756,837	7,854,500	5,061,842	2,879,437	119,203,148
1933-34 ..	54,042,154	44,201,645	13,712,508	8,641,477	5,444,280	3,049,851	129,091,915
PER EMPLOYEE (a)							
	£	£	£	£	£	£	£
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
1933-34 ..	351	283	342	293	337	312	318
PER HEAD OF POPULATION.							
	£	£	£	£	£	£	£
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	20.96	13.04	12.07	10.62	12.42	16.94
1932-33 ..	19.13	22.64	13.56	13.55	11.59	12.63	18.05
1933-34 ..	20.68	24.22	14.43	14.84	12.36	13.32	19.40

(a) Including Working Proprietors.

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1933-34 was estimated at £330,134,060, there remained, after payment of £189,827,264, the value of the materials used, of £64,444,660 for salaries and wages, and of £11,214,881 for fuel, the sum of £64,647,255 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 1933-34 :—

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1933-34.

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 ..	77,330,401	5,239,416	25,748,547	28,293,607	136,611,971
Victoria ..	61,224,916	3,069,749	22,851,649	21,349,996	108,496,310
Queensland ..	27,758,597	971,680	6,995,340	6,717,168	42,442,785
South Australia ..	13,450,771	827,049	4,615,081	4,026,396	22,919,297
Western Australia ..	6,791,684	641,324	2,752,540	2,691,740	12,877,288
Tasmania ..	3,270,895	465,663	1,481,503	1,568,348	6,786,409
Australia ..	189,827,264	11,214,881	64,444,660	64,647,255	330,134,060

PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

	%	%	%	%	%
New South Wales ..	56.60	3.84	18.85	20.71	100.00
Victoria ..	56.43	2.83	21.06	19.68	100.00
Queensland ..	65.40	2.29	16.48	15.83	100.00
South Australia ..	58.69	3.61	20.14	17.56	100.00
Western Australia ..	52.74	4.98	21.38	20.90	100.00
Tasmania ..	48.20	6.86	21.83	23.11	100.00
Australia ..	57.50	3.40	19.52	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 £227,714,293 in 1933-34.

The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1933-34 :—

VALUE OF LAND, BUILDINGS, PLANT, AND MACHINERY, 1933-34.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	46,279,284	35,563,879	9,461,870	7,989,314	5,581,057	2,630,761	107,506,165
Plant and machinery	49,083,921	33,270,400	16,891,339	9,161,672	5,678,638	6,122,158	120,208,128
Total ..	95,363,205	68,834,279	26,353,209	17,150,986	11,259,695	8,752,919	227,714,293

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, 1929-30 to 1933-34.* The appended table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1929-30 to 1933-34 inclusive :—

VALUE OF LAND AND BUILDINGS.—AUSTRALIA.

Class of Industry.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,565,373	2,561,418	2,392,522	2,396,967	2,415,060
II. Bricks, Pottery, Glass, etc. ..	3,020,979	2,405,960	1,992,755	2,214,761	2,374,697
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,986,996	5,866,714	5,779,483	5,832,064	5,903,867
IV. Industrial Metals, Machines, Implements and Conveyances ..	28,957,846	27,679,331	25,582,740	25,632,777	25,846,318
V. Precious Metals, Jewellery and Plate ..	658,936	557,662	510,746	490,511	518,293
VI. Textiles and Textile Goods	5,065,228	4,884,218	4,739,366	4,993,710	5,106,496
VII. Skins and Leather ..	1,936,107	1,873,402	1,778,219	1,768,577	1,789,880
VIII. Clothing ..	12,539,163	10,697,755	9,334,049	8,894,673	9,059,219
IX. Food, Drink and Tobacco ..	26,996,483	26,760,444	26,676,269	26,645,408	27,008,648
X. Woodworking and Basketware ..	4,514,789	3,866,980	3,601,684	3,506,606	3,486,892
XI. Furniture, Bedding, etc.	2,733,336	2,283,528	1,978,384	1,869,195	1,963,269
XII. Paper, Stationery, Printing, Bookbinding, etc.	9,974,734	9,764,623	9,187,481	9,048,534	9,093,698
XIII. Rubber ..	2,250,302	2,213,432	2,078,335	1,853,590	1,893,051
XIV. Musical Instruments ..	444,875	391,144	313,313	212,112	144,215
XV. Miscellaneous Products ..	923,403	1,037,221	1,028,693	1,014,793	1,063,794
XVI. Heat, Light and Power ..	9,499,679	9,366,777	9,616,285	9,462,594	9,838,768
Total .. ..	118,068,229	112,210,609	106,590,324	105,836,872	107,506,165

(ii) *Value in each State, 1933-34.* The following table gives similar information for each State for 1933-34 :—

VALUE OF LAND AND BUILDINGS, 1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,086,499	798,830	125,546	155,811	59,015	189,359	2,415,060
II. Bricks, Pottery, Glass, etc. ..	1,317,126	670,035	101,937	155,740	114,660	15,199	2,374,697
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,184,299	2,346,146	163,632	486,626	631,416	91,748	5,903,867
IV. Industrial Metals, Machines, Implements and Conveyances ..	12,714,378	7,138,223	1,794,358	2,321,556	1,213,610	664,193	25,846,318
V. Precious Metals, Jewellery and Plate ..	173,221	252,312	26,820	31,815	19,410	14,715	518,293
VI. Textiles and Textile Goods ..	1,665,857	2,771,501	161,913	143,576	87,317	276,332	5,106,496
VII. Skins and Leather ..	633,739	916,295	78,196	54,647	93,292	13,711	1,789,880
VIII. Clothing ..	3,312,543	4,233,817	505,787	551,752	344,758	110,562	9,059,219
IX. Food, Drink and Tobacco ..	9,899,270	8,159,188	4,272,619	2,242,175	1,570,252	865,144	27,008,648
X. Woodworking and Basketware ..	1,427,328	936,389	431,897	264,328	286,411	140,539	3,486,892
XI. Furniture, Bedding, etc. ..	765,286	716,188	194,383	133,158	113,248	41,006	1,963,269
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,826,270	2,927,176	912,065	669,507	644,136	114,544	9,093,698
XIII. Rubber ..	872,444	805,771	91,294	64,715	38,852	19,975	1,893,051
XIV. Musical Instruments ..	60,655	56,577	7,318	12,985	6,680	..	144,215
XV. Miscellaneous Products ..	521,090	367,008	67,981	65,675	34,601	7,439	1,063,794
XVI. Heat, Light and Power ..	5,819,279	2,468,423	526,124	635,248	323,399	66,295	9,838,768
Total ..	46,279,284	35,563,879	9,461,870	7,989,314	5,581,057	2,630,761	107,506,165

(iii) *Value in each State, 1929-30 to 1933-34.* The total value of factory land and buildings for each year from 1929-30 to 1933-34 is given hereunder :—

VALUE OF LAND AND BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1929-30 ..	53,785,319	36,988,485	9,690,313	8,937,039	5,670,214	2,996,859	118,068,229
1930-31 ..	49,822,312	36,218,384	9,355,106	8,418,702	5,656,833	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
1933-34 ..	46,279,284	35,563,879	9,461,870	7,989,314	5,581,057	2,630,761	107,506,165

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ending 1932-33, however, there was a decline of £12 million, i.e., to £105.8 million but in 1933-34 an increase of £1.7 million, the first since 1929-30, was recorded.



3. Value of Plant and Machinery.—(i) *Total, Australia, 1929-30 to 1933-34.* 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.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	4,926,370	5,959,537	5,773,446	5,517,010	5,373,802
II. Bricks, Pottery, Glass, etc. ..	3,093,832	2,331,332	1,974,507	2,291,788	2,414,175
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,814,275	5,738,555	5,729,195	5,537,025	5,386,426
IV. Industrial Metals, Machines, Implements and Conveyances ..	26,797,812	25,385,254	24,665,290	24,916,610	24,611,820
V. Precious Metals, Jewellery and Plate ..	150,733	139,827	139,441	141,446	148,402
VI. Textiles and Textile Goods ..	6,181,931	5,935,393	5,638,054	5,743,596	5,751,145
VII. Skins and Leather ..	902,344	862,012	916,685	905,709	913,723
VIII. Clothing ..	2,399,668	2,174,238	2,211,284	2,054,915	2,061,074
IX. Food, Drink and Tobacco ..	28,261,873	28,948,702	28,176,453	27,618,639	27,305,642
X. Woodworking and Basketware ..	4,384,656	3,762,029	3,498,591	3,318,657	3,326,466
XI. Furniture, Bedding, etc. ..	898,333	732,590	672,169	645,200	679,252
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	8,317,935	7,768,633	7,310,058	7,111,322	7,139,924
XIII. Rubber ..	2,275,808	2,175,851	2,029,401	1,749,634	1,710,597
XIV. Musical Instruments ..	210,365	189,854	162,496	93,230	33,582
XV. Miscellaneous Products ..	349,512	493,597	507,754	545,511	560,737
XVI. Heat, Light and Power ..	32,662,044	31,900,293	32,124,553	32,359,565	32,791,361
Total .. ..	127,627,691	124,497,697	121,529,377	120,549,857	120,208,128

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. Since that year, however, there has been a decrease for each successive period, although in 1933-34 the decrease amounted to only £340,000.

(ii) *Value in each State, 1929-30 to 1933-34.* 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 four years, however, as pointed out above a total decrease of £7.4 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.
	£	£	£	£	£	£	£
1929-30 ..	53,515,368	35,022,535	13,723,983	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	9,624,037	5,945,468	6,455,746	121,529,377
1932-33 ..	49,903,177	33,022,441	16,468,197	9,450,517	5,733,638	6,031,887	120,549,857
1933-34 ..	49,083,921	33,270,400	16,891,339	9,161,672	5,678,638	6,122,158	120,208,128

(iii) *Value according to Industry, 1933-34.* The following table shows the value of plant and machinery used in factories in each State during 1933-34, classified according to industry :—

VALUE OF PLANT AND MACHINERY.—1933-34.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metaliferous Mine and Quarry Products ..	2,965,067	1,567,287	237,019	257,113	122,913	224,403	5,373,802
II. Bricks, Pottery, Glass, etc. ..	1,323,891	626,995	118,733	177,651	136,692	30,213	2,414,175
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,444,028	2,268,669	138,899	734,621	743,997	56,212	5,386,426
IV. Industrial Metals, Machines, Implements and Conveyances ..	14,150,313	4,732,727	1,694,403	2,064,023	734,603	1,235,751	24,611,820
V. Precious Metals, Jewellery and Plate ..	47,624	81,666	4,986	9,203	3,274	1,649	148,402
VI. Textiles and Textile Goods ..	1,784,499	3,178,540	196,538	179,120	101,804	310,644	5,751,145
VII. Skins and Leather ..	329,772	469,262	53,260	20,877	33,984	6,568	913,723
VIII. Clothing ..	708,463	1,065,368	121,400	97,657	56,172	12,014	2,061,074
IX. Food, Drink and Tobacco ..	8,141,889	6,239,428	9,350,615	1,648,821	1,494,364	430,525	27,305,642
X. Woodworking and Basketware ..	912,269	882,968	587,939	180,335	566,237	196,713	3,326,466
XI. Furniture, Bedding, etc. ..	269,425	200,148	81,948	70,020	38,307	19,404	679,252
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,936,945	2,590,587	607,006	538,193	370,485	96,708	7,139,924
XIII. Rubber ..	641,756	1,010,652	31,346	12,829	8,549	5,465	1,710,597
XIV. Musical Instruments ..	18,291	10,482	371	3,901	537	..	33,582
XV. Miscellaneous Products ..	227,286	280,136	16,495	16,556	13,663	6,601	560,737
XVI. Heat, Light and Power ..	13,182,403	8,065,485	3,650,381	3,150,752	1,253,057	3,489,283	32,791,361
Total ..	49,083,921	33,270,400	16,891,339	9,161,672	5,678,638	6,122,158	120,208,128

### § 9. Individual Industries.

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

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, 1933-34.* 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, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas. (a)	Australia.
Number of factories .. ..	67	53	15	9	6	3	153
Number of employees .. ..	1,370	2,139	323	92	81	34	4,039
Actual horse-power of engines used ..	3,370	4,615	673	362	395	168	9,583
Approx. value of land and buildings .. .. £	244,434	421,212	34,486	20,836	38,720	6,326	766,014
Approx. value of plant and machinery .. .. £	161,110	268,896	27,860	14,841	25,481	6,126	504,314
Wages paid .. .. £	246,203	331,803	51,179	13,087	12,819	4,779	659,870
Value of fuel used .. .. £	30,330	43,111	4,911	884	1,436	943	81,615
Value of materials used .. .. £	1,118,457	1,371,666	224,462	32,356	54,910	16,570	2,818,421
Total value of output .. .. £	1,639,332	2,029,007	289,570	48,040	79,968	24,139	4,110,056
Value of production .. .. £	490,545	614,230	60,197	14,800	23,622	6,626	1,210,020

(a) Includes Fellmongery.

(ii) *Total for Australia, 1929-30 to 1933-34.* The development of the tanning industry during the years stated is shown in the following table:—

TANNING, CURRYING AND LEATHER DRESSING.—AUSTRALIA.

Items.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. ..	143	148	146	147	153
Number of employees .. ..	3,572	2,885	3,336	3,766	4,039
Actual horse-power of engines used ..	8,224	7,948	8,312	8,945	9,583
Approx. value of land and buildings ..	£ 824,415	804,063	763,950	776,532	766,014
Approx. value of plant and machinery ..	£ 603,083	545,250	519,579	506,920	504,314
Wages paid .. .. £	812,772	595,155	609,305	652,574	659,870
Value of fuel used .. .. £	81,660	68,733	74,653	81,116	81,615
Value of materials used .. .. £	3,071,761	2,132,437	2,359,842	2,451,725	2,818,421
Total value of output .. .. £	4,467,175	3,183,138	3,509,078	3,688,550	4,110,056
Value of production .. .. £	1,313,754	981,968	1,074,583	1,155,709	1,210,020

The improvement recorded for the years 1931-32 and 1932-33 was continued during 1933-34. It should be noted, however, that in order to conceal confidential information particulars of one fellmongering establishment have been included in the figures for Tasmania.

(iii) *Raw Material Used and Production, 1933-34.* 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, 1933-34.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides .. No.	519,362	765,738	121,158	26,693	38,872	7,580	1,479,403
Skins—							
Calf .. ..	462,968	709,403	182,828	1,422	270	..	1,356,891
Goat .. ..	428,333	354,212	14,454	508	586	..	798,093
Sheep .. ..	2,646,375	531,492	216,704	145,007	4,668	..	3,544,246
Marsupial .. ..	..	100,318	60,831	3,663	8,703	..	173,515
Reptile .. ..	20,383	59,735	32	..	..	..	80,150
Other .. ..	2,127,128	380,114	4	..	4,000	..	2,511,246
Bark used—							
Wattle .. ton	9,412	8,465	1,867	496	186	198	20,624
Other .. ..	168	1,866	28	102	467	..	2,631
Tanning extract used .. lb.	1,466,534	952,006	(a)	47,725	503,311	(a)	b 2,969,576
Leather made—							
Sole .. ..	10,972,555	13,079,341	2,308,077	296,021	1,263,079	269,972	28,189,045
Harness .. ..	773,499	352,949	486,899	265,842	152,925	..	2,032,114
Upholstery .. sq. ft.	..	1,058,364	..	..	..	..	1,058,364
Patent and other ..	7,124,238	12,886,484	1,026,237	254,869	135,143	..	21,426,971
Waxed kip and other .. lb.	114,089	50,303	33,463	85,738	27,623	..	311,216
Dressed from skins—							
Calf .. sq. ft.	3,633,139	4,715,352	1,339,832	8,360	2,387	..	9,699,070
Goat .. ..	1,744,980	1,673,591	122,380	1,620	3,320	..	3,545,891
Sheep .. ..	12,332,505	3,153,398	608,976	1,015,049	15,978	..	17,125,906
Marsupial .. ..	..	302,112	299,549	3,560	45,389	..	710,610

(a) Not available.

(b) Incomplete.

3. Soap and Candle Factories.—(i) *Details for each State, 1933-34.* 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 1933-34:—

**SOAP AND CANDLE FACTORIES, 1933-34.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories .. ..	28	20	13	4	4	2	71
Number of employees .. ..	925	661	168	143	60	28	1,985
Actual horse-power of engines used .. ..	1,266	684	217	281	(a)	(a)	b 2,537
Approx. value of land and buildings £	314,725	197,436	43,280	59,087	(a)	(a)	b 640,603
Approx. value of plant and machinery £	225,577	232,283	26,132	62,381	(a)	(a)	b 573,905
Wages paid .. ..	£ 161,949	£ 107,360	£ 32,494	£ 21,316	(a)	(a)	b 338,517
Value of fuel used .. ..	£ 23,669	£ 27,086	£ 2,946	£ 2,526	(a)	(a)	b 58,741
Value of materials used .. ..	£ 682,713	£ 435,784	£ 84,128	£ 84,649	(a)	(a)	b 1,365,699
Total value of output .. ..	£ 1,326,134	£ 929,123	£ 161,862	£ 160,483	(a)	(a)	b 2,696,606
Value of production .. ..	£ 619,752	£ 466,253	£ 74,788	£ 73,308	(a)	(a)	b 1,272,166

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1929-30 to 1933-34.* The next table gives similar particulars for the last five years for Australia:—

**SOAP AND CANDLE FACTORIES.—AUSTRALIA.**

Items.	1929-30. <sup>a</sup>	1930-31. <sup>b</sup>	1931-32.	1932-33.	1933-34.
Number of factories .. ..	62	56	68	64	71
Number of employees .. ..	2,148	1,985	2,106	2,010	1,985
Actual horse-power of engines used .. ..	2,595	2,202	2,579	2,453	2,537
Approx. value of land and buildings £	681,818	650,000	667,948	656,181	640,603
Approx. value of plant and machinery £	654,647	604,767	617,932	618,337	573,905
Wages paid .. ..	£ 426,608	£ 388,598	£ 384,410	£ 369,397	£ 338,517
Value of fuel used .. ..	£ 82,239	£ 71,395	£ 72,349	£ 62,545	£ 58,741
Value of materials used .. ..	£ 1,797,688	£ 1,448,411	£ 1,486,457	£ 1,408,015	£ 1,365,699
Total value of output .. ..	£ 3,143,838	£ 2,768,214	£ 2,875,670	£ 2,664,778	£ 2,696,606
Value of production .. ..	£ 1,263,911	£ 1,248,408	£ 1,316,774	£ 1,194,218	£ 1,272,166

(a) Including other small establishments in Western Australia.

(b) Excluding Western Australia.

(iii) *Raw Material Used and Production, 1929-30 to 1933-34.* 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.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Tallow used .. .. cwt.	491,603	467,446	503,501	499,188	492,624
Alkali used .. .. "	219,648	187,408	249,858	236,937	264,576
Copra oil used .. .. "	75,908	74,646	79,147	74,362	80,150
Soap made .. .. "	1,026,373	976,771	964,476	924,403	891,832
Candles made .. .. "	49,812	51,582	55,110	49,562	51,598

The output for the year 1933-34 comprised the following quantities of soap :— Household, 718,479 cwt. ; toilet, 85,989 cwt. ; sand, 66,381 cwt. ; soft, 13,848 cwt. ; and other 7,135 cwt.

4. Saw-mills, etc.—(i) *Details for States, 1933-34.* 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, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	412	295	234	38	87	210	1,276
Number of employees ..	2,964	3,213	3,301	682	1,208	930	12,298
Actual horse-power of engines used ..	15,281	11,154	9,957	2,433	5,615	4,624	49,064
Approximate value of land and buildings ..	£ 696,112	£ 423,567	£ 319,749	£ 158,836	£ 225,995	£ 75,470	£ 1,899,729
Approximate value of plant and machinery ..	£ 570,803	£ 586,607	£ 497,502	£ 114,004	£ 537,183	£ 154,548	£ 2,460,647
Wages paid ..	£ 464,202	£ 540,297	£ 462,809	£ 108,028	£ 230,601	£ 120,463	£ 1,926,400
Value of fuel used ..	£ 32,139	£ 29,521	£ 26,897	£ 5,444	£ 11,807	£ 9,630	£ 115,438
Value of materials used ..	£ 1,463,906	£ 716,750	£ 863,669	£ 384,391	£ 406,154	£ 187,393	£ 4,022,263
Total value of output ..	£ 2,276,283	£ 1,568,635	£ 1,584,957	£ 603,338	£ 787,680	£ 390,680	£ 7,211,573
Value of production ..	£ 780,238	£ 822,364	£ 694,391	£ 213,503	£ 369,719	£ 193,657	£ 3,073,872

(ii) *Total for Australia, 1929-30 to 1933-34.* The development of forest and other saw-mills, etc., since 1929-30 is shown in the following table. Joinery works have been excluded for the last four years :—

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

Items.	1929-30. (a)	1930-31.	1931-32.	1932-33.	1933-34.
Number of establishments ..	2,109	1,160	1,161	1,229	1,276
Number of employees ..	20,957	9,079	8,338	10,102	12,298
Actual horse-power of engines used ..	69,301	44,024	42,557	45,100	49,064
Approx. value of land and buildings ..	£ 3,802,885	£ 1,989,580	£ 1,902,367	£ 1,897,933	£ 1,899,729
Approx. value of plant and machinery ..	£ 3,950,279	£ 2,821,431	£ 2,611,864	£ 2,449,908	£ 2,460,647
Wages paid ..	£ 4,477,491	£ 1,675,640	£ 1,358,351	£ 1,643,210	£ 1,926,400
Value of fuel used ..	£ 202,329	£ 99,321	£ 95,573	£ 103,361	£ 115,438
Value of materials used ..	£ 8,471,366	£ 2,955,028	£ 2,651,895	£ 3,285,202	£ 4,022,263
Total value of output ..	£ 15,605,706	£ 5,512,150	£ 4,820,557	£ 5,968,080	£ 7,211,573
Value of production ..	£ 6,932,011	£ 2,457,801	£ 2,073,089	£ 2,579,517	£ 3,073,872

(a) Including joinery works.

The table furnishes evidence of definite improvement during the past two years. The saw-mill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the height of the depression, had recovered to 370 million super. feet in 1933-34. Indications point to further increases as a result of developments in the building industry. Further reference is made to the saw-milling industry in Chapter XXIII.—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-shellers and baggers, drills, kerosene and petrol engines, and other implements employed in agriculture. The stripper harvester, which combines the stripper with a mechanism for winnowing and bagging grain, is an Australian invention, and is universally employed in the larger wheat-growing areas.

(ii) *Details for States, 1933-34.* The following table gives details respecting agricultural implement works in each State for the year 1933-34 :—

#### AGRICULTURAL IMPLEMENT WORKS, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	24	73	6	30	5	1	139
Number of employees .. ..	606	2,436	234	588	59	1	3,924
Actual horse-power of engines used ..	604	3,003	448	1,117	(a)	(a) b	5,257
Approx. value of land and buildings £	109,848	281,091	51,422	136,994	(a)	(a) b	607,370
Approx. value of plant and machinery £	57,000	282,827	43,794	175,967	(a)	(a) b	562,396
Wages paid .. ..	£ 115,357	430,683	42,778	71,326	(a)	(a) b	671,861
Value of fuel used .. ..	£ 5,379	37,335	3,861	6,567	(a)	(a) b	53,365
Value of materials used .. ..	£ 133,285	527,332	63,366	73,183	(a)	(a) b	799,197
Total value of output .. ..	£ 290,152	1,473,173	132,496	178,885	(a)	(a) b	1,766,707
Value of production .. ..	£ 151,488	582,227	65,269	99,135	(a)	(a) b	914,145

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(iii) *Total for Australia, 1929-30 to 1933-34.* 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. Despite the continuance of the low prices the industry has made progress during the past two years. Details for the last five years are as follow :—

#### AGRICULTURAL IMPLEMENT WORKS.—AUSTRALIA.

Items.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. ..	148	148	139	142	139
Number of employees .. ..	4,463	3,043	2,634	3,770	3,924
Actual horse-power of engines used ..	4,737	4,349	4,094	4,792	5,257
Approx. value of land and buildings £	756,954	694,049	632,971	613,219	607,370
Approx. value of plant and machinery £	640,800	602,018	571,277	552,296	562,396
Wages paid .. ..	£ 985,369	607,421	441,102	626,214	671,861
Value of fuel used .. ..	£ 68,320	44,280	38,781	53,234	53,365
Value of materials used .. ..	£ 919,842	596,002	506,074	779,959	799,197
Total value of output .. ..	£ 2,397,562	1,473,173	1,146,849	1,699,523	1,766,707
Value of production .. ..	£ 1,409,400	832,891	601,994	866,330	914,145

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) 1933-34.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	272	343	45	53	89	20	822
Number of employees .. ..	5,598	5,318	1,009	830	921	190	13,866
Actual horse-power of engines used ..	8,607	8,057	1,473	1,365	2,051	358	21,911
Approximate value of land and buildings £	1,242,895	1,232,772	193,958	115,171	186,863	57,346	3,029,005
Approximate value of plant and machinery £	1,129,326	1,242,619	236,759	124,284	152,049	34,614	2,919,651
Wages paid .. ..	£ 1,101,479	982,310	205,624	13,354	179,704	30,482	2,612,953
Value of fuel used .. ..	£ 62,249	66,291	12,658	10,091	21,805	4,509	177,603
Value of materials used .. ..	£ 1,136,169	1,242,723	225,353	139,427	206,032	25,939	2,975,843
Total value of output .. ..	£ 2,829,123	2,843,083	556,374	329,800	519,740	76,884	7,155,004
Value of production .. ..	£ 1,630,705	1,534,069	318,163	180,282	291,903	46,436	4,001,558

(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 this classification noted in the preceding paragraph has made possible the separate publication of details for the group of industries comprised herein. This grouping includes ironworks, foundries, the making of iron safes and doors, steel castings, iron bedsteads, sash weights, steel window frames and sashes, nuts and bolts, springs, horse-shoes, screws, lifts, tools, brickmakers' implements, and oxy-acetylene welding. Particulars for the year 1933-34 are as follow :—

**SMELTING, CONVERTING, REFINING, AND ROLLING OF IRON AND STEEL, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	156	202	38	31	..	..	427
Number of employes .. ..	7,771	3,803	547	820	..	..	12,941
Actual horse-power of engines used .. ..	85,982	9,906	816	1,778	..	..	98,482
Approximate value of land and buildings .. ..	£ 1,869,246	584,211	80,815	117,310	..	..	2,651,582
Approximate value of plant and machinery .. ..	£ 5,374,675	617,638	125,920	99,978	..	..	6,218,211
Wages paid .. ..	£ 1,715,315	631,697	89,350	120,857	..	..	2,557,219
Value of fuel used .. ..	£ 1,099,377	96,452	11,343	12,782	..	..	1,219,954
Value of materials used .. ..	£ 8,042,369	853,264	114,857	145,717	..	..	9,156,207
Total value of output .. ..	£ 12,493,510	1,963,378	269,939	311,235	..	..	15,038,062
Value of production .. ..	£ 3,351,764	1,013,662	143,739	152,736	..	..	4,661,901

8. Railway and Tramway Workshops.—(i) *Details for each State, 1933-34.* 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 1933-34 have, however, been excluded :—

**TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC., (a) 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	37	21	12	14	20	5	109
Number of employes .. ..	11,279	5,243	2,791	2,533	1,776	289	23,911
Actual horse-power of engines used .. ..	13,184	5,401	3,139	3,545	4,534	375	30,178
Approximate value of land and buildings .. ..	£ 2,904,536	1,454,377	563,127	875,221	479,954	17,733	6,294,948
Approximate value of plant and machinery .. ..	£ 2,384,273	1,106,558	355,111	711,656	388,025	92,534	5,038,157
Wages paid .. ..	£ 2,255,765	1,079,041	588,131	492,782	358,976	60,749	4,835,444
Value of fuel used .. ..	£ 99,991	67,326	17,195	22,062	14,700	4,869	226,143
Value of materials used .. ..	£ 1,788,321	1,124,693	338,694	321,540	207,862	14,249	3,795,359
Total value of output .. ..	£ 4,561,504	2,611,719	1,040,992	920,022	684,338	87,853	9,906,428
Value of production .. ..	£ 2,673,192	1,419,700	685,103	576,420	461,776	68,735	5,884,926

(a) Government and Municipal only.

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

(ii) *Total for Australia, 1929-30 to 1933-34.* The following table shows the development of railway and tramway workshops in Australia since 1929-30 :—

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

Items.	1929-30.	1930-31. (a)	1931-32. (a)	1932-33. (a)	1933-34. (a)
Number of factories .. ..	120	112	108	107	109
Number of employees .. ..	29,339	26,055	24,017	23,969	23,911
Actual horse-power of engines used .. ..	31,600	31,952	34,050	29,832	30,178
Approx. value of land and buildings .. ..	6,230,511	6,393,433	6,027,378	6,259,362	6,294,948
Approx. value of plant and machinery .. ..	5,872,138	5,329,473	4,939,144	5,024,051	5,038,157
Wages paid .. ..	7,599,005	6,035,954	5,095,173	4,802,944	4,835,444
Value of fuel used .. ..	295,415	239,782	218,795	222,452	226,143
Value of materials used .. ..	5,709,328	3,930,083	3,476,207	3,733,160	3,795,559
Total value of output .. ..	15,615,590	11,626,861	9,782,841	9,778,258	9,906,428
Value of production .. ..	9,610,847	7,456,996	6,087,339	5,822,646	5,884,926

(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, 1933-34.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A. (a)	Tas.	Australia.
Number of factories .. ..	8	10	12	1	..	3	34
Number of employees .. ..	754	68	421	969	..	1,031	3,263
Actual horse-power of engines used .. ..	9,179	97	12,928	(b)	..	(b)	c 66,141
Approx. value of land and buildings .. ..	208,164	22,815	240,737	(b)	..	(b)	c 925,745
Approx. value of plant and machinery .. ..	544,016	9,643	639,183	(b)	..	(b)	c 2,780,938
Wages paid .. ..	195,499	9,354	109,681	(b)	..	(b)	c 842,396
Value of fuel used .. ..	152,067	1,674	97,572	(b)	..	(b)	c 727,204
Value of materials used .. ..	4,175,031	85,957	705,473	(b)	..	(b)	c 8,363,593
Total value of output .. ..	5,124,442	108,026	1,144,527	(b)	..	(b)	c 21,304,946
Value of production .. ..	797,349	20,395	341,482	(b)	..	(b)	c 2,414,149

(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, 1933-34.* The table hereunder gives particulars of factories engaged in bacon-curing in each State for the year 1933-34 :—

**BACON-CURING FACTORIES, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
Number of factories .. ..	22	20	9	8	8	6	73
Number of employees .. ..	313	516	543	214	69	37	1,692
Actual horse-power of engines used .. ..	1,015	3,184	1,014	486	478	135	6,312
Approximate value of land and buildings .. ..	115,820	225,382	211,686	69,312	26,396	13,790	662,386
Approximate value of plant and machinery .. ..	40,986	120,304	120,418	28,501	12,102	5,185	327,496
Wages paid .. ..	81,342	108,762	119,171	43,166	14,468	6,455	373,364
Value of fuel used .. ..	13,262	21,073	17,929	4,389	2,865	1,273	60,791
Value of materials used .. ..	633,289	645,712	677,488	282,273	162,232	43,644	2,444,638
Total value of output .. ..	807,430	887,186	989,363	362,135	191,432	59,391	3,296,957
Value of production .. ..	160,879	220,401	293,946	75,473	26,355	14,474	791,528



(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 1933-34 are given hereafter :—

**BACON-CURING FACTORIES.—PIGS KILLED, AND PRODUCTION, 1933-34.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
<b>PIGS KILLED.</b>							
Number .. .. .	224,849	187,092	255,121	72,778	50,902	15,888	806,630
<b>PRODUCTS.</b>							
Bacon and ham .. .. .	lb. 19,953,792	16,279,693	18,573,812	6,481,851	4,257,785	1,353,199	66,900,132
Lard .. .. .	682,132	929,976	1,174,738	201,199	247,633	78,821	3,314,499
<b>VALUE.</b>							
Bacon and ham .. .. .	£ 684,951	663,505	676,129	249,022	145,215	49,839	2,468,661
Lard .. .. .	£ 15,205	22,788	22,806	5,090	5,651	1,942	73,482
Other products .. .. .	£ 81,348	120,563	248,712	108,023	19,777	7,391	585,814

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

**II. Butter, Cheese, and Condensed Milk Factories.**—(i) *Details for each State, 1933-34.* The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1933-34 :—

**BUTTER, CHEESE, AND CONDENSED MILK FACTORIES, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories .. .. .	138	175	116	42	19	41	531
Number of employees .. .. .	1,494	2,509	1,174	396	178	216	5,967
Actual horse-power of engines used .. .. .	11,069	8,247	7,885	1,153	886	671	29,911
Approximate value of land and buildings .. .. .	£ 664,245	1,053,189	552,179	169,932	80,322	59,271	2,579,138
Approximate value of plant and machinery .. .. .	£ 796,087	1,035,006	681,219	119,053	80,991	62,999	2,775,355
Wages paid .. .. .	£ 331,365	497,800	245,343	65,971	34,661	27,257	1,202,397
Value of fuel used .. .. .	£ 80,333	142,675	45,934	15,313	9,756	8,250	311,261
Value of materials used .. .. .	£ 5,687,716	5,418,857	4,858,730	746,704	422,496	253,471	17,387,974
Total value of output .. .. .	£ 6,447,824	6,745,845	5,816,108	918,455	551,575	329,871	20,809,678
Value of production .. .. .	£ 670,775	1,184,313	911,444	156,438	119,323	68,150	3,110,443

(ii) *Total for Australia, 1929-30 to 1933-34.* The progress of this industry during the last five years is set out hereunder :—

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

Items.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. .. .	509	506	513	520	531
Number of employees .. .. .	5,276	5,129	5,488	5,703	5,967
Actual horse-power of engines used .. .. .	25,223	26,843	29,131	29,028	29,911
Approx. value of land and buildings .. .. .	£ 2,538,589	2,530,861	2,545,245	2,533,470	2,579,138
Approx. value of plant and machinery .. .. .	£ 2,735,185	2,766,227	2,715,729	2,749,218	2,775,355
Wages paid .. .. .	£ 1,291,259	1,228,100	1,202,209	1,179,007	1,202,397
Value of fuel used .. .. .	£ 355,811	328,229	303,547	311,254	311,261
Value of materials used .. .. .	£ 21,791,835	19,925,013	19,920,816	17,996,224	17,387,974
Total value of output .. .. .	£ 25,153,846	23,200,709	22,743,620	21,035,968	20,809,678
Value of production .. .. .	£ 3,006,200	2,947,467	2,519,257	2,728,490	3,110,443

(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 1933-34 :—

**BUTTER, CHEESE, AND CONDENSED MILK FACTORIES.—PRODUCTION, 1933-34.**

Particulars	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
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**MILK USED (,000 OMITTED).**

Butter factories .. gals.	280,257	284,977	253,685	29,394	19,762	15,739	883,814
Cheese factories .. "	9,497	8,104	13,631	5,084	289	1,440	38,045
Condensed milk factories .. "	(a)	12,532	(a)	(a)	(a)	..	(b)17,240

**PRODUCTS (,000 OMITTED).**

Butter .. .. lb.	142,303	130,379	123,919	15,329	9,825	6,374	428,129
Cheese .. .. "	8,864	8,170	13,884	5,315	284	1,454	37,971
Condensed and concentrated milk .. .. lb.	(a)	29,618	(a)	(a)	(a)	..	(b)41,378
Powdered milk .. "	..	12,281	..	..	..	..	12,281

**VALUE (,000 OMITTED).**

Butter .. .. £	5,875	5,324	5,478	746	500	286	18,209
Cheese .. .. "	252	317	335	138	9	34	1,085
Condensed and concentrated milk .. .. £	(a)	588	(a)	(a)	(a)	..	(b) 886
Powdered milk .. "	..	303	..	..	..	..	303

(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 XXII.—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 substitution of the export of chilled for frozen meat has already been referred to in Chapter XX.—Pastoral Production.

**MEAT AND FISH PRESERVING WORKS,(c) 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	7	24	9	(a) 1	(a) 4	..	45
Number of employees .. ..	238	1,405	1,699	(a)	(a)	..	b 3,586
Actual horse-power of engines used .. ..	283	5,747	5,419	(a)	(a)	..	b 12,100
Approximate value of land and buildings .. .. £	58,246	738,520	993,199	(a)	(a)	..	b2,169,455
Approximate value of plant and machinery .. .. £	19,857	388,030	593,774	(a)	(a)	..	b1,390,516
Wages paid .. .. £	43,078	283,583	539,709	(a)	(a)	..	b 927,796
Value of fuel used .. .. £	6,738	48,750	83,916	(a)	(a)	..	b 146,375
Value of materials used .. .. £	123,489	3,011,098	2,782,226	(a)	(a)	..	b6,005,472
Total value of output .. .. £	196,780	3,629,639	3,424,474	(a)	(a)	..	b7,439,848
Value of production .. .. £	66,553	569,791	558,332	(a)	(a)	..	b1,288,001

(a) Not available for publication.

(b) Including South Australia and Western Australia

(c) Including meat extracts.

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 XX.—Pastoral Production.

13. Bakeries.—Information regarding establishments in which the manufacture of bread, cakes, &c., was carried on in the year 1933-34 is given in the table below :—

**BAKERIES (INCLUDING CAKES AND PASTRY), 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories .. ..	461	535	225	109	94	66	1,490
Number of employees .. ..	3,106	2,942	1,394	711	402	967	9,522
Actual horse-power of engines used .. ..	3,224	1,994	849	707	467	720	7,961
Approximate value of land and buildings .. ..	£ 1,654,856	£ 1,117,561	£ 374,303	£ 244,411	£ 135,220	£ 330,984	£ 3,857,335
Approximate value of plant and machinery .. ..	£ 485,552	£ 366,329	£ 144,691	£ 82,631	£ 42,710	£ 59,186	£ 1,181,099
Wages paid .. ..	£ 540,158	£ 430,805	£ 205,865	£ 101,329	£ 58,057	£ 123,190	£ 1,459,404
Value of fuel used .. ..	£ 95,593	£ 82,360	£ 27,336	£ 15,598	£ 9,455	£ 16,723	£ 247,065
Value of materials used .. ..	£ 1,775,655	£ 1,514,926	£ 604,097	£ 344,683	£ 214,679	£ 302,950	£ 4,756,990
Total value of output .. ..	£ 2,958,653	£ 2,520,665	£ 1,195,116	£ 548,838	£ 377,704	£ 511,587	£ 8,112,563
Value of production .. ..	£ 1,087,405	£ 923,379	£ 563,683	£ 188,557	£ 153,570	£ 191,914	£ 3,108,508

(a) Includes Biscuits and Confectionery.

14. Jam and Fruit Preserving, Pickles, Sauces, and Vinegar Factories.—(i) *Details for each State, 1933-34.* The subjoined table gives particulars of factories included in this class for the year 1933-34. One establishment engaged in meat preserving has been included in the details shown for Tasmania in order that confidential information may not be disclosed.

**JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	29	46	13	14	9	9	120
Number of employees .. ..	1,184	2,280	483	376	70	552	4,893
Actual horse-power of engines used .. ..	1,368	2,763	215	335	70	1,242	5,493
Approximate value of land and buildings .. ..	£ 251,461	£ 517,129	£ 38,561	£ 112,053	£ 18,222	£ 94,963	£ 1,032,409
Approximate value of plant and machinery .. ..	£ 107,503	£ 297,402	£ 30,377	£ 54,431	£ 5,705	£ 29,781	£ 525,199
Wages paid .. ..	£ 172,906	£ 343,571	£ 50,928	£ 49,884	£ 8,389	£ 96,587	£ 722,265
Value of fuel used .. ..	£ 16,586	£ 32,110	£ 3,459	£ 4,773	£ 930	£ 7,866	£ 65,724
Value of materials used .. ..	£ 640,107	£ 1,377,110	£ 281,102	£ 184,631	£ 40,644	£ 308,008	£ 2,831,602
Total value of output .. ..	£ 1,278,473	£ 2,159,672	£ 411,190	£ 271,860	£ 59,250	£ 454,514	£ 4,634,959
Value of production .. ..	£ 621,780	£ 750,452	£ 126,629	£ 82,456	£ 17,676	£ 138,640	£ 1,737,633

(ii) *Total for Australia, 1929-30 to 1933-34.* 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.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. ..	121	111	121	115	120
Number of employees .. ..	4,780	3,803	4,130	4,786	4,895
Actual horse-power of engines used .. ..	6,101	5,308	5,711	5,730	5,493
Approx. value of land and buildings .. ..	£ 1,064,661	£ 984,464	£ 1,037,911	£ 1,025,310	£ 1,032,409
Approx. value of plant and machinery .. ..	£ 567,833	£ 546,362	£ 548,062	£ 525,057	£ 525,199
Wages paid .. ..	£ 873,508	£ 627,209	£ 617,012	£ 709,572	£ 722,265
Value of fuel used .. ..	£ 83,634	£ 61,588	£ 61,322	£ 66,231	£ 65,724
Value of materials used .. ..	£ 3,290,268	£ 2,354,034	£ 2,785,669	£ 3,185,285	£ 2,831,602
Total value of output .. ..	£ 5,178,438	£ 3,686,333	£ 4,210,988	£ 4,919,037	£ 4,634,959
Value of production .. ..	£ 1,804,536	£ 1,270,711	£ 1,363,487	£ 1,667,521	£ 1,737,633

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 termination of the war, production declined considerably, and in 1933-34 amounted to only 73,096,000 lb., compared with 142,290,204 lb. in 1918-19. The output of preserved fruit in 1933-34 amounted to 76,098,000 lb. This quantity was considerably less than the record production of 104 million lb. during 1932-33. 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 1933-34 :—

### JAMS, PRESERVED FRUIT, PICKLES AND SAUCES.—OUTPUT, 1933-34.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Jams and Jellies .. lb.	13,080	35,171	6,696	5,446	677	12,026	73,096
Pulp .. .. .	2,476	18,836	889	4,911	(c)	5,046	32,158
Fruit, preserved ..	17,101	45,495	8,200	1,874	..	3,428	76,098
Pickles .. .. . pints	892	1,286	361	718	(a)	(a)	b 3,457,668
Sauces .. .. .	5,594	6,906	500	1,887	(a)	(a)	b 15,467
VALUE.							
Jams and Jellies .. £	431,818	652,035	144,915	119,160	12,953	266,079	1,626,960
Pulp .. .. .	13,101	121,200	5,235	23,341	2,326	63,553	233,756
Fruit, preserved ..	309,467	697,911	206,239	31,586	..	98,736	1,343,939
Pickles .. .. .	34,360	44,892	14,916	28,466	(a)	(a)	(b) 130,092
Sauces .. .. .	273,208	234,632	17,664	56,102	(a)	(a)	(b) 601,277

(a) Particulars not available for publication.  
(c) Not available.

(b) Including Western Australia and Tasmania.

15. *Confectionery Factories.*—(i) *Details for each State, 1933-34.* 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 1933-34 given hereunder show the remarkable development since 1900 :—

### SUGAR CONFECTIONERY FACTORIES,(b) 1933-34.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	65	108	12	16	8	5	214
Number of employees ..	2,834	2,770	476	357	248	13	6,698
Actual horse-power of engines used .. .. .	4,542	5,730	883	585	293	40	12,073
Approximate value of land and buildings .. .. . £	955,692	430,145	155,019	92,058	55,842	5,850	1,694,606
Approximate value of plant and machinery .. .. . £	925,897	534,054	72,808	77,433	70,129	6,196	1,686,517
Wages paid .. .. . £	392,586	375,982	60,140	32,566	56,171	1,147	898,592
Value of fuel used .. .. . £	48,839	43,023	6,591	9,941	3,910	377	112,681
Value of materials used .. .. . £	1,219,518	1,012,731	101,556	107,717	74,719	2,515	2,518,756
Total value of output .. .. . £	2,385,387	1,737,631	249,987	167,293	187,618	6,189	4,734,103
Value of production .. .. . £	1,117,030	681,877	141,840	49,635	108,989	3,297	2,102,668

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

(b) Including Chocolate

(ii) *Total for Australia, 1929-30 to 1933-34.* Particulars of the confectionery industry during the last five years are shown in the following table:—

## SUGAR CONFECTIONERY FACTORIES.—AUSTRALIA.

Items.	1929-30. (a)	1930-31. (a)	1931-32. (a)	1932-33. (a)	1933-34. (a)
Number of factories .. .. .	254	220	223	221	214
Number of employees .. .. .	7,260	6,241	6,270	6,375	6,698
Actual horse-power of engines used .. .. .	12,432	11,014	12,574	11,691	12,073
Approx. value of land and buildings .. .. .	2,007,492	1,788,358	1,797,490	1,737,550	1,694,606
Approx. value of plant and machinery .. .. .	2,248,470	1,987,197	1,882,742	1,738,497	1,686,517
Wages paid .. .. .	1,167,654	931,991	861,562	857,503	898,592
Value of fuel used .. .. .	167,526	118,245	111,789	108,489	112,681
Value of materials used .. .. .	3,549,673	2,590,032	2,276,592	2,409,145	2,518,756
Total value of output .. .. .	6,567,759	4,832,952	4,398,656	4,473,075	4,734,105
Value of production .. .. .	2,850,560	2,124,675	2,010,275	1,955,441	2,102,668

(a) 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 1933-34 was less by 8 per cent. than in 1929-30. Confectionery establishments in Tasmania have been combined with bakeries in order to conceal confidential information. Production is sufficient to supply local requirements, and an export trade is being developed. Several large British manufacturers of confectionery have established branch works in Australia.

16. *Grain Milling.*—(i) *Details for States, 1933-34.* The following table shows the position of the flour-milling industry in each State in 1933-34:—

## GRAIN MILLING, 1933-34.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas. (a)	Australia.
Number of factories .. .. .	53	39	10	36	22	10	170
Number of employees .. .. .	1,259	1,018	331	412	409	99	3,528
Actual horse-power of engines used .. .. .	8,141	6,238	1,655	3,146	3,506	558	23,244
Approximate value of land and buildings .. .. .	£ 784,747	492,511	172,488	165,811	239,878	60,158	1,915,593
Approximate value of plant and machinery .. .. .	£ 728,287	483,187	213,731	211,121	266,436	37,574	1,940,336
Wages paid .. .. .	£ 288,818	217,934	75,704	75,318	82,771	23,195	763,740
Value of fuel used .. .. .	£ 78,217	58,233	15,465	23,691	21,149	4,076	200,831
Value of materials used .. .. .	£ 3,544,536	2,807,196	731,020	831,149	867,028	201,661	8,982,500
Total value of output .. .. .	£ 4,536,425	3,530,866	930,753	1,021,673	1,121,830	250,275	11,391,822
Value of production .. .. .	£ 913,672	665,437	184,268	166,333	233,653	44,538	2,208,401

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

(ii) *Production of Flour and By-products, 1929-30 to 1933-34.* 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)
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
1933-34 ..	495,779	395,566	84,159	121,811	122,000	19,253	1,238,568

(a) Tons of 2,000 lb.

The production of flour in Australia for the last year, 1,238,568 tons, was valued at £8,713,474. In addition, 536,338 tons of bran and pollard, valued at £2,444,393, were made. The quantity of wheat ground was 60,168,830 bushels.

17. Sugar Mills.—(i) *Details for 1933-34.* The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1933-34. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XXI.—Agricultural Production.

## SUGAR MILLS, 1933-34.

Items.	N.S.W.	Queensland.	Australia.
Number of factories .. .. .	3	33	36
Number of employees .. .. .	135	5,132	5,267
Actual horse-power of engines used .. .. .	2,879	39,633	42,512
Approximate value of land and buildings £	134,000	794,111	928,111
Approximate value of plant and machinery £	539,670	6,518,636	7,058,306
Wages paid .. .. .	£ 62,171	1,187,969	1,250,140
Value of fuel used .. .. .	£ 12,170	83,046	95,216
Value of materials used .. .. .	£ 364,382	7,976,137	8,340,519
Total value of output .. .. .	£ 558,457	10,281,640	10,840,097
Value of production .. .. .	£ 181,905	2,222,457	2,404,362

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 since 1911 :—

## SUGAR MILLS.—NEW SOUTH WALES.

Items.	1911.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. .. .	4	3	3	3	3
Number of employees .. .. .	469	135	124	118	135
Cane crushed .. .. . tons	147,799	160,209	179,153	156,818	230,918
Sugar produced .. .. .	17,299	18,841	22,459	18,567	27,586
Molasses produced .. .. . gals.	796,440	918,800	940,600	899,100	1,163,700

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 may differ slightly from those given in Chapter XXI.—Agriculture, which refer to harvest years.

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

## SUGAR MILLS.—QUEENSLAND, 1911 TO 1933-34.

Items.	1911.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories ..	49	35	35	33	33
Number of employees ..	4,295	5,138	5,114	4,916	5,132
Cane crushed .. tons	1,534,451	3,539,475	4,033,889	3,546,373	4,667,122
Sugar produced .. "	173,296	514,296	579,222	512,781	638,559
Molasses—					
Sold to distillers and others .. gals.	2,393,669	4,529,352	3,282,351	2,904,242	4,448,494
Used as fodder .. "	789,564	2,342,609	2,940,551	2,988,905	2,902,188
Used as manure .. "	223,000	714,670	1,753,086	1,414,338	1,793,101
Run to waste .. "	1,847,333	1,311,453	910,418	1,402,483	1,747,365
Burnt as fuel .. "		4,354,350	7,075,965	6,182,769	7,348,015
In stock .. "	1,197,626	1,206,050	1,350,769	898,524	634,022
Total molasses .. "	6,451,192	14,458,484	17,313,140	15,791,261	18,873,185

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 1933-34 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 317,537 tons, for a yield of 314,987 tons of refined sugar, valued at £10,031,724.

19. *Breweries.*—(i) *Details for each State, 1933-34.* The following table gives particulars concerning breweries in each State :—

## BREWERIES, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of breweries ..	6	10	8	6	8	4	42
Number of employees ..	786	1,123	363	235	406	82	2,995
Actual horse-power of engines used ..	5,572	4,034	1,744	1,361	2,068	758	15,537
Approximate value of land and buildings .. £	860,459	722,308	303,981	188,228	181,976	166,622	2,423,574
Approximate value of plant and machinery .. £	799,100	874,219	273,187	217,309	230,770	112,974	2,507,559
Wages paid .. £	218,348	356,670	100,618	71,856	117,671	20,934	886,597
Value of fuel used .. £	62,423	63,118	23,995	15,386	17,131	7,847	189,902
Value of materials used .. £	574,756	828,946	173,179	137,173	251,086	40,817	2,011,957
Total value of output .. £	2,107,235	1,909,253	483,871	370,179	620,772	134,566	5,625,876
Value of production .. £	1,470,954	1,017,189	286,697	217,620	352,555	79,902	3,424,017

(a) Includes Malt Works.

(ii) *Total for Australia, 1929-30 to 1933-34.* The next table shows the extent of this industry for the last five years :—

## BREWERIES.—AUSTRALIA.

Items.	1929-30.	1930-31.	1931-32. (a)	1932-33. (a)	1933-34. (a)
Number of breweries ..	45	43	41	41	42
Number of employees ..	3,590	3,109	2,832	2,888	2,995
Actual horse-power of engines used ..	14,800	15,553	15,347	15,315	15,537
Approx. value of land and buildings .. £	2,457,428	2,447,642	2,400,715	2,378,417	2,423,574
Approx. value of plant and machinery .. £	2,956,907	2,865,987	2,639,383	2,535,431	2,507,559
Wages paid .. £	1,165,380	992,698	889,639	858,371	886,597
Value of fuel used .. £	276,109	230,958	187,452	183,428	189,902
Value of materials used .. £	2,887,251	2,146,331	1,880,923	1,905,147	2,011,957
Total value of output .. £	7,258,933	5,828,193	5,133,025	5,235,923	5,625,876
Value of production .. £	4,095,483	3,450,904	3,055,650	3,147,348	3,424,017

(a) Includes Malt Works in Tasmania.

The quantity of ale and stout brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32. During the next two years the output had risen to 57.8 million gallons. The consumption of ale and stout per head of the population remained fairly steady for several years at about 11.25 gallons. In 1931-32 the average fell to 7.32 gallons, but in 1932-33 it increased to 7.43 gallons and in 1933-34 to 8.02 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 1933-34.

**BREWERIES.—MATERIALS USED AND PRODUCTION, 1933-34.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
<b>RAW MATERIAL USED.</b>							
Malt .. bushels	655,806	709,160	186,797	135,791	226,767	40,385	1,954,706
Hops .. lb.	598,267	626,857	161,791	135,002	163,125	27,533	1,712,575
Sugar .. cwt.	68,200	82,600	19,440	16,740	9,840	3,640	200,460
<b>RAW MATERIAL USED PER 1,000 GALLONS OF ALE AND STOUT PRODUCED.</b>							
Malt .. bushels	32.82	32.25	34.97	32.09	43.22	38.63	33.80
Hops .. lb.	29.94	28.51	30.29	31.90	31.09	26.34	29.61
Sugar .. cwt.	3.41	3.76	3.64	3.95	1.88	3.48	3.47
<b>ALE AND STOUT BREWED.</b>							
Quantity gallons	19,981,677	21,989,043	5,340,627	4,231,515	5,247,017	1,045,454	57,835,330
Value (£)	2,128,883	1,911,245	483,871	365,494	593,021	125,306	5,607,820

(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 1933-34:—Materials used: barley 69,975 bushels; barley malt 86,459 bushels; rye 851 bushels; molasses 772,168 cwt.; wine 9,230,327 gallons; raisins and currants 10,010 cwt. The quantities of spirits distilled from barley, malt and grain were 390,187 gallons; from molasses 4,065,928 gallons; and from wine 1,810,092 gallons; total 6,266,207 gallons. The quantity of spirits denatured during the year was 2,576,567 gallons.

**21. Tobacco, etc., Factories.**—(i) *Details for each State, 1933-34.* During the year 1933-34 there were thirty-one establishments in which the manufacture of tobacco, cigars, or cigarettes was carried on. There were no tobacco factories in Tasmania.

**TOBACCO, CIGAR, AND CIGARETTE FACTORIES, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories .. ..	8	14	7	1	1	31
Number of employees .. ..	2,405	1,752	69	14	155	4,395
Actual horse-power of engines used .. ..	1,240	923	(a)	(a)	(a)	b 2,234
Approx. value of land and buildings .. .. £	594,516	321,214	(a)	(a)	(a)	b 916,971
Approx. value of plant and machinery .. .. £	423,459	215,181	(a)	(a)	(a)	b 658,850
Wages paid .. ..	£ 478,957	£ 332,785	(a)	(a)	(a)	b 838,608
Value of fuel used .. ..	£ 8,996	£ 8,766	(a)	(a)	(a)	b 18,596
Value of materials used .. ..	£ 3,596,986	£ 1,344,163	(a)	(a)	(a)	b 5,003,766
Total value of output .. ..	£ 4,681,683	£ 2,076,784	(a)	(a)	(a)	b 6,894,327
Value of production .. ..	£ 1,075,701	£ 723,855	(a)	(a)	(a)	b 1,871,965

(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 1933-34 comprised—manufactured tobacco 52,930 lb., cigars 9,010 lb., and cigarettes 40,660 lb., while the quantities manufactured in Australian factories were respectively 14,656,195 lb., 258,771 lb., and 4,576,617 lb. The following tables show the extent of the industry in Australia for the last five years:—

## TOBACCO, CIGAR AND CIGARETTE FACTORIES.—AUSTRALIA.

Items.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. .. .	23	22	24	30	31
Number of employees .. .. .	4,096	4,154	4,119	4,142	4,395
Actual horse-power of engines used .. .. .	1,986	2,009	2,133	2,145	2,234
Approx. value of land and buildings .. .. .	£ 857,787	857,540	912,541	916,547	916,971
Approx. value of plant and machinery .. .. .	£ 565,556	618,377	656,862	663,060	658,850
Wages paid .. .. .	£ 818,342	807,348	800,702	812,220	838,668
Value of fuel used .. .. .	£ 24,941	24,685	26,013	23,088	18,596
Value of materials used .. .. .	£ 5,111,443	4,831,775	5,448,396	4,823,564	5,003,766
Total value of output .. .. .	£ 7,523,114	6,842,394	7,299,324	6,591,780	6,894,327
Value of production .. .. .	£ 2,386,730	1,985,934	1,824,915	1,745,128	1,871,965

## LEAF USED AND PRODUCTION.

Leaf used {	Australian (Stemmed) 1,000 lb.	1,192	3,129	2,349	2,722	3,397
Imported ( " )	"	17,983	13,327	14,076	14,103	13,718
Tobacco made .. .. .	"	16,064	14,242	14,084	14,788	14,656
Cigars made .. .. .	"	307	224	225	254	259
Cigarettes made .. .. .	"	5,371	4,225	4,191	4,362	4,577

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 the quantity of local leaf used fell to 2.7 million lb. but rose again to 3.3 million lb. in 1933-34. In this connexion, see item "Tobacco" in Chapter XXI.—Agricultural Production. The respective quantities of Australian and imported leaf used during 1933-34 were 3,306,790 lb., and 13,718,454 lb.

22. *Woolen and Tweed Mills.*—(i) *Details for each State, 1933-34.* 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 1933-34:—

## WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1933-34.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories .. .. .	19	41	18	8	6	6	98
Number of employees .. .. .	5,213	9,231	755	770	185	1,392	17,546
Actual horse-power of engines used .. .. .	8,363	16,778	1,372	1,836	629	2,445	31,423
Approx. value of land and buildings .. .. .	£ 687,895	1,196,546	72,497	90,069	52,104	260,886	2,359,997
Approx. value of plant and machinery .. .. .	£ 1,048,108	1,585,677	138,977	149,930	84,052	299,720	3,306,464
Wages paid .. .. .	£ 687,862	1,144,211	113,152	91,612	30,043	166,144	2,233,024
Value of fuel used .. .. .	£ 110,825	196,087	20,621	19,995	9,876	40,788	398,192
Value of materials used .. .. .	£ 1,894,764	2,764,403	1,726,229	522,775	179,178	313,897	7,401,246
Total value of output .. .. .	£ 3,109,963	4,950,498	1,924,305	662,950	253,037	735,161	11,635,920
Value of production .. .. .	£ 1,104,374	1,990,008	177,455	120,186	63,893	380,476	3,386,484

(a) *Woolscouring not included.*

(ii) *Total for Australia, 1929-30 to 1933-34.* 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.	1929-30. (a)	1930-31. (b)	1931-32. (b)	1932-33. (b)	1933-34. (b)
Number of factories .. ..	58	92	81	89	98
Number of employees .. ..	11,843	11,551	13,607	16,206	17,546
Actual horse-power of engines used .. ..	26,407	27,453	30,298	31,586	31,423
Approx. value of land and buildings .. ..	£ 2,124,486	2,305,858	2,232,015	2,273,954	2,359,997
Approx. value of plant and machinery .. ..	£ 3,553,493	3,567,670	3,381,308	3,354,724	3,306,464
Wages paid .. ..	£ 1,780,514	1,633,432	1,945,879	2,196,162	2,233,024
Value of fuel used .. ..	£ 298,212	301,428	322,532	426,331	398,192
Value of materials used .. ..	£ 3,758,577	3,756,418	4,893,757	6,084,638	7,401,246
Total value of output .. ..	£ 6,964,160	6,758,788	8,452,029	10,307,925	11,635,920
Value of production .. ..	£ 2,907,371	2,700,942	3,235,740	3,796,956	3,836,482

(a) Excluding Woolscouring. (b) Excluding Woolscouring in New South Wales.

(iii) *Quantity and Value of Production.* The production consists chiefly of tweed cloths, flannels, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability. Detailed particulars for the several States are not available for publication. The total length of tweed and cloth manufactured in Australia in 1933-34 was 23,279,903 square yards. In New South Wales 7,896,208 square yards, and in Victoria 14,100,111 square yards of tweed and cloth were manufactured. The production of flannel amounted to 9,851,097 yards, while blankets, shawls, and rugs to the number of 1,388,296 were made. The output of yarn reported was 9,567,303 lb., most of which was produced in Victoria.

In addition to the woollen and tweed factories, there were 320 hosiery and knitting mills operating in Australia in 1933-34. These establishments provided employment for 13,950 persons, of whom 10,060 were females, and the value of their output amounted to £6,651,293.

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 1933-34, and these employed 2,012 hands while the value of the output was £1,327,479.

23. *Boot Factories.*—(i) *Boot and Shoe Factories, 1933-34.* 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, 1933-34.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	93	169	21	15	8	3	309
Number of employees .. ..	4,547	9,420	878	464	306	75	15,690
Actual horse-power of engines used .. ..	1,809	2,799	265	265	213	40	5,391
Approximate value of land and buildings .. ..	£ 372,198	710,558	59,344	79,201	32,815	8,280	1,262,396
Approximate value of plant and machinery .. ..	£ 231,898	376,327	41,761	27,536	19,072	3,347	699,941
Wages paid .. ..	£ 594,040	1,203,844	104,756	56,667	35,264	7,328	2,001,899
Value of fuel used .. ..	£ 19,249	32,633	2,219	1,824	875	277	57,077
Value of materials used .. ..	£ 1,094,031	2,156,926	158,044	87,962	71,951	12,103	3,581,017
Total value of output .. ..	£ 1,920,487	3,856,500	315,326	162,909	119,717	20,920	6,395,859
Value of production .. ..	£ 807,207	1,666,941	155,063	73,123	46,891	8,540	2,757,765

(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 1933-34 the number amounted to 1,249, in which 1,923 hands were employed. The sum of £99,841 was distributed in salaries and wages, and the output was valued at £585,636.

(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, 1933-34.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Boots and shoes pairs	4,258	8,052	631	443	328	43	13,755
Slippers .. ..	2,180	3,431	8	54	42	1	5,716
Uppers (a) .. ..	25	11	161	6	..	..	203
VALUE.							
Boots and shoes £	1,648,038	3,403,758	296,439	155,351	110,927	19,524	5,634,037
Slippers .. .. £	238,425	363,657	1,657	4,492	6,174	553	614,958
Uppers (a) .. .. £	4,626	5,814	17,199	2,587	229	85	30,540

(a) Made for other than factory use.

24. *Tailoring, and Slop Clothing Factories.*—(i) *Details for each State, 1933-34.* The importance of this industry in the several States is shown in the following table :—

**TAILORING AND SLOP CLOTHING FACTORIES, 1933-34.**

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	344	398	104	103	69	22	1,040
Number of employees .. ..	8,412	7,484	2,416	1,499	842	298	20,951
Actual horse-power of engines used .. ..	766	729	131	105	88	19	1,838
Approximate value of land and buildings £	1,094,239	763,209	228,231	219,928	144,160	66,725	2,516,492
Approximate value of plant and machinery £	100,673	115,888	24,479	17,006	10,804	4,150	273,000
Wages paid .. .. £	861,551	785,631	221,585	136,196	92,117	29,746	2,126,826
Value of fuel used .. .. £	17,820	21,296	5,751	4,134	2,006	790	51,887
Value of materials used .. .. £	1,497,092	1,947,524	361,532	152,753	117,158	36,648	4,112,707
Total value of output .. .. £	2,802,659	3,329,281	777,631	369,623	268,236	79,637	7,627,067
Value of production .. .. £	1,287,747	1,360,461	410,348	212,736	148,982	42,199	3,462,473

(ii) *Total for Australia, 1929-30 to 1933-34.* Details for the last five years are as follow :—

**TAILORING AND SLOP CLOTHING FACTORIES.—AUSTRALIA.**

Items.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. ..	1,327	1,112	1,006	1,019	1,040
Number of employees .. ..	23,016	17,664	17,470	18,681	20,951
Actual horse-power of engines used .. ..	2,062	1,683	1,647	1,847	1,838
Approx. value of land and buildings £	4,151,355	3,272,248	2,654,382	2,493,182	2,516,492
Approx. value of plant and machinery £	328,676	278,696	256,976	257,146	273,000
Wages paid .. .. £	3,190,686	2,058,597	1,859,268	1,895,349	2,126,826
Value of fuel used .. .. £	63,011	50,717	47,798	48,831	51,887
Value of materials used .. .. £	4,473,949	3,119,083	3,255,800	3,635,773	4,112,707
Total value of output .. .. £	9,222,505	6,307,261	6,158,633	6,653,256	7,627,067
Value of production .. .. £	4,683,545	3,137,461	2,852,035	2,968,652	3,462,473

25. Dressmaking and Millinery Establishments.—(i) *Details for each State, 1933-34.* Particulars of dressmaking and millinery establishments are given separately in the following tables :—

## DRESSMAKING ESTABLISHMENTS, 1933-34.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories .. ..	91	457	32	45	32	13	670
Number of employees .. ..	1,241	7,789	572	721	484	81	10,888
Actual horse-power of engines used .. ..	68	699	34	47	56	8	912
Approximate value of land and buildings .. .. £	197,467	1,081,440	41,918	65,162	53,969	11,940	1,451,896
Approximate value of plant and machinery .. .. £	10,370	93,278	9,908	8,249	5,216	715	127,736
Wages paid .. .. £	110,180	703,105	40,632	53,265	35,750	5,281	948,213
Value of fuel used .. .. £	1,851	14,601	1,050	1,265	744	138	19,649
Value of materials used .. .. £	104,440	1,597,984	53,213	63,254	42,926	3,105	1,864,922
Total value of output .. .. £	272,542	2,703,857	111,721	142,988	103,507	11,396	3,346,011
Value of production .. .. £	166,251	1,091,272	57,458	78,469	59,837	8,153	1,461,440

(a) Includes Millinery.

## MILLINERY ESTABLISHMENTS, 1933-34.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	41	70	13	10	8	(a)	142
Number of employees .. ..	921	1,665	335	344	59	(a)	3,324
Actual horse-power of engines used .. ..	56	172	26	23	7	(a)	284
Approximate value of land and buildings .. .. £	116,868	174,610	20,946	23,815	7,130	(a)	343,369
Approximate value of plant and machinery .. .. £	8,664	22,095	6,425	11,500	425	(a)	49,109
Wages paid .. .. £	85,645	147,301	28,362	22,573	5,487	(a)	289,368
Value of fuel used .. .. £	2,162	3,895	630	765	104	(a)	7,556
Value of materials used .. .. £	149,608	228,225	38,494	38,970	6,922	(a)	462,219
Total value of output .. .. £	311,282	474,077	72,492	79,555	15,582	(a)	952,588
Value of production .. .. £	159,512	241,957	33,368	39,820	8,556	(a)	483,213

(a) Included in Dressmaking.

(ii) *Total for Australia, 1929-30 to 1933-34.* 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.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of factories .. ..	816	724	731	764	812
Number of employees .. ..	12,709	10,396	11,347	13,455	14,212
Actual horse-power of engines used .. ..	971	907	1,049	1,139	1,196
Approx. value of land and buildings .. .. £	2,310,358	1,904,825	1,667,555	1,710,482	1,795,265
Approx. value of plant and machinery .. .. £	157,051	151,460	163,200	171,217	176,845
Wages paid .. .. £	1,399,256	1,066,438	1,045,554	1,187,875	1,237,581
Value of fuel used .. .. £	23,842	20,657	22,508	24,717	27,205
Value of materials used .. .. £	2,501,600	1,993,968	2,061,912	2,354,141	2,327,141
Total value of output .. .. £	4,753,906	3,680,918	3,770,217	4,238,509	4,298,999
Value of production .. .. £	2,228,464	1,666,293	1,685,797	1,859,651	1,944,653

26. *Printing and Book Binding Works.*—(i) *Details for each State, 1933-34.* Printing and bookbinding works rank high in importance among the industries of Australia, and in 1933-34 afforded employment for about 22,500 employees, and paid more than £4,389,000 in salaries and wages, while the value of output amounted to £12,536,000.

The following table gives particulars of establishments engaged in general printing and bookbinding in each State for the year 1933-34. Government printing works are included, but establishments producing newspapers and periodicals are shown separately in the next table:—

## GENERAL PRINTING AND BOOKBINDING ESTABLISHMENTS, 1933-34.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Australia.
Number of factories .. ..	268	387	86	89	84	17	931
Number of employees .. ..	5,338	5,284	1,622	1,442	696	279	14,661
Actual horse-power of engines used .. ..	4,007	4,132	787	1,466	695	188	11,275
Approximate value of land and buildings .. ..	£ 1,202,522	£ 1,308,614	£ 336,651	£ 542,126	£ 213,805	£ 40,302	£ 3,644,020
Approximate value of plant and machinery .. ..	£ 1,053,737	£ 943,268	£ 188,964	£ 421,281	£ 153,248	£ 34,259	£ 2,794,757
Wages paid .. ..	£ 871,388	£ 828,128	£ 258,065	£ 246,154	£ 110,966	£ 46,011	£ 2,360,712
Value of fuel used .. ..	£ 30,957	£ 31,075	£ 8,694	£ 9,829	£ 3,822	£ 1,775	£ 86,152
Value of materials used .. ..	£ 999,220	£ 1,026,089	£ 196,344	£ 288,420	£ 116,120	£ 24,820	£ 2,651,013
Total value of output .. ..	£ 2,589,293	£ 2,582,149	£ 636,853	£ 693,217	£ 313,495	£ 96,676	£ 6,911,683
Value of production .. ..	£ 1,559,116	£ 1,524,985	£ 431,815	£ 394,968	£ 193,553	£ 70,081	£ 4,174,518

(a) Includes Newspapers and Periodicals.

## ESTABLISHMENTS PRODUCING NEWSPAPERS AND PERIODICALS, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust.	Tas.	Australia.
Number of establishments .. ..	212	120	70	..	32	7	441
Number of employees .. ..	3,440	2,270	1,457	..	540	373	8,080
Actual horse-power of engines used .. ..	5,843	3,468	2,140	..	1,418	336	13,205
Approximate value of land and buildings .. ..	£ 1,609,874	£ 759,680	£ 492,973	..	£ 396,015	£ 72,667	£ 3,331,209
Approximate value of plant and machinery .. ..	£ 1,179,038	£ 765,154	£ 375,469	..	£ 203,336	£ 61,949	£ 2,584,946
Wages paid .. ..	£ 894,277	£ 604,776	£ 306,059	..	£ 139,113	£ 84,544	£ 2,028,769
Value of fuel used .. ..	£ 43,559	£ 26,245	£ 18,139	..	£ 9,634	£ 4,423	£ 102,000
Value of materials used .. ..	£ 882,451	£ 755,692	£ 227,328	..	£ 117,649	£ 56,098	£ 2,039,218
Total value of output .. ..	£ 2,544,580	£ 1,765,847	£ 768,345	..	£ 361,871	£ 183,900	£ 5,624,543
Value of production .. ..	£ 1,618,570	£ 983,910	£ 522,878	..	£ 234,588	£ 123,379	£ 3,483,325

(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 1933-34:—

## ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	916	862	155	121	203	89	2,346
Number of employees .. ..	4,109	4,101	882	826	632	410	10,960
Actual horse-power of engines used .. ..	3,476	2,758	611	664	700	264	8,473
Approximate value of land and buildings .. ..	£ 1,598,019	£ 1,327,834	£ 378,044	£ 290,523	£ 271,089	£ 187,432	£ 4,052,941
Approximate value of plant and machinery .. ..	£ 348,656	£ 284,514	£ 71,208	£ 61,507	£ 61,349	£ 23,256	£ 850,490
Wages paid .. ..	£ 574,769	£ 614,165	£ 146,179	£ 105,142	£ 91,208	£ 45,525	£ 1,576,988
Value of fuel used .. ..	£ 34,776	£ 37,939	£ 7,589	£ 7,135	£ 6,258	£ 3,832	£ 97,529
Value of materials used .. ..	£ 658,728	£ 99,949	£ 34,363	£ 116,661	£ 83,027	£ 42,524	£ 1,035,252
Total value of output .. ..	£ 1,666,559	£ 1,078,812	£ 310,068	£ 296,568	£ 272,221	£ 126,089	£ 3,750,317
Value of production .. ..	£ 973,055	£ 940,924	£ 268,116	£ 172,772	£ 182,936	£ 79,733	£ 2,617,536

Particulars in regard to motor body building for the year 1933-34 are as follow :—

**MOTOR BODY BUILDING, 1933-34.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	46	65	20	11	28	..	170
Number of employees .. ..	757	1,710	267	3,328	152	..	6,214
Actual horse-power of engines used .. ..	741	1,471	201	3,076	181	..	5,670
Approximate value of land and buildings .. ..	£ 273,407	440,277	40,296	422,943	55,568	..	1,232,491
Approximate value of plant and machinery .. ..	£ 32,699	175,594	7,071	216,228	13,427	..	445,019
Wages paid .. ..	£ 124,770	326,717	41,430	584,909	23,649	..	1,101,475
Value of fuel used .. ..	£ 3,860	9,828	1,123	25,034	1,365	..	41,210
Value of materials used .. ..	£ 132,402	387,857	38,756	776,403	28,639	..	1,364,117
Total value of output .. ..	£ 334,401	941,731	93,273	1,476,784	71,545	..	2,917,734
Value of production .. ..	£ 198,139	544,046	53,394	675,287	41,541	..	1,512,407

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

**MOTOR BODIES PRODUCED IN AUSTRALIA.**

Items.	1928-29. (a)	1929-30. (a)	1930-31. (a)	1931-32.	1932-33.	1933-34.
Motor Bodies—						
Number .. ..	72,193	46,409	10,417	6,323	13,532	26,302
Value .. ..	£ 4,357,841	3,118,987	864,209	450,310	1,100,504	2,112,439

(a) Excluding Queensland.

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, 1933-34.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	228	303	83	52	70	40	776
Number of employees .. ..	2,658	2,409	894	576	421	232	7,190
Actual horse-power of engines used .. ..	5,595	3,262	1,553	1,726	977	513	13,626
Approximate value of land and buildings .. ..	£ 543,380	519,009	152,963	103,182	100,708	34,842	1,454,084
Approximate value of plant and machinery .. ..	£ 227,609	147,751	67,390	64,455	32,977	15,771	555,953
Wages paid .. ..	£ 405,831	303,353	143,372	77,536	65,621	26,934	1,022,647
Value of fuel used .. ..	£ 22,012	15,543	6,434	4,897	2,290	1,488	52,664
Value of materials used .. ..	£ 770,497	522,649	211,194	130,623	112,864	26,244	1,774,071
Total value of output .. ..	£ 1,468,296	1,066,046	453,200	254,267	229,793	74,658	3,546,260
Value of production .. ..	£ 675,787	527,854	235,572	118,747	114,639	46,926	1,719,525

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 1929-30 the production of electric light and power has increased from 2,436,000,000 to 2,910,000,000 British units, or by more than 19 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 1933-34. Particulars for the year 1933-34 are as follow :—

## ELECTRIC LIGHT AND POWER WORKS, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	122	93	53	43	71	4	386
Number of employees .. ..	1,881	1,281	794	1,049	405	93	5,593
Actual horse-power of engines used .. ..	495,666	172,816	67,328	139,180	67,411	78,663	1,021,064
Approximate value of land and buildings .. ..	£ 4,927,000	2,117,974	380,902	592,977	239,485	26,367	8,284,705
Approximate value of plant and machinery .. ..	£ 10,095,366	6,494,657	3,166,785	1,984,393	1,084,666	3,334,196	26,160,063
Wages paid .. ..	£ 488,528	283,723	206,822	255,127	99,031	21,591	1,354,822
Value of fuel used .. ..	£ 1,195,413	453,887	238,954	153,889	301,604	59	2,343,806
Total value of output .. ..	£ 5,022,325	1,506,903	946,974	1,031,477	734,210	318,840	9,560,729

30. Gas Works.—(i) *Details for each State, 1933-34.* 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 1933-34 :—

## GAS WORKS, 1933-34.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories .. ..	45	37	16	5	4	2	109
Number of employees .. ..	1,182	705	286	528	110	72	2,883
Actual horse-power of engines used .. ..	5,094	2,575	902	1,905	213	107	10,796
Approximate value of land and buildings .. ..	£ 892,279	346,949	145,222	42,271	83,914	39,928	1,550,563
Approximate value of plant and machinery .. ..	£ 3,087,037	1,559,697	483,596	1,166,359	168,391	155,087	6,620,167
Wages paid .. ..	£ 252,330	158,115	71,031	128,100	25,197	18,332	653,105
Value of fuel used .. ..	£ 229,852	120,633	14,873	34,656	12,854	4,228	417,096
Value of materials used .. ..	£ 709,284	633,092	115,274	119,935	52,140	20,757	1,650,482
Total value of output .. ..	£ 2,048,438	1,367,662	521,888	522,561	132,466	73,445	4,666,460
Value of production .. ..	£ 1,109,302	613,937	391,741	367,970	67,472	48,460	2,598,882

(ii) *Coal Used and Production, 1933-34.* The following table gives details for the year 1933-34 :—

## GAS WORKS.—COAL USED AND PRODUCTION, 1933-34.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>COAL USED.</b>							
Coal .. .. tons	508,926	305,945	78,734	70,073	19,806	10,662	994,146
<b>PRODUCTS.</b>							
Gas .. 1,000 cubic feet	9,414,103	5,539,553	1,230,620	1,066,471	407,539	154,962	17,813,248
Coke .. .. tons	330,705	184,671	44,747	44,029	10,902	2,980	618,034
<b>VALUE.</b>							
Gas .. .. £	1,352,621	1,028,061	472,612	411,030	111,668	63,177	3,439,169
Coke .. .. £	370,725	277,826	33,765	71,912	16,622	6,158	777,008

The production of gas declined from 20,929,569,000 cubic feet in 1929-30 to an annual average of 17,800,000,000 cubic feet during the past three years.