# CHAPTER XXIV. MANUFACTURING INDUSTRY.

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

# § 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.
1932-33 · · · 1933-34 · · · 1934-35 · · · 1935-36 · · · 1936-37 · · ·	7,444	8,612	2,155	1,710	1,499	910	22,330
	7,818	8,896	2,345	1,733	1,606	899	23,297
	8,254	9,100	2,470	1,803	1,658	926	24,211
	8,486	9,160	2,482	1,895	1,946	925	24,894
	8,726	9,165	2,883	1,916	2,032	946	25,668

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 This classification which was introduced during the year 1930-31 superseded the grouping which had been in use since 1902.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 Industr	· .		1932-33.	1933-34.	1934-35.	1935-36.	1936-37
I. Treatment of Non-metallifer	ous Mine a	nd Quarry					
Products			374	404	433	462	517
II. Bricks, Pottery, Glass, etc.			362	409	431	450	436
111. Chemicals, Dyes, Explosiv	es, Paint,	Oils and	-	, ,			
a			547	589	596	630	655
IV. Industrial Metals, Machine	s, Implen	ents and	1			í · l	
			5,529	5,789	6,100	6,393	6,788
V. Precious Metals, Jewellery a	nd Plate		242	255	270	277	282
VI. Textiles and Textile Goods			555	588	588	589	577
VII. Skins and Leather			487	511	518	525	537
VIII. Clothing			3,917	4,052	4,229	4,260	4,259
IX. Food, Drink and Tobacco			4,421	4,583	4,657	4,721	4,842
X. Woodworking and Basketwa			2,198	2,243	2,446	2,541	2,715
30 1 33 14 33 2 3 3 3 4			947	995	1,020	1,057	1,002
XII. Paper, Stationery, Printing,	Bookbind	ing, etc.	1,624	1,712	1,750	1,781	1,774
XIII. Rubber			304	305	292	290	280
XIV. Musical Instruments			3.5	32	20	31	34
XV. Miscellaneous Products			312	333	349	371	390
Total, Classes I. to	xv. :		21,854	22,800	23,708	24,378	25,187
XVI. Heat, Light and Power			476	497	503	516	481
Grand Total			22,330	23,297	24,211	24,894	25,668

The number of factories in operation declined each year from 1928-29 to 1931-32 as the result of the economic depression, but the returns since the last-mentioned year reveal a substantial recovery in every State, the number recorded for Australia in 1936-37 being the highest to date.

3. Classification of Factories, States, 1936-37.—The following table shows the number of factories in each State in 1936-37, classified according to the nature of the industry:—FACTORIES.—CLASSIFICATION, 1936-37.

Class of Industry.	X.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	168	179	56	42	56	16	517
II. Bricks, Pottery, Glass, etc	197	108	38	- 43	36	14	436
III. Chemicals, Dyes, Explosives, Paint,				]		_	
Oils and Grease	269	236	44	52	36	1 S	655
IV. Industrial Metals; Machines, Im-							
plements and Conveyances	2,401	2,511	620	474	598	184	6,788
V. Precious Metals, Jewellery and	\ \		1	ł			
Plate	78	138	25	18	17	6	282
VI. Textiles and Textile Goods	147	351	22	32	14	11	577
VII. Skins and Leather	215	208	51	24	29	10	537
VIII. Clothing	1,577	1,832	276	283	236	55	4,259
IX. Food, Drink and Tobacco	1,438	1,456	752	522	423	251	4.842
X. Woodworking and Basketware	835	694	542	147	215	282	2,715
XI. Furniture, Bedding, etc	341	384	138	79	97	50	1,002
XII. Paper, Stationery, Printing, Book-			1	''		•	1
binding, etc	655	665	181	115	130	28	1,774.
XIII. Rubber	93	102	3.2	27	24	11	289
XIV. Musical Instruments	11	1.4	3	3	3		34
XV. Miscellaneous Products	149	164	36	15	23	3	390
Av. Miscontificati France							
Total, Classes J. to XV	8,577	9,042	2,816	1,876	1,937	939	25,187
XVI. Heat, Light and Power	149	123	67	40	95	7	481
Grand Total	8,726	9,165	2,883	1,916	2,032	946	25,668

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

1. States, 1936-37.—The following table shows, for each State, the number of factories classified according to the number of persons engaged in 1936-37:—

# FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1936-37.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
		Nu	MBER OF	FACTORIES.			
Under 4 4 5 to 10	2,582 810 2,362	3,264 777 2,189	981 312 761	462 214 613	983 103 491	280 103 367	8,552 2,319 6,783
11 to 20 21 to 50 51 to 100	1,200 1,039 369	1,208 996 386	374 251 102	263 227 92	214 160 55	104 66 13	3,363 2,739 1,017
Over 100	364	345	102	45	26	13	895
Total	8,726	9,165	2,883	1,916	2,032	946	25,668

Some marked changes have taken place in the distribution of factories according to the number of persons engaged during the past decade. In 1926-27 of a total of 21,579 factories reported, 7,644, or 35.42 per cent. had less than five persons engaged whereas in 1936-37 the number of such factories had increased to 10,871 representing 42.4 per cent. of the total of 25,668 factories. The increase in the number of small factories was probably due to the multiplication of small repair establishments (boots and shoes, cycles and motors, etc.) which are technically accounted as factories by the installation of some power machine.

In the other groups, the effect of the economic depression during the middle years of the decade is clearly noticeable, but since 1931-32 the improvement has been very steady. Factories with more than 100 persons engaged advanced from 733 in 1926-27 to a new high level of 895 in 1936-37, the persons engaged in these factories increasing from 204,363 or 43.74 per cent. of the total number to 250,764 or 47.2 per cent. during the same period.

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

FACTORIES.—CLASSIFICATION OF PERSONS ENGAGED, ACCORDING TO SIZE OF FACTORY, 1936-37.

No. of Persons Employed in Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	AVERAG	E NUMBER	ENGAGED	DURING P	ERIOD WO	RKED.	
Under 4	5,213	6,162	2,073	1,022	1,920	625	17,015
4	3,240	3,108	1,248	856	412	412	9,276
5 to 10	16,236	15,292	5,141	4,174	3,204	2,488	46,535
II to 20	17,756	17,749	5,444	3,824	3,066	1,514	49,353
21 to 50	33,727	31,579	7,670	6,926	4,963	2,149	87,014
51 to 100	26,194	26,675	7,235	6,175	3,794	920	70,993
Över 100	108,700	92,127	20,529	18,344	5,957	5,107	250,764
Total	211,066	192,692	49,340	41,321	23,316	. 13,215	530,950
Av. per Ficty,	24.19	21.02	17.11	21.57	11.47	13.97	20.69

<sup>2.</sup> Australia, 1932-33 to 1936-37.—The percentage of persons engaged in factories with more than 100 hands on the total for all factories reached its highest level in 1936-37 with 47.2 per cent., which exceeded the previous highest percentage of 46.00 recorded in 1935-36.

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

		Esta	blishment	ts Employ	ing on the	Average-	_	
Year.	20 and under.		21 to 100,		101 and	upwards.	Total.	
	Es- tablish- ments.	Persons En- gaged.	Es- tablish- ments.	Persons En- gaged.	Es- tablish- ments.	Persons En- gaged,	Es- tablish- ments.	Persons En- gaged.
1932–33.— Number Average per establishment Percentage on total	18,883	102,477 5.43 26.76	2,841  12.72	117,021 41.19 30.56	606	163,462 269.74 42.68	22,330	382,960 17.15 100.00
1933-34— Number Average per establishment Percentage on total	19,576  84.03	108,125 5.52 25.94		127,068 41.63 30.48	669 2.87	181,634 271.50 43.58	23,297 100.00	416,827 17.89 100.00
Number Average per establishment Percentage on total  1935-36—		112,708 5.63 24.48		143,157 41.41 31.10	742  3.06	204.502 275.61 44.42	24,211	460,367 19.01 100.00
Number Average per establishment Percentage on total	20,413 82.00	117,443 5.75 23.40	3,646  14.65	153,603 42.13 30.60	835  3.35	230,889 276.51 46.00	24,894	501,935 20,16 100.00
Number Average per establishment Percentage on total	21,017 81.88	122,179 5.81 23.01	3,756 14.63	158,007   42.07   29.76	895  3·49	250,764 280.18 47.23	25,668	530,950 20.69 100.00

# § 3. Power used in Factories.

1. Factories other than Central Electric Stations, States, 1936-37.—The following table shows the number of factories using steam, gas, oil, electricity, or water power, and the rated horse-power of engines ordinarily in use and in reserve or idle during 1936-37:—

FACTORIES.(a)—	-RATED	HORSE-POWER	0F	ENGINES,	1936-37.
----------------	--------	-------------	----	----------	----------

		Number	of Establish	Rated Horse-power of Engines.			
State.		- Using Power.	Others.	Total.	Ordinarily in use.	In Reserve or Idle (omitting obsolete).	
<u>_</u>		No. !	No.	No.	Н.Р.	H.P.	
New South Wales		8,230	390	8,620	491,828	138,680	
Victoria		8,454	627	9,081	.324,086	105,419	
Queensland		2,652	18o	2,832	156,246	30,335	
South Australia		1,696	184	1,880	87,541	10,047	
Western Australia		1,772	169	1,941	56,206	7,360	
Tasmania		893	48	941	81,405	16,838	
Australia		23,697	1,598	25,295	1,197,312	308,679	

<sup>(</sup>a) Not including Central Electric Stations.

As a result of the decisions of the Conference of Australian Statisticians in March, 1937, statistics of power used in factories are now collected on a different basis from that used in 1935-36 and previous years. In those years the statistics represented the "average horse-power used" in all factories, including Central Electric Stations, and thereby involved some duplication. In 1936-37 information was obtained in respect of the "rated horse-power" of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition, the power equipment of Central Electric Stations was collected in greater detail. The table shown above refers to all factories except Central Electric Stations. Particulars of the types of engines used are given in the next table.

FACTORIES(a).—RATED HORSE-POWER OF ENGINES ORDINARILY IN USE,
1936-37.

		Rated Horse-power of Engines ordinarily in use.										
State.		Steam.		Intern	Internal Combustion.			Motors of	Total.			
-		Recipro- cating.	Turbine.	Gas.	Light Oils.	Heavy Oils.	Water.	Pur- chased.	Own Genera- tion.	(7)		
-	_											
		н.р.	H.F.	H.P.	H.P.	H.P.	ΗР.	H.P.	H.P.	H.P.		
N.S.W.	.:	113,212	32,537	5,236	3,958	11,238	257	325,390	78,791	491,828		
Victoria		38,556	25,058	6,715	3,487	9,686	558	240,026	31,099	324,086		
Queensland		72,806	5,578	7,389	3,224	12,761		54,488	27,745	156,246		
S. Australia	• •	8,089		5,156	2,102	6,742		65,452	5,652	87,541		
W. Australia	• •	7,422	5	2,529	1,273	5,795		39,182	.4,508	56,206		
Tasmania	• •	4.878	133	5	1,403	371	209	74,406	12.4	81,405		
Australia		244,963	63,311	27,030	15,447	46,593	1,024	798,944	147,919	1,197,312		

<sup>(</sup>a) Excluding Central Electric Stations.

<sup>(</sup>b) Excluding particulars in previous column.

2. Central Electric Stations, Australia, 1936-37.—Particulars of the capacity of engines and generators installed in Central Electric Stations in Australia in 1936-37 are given in the following table:—

# CENTRAL ELECTRIC STATIONS, AUSTRALIA, 1936-37.

	Capacity of Engines and Generators.										
Particulars.	s	team,	Intern	al Comb							
	Recipro- cating.	Turbine.	Gas.	Light Oils.	Heavy Oils,	Water.	Total.				
Engines installed— Total installed—Rated H.P.	36,589	1,532,785	18,349	1,327	104,969	159,258	1,853,277				
Generators installed— Kilowatt capacity Total installed K.W. Effective capacity K.W. Maximum load K.W.	27,648 23,714 18,762	1,112,560 937,627 805,050	12,021 11,158 8,578	625 530 384	\$1,759 71,543 57,494	120,606 110,840 110,752	1,355,219 1,155,412 1,001,020				
Horse-power equipment— Total installed H.P. Effective capacity H.P. Maximum load, H.P.	37,064 31,790 25,151	1,491,442 1,256,936 1,079,210	16,115 14,958 11,499	838 710 515	109,602 95,907 77,074	161,677 148,587 148,469	1,816,738 1,548,888 1,341,918				

3. All Factories, Australia, 1931-32 to 1935-36.—The following table shows the average horse-power used in factories in Australia in each of the five years ended 1935-36. Similar particulars are no longer collected, as mentioned above. For this reason comparisons with 1936-37 are not possible.

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

		ber of shiments.		Average Horse-power Used.								
Year.							•	Tot:	al.			
	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:			
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	1 884,094			
1934-35	 22.588	1,623	983,461	36,282	110,984	730,573	134,012	1,995,312	941,600			
1935-36	 23,197	1,697	1,086,642	35,050	119,341	777,016	128,840	2,146,889	999,595			

4. Classes of Industry, States, 1936-37.—(i) Factories other than Central Electric Stations. The next table shows the rated horse-power of engines ordinarily in use in the various classes of industry in each State during 1936-37:—

### FACTORIES.—RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1936-37.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
0	н.р.	н.Р.	H.P.	H.P.	н.Р.	H.P.	H.P.
I. Treatment of Non-metalli-							
ferous' Mine and Quarry							
Products	35,248	23.205	3,293	3.977	3,648	7.722	77,093
11. Bricks, Pottery, Glass, etc	21,103	16.913	2,537	3,241	2,652	023	47,069
III. Chemicals, Dyes, Explosives,		, .					,
Paint, Oils and Grease	18,466	16,825	2,003	5.830	5.295	.428	48,847
IV. Industrial Metals, Machines,							
Implements and Con-		_					0
veyances	194,715	61,155	22,931	33,611	12,241	55.854	380,507
V. Precious Metals, Jewellery			0				
and Plate	1,179	2,048	108	240		17	3,667
VI. Textiles and Textile Goods	17,671	34,099	2,296	2,591	658 665	2,508 67	59,823
VII. Skins and Leather	7.547		2,112		692		
IX. Food, Drink and Tobacco	92,695	9,883	1,059	21,067	15,839	139 6,052	
X. Woodworking and Basket-	92,095	09,807	85,363	21,007	15,539	0,052	290,023
	34,328	21,601	25,642	8,215	9.755	6,313	108,854
XI. Furniture, Bedding, etc.	7,115		2,592	2,381		686	20,744
XII. Paper, Stationery, Printing,	7.113	0,43-	2,392	2,301	. 1,510	000	-0,7++
Bookbinding, etc.	21.323	26,076	4,616	2,439	2.520	689	57,663
XIII. Rubber	20,883	19,517	819	122	83	ÓÐ	41,490
XIV. Musical Instruments	511	63	13		22		627
XV. Miscellaneous Products	3,900	2,916	115	292		133	7.520
201. Desouthineous Product	3,,,00	2.910	113			-33	7.520
	-			·			
Total, Classes I to XV.	181 121	320,852	155 100	85.026	55 827	81.207	1,182,935
Louis, Onesico a co sa s	1 40 111-1	3-0,032	*33,499	05,030	33,427	,=97	,,933
	· — —						
XVI. Gas Works	7,404	3,234	747	2,505	379	108	14,377
Grand Total						0	:
Grand Lotal	491,828	324,086	150,240	07,541	56,206	01,105	1,197,312

(ii) Central Electric Stations. Details of the capacity of engines and generators installed in Central Electric Stations in each State are given in the next table for 1936-37.

# CENTRAL ELECTRIC STATIONS, STATES, 1936-37.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust. W. Aus	st. Tas.	Australia.
Engines installed Rated H.P. Generators installed—	866,970	424,086	215,649	145,565 , 101,14	3 99,864	1.853,277
Kilowatt capacity— Total installed 'K.W. Effective capacity . K.W. Maximum load K.W.	646,727 534,601 435,992	322.964 291,854 274,951	130,059 94,884 65,111	108,570 ; 70,61; 107,522 ; 53,64; 100,320 ; 50,880	4 1 72,907	1,355,219 1,155,412 1,001,020
Horse-power equivalent (a) Total installed . H.P. Effective capacity . H.P. Maximum load . H.P.	866,970 716,659 584,470	432,950 391,245 368,586	127,197	145.544 94.659 144,138 71,91 134,484 68,21	97.735	1,816,738 1,548,888 1,341,918

(a) Estimated.

# § 4. Employment in Factories.

J. Number Engaged.—All persons engaged in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see paragraph 5 (ii) hereinafter) are counted as factory employees, while all those are excluded who are engaged in selling and distributing, such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods and retailing storemen. Employment has been classified as follows:—(i) Working proprietors; (ii) managers and overseers: (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) skilled and unskilled workers in the factories, mills, or workshops; (vi) carters and messengers; and (vii) others.

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

The following table shows, for each year from 1932-33 to 1936-37 inclusive (a) the average number of persons (including both sexes of all ages) engaged in manufacturing industries in each State; (b) the percentage of the number engaged in each State on the total number engaged in Australia; and (c) the number engaged per ten thousand of the mean population in each State and Australia.

The number of persons engaged in factories in Australia reached its highest point before the depression during the years 1926–27 to 1928–29 when the average for those years was slightly in excess of 450,000. The downward trend in manufacturing operations which began early in 1930 continued with increasing force until the number engaged had fallen to 336,658 in 1931–32, a decline of 25 per cent. on the average already quoted. In 1932–33 employment began to increase and gains were recorded in each year thereafter until a new high level of 523,948 was reached in 1936–37. Stated in relation to population, the number engaged in 1936–37 was 21,000 in excess of the previous maximum in 1926–27.

			FACT0	RIES.—E	MPLOYME	NT.	· · · · · · · · · · · · · · · · · · ·	
Year,	;	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Av	erage Nu	JMBER ENC	AGED DUI	RING FULL	YEAR (52	WEEKS).	·
1933-34 1934-35 1935-36		138,515 154,061 175,033 193,200 208,497	144,428 156,334 169,691 183,390 191,383	37,388 40,083 43,048 45,128 48,216	26,348 29,486 33,497 38,471 40,710	14,815 16,163 17,774 20,993 22,711	9,233 9,782 10,555 11,589 12,431	370,727 405,909 449,598 492,771 523,948
			PERCENTAG	E ON AU	JSTRALIAN	TOTAL.		·
	i	0/ /0	. %	%	%	%	%	%
1934-35 1935-36		37.36 37.96 38.93 39.21 39.79	38.96 38.52 37.74 37.21 36.53	9.87 9.58 9.16 9.20	7.10 7.26 7.45 7.81 7.77	4.00 3.98 3.95 4.26 4.34	2.49 2.41 2.35 2.35 2.37	100.00 100.00 100.00 100.00
			PER 1	0,000 OF	Populati	on.	•	
1934-35 1935-36		535 590 664 727 778	796 857 924 995 1,033	397 422 448 464 490	455 506 573 656 692	339 367 401 469 503	405 427 461 503 535	561 610 671 730 770

2. Rates of Increase, 1932-33 to 1936-37.—The percentage of increase on the average number of persons engaged in the preceding year is shown below for each State from 1932-33 onwards:—

FACTORIES.—PERSONS ENGAGED.—PERCENTAGES OF ANNUAL INCREASE.

		-			***				
	Year.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
								-	
			%	%	%	%	0/ /0	%	%
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
1934-35			13.61	8.54	7.40	13.60	9.97	7.90	10.76
1935–36		]	10.38	8.07	4.83	14.85	18.11	9.80	9.60
1936–37	• •	[	7.92	4.36	6.84	5.82	8.18	7.27	6.33
		!		'		!			

3. Persons engaged in Classes of Industry, Australia, 1932–33 to 1936–37.—The table hereunder gives the average number of persons engaged in factories under each industrial group in Australia for the years 1932–33 to 1936–37 inclusive:—

FACTORIES.—PERSONS ENGAGED.—CLASSES, AUSTRALIA.

Class of Industry.	1932-33.	1933-34-	1934-35. c	1935-36.	1936-37.
I. Treatment of Non-metalliferous Mine and Quarry Products II. Bricks, Pottery, Glass, etc. III. Chemicals, Dyes, Explosives, Paint, Olls and Grease IV. Industrial Metals, Machines, Implenants and Conveyances V. Precious Metals, Jewellery and Plate VI. Textiles and Textile Goods VII. Skins and Leather VIII. Clothing IX. Food, Drink and Tobacco X. Woodworking and Basketware XI. Furniture, Bedding, etc. XII. Paper, Stationery, Printing, Bookbinding, etc. XIII. Rubber XIV. Musleal Instruments	4,534 6,816 12,655 94,598 2,029 34,974 8,865 67,311 64,670 17,044 8,108 29,955 5,822 749	5,507 9,020 13,310 107,398 2,371 36,790 9,513 72,260 67,668 19,927 9,562 31,937 6,561 572	6,550 11,483 14,846 125,640 2,737 38,042 9,779 78,074 70,517 24,192 11,306 34,018 7,369 460	7,571 13,088 16,217 145,481 3,210 42,031 10,440 81,400 73,265 27,478 13,443 35,952 6,797 451	8,736 14,262 17,614 161,512 3,482 43,370 10,872 82,138 77,498 29,311 14,707 37,309 6,455 422
XV. Miscellaneous Products	362,618	397,518	440,799	6,591 	515,058
XVI. Heat, Light and Power	8,109	8,391	8,799	9,356	8,890
Grand Total	370,727	405,909	449,598	492,771	523,948

Although factory employment in 1936-37 was considerably greater than predepression levels the gains have been confined to comparatively few classes. The largest class of all—Industrial Metals, etc.—now employs 30,000 more persons than before the depression, Textiles 15,000 more, Food, Drink and Tobacco 7,500, Miscellaneous Products 4,500, Chemicals, etc. 3.500, and Paper, Stationery, etc. 3,500. Five classes reported less employment in 1936-37 including the major classes, Clothing and Woodworking.

4. Persons Engaged in Classes of Industry, States, 1936-37.—The following table gives a classification of persons engaged in each State during 1936-37:—

FACTORIES.—PERSONS ENGAGED.—CLASSES, 1936-37.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia.
I. Treatment of Non-metalli-							
ferous Mine and Quarry Products		2622			~6-	***	8,736
II. Bricks, Pottery, Glass, etc	3,742	2,630	721	549	765 686	329 205	14,262
III. Chemicals, Dyes, Explosives,	7,382	4,244	815	930	000	203	14,202
Paint, Oils and Grease	7,344	7,342	607	1,442	766	113	17,614
IV. Industrial Metals Machines,	7,344	/,34~	007	1,44~	,00	***3	1,,014
Implements and Convey-							-
ances	73,464	48,194	11,481	18,147	6,703	3,523	161,512
V. Precious Metals, Jewellery	73,404	4-7-24	12,402	,-,,	-,, - 5	3,3-3	, ,
and Plate	952	2,102	158	176	75	10	3,482
VI. Textiles and Textile Goods	13,892	25,467	892	1,185	398	1,536	43,370
VII. Skins and Leather	4,238	4,925	900	401	340	68	10,872
VIII. Clothing	30,102	37,953	6,187	4,452	2,898	546	82,138
IX. Food, Drink and Tobacco	25,991	25,902	13,577	5,783	3,554	2,691	77,498
X. Woodworking and Basketware	9,483	7,289	5,923	1,827	2,871	1,918	29,311
XI. Furniture, Bedding, etc	6,237	4,565	1,670	1,045	849	341	14,707
XII. Paper, Stationery, Printing,	1	i	1				
Bookbinding, etc	15,712	13,350	3,551	2.189	1,741	766	37,309
XIII. Rubber	2,723	2,759	687	145	80	61	6,455
XIV. Musical Instruments	249	96	35	12	30	• • •	422
XV. Miscellaneous Products	3,860	2,495	303	309	210	193	7,370
Total, Classes I. to XV.	205,371	189,313	47,507	38,592	21,966	12,309	515,058
XVI. Heat, Light and Power	3,126	2,070	709	2,118	745	122	8,890
Grand Total	208,497	191,383	48,216	40,710	22,711	12,431	523,948

5. Persons Engaged According to Nature of Employment.—(i) General. In the following table the average numbers of persons engaged in the States during 1936-37 are classified according to the nature of their employment:—

FACTORIES.—PERSONS ENGAGED.—NATURE OF EMPLOYMENT, 1936-37.

	Average Number of Persons Engaged.										
State.	Working Pro- prietors.	Managers and Overseers.	ants and	Engine- drivers and Firemen.	Workers, Skilled & Unskilled. (a)	Carters, Messen- gers and Others.	Total.				
New South Wales Victoria	7,092 8,032 2,319 1,468 1,220	7,043 6,402 1,923 1,489 943 562	9,588	2,702 1,877 1,833 416 537 264	176,003 163,275 37,761 33,883 18,311 10,011		40,710				
Australia	20,755	18,362	31,106	7,629	439,244	6,852	523,948				

<sup>(</sup>a) Including Outworkers.

<sup>(</sup>ii) Outworkers. The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and technically embraces only those to whom work is given out by factory owners to be done in the employees' own homes. Individuals working for themselves are not included. The following table gives

particulars of the average number of outworkers connected with factories in each State during the last five years:—

#### FACTORIES.—OUTWORKERS.(a)

Year.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1932-33		131	178	25	18	3	7	362
1933-34		261	164	37	11	2	15	490
1934-35		296	143	11	12	3	10	475
1935-36		235	142	10	6		29 ,	422
1936-37	••	264	176	14	17	, 3	17	491

(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 Persons engaged according to Sex.—(i) General. In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and is now more than one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and at present about one third of the persons engaged are females. In the remaining States the ratio was roughly one female engaged to every four males, while that for Australia was three to eight. The employment of women, is however, mainly confined to a few trades.
- (ii) Average Number of Males and Females Engaged, 1932-33 to 1936-37. The next table shows the average number of males and females engaged in factories in each State during the last five years;—

#### FACTORIES.-MALES AND FEMALES ENGAGED.

	•					
State.		1932-33.	1933-31	1934-35	1935-36.	1936-37.
		3	Males.			
New South Wales		99,721	111;653	127,114	140,890	152,064
Victoria		91,899	100,959	110,910	121,734	128,457
Queensland		30,099	32,248	34,596	36,411	38,970
South Australia		20,901	23,743	27,271	31,391	33,400
Western Australia		11,748	12,930	14,253	16,911	18,466
Tasmania		7,147	7,716	8.321	9,211	10,055
Australia	• •	261,515	289,249	322,465	356,554	381,412
		F	EMALES.			
New South Wales		38,794	42,408	47,919	52,304	56,433
Victoria		52,529	55,375	58,781	61,656	62,926
Queensland		7,289	7,835	8,452	8,717	9,246
South Australia		5,447	5,743	1 6,226	7,080	7,310
Western Australia		3,067	3,233	3,521	4,082	4,245
Tasmania	• •	2,086	2,066	2,234	2,378	2,376
Australia		109,212	116,660	127,133	136,217	142,536

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

PERSONS ENGAGED.—MALE AND FEMALE.—PERCENTAGES OF ANNUAL INCREASE.

State.		1931-32 1932-33.	1932-33— 1933-34	1933-34 1934-35.	1934–35— 1935–36.	1935–36 1936–37.							
Males.													
		%	%	%	%	%							
New South Wales		9.97	11.97	13.85	10.84	7.93							
Victoria		12.60	9.86	9.86	8.98	5.52							
Queensland		3.26	7.14	7.28	5.25	6.98							
South Australia		10.40	13.60	14.86	15.11	6.40							
Western Australia		11.51	10.06	10.23	18.65	9.20							
Tasmania	• •	2.11	7.96	7.84	10.70	9.16							
Total		9.92	10.61	11.48	10.57	6.97							
		F	EMALES.										
New South Wales		8.71	9.32	13.00	9.15	7.89							
Victoria		12.61	5.42	6.15	4.90	2.05							
Queensland		9.61	7.49	7.87	3.14	6.07							
South Australia		11.12	5.43	8.41	13.72	3.25							
Western Australia		7.35	5.41	8.90	15.93	3.99							
Tasmania	••	4.25	- 0.96	8.13	6.45	- o.o8							
Total		10.60	6.82	8.98	7.15	4.64							

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

4. Masculinity of Persons Engaged in Factories.—The extent to which females are engaged in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons engaged for each State for a series of years. The following table furnishes particulars for the years 1932-33 to 1936-37:—

MASCULINITY(a) OF PERSONS ENGAGED IN FACTORIES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1932-33 · · · 1933-34 · · · 1934-35 · · · 1935-36 · · · 1936-37 · · ·	 264 263 275 269 269	175 182 189 197 204	413 412 409 418 421	384 413 438 443 457	383 400 405 414 435	343 373 372 387 423	239 248 254 262 268

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 100 females engaged in factories for every 300 males, but in that year, the proportion of females began to rise with increasing activity in the clothing and textile industries in which the number of females to males is relatively high. As these trades were not as seriously affected by the depression as the heavier industries the proportion continued to rise until in 1932-33 there were only 239 males engaged to every 100 females. Since that year the proportion has declined to 268 males in 1936-37.

5. Employment of Females in Particular Industries.—The greater number of females in manufacturing industries is engaged in four classes, viz.:—VI., Textiles; VIII., Clothing; IX., Food and Drink; and XII., Paper, Stationery, etc. In 1936-37 these industries accounted for 82.47 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, viz., in Class VI., Textiles where

there were 145 females to every 100 males and in Class VIII., Clothing, with 282 females per 100 males. The following tables show the average number of males and females engaged in each of these classes in 1936-37:—

MALES AND FEMALES ENGAGED IN PARTICULAR INDUSTRIES, 1936-37.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
Aver	AGE NUM	BER EN	GAGED-	Males.			
VI. Textiles and Textile Goods VIII. Clothing IX. Food and Drink XII. Paper, Stationery, etc. All Other Classes Total	5,410 7,925 16,917 10,783 111,029 152,064	9,375 79,498 128,457	398 1,367 12,037 2,600 22,568 38,970	25,388	139 694 2,858 1,294 13,481	589 201 1,970 602 6,684	17,717 21,480 57,355 26,212 258,648 381,412
AVERA	SE NUMB	ER ENG	AGED-L	EMALES	·		
VI. Textiles and Textile Goods VIII. Clothing	8,482 22,177 9,074 4,929 11,771	15,047 27,640 7,051 3,975 9,213	494 4,820 1,540 951 1,441	424 3,472 1,070 631 1,713	259 2,204 696 447 639	947 345 712 164 208	25,653 60,658 20,143 11,097 24,985
Total	56,433	62,926	9,246	7,310	4,245	2,376	142,536

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

FEMALES ENGAGED IN EACH INDUSTRY IN CLASS VIII., 1936-37.

	Nev	v South V	Vales.		Victoria.			Other States.		
Industry.	Males.	Females.	Feminity,	Males.	Females.	Feminity.	Males.	Females.	Femininity.	
Tailoring and Slop										
Clothing Waterproof and Oil-	2,160	9,245	428	1,933	6,220	322	1,292	4,696	363	
skin Clothing	8	22	275	64	173	270	8	12	150	
Dressmaking	35	1,476	4,217	572	7,467	1,305	61	2,272	3,725	
Millinery Shirts, Collars and	134	1,403	1,047	114	1,273		40-	788	1,970	
TT 1 1 - 41-1	225				4,469			1,689		
Stave and Corsets	335	4,030	1,203	449 164			144	62	1,173	
Handkerchiefs, Ties	40	553	1,383	104	915	558	. 0	02	1,033	
and Scarves	112	945	844	50	349	1,098	5	11	220	
Hats and Caps	649	945	150	661		1,090	31	132	426	
Gloves	10	34	340	(b)	(b) 42	(b)	1 3.	-3-		
Boots and Shoes	2,592	2,700	104	4,610	4,752	103		820		
Boot Repairing (in- cluding Bespoke	2,395	. 2,700	104	4,010	1 4,7,32		-,0-5		00	
Work)	1,047	31	3	675	15	. 2	406	22	5	
Boot Accessories	159	103	65	497	222			(b)	(b) J	
Umbrellas and Walk-	-39	.03	٧,	497		43	. (0)	(")	(0)	
ing Sticks	32	72	225	27	34	126	r r	17	155	
Dyeworks and Clean-	J-		3	~/	, 34		,	1	- 33	
ing (including Re-		;		!				1 1		
novating and		. 1		1				i I		
Repairing)	553	395	71	430	476	111	211	318	151	
Other	59	192	325	67	333		4	2	50	
Total	7,925	22,177	280	10,313	27,640	268	3,242	10,841	334	

<sup>(</sup>a) Number of females per 100 males.

# § 6. Child Labour in Factories.

1. Conditions of Child Labour.—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. Reference to the legislation regarding the employment of child labour in factories will be found in Official Year Book No. 16, pp. 540 to 566. The object of

<sup>(</sup>b) Included with Other.

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

2. Average Number of Children Engaged, 1932-33 to 1936-37.—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 1932-33 to 1936-37:—

### CHILDREN ENGAGED IN FACTORIES.

State.		1932-33. (a)	1933-34. (a)	1934-35. (a)	1935–36. (a)	1936-37. (b)
		1	IALES.	_		
New South Walcs		2,366	3,040	3,990	4,887	5,888
Victoria		3,441	4,248	5,194	6,118	6,213
Queensland		903	1,135	1,146	1,543	1,680
South Australia		611	799	1,025	1,352	1,422
Western Australia	!	351	427	574	777	786
Tasmania	1	263	219	255	330	364
Australia		7,935	9,868	12,184	15,007	16,353
		F	EMALES.	· · · · · · · · · · · · · · · · · · ·		
New South Wales		3,561	4,422	5,571	6,485	7,539
Victoria		4,643	5,634	6,015	6,002	5,298
Queensland		849	180	1,048	1,281	1,224
South Australia		523	644	738	876	988
Western Australia		202	235	426	473	432
Tasmania		209	202	294	310	289
Australia		9,987	12,118	14,092	15,427	15,770
		7	COTAL.			
New South Wales		5,927	7,462	9,561	11,372	13,427
Victoria		8,084	9,882	11,209	12,120	11,511
Queensland	!	1,752	2,116	2,194	2,824	2,904
South Australia	i	1,134	1,443	1,763	2,228	2,410
Western Australia	'	553	662	1,000	1,250	1,218
Tasmania	'	472	421	549	640	653
Australia		17,922	21,986	26,276	30,434	32,123

<sup>(</sup>a) Average during year.

3. Percentage of Children on Total Number of Persons Engaged.—Juvenile employment in factories reached its maximum in 1936-37 when the numbers were: Males 16,353 and females 15,770, compared with 15,007 males and 15,427 females in 1935-36, the previous highest points. The increases were general in most of the industries employing child labour, the most notable advance being made by males in Class IV.—Industrial Metals, etc.

PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF PERSONS ENGAGED.

State.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
New South Wales Victoria Queensland South Australia Western Australia Tasmania	 % 4.28 5.60 4.69 4.30 3.73 5.11	% 4.84 6.32 5.28 4.89 4.10 4.30	% 5.46 6.61 5.10 5.26 5.63 5.20	% 5.89 6.61 6.26 5.79 5.95 5.52	% 6.44 6.01 6.02 5.92 5.36
Australia	 4.83	5.42	5.84	6.18	6.13

<sup>(</sup>b) As at June, 1937.

4. Industries Employing Child Labour.—The employment of children is practically confined to a limited number of industries, the most important of which are specified in the next table, which shows the number engaged in June, 1937.

# CHILDREN EMPLOYED.—VARIOUS INDUSTRIES, JUNE, 1937.

-															•
		N.S.	w.	Vict	oria.	Q'la	nd.	S. A	ust.	W.A	ust.	Та	3.	Aust	ralia.
Class.	Industry.	М.	F.	м.	F.	ж.	F.	3I. <sup>1</sup>	F.	M.	F.	M.	F.	M.	F.
n.	Bricks and Tiles, Fire-	_ ,			:	į	-	, .		_	_		_		
	bricks and Fireclay	ار		1	. !			+							
	Goods Glass Bottles	37	• •	23	9	24	٠.	25	'	II	•••	6	::	205 80	9 5
ΙΪΊ.	Chemicals, Drugs and	3/	••	34	ا	-	٠.	ا	• • •	٠. ١	••	• • •	•••	30	3
	Medicines	53	123	21	55	3	14	14	23	7	3	1	2	99	220
IV.	Smelting, Converting	١			1				_	. !					
	Refining and Rolling of Iron and Steel	298	11	313	25			125	7.4					736	50
,,	Engineering (not Marine	290	• • •	313	اد	••	• • •	125	14		••	٠٠ ا	• • •	230	30
,,	or Electrical)	280	13	420	20	148	4	136	17	63		3		1050	54
,,	Electrical Installations,			_				!	!	1					
	Motor Vehicles and	252	95	263	46	8	• •	36	13	9	• •	2	• •	570	154
"	Cycles (ii) Repairs	252	22	220	10	60	6	108	5	58	2	36	3	734	48
,,	Motor Bodies	34		113	5	19	۱	104	9	14			••	284	14
,,	Brass and Copper Galvanized Ironworking	125	28	145	4	27	I	24	3	14	••	3	• •	338	36
,,	and Tinsmithing	272	75	270	52	36	7	5 <i>7</i> !		72		3	١	710	134
,,	Wireless Apparatus	362	132		32	10				ĭ				635	164
VI.	Cotton	66	152	50	118		• • •							116	270
,,	Wool, Worsted and Shoddy	186	519	421	437	17		38	24	i	6	54	107	216	1136
,,	Hosiery and Other	100	319	441	43/	- /	43	30	24			34	10,	/10	1130
	Knitted Goods	67	594	200	875	3	II	1	14		6	2	13		1513
vii.	Rope and Cordage Tanning, Currying and	34	26	103	22	7	•••	26	••	7	•••	•••	• •	177	48
V 11.	Leather Dressing	60	1	107	1	26		1		6				200	2
,,	Bags, Trunks and Other				1										
VIII.	Leather Go <b>od</b> s Tailoring and Slop	72	93	40	55	14	14	4	36	4	2			134	200
7111.	Clothing	121	1124	76	408	41	263	ا و	236	10	46	2	22	259	2099
,,	Dressmaking	3	223	27	649	2		1	164	1	119		8	33	1285
,,	Millinery Shirts, Collars and	13	200	4	116	4	39	• •	28		18	•••	• •	21	401
- "	Underclothing .	22	658	28	338	7	125	ľ	92	1	39			50	1252
,,	Stays and Corsets	1	70	16	85		5							17	160
,,	Hats and Caps	33	78	22	37	• • • •	2	1	5	1	18	• •	٠٠.	57	140
ıä.	Boots and Shoes Bakeries (including	219	478	154	429	19	75	22	39	37	13	4	2	455	1036
1.1.	Cakes and Pastry)	57	19	89	22	14	35	25	3	10		72	104	267	183
,,	Biscuits	108	371	111	86	2	16	11	25	10	24		••	242	522
,,	Sugar Confectionery (including Chocolates)	72	484	41	133	18	75	14	26	1	17			146	744
	Condiments, Coffee and	/2	404	41	-33	-	/3	1 4	35	1	/		• •	140	744
- 1	Spices	16	77	13	41	5	18	32	3	25	1		• •	91	140
XI.	Billiard Tables, Cabinet and Furniture making				- (			i							
	and Upholstery	209	45	257	13	73	11	79	2	58	1	16	2	692	74
XII.	Manufactured Station-	-								-					
	Cardboard Boxes, Car-	58	146	23	79	. 2	4	7	21	1	8	• • •	• •	91	258
"	tons, etc	57	255	29	117	1	19	2	23	2	17			91	43 I
,,,	Paper Bags	3.	26	11	31		17		ĕ					19	80
,,	Papermaking	14	7	10		<i>,</i> ·	• •				• • •		••	24	7
"	Newspapers (including Weekly Publications)	129	13	34	. 3	63	8	14	1	18	8	4	1	262	34
-,,	General Printing and		- 3		1	آ	_	1	_		[	7	_		,
t	Bookbinding (not in-	26.	000		Tool	61				اء ا				690	
	cluding Government)	204	230	274	190	01	56	32	30	46	19	13		- 090	531

<sup>5.</sup> 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 1936-37 was £451,829,278, of which amount the sum of £260,578,903 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £13,565,730 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., £177,684,645 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 1936-37 was £90,123,132. This figure which is exclusive of amounts drawn by working proprietors shows an increase of £8,024,844 or 9.8 per cent., as compared with the total for the previous year.
- 2. Salaries and Wages Paid.—(i) Total Amount, 1936-37. The total amount of salaries and wages paid in the year 1936-37 in various classes of factories in each State is shown in the following table:—

SALARIES AND WAGES PAID IN FACTORIES, 1936-37.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non- metalliferous Mine and Quarry Pro-							
ducts II. Bricks, Pottery, Glass	820,843	515,988	150,787	106,406	145,844	68,025	1,807,893
etc	1,390,937	799,261	149,158	164,274	130,564	35,512	2,669,706
Oils and Grease IV. Industrial Metals, Machines, Imple-	1,363,203	1,378,604	110,839	257,252	166,283	18,825	3,295,006
ments and Conveyances V. Precious Metals,	14,795,139	9,057,037	2,352,948	3,60 <del>2</del> ,666	1,338,447	7#5,408	31,891,645
Jewellery and Plate VI. Textiles and Textile	151,077	320,051	23,163	22,477	12,031	2,915	531,714
Goods VII. Skins and Leather	1,805,303		113, <del>25</del> 4 152,003				5,457,816 1,765,637
VIII. Clothing IX. Food, Drink and	3,277,733		595,097	398,599		58,833	8,973,718
Tobacco X. Woodworking and	4,709,961	4,845,639	3,176,813	988,817	681,933	407,715	14,810,878
Basketware XI. Furniture, Bedding,	1,661,739	1,289,419	980,480	292,251	582,265	268,837	5,074,991
etc XII. Paper, Stationery, Printing, Book-	1,047,031	628,651	283,090	151,624	133,054	46,434	2,289,884
binding, etc	2,982,315	2,467,058	671,422	405,828	343,290	160,528	7,030,441
XIII. Rubber	551,855	521,896		15,219		6,349	1,192,886
XIV. Musical Instruments XV. Miscellaneous Pro-	49,019	16,382	7,4 [4	1,383	6,495		80,695
đucts	519,135	351,969	37,863	38,328	23,319	24,682	995,296
Total, Classes I. to XV.	35,835,036	30,481,815	8,892,606	6,645,644	3,967,458	2,045,647	87,868,206
XVI. Heat, Light and Power	807,408	505,080	196,031	526,994	190,275	29,138	2,254,926
Grand Total	36,642,444	30,986,895	9,088,637	7,172,638	4,157,733	2,074,785	90,123,132

(ii) Totals and Averages, 1932-33 to 1936-37. 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 1932-33 to 1936-37. 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 the method of computing the average number of hands employed as explained earlier. The figures are exclusive of working proprietors and of the amounts drawn by them:—

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.
		£	£	£	£	£	£	£
1932-33	Total amount paid Average per employee		21,218,271					59,416,436
	Total amount paid	25,748,547		6,995,340	4,615,081	2,752,540	1,481,503	64,444,660
1934-35	Average per employee Total amount paid	29,514,013	25,275,014	7,889,535	5,433,531	3,111,239	1,601,217	72,824,549
	Average per employee Total amount paid		156.33 28,456,028					169.34 82,098,288
1026-27	Average per employee		162.28					
	Average per employee		169.00	198.02	182.78	193.46	175.72	179.10

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 1936–37 were paid in Queensland, Western Australia and South Australia in that order.

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

(iii) Earnings of Males and Females, 1936-37. The following table shows the approximate amount paid in salaries and wages to males and females in each class of industry in each State during the year 1936-37:—

SALARIES AND WAGES .- MALE AND FEMALE FACTORY EMPLOYEES, 1936-37.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
		MA	LES.				
I. Treatment of Non-	£	£	£	£	£	£	£
metalliferous Mine		l					1
and Quarry Pro-	0		- 0 0				l
ducts	814,775	509,533	148,478	105,899	143,979	07,403	1,790,127
II. Bricks, Pottery, Glass,	1,364,544	777,303		161,871	129,167		2,613,178
III. Chemicals, Dyes, Ex-	1,304,344	///,303	145,072	101,0/1	129,107	35,221	2,013,176
plosives, Paint,							ł
Oils and Grease	1,120,527	1,150,441	96,951	236,049	157,612	17.877	2,788,452
- IV. Industrial Metals.	, , , , , , , , , , , , , , , , , , ,	1 -7-3-74-	90,931	-3-1-45	37,1	,,,,	1 -,,,,,,,,
Machines, Imple-	_						i
ments and Con-							ļ
veyances	14,387,984	8,795,045	2,316,594	3,525,495	1,318,703	735,793	31,079,614
V. Precious Metals,	1			_			
Jewellery and Plate	138,671	292,424	21,875	21,644	11,666	2,915	489,195
VI. Textiles and Textile		- 0 6-6		0		60-	
VII. Skins and Leather		1,811,656		118,761			3,174,237
MILE Clathing	634,067	691,508		35,056	42,405 99,773		
1X. Food. Drink and	1,340,007	1,004,010	215,050	125,433	99,773	29,000	3,494,489
Tobacco	2 704 415	4,106,089	2 020 552	900,102	618,536	247 024	12,805,728
X. Woodworking and	3,794,413	4,100,009	3,039,332	900,102	010,530	347,034	12,003,720
Basketware	1.630.331	1,268,119	962,283	286,361	580,391	265,600	4,993,184
XI. Furniture, Bedding	1 -7-5-755-	.,,,	,,	,3	55	3,-99	4,555,4
etc	933,803	542,909	264,577	142,688	122,505	45,168	2,051,650
XII. Paper, Stationery,							
Printing, Book-	i . :		i		_ 1		
binding, etc		2,081,789	573,700	352,858		144,859	5,981,266
XIII. Rubber	463,484		59,847	14,007	9,106	6,078	
XIV. Musical Instruments	43,024	16,226	7,414	1,385	6,495	••	74,544
XV. Miscellaneous Pro-		28-22-		ا ع م	18,797		00.
	413,177			32,464			
Total, Classes I. to XV.							
XVI. Heat, Light and Power	803,075	503,801	196,031	510,152,	189,232	29,060	2,231,351
Grand Total	31,450,699	24.963.007:	8.206.214	6,570,225	3.777.064	1.872.010	76,030,108

# SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES, 1936-37—continued.

Class of Industry.	n.s.w.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<del>-</del> <del></del>	;	FEM	ALES.		<del></del>		
	2	£		£	£	£	£
I. Treatment of Non- metalliferous Mine and Quarry Pro-				_			
ducts	6,068	6,455	2,309	507	1,865	562	17,766
etc. III. Chemicals, Dyes, Ex-	26,393	21,958	4,086	2,403	1.397	291	56,528
plosives, Paint, Oils and Grease .  IV. Industrial Metals, Machines, Implements and Con-	233,676	228,163	13,888	21,203	8,671	948	506,549
veyances V. Precious Metals.	407,155	261,992	36,354	77,171	19,744	9,615	812,031
Jewellery and Plate VI. Textiles and Textile	12,406	27,627	1,288	833	365	••	42,519
Goods	774,524	1,336,720	40,967	30,588		79,313	2,283,579
VII. Skins and Leather	75,679		9,513	16,113		493	
VIII. Clothing IX. Food, Drink and		2,665,092	380,047	273,166	193,973		5,479,229
Tobacco X. Woodworking and	915,546	739,550	137,261	88,715	63,397	60,681	2,005,150
Basketware XI. Furniture, Bedding,	31,408	21,300	18,197	5,890	1,874	3,138	81,807
etc	113,228	85,742	18,513	8,936	10,549	1,266	238,234
binding, etc	453,879	385,269	97,722	52,970	43,666	15,669	1,049,175
XIII. Rubber	88,371	76,777	28,428,	1,212	186'	271	195,245
XIV. Musical Instruments XV. Miscellaneous Pro-	5,995	. 156				••	6,151
ducts	105,958	64,662	3,850	5,864	4,522	616	185,472
Total, Classes I. to XV	5,187,412	6,021,729	792,423	585,571	379,626	202,688	13,169,449
XVI. Heat, Light and Power	4,333	1,270		16,842	1,043	78	23,575
Total		6,023,008	792,423	602,413	380,669		13,193,024

(iv) Total and Average Earnings of Males and Females, 1932-33 to 1936-37. Particulars for the last five years are given in the table hereunder:—

# SALARIES AND WAGES.-MALE AND FEMALE FACTORY EMPLOYEES.

	Particulars.	n.s.w.	Victoria.	Q'land.	S. Aust. W	. Aust.	Tas.	Australia.
	,	-	Males	<u> </u>	·			
1932-33.		20,099,456 84.51			3,709,236 2, 89,66	270,903 89.36		
	Average per employee £	213.72	194.25	201.02	188.62	208.05	188.75	202.51
1933-34.	Amount paid£ Per cent on total	21,885,356 85.00	18,009,598 78.81	6,353,917 90.83	4,170,047 2, 90.36	475,698 89.94		54,210,033 84.12
	Average per employee £	206.98	191.45	208.03	185.58	206.27	182.05	199.32
1934-35.	Amount paid£ Per cent. on total	25,215,937 85.44			4,937,285 2, 90.87	90.20		
	Average per employee £	208.57	193.31	219.93	190.22	210.66	183.68	202.48
1935-36.	Amount paid£ Per cent. on total	85.78	79.97		5,810,399 3,	90.54		
6	Average per employee £ Amount paid . £					212.76		
1936-37.	Per cent. on total	85.83	24,903,007 80.56	0,290,214	6,570,225 3, 91.60	90.84		
	Average per employee £					218.47	198.05	

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

	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australi a
			FEMALE	3.		<del></del>		
1932-33.	Amount paid£ Per cent. on total	3,683,392 15.49	4,621,254			270,525 10.64		9,750,603 16.41
1933-34.	Average per employee £	95.78			79.62	89.05	79.24	
*933-34.	Per cent. on total Average per employee £	15.00	21.19		9.64	10.06	11.21	15.88
1934-35.	Amount paid£ Per cent. on total		5,238,700	705,092	496.246	304,763		11,214,474
_	Average per employee £	90.40	90.27	84.51	80.64	87.30	77.93	89.17
1935–36.	Amount paid£ Per cent. on total	14.22		740,827	8.86	350,469	10.82	
1936-37.		5,191,745	6,023,008,		602,413	86.84 380,669		13,193,024
	Per cent. on total Average per employee £	14.17 92.71		8.72 86.57		9.16	9.77 86.10	

<sup>(</sup>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, 1936-37.

	1		Salaries an	d Wages Pa	aid to—			
Class of Industry.	Manager seers, Acc and C	ountants		Other oyees.	All Employees.			
	Males.	Females.	Males.	Females.	Males.	Females.	Total.	
I. Treatment of Non- metalliferous Mine and Quarry Pro-	£	£	£	£	£	£	. <b>£</b>	
ducts II. Bricks, Pottery, Glass,	259,876	17,106	1,530,251	660	1,790,127	17,766	1,807,893	
etc	291,578	29,038	2,321,600	27,490	2,613,178	56,528	2,669,706	
III. Chemicals Dyes, Explosives, Paint, Oils and Grease IV. Industrial Metals, Machines, Implements and Con-	687,604	126,579	2,100,853	379,970	2,788,457	506,549	3,295,006	
veyances	3,912,401	423,789	27,167,213	388,242	31,079,614	812,031	31,891,645	
V. Precious Metals, Jewellery and Plate VI. Textiles and Textile	48,830	12,736	440,365	29,783	489,195	42,519	531,714	
Goods	616,446	139,667				2,283,579		
VII. Skins and Leather VIII. Clothing	200,869 516,144		1,354,754		1,555,623	210,014 5,479,229		
IX. Food, Drink and	310,144	3~3,~31	2,970,343	3,133,970	3,494,409	3,479,229	0,9/3,/10	
Tohacco X. Woodworking and	2,553,525	1				2,005,150	1 ., , ,	
Basketware XI. Furniture, Bedding	543,700	62,386	4,449,484	19,421	4,993,184	81,807	5,074,991	
etc XII. Paper, Stationery, Printing, Book-	183,859	46,652	1,867,791	191,582	2,051,650	238,234	2,289,884	
binding, etc	1,053,705		4,927,561			1,049,175		
XIII. Rubber	221,952		775,689					
XIV. Musical Instruments XV. Miscellaneous Pro-	10,647	2,675	63,897	3,476	74,544	6,151	80,695	
ducts	151,711	34.001	658,113	151,471	809,824	185,472	995,296	
Total, Classes I. to XV.	11,252,847	1,904,575	63,445,910					
XVI. Heat, Light and								
Power	476,532		1,754,819		2,231,351		2,254,926	
	11,729,379							
Average paid per employee	340.56	128.15	198.98	89.39	212.44	93.52	179.10	

3. Power, Fuel and Light Used.—(i) Total Value, 1936-37. The expenditure by factories on power, fuel and light is of considerable importance; in 1936-37 it amounted to £13,565,730, an increase of £289,435 as compared with the previous year. The following table shows the value of power, fuel and light used in the different classes of industry in 1936-37:—

VALUE OF POWER, FUEL AND LIGHT USED(a) IN FACTORIES, 1936-37.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
	£	£	£	£	£	£	£
I. Treatment of Non- metalliferous Mine and Quarry Pro-							  - 
ducts II. Bricks, Pottery, Glass,	280,539	212,470	55,525	49,150	68,431	72,636	738,75
etc	404,108	263,522	40,530	55,368	58,596	13,612	835,73
plosives, Paint, Oils and Grease  IV. Industrial Metals, Machines, Imple-	199,688	221,429	14,432	43,951	34,103	2,566	516,169
ments and Con- veyances	2,798,168	551,685	191,121	229,284	82,415	214,403	4,067,07
V. Precious Metals, Jewellery and Plate VI. Textiles and Textile	8,691	15,588	· 8 <b>7</b> 6	1,807	523	134	27,61
Goods	178,308					19,782	
VII. Skins and Leather	64,328 95,741					733 1,385	
IX. Food, Drink and Tobacco	798,904	767,636	472,102	187,830	135,243	52,623	2,414,33
X. Woodworking and Basketware	83,454	80,966	53,697	15,013	30,323	16,445	279,89
XI. Furniture, Bedding, etc.	32,661	27,637	9,487	8,434	4,164	1,681	84,06
XII. Paper, Stationery, Printing, Book-							
binding, etc	138,662 85,536					4,725 618	
XIV. Musical Instruments XV. Miscellaneous Pro-	3,423	282	76	24			3,92
ducts	29,661	23,810	1,091	1,812	910	728	58,01
Total, Classes I. to XV.	5,201,872	3,002,057	921,836	649,270	455,608	402,071	10,632,71
KVI. Heat, Light and Power	1,263,070	675,431	303,419	207,538	483,558		2,033,01
Grand Total	6,464,942		1,225,255	856,808			13,565,73

(ii) Values of Items, 1936-37. The following table shows the values of the various items of power, fuel and light used in factories in each State during the year 1936-37:—

VALUE OF POWER, FUEL AND LIGHT USED IN FACTORIES, 1936-37.

Particulars.		New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tas- mania.	Australia.
		£	£	£	£	£	£	£
Coal		1,991,000	1,303,395	560,327	273,811	278,328	92,900	4,499,761
Coke		1,260,576	254,336	30,338	34,299	29,128	2,900	1,611,577
Wood		110,344	178,549	124,448	63,203	162,318	29,793	668,655
Charcoal		(a) 68,726	90,453	36,310	27;623	7,268	154	230,534
Fuel Oil		417,570		79,086	72,322	185,675	10,754	999,757
Gas		466,977	103,814	24,609	22,121	12,990	2,408	632,919
Electricity		1,669,492	1,137,281	228,344	290,541	176,026	240,868	3,742,552
Water and Lubri	cat-						,	•
ing Oil		480,257	375,310	141,793	72,888	87,433	22,294	1,179,975
Total		6,464,942	3,677,488	1,225,255	856,808	939,166	402,071	13,565,730
			(a)	Including C	ther.			

(iii) Quantities, 1936-37. The following table shows the quantities of certain items of power, fuel and light used in factories in each State during the year 1936-37:—

#### QUANTITY OF POWER, FUEL AND LIGHT USED IN FACTORIES, 1936-37.

Particula	rs.	Unit.	New South Wales.	Victoria.	Queens- land.	South Australia	Western Australia.	Tas- mania.	Australia.
Coal		Ton	2,312,983	3,018,248	412,317	211,501	227,307	75,844	6,258,200
Coke		Ton	1,138,847	171,664	20,450	19,517	12,538	1,389	1,364,405
Wood		Ton	139,888	397,853	222,485	88,247	284,763	74,105	1,207,341
Fuel Oil		Gal.	20.201,089	12,209,281	2,702,824	3,134.005	7,458.833	332.074	46.039.096

(iv) Total Value, 1932-33 to 1936-37. 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.	Taq.	Australia.
	0	£ 4,791,381	£ .2,923,230	905,893	764,930	£ 598,088	£ 462,650	10,446,172
1932-33 1933-34		5,239,416		971,680	827,049 866,567	641,324	465,663 487,592	11,214,881
1934-35 1935-36 1936-37		6,273,485	3,505,321	1,080,525	972,636 856,808	852,327 .939,166	592,001	13,276,295
1930-37	••	0,404,942	3,077,400	1,223,233	0,000	.939,100	402,071	23,303,730

4. Value of Materials Used.—(i) Total Amount, 1936-37. 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 1936-37 was £260,578,903, representing 57.67 per cent. of the value of the final output. (See par. 5.) The table hereunder shows the value of the materials used in various classes of industry in each State:—

VALUE OF MATERIALS USED IN FACTORIES, 1936-37.

	· · · · · · · · · · · · · · · · · · ·	MAILK	17125 00		ACTOR:			
	Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
J.	Treatment of Non- metalliterous Mine and Quarry Pro-		£	£	£	£	£	£
~*	duets	2,045,798	953,093	310,487	123,633	217,599	131,168	3,781,778
	Bricks, Pottery, Glass, etc.	861,831	406,927	62,273	158,572	72,015	25,515	1,587,133
	Chemicals, Dyes, Explosives, Paint, Oils and Grease Industrial Metals, Machines, Imple-	7,236,656	4,918,373	545,532	1,214,066	1,018,239	100,605	15,033,521
v	ments and Conveyances Precious Metals,	39,325,668	12,241,092	3,432,888	9,654,801	1,536,362	1,766,572	67,957,383
	Jewellery and Plate Textiles and Textile	142,478	399,615	10,667	18,980	6,672	599	579,011
	Goods		8,170,755		864,391			
	Skins and Leather		2,989,194					
	Clothing	5,888,236	8,841,460	1,043,589	483,218	407,425	67,366	16,731,294
IX.	Food, Drink and	1					1	
	Tobacco	31,109,502	30,089,015	23,526,646	6,869,274	4,232,483	1,900,799	97,787,719
Χ.	Woodworking and					0.000		6(0
	Basketware	4,424,894	2,799,543	2,209,357	924,295	848,669	441,811	11,651,569
A1.	Furniture, Bedding,			_			ا م	
3777	etc	2,103,954	1,400,381	444,614	278,438	245,663	51,583	4.524,633
XII.	Paper, Stationery, Printing. Book-	i	: i					
		1 705 254	3,507,901	607 470		322,868	111,561	9,179,453
VIII	The blan		2,062,381		444,357			
	Musical Instruments	39,252						53,579
	Miscellaneous Pro-	39,252	3,103	2,335	3,402	i 107		33.379
2	ducts	989.786	757,077	35,095	61,774	31,660	23,487	1,898.879
	Total, Classes I. to XV							
W 17 F		100,709,324	79,544,910	34,435,073	21,231,391	9,272,400	5,179,001	231,393.767
AVI	Heat, Light and	883,970	757,513	176,558	T 48 274	1 154,851	6400	2.185,116
	0 1							
	Grand Total	109,593,494	80,302,423	34,612,231	21,399,805	9,427,259	5,243,691	260,578,903

(ii) Total Amount, 1932-33 to 1936-37. 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'iand.	S. Aust.	W. Aust.	Tasmania.	Australia.
1932-33 · · · 1933-34 · · · 1934-35 · · ·	£ 70,084,956 77,330,401 87,096,873	£ 58,081,097 61,224,916 65,096,374	£ 24,772,613 27,758,597 30,346,510	£ 12,321,268 13,450,771 15,275,492	£ 6,667,618 6,791,684 7,654,382	£ 3,220,996 3,270,895 3,577,386	£ 175,148,548 189,827,264 209,047,017
1935–36 1936 <b>–37</b>	109,593.494	80,302,423	30,901,341	19,261,750	9,172,205	4,195,021 5,243,691	238,974,797 260,578,903

5. Total Value of Output.—(i) Total, 1936-37. The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1936-37 is shown in the following table. The figures given represent not only the increase in value due to the process of manufacture, but include also the values of the raw materials and the power, fuel and light used. The difference between the sum of the values of the materials and the fuel and light used, and the total output (see par. 6) is the real value of factory production.

TOTAL VALUE OF OUTPUT OF PACTORIES, 1936-37	TOTAL	VALUE	0F	OUTPUT	0F	PACTORIES.	1936-37.
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				•				
c	lass of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I.	Treatment of Non- metalliferous Mine and Quarry Pro-		£	£	·£·	£	£	£
17.	ducts Bricks, Pottery,	4,169,412	2,445,353	681,053	380,564	579,952	444,179	8,700,513
	Glass, etc Chemicals, Dyes, Explosives, Paint,		2,018,926	370,588	558,517	363,789	91,435	7,109,297
ıv.	Oils and Grease Industrial Metals, Machines, Imple- ments and Con-	13,313,502			1,896, <b>3</b> 25			. 26,862,456
v.	veyances Precious Metals, Jewellery and		26,849,850		14,707,266	3,758,493	3,696,648	124,769,05
VI.	Plate Textiles and Textile			1 ,,,	61,449	29,958	4,950	1,464,39
	Goods	8,386,992						
	Skins and Leather			1,862,554				
	Clothing Food, Drink and		16,021,980		1,107,635			
X.	Tobacco Woodworking and		41,770,149		1	i		136,427,76
XI.	Basketware Furniture, Bedding	7,353,356		3,821,018	•	1,743,311	,,,,	20,306,08
XII.	Paper, Stationery, Printing, Book-			,	1		123,076	8,423,95
	binding, etc	9,937,674			1,126,434	925,193	439,338	22,380,97
	Rubber	2,710,042			1	1	25,769	6,625,20
XV.	ments Miscellaneous Pro-	130,196	30.888	15,625	8,104	10,283		195,09
	ducts Total, Classes I. to		1,472,254	97.8+3	149,466	70,405	65,128	3,874,52
	XV	185,643,923	138,689,203	51,857,772	32,799,434	17,161,287	9,796,382	435,948,00
AVI.	Heat, Light and Power	7,168,491	4,002,989	1,164,236	1,728,742	1,151,835	664.984	15,881,27
	Grand Total	192,812,414	142,692,192	   53,022,008 	34,528,176	18,313,122	10,461,366	451,829,27

(ii) Total, 1932-33 to 1936-37. The following statement shows the value of output of factories in each State in the five years ended 1936-37:—

TOTAL VALUE OF OUTPUT OF FACTORIES.

		<del></del>					
Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	! <del></del>	·					
	£	£	£	£	£	£	£
1933-34	124,445,767 136,611,971 154,433,248. 174,693,761 192,812,414	108,496,310	38,435,343 42,442,785 46,021,303 47,664,810 53,022,008	20,940,698 22,919,297 25,699,172 31,904,091 34,528,176	12,327,548 12,877,288 14,641,680 17,528,741 18,313,122	6,563,083 6,786,409 7,223,124 8,853,882 10,461,366	304,797,868 330,134,060 365,201,384 414,688,455 451,829,278

6. Value of Production.—(i) Total in Classes, 1936-37. The value of production for any industry was defined by the Conference of Statisticians at Sydney in 1925 as "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production."

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

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 8 par. 4, was estimated at £9,584,314 for 1936-37. Many miscellaneous expenses, also, such as insurance and advertising, have not been taken into account. Hence, it must not be inferred that when wages and salaries are deducted from the value of production, the whole of the "surplus" is available for interest and profit.

The following table shows the value of production in 1936-37 in each State for the various classes of factories:—

VALUE OF PRO	DUCTION,	1936-37.
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Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non- metalliferous Mine and Quarry Pro-	£	£	£	£	£	£	£
ducts	1,843,075	1,279,790	315,041	207,781	293,922	240,375	4,179,984
ctc III. Chemicals, Dyes, Explosives, Paint.	2,440,103	1,348,477	267,785	344,577	233,178	52,308	4,686,428
Oils and Grease IV. Industrial Metals, Machines, Implements and Con-	5,877,158	3,934,174	334,591	638,308 1	472,128	56,407	11,312,766
veyances V. Precious Metals.	25,872,008	14,057,073	4,136,941	4,823.181	2,139,716	1,715,679	52,744,592
Jewellery and Plate VI. Textiles and Textile	249,500	502,471	38,148	40,662	22,763	4,217	857,761
Goods	3,139,660	5,776,280				378,486	9,828,156
VII. Skins and Leather	1,198,772	1,483,825					
VIII. Clothing IX. Food, Drink and	5,380,198	7,050,326	1,017,719	611,122	476,188	1	
Tobacco X. Woodworking and	13,754,637	10,913,498	6,522,195	2,385,379	1,861,659	788,335	36,225,703
Basketware XI. Furniture, Bedding,	2,845,008	2,185,853	1,557,964	498,419	864,319	423,054	8,374,617
etc XII. Paper, Stationery, Printing, Book-	1,675,762	1,145,974	457,477	239,516	226,716	69,812	3,815,257
binding, etc	5,603,658	4,477,450	1,141,145	665,303	584,134	323,052	12,794,742
XIII. Rubber	765,489		192,103		24,096	14,931	2,303,302
XIV. Musical Instruments XV. Miscellaneous Pro-	87,521	22,503	13,214	4,678			137,594
ducts	999,978	691,367	61,657	85,880	37,835	40,913	1,917,530
Total, Classes I. to XV.	71,732,527	56,142,236	16,500,263	10,898,573	7,433,271	4,214,630	166,921,500
XVI. Heat, Light and Power	5,021,451	2,570,045	684,259	1,372,990	513,426	600,974	10,763,145
Grand Total	76,753,978	58,712,281	17,184,522	12,271,563	7,946,697	4,815,604	177,684,645

(ii) Total and Averages, 1932-33 to 1936-37. The value of production and the amount per person engaged and per head of population are shown in the following table for the years specified:—

FACTORIES.—VALUE OF PRODUCTION.

	1	PACIURIE	SVALUE	OF PROD	oction.		
Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
			Vai	UE.	-		
1932-33 ·· 1933-34 ·· 1934-35 ·· 1935-36 ·· 1936-37 ··	£ 49,569,430 54,042,154 61,430,068 69,469,955 76,753,978	£. 41,081,102 44,201,645 48,762,591 54,043,690 58,712,281	£ 12,756,837 13,712,508 14,623,319 15,682,944 17,184,522	£ 7,854,500 8,641,477 9,557,113 11,669,705 12,271,563	£ 5,061,842 5,444,280 6,284,923 7,504,209 7,946,697	£ 2,879,437 3,049,851 3,158,146 4,066,860 4,815,604	£ 119,203,148 129,091,915 143,816,166 162,437,363 177,684,645
		P	ER PERSON	ENGAGED			
1932-33 · · · 1933-34 · · · · 1934-35 · · · · 1935-36 · · · · 1936-37 · · ·	£ 358 351 351 360 368	£ 284 283 287 295 307	£ 341 342 340 348 356	£ 298 293 285 303 301	£ 342 337 354 357 350	£ 312 312 299 351 387	£ 321 315 320 330 339
		PE	R HEAD OF	POPULATIO	on.		
1932-33 · · · 1933-34 · · · 1934-35 · · · · 1935-36 · · · · 1936-37 · · ·	£ 19.13 20.68 23.62 26.15 28.63	£ 22.64 24.22 26.55 29.32 31.70	£ 13.56 14.43 15.22 16.13 17.46	£ 13.55 14.84 16.36 19.91 20.86	£ 11.59 12.36 14.18 16.76 17.59	£ 12.63 13.32 13.78 17.66 20.74	£ 18.05 19.40 21.46 24.06 26.11

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1936-37 was estimated at £451,829,278, there remained, after payment of £260,578,903, the value of the materials used, of £90,123,132 for salaries and wages, and of £13,565,730 for fuel, the sum of £87,561,513 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 1936-37:—

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1936-37.

State.		Materials. Used. (a)	Power, Fuel and Light.	Salaries and Wages,	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
		VAI	UE AND COST	e, etc.		·
		£	£	£	£	£
New South Wales Victoria Queensland South Australia Western Australia Tasmania		109,593,494 80,302,423 34,612,231 21,399,805 9,427,259 5,243,691	6,464,942 3,677,488 1,225,255 856,808 939,166 402,071	36,642,444 30,986,895 9,088,637 7,172,638 4,157,733 2,074,785	40,11,534 27,725,386 8,095,885 5,098,925 3,788,964 2,740,819	192,812,414 142,692,192 53,022,008 34,528,176 18,313,122 10,461,366
Australia	••	260,578,903	13,565,730	90,123,132	87,561,513	151,829,278

 <sup>(</sup>a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
 (b) Including lubricants and water.

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1936-37.—
continued.

State.		Materials. Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
I	PERCE	ENTAGE OF C	Costs, etc.,	ON TOTAL	Value.	
		%	%	%	%	%
New South Wales Victoria Qucensland South Australia Western Australia Tasmania		56.84 56.28 65.28 61.98 51.48 50.12	3.36 2.58 2.31 2.48 5.13 3.85	19.00 21.71 17.14 20.77 22.70 19.83	20.80 19.43 15.27 14.77 20.69 26.20	100.00 100.00 100.00 100.00 100.00
Australia		57.67	3.00	19.95	19.38	100.00

 <sup>(</sup>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.

I. General.—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1936-37:—

VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY, 1936-37.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia,
Land and buildings						1	!
Total	f03,609,212	75,161,894	28,943,414	17,263,895	13,421,673	7,803,114	246,203,232

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. Value of Land and Buildings.—(i) Total, Australia, 1932-33 to 1936-37. The appended table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1932-33 to 1936-37 inclusive:—

VALUE OF LAND AND BUILDINGS.—AUSTRALIA.

Class of Industry.	1932-33.	1933-34.	τ934-35.	1935-36.	1936-37.
	£	£	£	£	£
I. Treatment of Non- metalliferous Mine and					
Quarry Products	2,396,967	2,415,120	2,409,200	2,412,145	2,617,765
II. Bricks, Pottery, Glass,					
etc.	2,214,761	2,376,697	2,558,791	2,706,575	2,686,930
III. Chemicals, Dyes, Explosives, Paint, Oils				1	'
and Grease	5,832,064	5,903,867	6,129,529	6,398,332	6,596,554
IV. Industrial Metals,	31-3-14	313-311	-,,,5-5	!	-109-1004
Machines, Implements		i			
and Conveyances	25,632,777	25,877,989	26,718,722	27,873,261	30,061,037
V. Precious Metals, Jewel-		0			<b>6</b> . (0-
lery and Plate	490,511	518,293	536,745	561,735	602,685
VI. Textiles and Textile Goods	4,993,710	5,106,496	5,169,116	5,447,503	5,558,420
VII. Skins and Leather	1,768,577	1,789,880	1,790,607	1,833,335	2,008,167
VIII. Clothing	8,894,673	9,059,219	9,571,442	9,750,733	10,282,902
IX. Food, Drink and To-				١	
bacco	26,645,408	27,006,548	27,949,389	28,928,977	30,166,301
X. Woodworking and Bas-					
ketware	3,506,606	3,486,892	3,694,166	3,769,305	3,838,701
XI. Furniture, Bedding, etc.	1,869,195	1,963,269	2,056,019	2,196,782	2,370,393
XII. Paper, Stationery, Print-	_				
ing, Bookbinding, etc.	9,048,534	9,093,698	9,221,909	9,564,871	9,668,602
XIII. Rubber	1,853,590	1,893,051	1,849,493	1,842,048	1,751,707
XIV. Musical Instruments , .	212,112	144,215	122,887	115,948	109,531
XV. Miscellaneous Products	1,014,793	1,063,804	1,114,681	1,213,697	1,323,085
Total, Classes I. to XV.	96,374,278	97,699,038	100,892,696	104,615,247	109,642,780
XVI. Heat, Light and Power	9,462,594	9,838,768	9,947,961	9,994,655	9,883,357
Grand Total	105.836.872	107,537,806	110,840,657	114,609,902	119,526,137

(ii) Value in each State, 1936-37. The following table gives similar information for each State for 1936-37:—

VALUE OF LAND AND BUILDINGS, 1936-37.

7112	THEOR OF EARLY POLEDINGS, 1700 U.												
- Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.						
1. Treatment of Non-	£	£	£	£	£	£	£						
metalliferous Mine and Quarry Pro-													
ducts II. Bricks, Pottery, Glass,	1,176,378	805,424	207,033	152,608	104,750	171,572	2,617,765						
etc. III. Chemicals, Dyes, Ex-	1,532,168	736,290	119,897	162,217	116,119	20,239	2,686,930						
plosives, Paint, Oils and Grease	2,438,653	2,788,955	171,107	451,454	667,129	79,256	6,596,554						
IV. Industrial Metals, Machines, Imple-													
ments and Con- veyances	14,713,578	8,328,919	2,248,086	2,341,470	1,553,730	875 <b>,</b> 254	30,061,037						
V. Precious Metals, Jewellery and Plate VI. Textiles and Textile	207,962	294,603	30,899	34,861	25,635	8,725	602,685						
Goods VII. Skins and Leather	1,861,815 770,476	3,093,045 926,931	126,253			246,800							
VIII. Clothing IX. Food, Drink and		4,369,901			465.299	97,398							
Tobacco X. Woodworking and	10,962,862	9,047,184	5,267,055	2,337,522	1,627,923	923,755	30,166,301						
Basketware XI. Furniture, Bedding,	1,586,234	981,942	516,358	304,153	293,107	156,907	3,838,701						
XII. Paper, Stationery,	965,174	819,478	261,900	160,690	125,697	37,454	2,370,393						
Printing, Book- binding, etc.		3,172,338	944,618										
XIII. Rubber XIV. Musical Instruments	805,590 55,949		105,979 7,460	59.644 2,278			1,751,707						
XV. Miscellaneous Pro- ducts	708,497	454,011	57,860	58,677	34,152	9,888	1,323,085						
Total, Classes I. to XV.	46,047,280	36,573,603	10,809,016	7,525,270	5,915,659	2,771,952	109.642,780						
XVI. Heat, Light and Power	5,582,318	2,374,665	674,145	607.877	363,646	280.706	9.883,357						
Grand Total	51,629,598	38,948,268	11,483,161	8,133,147	6,279,305	3,052,658	119.526,137						

(iii) Value in cack State, 1932-33 to 1936-37. The total value of factory land and buildings for each year from 1932-33 to 1936-37 is given hereunder:—

VALUE	OF	LAND	AND	BUILDINGS.

Year.	N.S.W. Victoria.		Q'land. S. Aust.		W. Aust.	Tasmania.	Australia.	
1932-33 1933-34 1934-35 1935-36 1936-37	£ 45,873,565 46,310,925 47.937,192 49,494,222 51,629,598	£ 34,804,987 35,563,879 36,644,621 37,678,298 38,948,268	£ 9,075,596 9,461,870 9,942,803 10,514,513 11,483,161	£ 7,915,965 7,989,314 7,947,825 8,268,807 8,133,147	£ 5,537,227 5,581,057 5,673,461 5,978,111 6,279,305	£ 2,629,532 2,630,761 2,694,755 2,675,951 3,052,658	£ 105,836,872 107,537,806 110,840,657 114,609,902 119,526,137	

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ending 1932-33, however, there was a decline of £12 million to £105.8 million, but during the next four years the value had risen to £119.5 million.

3. Value of Plant and Machinery.—(i) Total, Australia, 1932-33 to 1936-37. 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.	1932-33.	1933~34.	1934-35.	1935-36.	1936-37.
	£	£	£	<u>£</u>	£
I. Treatment of Non-		1	i		i
metalliferous Mine and		!	'	_	1
Quarry Products	5,517,010	5,373,802	5,279,528	5,249,528	4,881,743
II. Bricks, Pottery, Glass,					
etc.	2,291,788	2,414,175	2,649,482	2,865,499	2,858,777
III Chemicals, Dyes, Ex-		1	!	:	i
plosives, Paint, Oils			1 - 6-0 066		
and Grease IV Industrial Metals.	5,537,025	5,386,426	5,638,866	5,722,327	5,923,776
IV. Industrial Metals, Machines, Implements				İ	1
and Conveyances	24,916,610	24,611,820	24,976,454		-6
V. Precious Metals, Jewel-	24,910,010	24,011,020	24,970,454	25,604,490	26,940,963
lery and Plate	111,446	148,402	162,129	175,884	.00.00
VI. Textiles and Textile Goods	5,743,596	5,751,145		6,052,307	187,373 6,505,668
VII. Skins and Leather	905,709	913,723	892,370	898,598	902,197
VIII. Clothing	2,054,915		2,180,610		2,326,915
IX. Food, Drink and To-	2,034,913	2,001,074	2,100,010	2,230,009	2,320,913
bacco	27,618,639	27,305,642	29,207,778	30,041,612	30,244,206
X. Woodworking and Bas-	27,010,039	27,303,042	29,207,770	30,041,012	30,244,200
ketware	3,318,657	3,326,466	3,490,416	3,629,550	3,597,835
XI. Furniture, Bedding, etc.	645,200	679,252	661,980	678,710	704,708
XII. Paper. Stationery, Print-	043,200	0/9,232	, 001,900	0/0,/10	704,700
ing. Bookbinding, etc.	7,111,322	7,139,924	7,108,001	7,532,292	7,773,218
XIII. Rubber	1,749,634	1,710,597	1,639,724	1,464,225	1,401.645
XIV. Musical Instruments	93,230	33,582	24,209	18,157	14.800
XV. Miscellaneous Products	545,511	560,737	580,623	579,858	671,173
24 . Miscenancous rioduces		300,737	300,023	379,030	0/1,1/3
Total, Classes I. to XV.	88,190,292	87,416,767	90,291,397	92,769,706	94,934,997
XVI. Heat, Light and Power	32,359,565	32,791,361	32,349,558	32,461,385	31,742,098
Grand Total	120,549,857	120,208,128	122,640,955	125,231,091	126,677,095

The maximum amount invested in plant and machinery was £127.6 million in 1929-30. The amount declined to £120.2 million during the next four years, but has since risen to £126.7 million.

(ii) Value in each State, 1932-33 to 1936-37. The following table shows the value of plant and machinery in each State during the last five years. It will be noted that the chief increases during the year 1936-37 were recorded in Victoria and Western Australia:—

VALUE OF PLANT AND MACHINERY.

#### N.S.W. Victoria. Q'land. S. Aust. W. Aust. Total. Year. Tasmania. £ £ £ £ £ 5,733,638 49,903,177 33,022,441 16,408,197 9,450,517 6,031,887 120,549,857 1932-33 9,161,672 33,270,400 16,891,339 5,678,638 49,083,921 6,122,158 120,208,128 1933-34 33,947,056 17,114,417 9,293,448 5,763,428 1934-35 50,453,590 6,069,016 122,640,955 1935-36 51,964,982 34,194,608 17,736,543 9,280,335 6,063,901 5,990,722 125,231,091 36,213,626 17,460,253 1936-37 51,979,614 9,130,748 7,142,368 4,750,486 126,677,095

(iii) Value according to Industry, 1936-37. The following table shows the value of plant and machinery used in factories in each State during 1936-37, classified according to industry:—

VALUE OF PLANT AND MACHINERY, 1936-37.

Class of Industry.	n.s.w.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
I. Treatment of Non- metalliferous Mine	£	£	£	£	£	£	£
and Quarry Pro- ducts II. Bricks, Pottery, Glass,	2,381,080	1,638,316	261,661	233,300	187,866	179,520	4,881,743
etc. III. Chemicals, Dyes, Ex-	1,550,418	811,936	132,261	181,903	153,208	29,051	2,858,777
plosives, Paint, Oils and Grease IV. Industrial Metals, Machines, Imple-	1,540,438	2,575,762	107,727	787,598	865,116	47,135	5,923,776
ments and Con- veyances V. Precious Metals,	15,488,289	5,294,369	1,903,880	1,972,945	971,476	1,310,004	26,940,963
Jewellery and Plate VI. Textiles and Textile	62,865	103,936	5,568	9,090	4,370	1,544	187,373
Goods	2,017,577			211,825	78,946	255,918	6,505,668
VII. Skins and Leather	354,887	358,203	105,270	10,108			902,197
VIII. Clothing IX. Food. Drink and	791,060	1,183,805	172,204	86,844	78,135	14,867	2,326,915
Tobacco X. Woodworking and	9,105,550	6,676,623	10,753,121	1,793,191	1,480,829	434,892	30,244,206
Basketware XI. Furniture. Bedding.	1,001,337	894,908	775, <b>5</b> 70	202,160	473,597	250,263	3,597,835
etc XII. Paper, Stationery, Printing, Book-	294,080	201,186	84,101	71,695	35,532	18,114	704,708
binding, etc	3,423,800	2,698,890	686,553	500,718	350,904	112,353	7,773,218
XIII. Rubber	526,292	808,248	39,176		8,312	5,679	
XIV. Musical Instruments XV. Miscellaneous Pro-	8,640	4,681	251	736	492	• •	14,800
ducts	356,846	262,613	15,366	17,670	12,250	6,428	671,173
Total, Classes I. to XV.	38,903,159	27,319,258	15,178,329	6,093,721	4,770,154	2,670,376	94,934,997
XVI. Heat, Light and Power	13,076,455	8,894,368	2,281,924	3,037,027	2,372,214	2,080,110	31,742,098
Grand Total	51,979,614	36,213,626	17,460,253	9,130,748	7,142,368	4,750,486	126,677,095

4. Depreciation of Land and Buildings and Plant and Machinery.—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State during the year 1936-37.

ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1936-37.

	*					i	
Class of Industry.	N.S.W.	Vie.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
<b>4</b> . – – –		Í	.				
	£	£	£	£	£	£	£
I. Treatment of Non- metalliferous Mine and Quarry Pro-	-			ı.	-	_	
ducts	337,774	95,434	28,683	12,757	30,206	39,048	543,902
etc. III. Chemicals, Dyes, Explosives, Paint.	196,994	49,943	9,653	13,886	16,491	1,416	288,383
Oils and Grease  IV. Industrial Metals,  Machines, Implements and Con-	215,724	264,159	16,250	21,928	56,992	7,111	582,164
	1,564.392	404,801	140,892	272,516	66,751	131,879	2,581,231
Jewellery and Plate VI Textiles and Textile	6,158	8,502	459	623	1,045	64	16,852
Goods	203.228	380,010	5,625	18,927	2,793	28,000	638,583
VII. Skins and Leather	30,234	49,212	8,149	763	3,515	358	92,231
VIII. Clothing IX. Food. Drink and	80,946	123,127	9,132	6,398	18,033	3,227	240,863
Tobacco X. Woodworking and	670,962	529,343	586,688	151,414	106,966	42,207	2,087,580
Basketware XI. Furniture, Bedding,	115,193	81,352	63,075	29,707	48,813	19,833	357,973
etc XII. Paper, Stationery, Printing, Book-	27,979	17,313	9,341	5,881	6,095	1,567	68,176
Binding, etc	264,000	266,941	62,970	52,712	40,934	13,185	700,742
XIII. Rubber	93,039	73,659	4,599	1,537	2,179	536	175,549
XIV. Musical Instruments XV. Miscellaneous Pro-	5,086	175	11	32	297	•••	5,601
ducts	28,075	32,260	1,420	2,812	2,072	628	67,267
Total, Classes I. to XV.	3,839,784	2,376,231	946,947	591,893	403,183	289,059	8,447,097
XVI. Heat, Light and Power	569,160	253,503	176,236	17,163	71,444	49,711	1,137,217
Grand Total	1,408,944	2,629,734	1,123.183	609,056	474,627	338,770	9,584,314

# § 9. Individual Industries.

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

2. Chemicals, Drugs and Medicines.—(i) Details for each State, 1936-37. This industry is the most important in Class III. and details for each State during the year 1936-37 are shown in the following table:—

CHEMICALS, DRUGS AND MEDICINES, 1936-37.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total value of output £	2,572 864,110 494,043 434,453 58,300 1,617,185 3,692,899 2,017,414	68 1,679 560,637 361,231 306,822 30,551 941,094 1,975,871 1,004,226	15 195 68,319 45,326 34,534 4,432 111,213 219,761 104,116	9 292 70,167 53,111 38,076 5,628 191,947 288,144 90,569	10 164 49,458 126,800 32,555 8,264 76,702 169,201 84,235	458 2,814 65 10,409 16,967	225 4,928 1,627,073 1,080,969 849,254 107,240 2,948,550 6,362,843 3,307,053

<sup>(</sup>a) Includes Explosives.

(ii) Total for Australia, 1932-33 to 1936-37. In the returns for Australia shown in the following table it will be seen that the industry has made consistent progress during each of the last four years:—

CHEMICALS, DRUGS AND MEDICINES.—AUSTRALIA.

Items.	-	1932-33.	1933-34-	1934-35.	1935–36.	1936–37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production		 182 3,524 1,297,851 820,679 613,279 77,499 2,121,117 4,281,625 2,083,009	190 3,852 1,350,042 832,532 651,557 84,127 2,287,226 4,828,851 2,457,498	203 4,251 1,435,705 929,216 713,018 90,732 2,441,380 5,171,339 2,639,227	214 4,619 1,556,254 986,700 786,211 99,376 2,751,056 5,723,675 2,873,243	225 4,928 1,627,073 1,080,969 849,254 107,240 2,948,550 6,362,843 3,307,053

3. Soap and Candle Factories.—(i) Details for each State, 1936-37. 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 1936-37:—

SOAP AND CANDLE FACTORIES, 1936-37.

Items.		Ŋ.s.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machine Wages paid Value of fuel used Value of materials used Total value of output Value of production.	£	27 1,245 302,199 185,083 242,223 22,568 96,584 1,819,113 830,703	199 700 203,741 206,879 125,332 31,975 616,177, 1,243,208 595,056	195 35,339 26,981 35,394 3,558 105,155 198,896	153 58,746 49,601 23,957 2,855 92,024 168,840 73,961	3 62 (a) (a) (a) (a) (a) (a) (a) (a)	1 24 (a) (a) (a) (a) (a) (a) (a) (a)	66 2,379 b 624,162 b 484,225 b 441,857 b 63,368 b 1,858,810 b 3,551,887 b 1,629,709

<sup>(</sup>a) Particulars not available for publication.

<sup>(</sup>b) Including Western Australia and Tasmania.

(ii) Total for Australia, 1932-33 to 1936-37. The next table gives similar particulars for the last five years for Australia:—

SOAP AND CANDLE FACTORIES.—AUSTRALIA.

Items			1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production		£ £ £ £ £	64 2,010 656,181 618,337 369,397 62,545 1,408,015 2,664,778 1,194,218	71 1,985 640,603 573,905 338,517 58,741 1,365,699 2,696,606 1,272,166	67 2,044 626,281 530,298 354,011 56,774 1,445,528 2,917,802 1,115,500	66 2,183 613,717 514,845 385,431 76,340 1,689,835 3,107,553 1,341,378	66 2,379 624,162 484,225 441,857 63,368 1,858,810 3,551,887 1,629,709

(iii) Raw Material Used and Production, 1932-33 to 1936-37. 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.

						<del>-</del>		<del></del>
P	articular	٧.	}	1932-33.	1933-34.	1934-35.	1935–36.	1936–37.
			{		1			
Tallow used Alkali used Copra oil used Soap made Candles made			cwt.	499,188 236,937 74,362 924,403 49,562	492,624 264,576 80,150 891,832 51,598	511,936 264,147 92,952 932,252 48,398	491,423 288,461 125,548 954,082 39,937	518,604 227,028 466,222 986,578 37,991
			·			l		ı

The output for the year 1936-37 comprised the following quantities of soap:—Household, 742,073 cwt.; toilet, 118,211 cwt.; sand, 86,945 cwt.; soft, 18,858 cwt.; and other, 20,491 cwt.

4. Chemical Fertilizers.—(i) Details for each State, 1936-37. The following table gives particulars of the factories engaged in the manufacture of chemical fertilizers in each State during the year 1936-37. Details of the consumption, imports and exports of fertilizers will be found in Chapter XX. "Agriculture."

CHEMICAL FERTILIZERS, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories Number of persons engaged Value of land and buildings £ Value of plant and machinery£ Wages paid £ Value of fuel used £ Value of materials used £ Total value of output £ Value of production £	4 209 81,672 77,280 48,400 12,880 345,761 585,004 226,363	5 921 507,002 758,334 202,737 41,206 1,024,890 1,586,252 520,156	15,379 15,281 18,133 1,316 209,518 285,182 74,348	9 592 218,052 595,350 121,782 21,021 534,653 831,265 275,591	5 368 498,438 664,583 94,879 17,616 693,145 998,299 287,538	6 36 47,532 34,409 7,414 301 65,048 89,563 24,214	34 2,214 1,368,075 2,145,237 493,345 94,340 2,873,015 4,375,565 1,408,210

(ii) Total for Australia, 1932-33 to 1936-37. The development of this industry since 1932-33 is set out hereunder:—

#### CHEMICAL FERTILIZERS,—AUSTRALIA.

Items.		1932-33.	1933-34.	1934-35.	1935–36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 	33 1,702 1,398,489 2,199,257 377,116 88.949 2,849,768 4,028,984 1,090,267	34 1,706 1,446,410 2,095,142 364,726 86,137 2,452,106 3,577,732 1,039,489	33 1,801 1,365,737 2,120,628 386,277 84,028 2,370,798 3,440,860 986,034	33 1,996 1,378,636 2,127,113 442,052 88,676 2,726,551 3,906,041 1,090,814	2,214 1,368,075 2,145,237 493,345 94,340 2,873,015 4,375,565 1,408,210

- 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, 1936-37. The following table gives details respecting agricultural implement works in each State for the year 1936-37:—

#### AGRICULTURAL IMPLEMENT WORKS, 1936-37.

Items.	N.S.W.	Vic. Q'land	S. Aust.	W. Aust.	Tas.	Australia
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	24 1,082 £ 129,236 £ 80,050 £ 196,716 £ 10,647 £ 236,568 £ 527,047 £ 279,832	74 8 3,186 459 342,503 29,654 360,033 59,043 737,793 86,295 53,541 6,369 903,249 65,407 1,903,662 178,200 946,872 106,422	1,132 144,607 182,742 192,098 14,206 240,775 499,575	8 94 43,612 2,474 19,936 466 11,600 42,248 30,182		148 6,253 689,612 683,642 1,232,838 85,229 1,457,599 3,150,732

(iii) Total for Australia, 1932-33 to ●936-37. This industry declined considerably during the war years, but great progress was made thereafter. The fall in world prices of agricultural products resulted in a considerable slackening in employment and output during the years 1929-30 to 1934-35, but the industry has expanded considerably during the past two years. Details for each of the last five years are as follows:—

# AGRICULTURAL IMPLEMENT WORKS.—AUSTRALIA.

Items.		1932-33	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 	142 3,770 613,219 552,296 626,214 53,234 779,959 1,699,523 866,330	139 3,924 607,370 502,396 671,861 53,365 799,197 1,766,707 914,145	139 4,202 587,962 562,345 730,906 59,001 875,754 1,958,593 1,033,838	143 5,053 608,679 600,915 936,350 66,518 1,121,478 2,528,088 1,340,092	148 6,253 689,612 683,642 1,232,838 85,229 1,457,599 3,150,732 1,607,904

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) 1936-37.

Items,	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Anst.	Tas.	Australia.
Number of factorics Number of persons engaged Value of land and buildings£ Value of plant and machinery  Wages paid £ Value of fuel used Value of materials used £ Value of production £	322 8,027 1,268,337 1,022,504 1,654,639 81,188 2,217,495 4,913,211 2,614,528	388 8,315 1,297,609 1,184,561 1,639,793 86,263 2,370,639 5,151,995 2,695,093	2,692 337,010 297,898 529,772 34,815 722,722 1,551,863 794,326	67 1,355 131,536 150,424 198,841 15,373 277,273 600,481 307,835	126 1,634 227,137 206,341 347,173 24,681 544,609 1,195,676 626,386	271 46,552 37,324 52,695 3,109 41,612 117,268	1,037 22.294 3,308,181 2,899,052 4,422,913 245,429 6,174,350 13,530,494 7,110,715

<sup>(</sup>a) Excluding marine and electrical. (b) Including establishments previously included with smelting, converting, refining and rolling of iron and steel.

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

7. Smelting, Converting, Refining and Rolling of Iron and Steel.—The extension of the classification noted in the preceding paragraph has made possible the separate publication of details for the group of industries comprised herein. This grouping includes ironworks, foundries, the making of iron safes and doors, steel castings, iron bedsteads, sash weights. steel window frames and sashes, nuts and bolts, springs, horseshoes, screws, lifts, tools, brickmakers' implements and oxy-acetylene welding. Particulars for the year 1936–37 are as follows:—

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL, 1936-37.

		!	•			!	<del></del>	
Items.		N.S.W.	Victoria.	Q'land.	S. Aust.	'W. Aust.	Таз.	Australia.
	-		·			'		
Number of factories		164	203		31	I		399
Number of persons engaged		12,397	5,659		1,421	91		19,568
Value of land and buildings	£	2,356,281	658,155		(b)	(b)		c 3,137,935
Value of plant and machinery	£	5,638,774	658,256		<b>(b)</b>	(b)		c 6,393,113
Wages paid	£	2,944,682	1,063,209		(b)	(b)		C 4,247,254
Value of fuel used	£	1,872,087	141,812		(b)	(b)		c 2,045,355
Value of materials used	£	14,245,184	1,391,578		(b)	(b)		C15,914,302
Total value of output	£	22,359.013	3,261,293		(b)	(b)		c26,272,606
Value of production	£	6,241,742	1,727,903		(b)	(b)		c 8,312,949
		1	1					}

<sup>(</sup>a) Now included with Engineering. (b) Particulars not available for publication. (c) Including South Australia and Western Australia.

8. Extracting and Refining of Non-ferrous Metals and Alloys.—The following table gives particulars of metal extraction and ore reduction works, other than those connected with iron and steel. The classification of these works is not uniform throughout the

States, and the tabulation is somewhat unsatisfactory. The returns do not include particulars of plants used on mines:—

#### EXTRACTING AND REFINING OF NON-FERROUS METALS AND ALLOYS, 1936-37.

Items.	N.S.W.	· Victoria.	Q'land.	S. Aust.	Ŵ.А. (a)	Tas.	Australia.
Number of factories Number of persons engaged Value of land and buildings £ Value of plant and machin- ery £ Wages paid £ Value of fuctured £ Value of materials used £ Total value of output £ Value of production £		6 47 17,220 4,233 10,868 1,662 165,699 191,527 24,166	15 633 293,184 823,796 172,314 95,131 1,210,058 2,271,951 966,762	(b) (b) (b) (b) (b) (b) (b) (b) (b)	(b) (b) (b) (b) (b) (b) (b) (b)	1,162,800 433,235 200,929 1,525,082 3,018,128	38 4,506 c 1,126,179 c 3,187,046 c 1,346,410 c 550,565 c16,224,017 c21,854,408 c 5,079,826

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

TRAMCARS, RAILWAY ROLLING-STOCK AND CARRIAGES, ETC.,(a) 1936-37.

Items.	. N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories Number of persons engag Value of land and buildings Value of plant and machi	£ 2,977,098	25 5,746 1,536,504	3,542 560,836	3,241 888,751	20 1,990 474,955	7 468 95,120	26,649 6,533,264
ery Wages paid Value of fuel used Value of materials used Total value of output Value of production	£ 2,376,657 £ 2,592,363 £ 100,835	1,393,509 57,059 1,270,981 2,886,522	366,944 847,185 25,528 572,354 1,589,572 991,690	746,596 695,635 27,589 545,947 1,396,088 822,552	388,779 424,894 16,932 267,603 780,450 495,915	51,246 104,201 5,617 21,935 144,928 117,376	5,058,723 5,967,787 233,560 4,717,251 12,002,430 7,051,628

<sup>(</sup>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, 1932-33 to 1936-37. The following table shows the development of railway and tramway workshops in Australia since 1932-33:—

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

Items.		1932-33.	1933-34.	1934-35.	1935–36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	£ £	23,969 6,259,362 5,024,051 4,802,944 222,452 3,733,160 9,778,258 5,822,646	109 23,911 6,294,948 5.038,157 4,835,444 226,143 3,795,359 9,906,428 5,884,926	24,487 6,414,562 5,012,877 5,166,904 222,611 4,052,214 10,248,401 5,973,576	25,678 6,436,465 5,041,663 5,585,710 236,560 4,444,903 11,455,618 6,774,155	26,649 6,533,264 5,058,723 5,967,787 233,560 4,717,251 12,002,439 7,051,628

<sup>(</sup>a) Government and Municipal only.

<sup>9.</sup> Railway and Tramway Workshops.—(i) Details for each State, 1936-37. 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 8 in 1936-37 have, however, been excluded:—

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

10. Motor Vehicles and Cycles.—The industries catering for the motor trade are included in Class IV.—Industrial Metals, Machines, Implements and Conveyances. Returns in regard to assembling and repairing are shown hereunder for the year 1936-37:—

#### ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1936-37.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Value of plant and machinery £ Wages paid £ Value of fuel used £ Value of materials used £ Total value of output £	475,388 1,200,647 58,889 1,235,370 3,366,805		261 1,803 581,392 116,350 307,099 14,128 283,295 909,441 612,018	151 1,437 357,579 79,207 214,006 10,614 176,928 504,330 316,588	312 1,372 456,332 99,397 237,529 13,540 279,231 771,329 478,558	35,238 87,876 3,194 87,431 232,128	2,907 19,521 5,582,921 1,252,343 3,280,034 158,055 2,975,491 8,637,444 5,503,898

Particulars in regard to motor body building for the year 1936-37 are as follows:-

#### MOTOR BODY BUILDING, 1936-37.

Items.	:	N.S.W.	Vie.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Marchan of names and and	*******	682,303	531,564 245,237 782,111	74,373 14,893 87,713 2,503 96,495 229,779	12 6,570 291,132 138,213 1,399,645 42,569 1,969,311 3,729,152	234 61,116 12,733 41,587 1,579 52,840 121,049		201 12,267 1,174,599 448,376 2,566,586 69,276 3,639,930 7,228,611 3,519,405

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

#### MOTOR BODIES PRODUCED IN AUSTRALIA.

							1	F
	Items.	!	1931-32.	1932-33.	1933-34.	1934-35	1935-36.	1936-37.
Volue	3 ·· · · ·	£	6,323 450,510	13,532 1,100,504	26,302 2,112,439	45,445 4,180,586	67,337 6,043,735	(a) 77,250 6,461,314

<sup>(</sup>a) Including Motor Bodies assembled.

The maximum number of motor bodies manufactured in Australia was 88,876, recorded in 1926-27.

11. Electrical Installations, Cables and Apparatus.—(i) Details for each State, 1936-37. The following table shows particulars of this industry for each State during the year 1936-37:—

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS, 1936-37.

Items.	N.S.W.	Vie.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total value of output £	923,072 55,911 1,406,308	125 3,079 412,959 190,856 493,081 22,685 773,197 1,588,779 792,897	13 120 30,999 6,406 22,028 574 29,481 61,510 31,455	27 489 76,860 32,886 71,768 5,247 150,460 269,176 113,469	23 126 49,235 8,536 20,991 1,273 22,087 62,441 39,081	5 27 9,750 928 3,475 92 3,621 10,175 6,462	318 9,215 1,349,212 687,740 1,534,415 85,782 2,385,154 5,085,776 2,614,840

(ii) Total for Australia, 1932-33 to 1936-37. The increased output of electrica energy in Australia during the past five years, referred to in par. 36 below, necessitated a corresponding demand for electrical equipment. As imports declined heavily during the depression years the local industry was called upon to furnish the bulk of the new supplies, and the result of its operations has been a remarkable development in the manufacture of electrical goods in Australia.

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS.—AUSTRALIA.

Items.	 	1932-33.	1933-34	1934-35.	1935-36.	1936~37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 	246 5,005 1,063,843 677,566 847,839 54,621 1,145,850 2,562,034 1,361,563	275 5,774 1,122,331 666,988 931,727 63,881 1,383,137 3,131,080 1,684,062	280 7,098 1,168,474 659,005 1,130,683 67,565 1,716,974 3,822,333 2,037,794	294 8,137 1,245,877 660,504 1,325,736 73,780 2,059,502 4,329,150 2,195,868	318 9,215 1,349,212 687,740 1,534,415 85,782 2,385,154 5,085,776 2,614,840

12. Wireless Apparatus.—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31, however, a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined, almost entirely, to the States of New South Wales and Victoria. The number of broadcast listeners' licences has increased from 331,128 in 1930-31 to 1,056,004 in 1936-37, and this increase is reflected in the advancement of the industry during that period:—

WIRELESS APPARATUS.—AUSTRALIA.

Items.		1932-33.	1933-34.	1934-35.	1935–36.	1936-37.
	 	ļ	• '			
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total Value of output Value of production	 	46 2,263 218,931 95,534 271,710 9,230 829,452 1,357,822 519,140	57 2,625 238,940 97,587 295,792 10,969 958,400 1,589,093 619,724	56 3,366 292,594 135,208 400,789 12,503 1,172,663 1,859,050 673,884	67 3,943 378,103 185,626 493,314 17,670 1,308,137 2,243,159 827,352	67 4,643 468,164 261,341 610,291 21,354 1,590,978 2,640,206 1,027,874
		) .				1

The number of domestic receiving sets assembled in 1936-37 was 183.143.

13. Woollen and Tweed Mills.—(i) Details for each State, 1936-37. 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 1936-37:—

WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1936-37.

Items,	 N.S.W.	Victoria.	Q'land.	S. Aust. (b)	W.A.	Tas.	Australia.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of ontput Value of production	 1,129,032 850,435 118,842 2,657,891 4,138,221		(c) (c) (c) (c) (c) (c)	8 860 99,858 179,266 115,489 20,161 663,537 867,656 183,958	2 (c) (c) (c) (c) (c) (c) (c)	241,107 183,057 19,244 497,127 878,614	90 19,239 d 2,412,499 d 3,474,275 d 2,514,293 d 357,777 d 7,734,520 d12,283,298 d 4,191,001

<sup>(</sup>a) Woolscouring not included. (b) Includes Fellmongery (c) Particulars not available for publication. (d) Including Queensland and Western Australia.

(ii) Total for Australia, 1932-33 to 1936-37. 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.		1932-33. (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37.
Number of factories Number of persons engaged Velue of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production			98 17,546 2,359,997 3,306,464 2,233,024 398,192 7,401,246 11,635,920 3,836,482	6,504,841	2,455,141 3,343,968 2,612,723 393,775 7,548,122	2,514,293 357,777 7,734,520

<sup>(</sup>a) 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 1936-37 was 25,013,855 square yards. In New South Wales 10,946,691 square yards, and in Victoria 12,757,001 square yards of tweed and cloth were manufactured. The production of flannel amounted to 5,904,677 yards, while blankets, shawls and rugs to the number of 1,462,775 were made.

Cotton ginning has been carried on intermittently in the Northern States, and the recent development in cotton growing has led to the establishment of modern ginning plants at convenient centres in Queensland. In New South Wales the first establishment for the manufacture of cotton goods was erected in 1923-24. The number of establishments treating cotton in Australia during 1936-37 was 30, the number of persons engaged 2,973, and the value of the output £2,244,593.

14. Hosiery and Other Knitted Goods.—(i) Details for each State, 1936-37. In addition to the woollen and tweed factories, there were 297 hosiery and knitting mills operating in Australia during the year 1936-37. The total number of persons engaged

in these establishments was 16,932 of which 11,928 were females. Details for each State are shown hereunder:-

HOSIERY	AND	OTHER	KNITTED	GOODS	1036-37
HUSIERI	AIII	Ullick	KINILLED	uvvvs,	1900-01.

Items.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories		- 75	208	1	7	3 '	3	297
Number of persons engaged		4,968	11,596	102	71	106	89	16,932
Value of land and buildings		612,532	1,181,990	(a)	15,750	8,504	(a)	61,842,228
Value of plant and machinery	£	591,942	1,273,751	(a)	4,265	7,016	(a)	.b1,901,624
Wages paid	£	621,240	1,363,845	(a)	6,441	9,954	(a)	162,017,903
Value of fuel used	£	30,494	78,231	(a)	, 303	475	(a)	b 110,334
Value of materials used	£	1,224,170	2,674,223	(a)	8,680	22,399	(a)	03,978,863
Total value of output	£	2,348,132	5,213,388	(a)	19,252	41,280	(a)	67,700,079
Value of production	£	1,093,468	2,460,934		10,269	18,406	(a)	b3,610,882

<sup>(</sup>a) Particulars not available for publication.

(ii) Total for Australia, 1932-33 to 1936-37. Comparative statistics for the five years are shown in the following table:-

HOSIERY AND OTHER KNITTED GOODS.-AUSTRALIA.

Items.		1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 	312 13,884 1,708,066 1,603,813 1,579,623 101,822 3,321,222 6,272,318 2,849,274	320 13,950 1,668,748 1,620,528 1,592,378 100,989 3,420,858 6,651,293 3,129,446	310 14,493 1,676,897 1,654,979 1,624,414 107,812 3,506,659 6,561,114 2,946,643	314 15,692 1,791,583 1,711,536 1,819,265 113,773 3,768,336 7,327,363 3,445,254	297 16,932 1,842,228 1,901,624 2,017,903 110,334 3,978,863 7,700,079 3,610,882

(iii) Raw Material used and Production, 1936-37. The main raw materials consumed in establishments manufacturing hosiery and knitted goods during the year 1936-37 consisted of woollen yarn, 5,647,665 lb.; cotton yarn, 5,334,953 lb.; silk, 979,175 lb.; and artificial silk, 5,267,409 lb. Production comprised 27,697,000 garments, valued at £3,543,229; 1,884,680 dozen pairs of stockings, valued at £2,453,122; and 1,585,782 dozen pairs of socks valued at £1,037,692.

15. Tanning, Currying and Leather Dressing.—(i) Details for each State, 1936-37. 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, 1936-37.

Items.		N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Aus- tralia.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 ££ ££ ££		2,460 418,191 241,453 470,556 49,036 1,645,808 2,517,926 823,082	14 346 33,502 30,163 62,003 5,702 295,045 406,002 105,255	6 43 9,128 4,359 6,481 592 22,186 34,065 11,287	8 90 (a) (a) (a) (a) (a) (a) (a)	(a) (a) (a)	132 4.467 b 785,191 b 504,296 b 858,610 b 85,330 b3,478,457 b5,091,033 b1,527,246

<sup>(</sup>b) Including Queensland and Tasmania.

<sup>(</sup>a) Particulars not available for publication. (b) Including Western Australia and Tasmania.

(ii) Total for Australia, 1932-33 to 1936-37. The development of the tanning industry during the years stated is shown in the following table:—

TANNING, CURRYING AND LEATHER DRESSING.—AUSTRALIA.

Items.			1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	-	-			ļ	<u>'</u>	<u> </u>
Number of factories			147	153	143	135	132
Number of persons engaged			3,766	4,039	4,142	4,433	4,467
Value of land and buildings		£	776,532	766,014	774,393	748,897	785,191
Value of plant and machinery		£	506,920	504,314	506,190	513,872	504,296
Wages paid		£	652,574	659,870	723,711	810,742	858,610
Value of fuel used		£	81,116	81,615	82,244	84,682	85,330
Value of materials used		£	2,451,725	2,818,421	2,764,343	3,099,679	3,478,457
Cotal value of output		£	3,688,550	4,110,056	4,080,442	4,632,662	5,091,033
Value of production		£	1,155,709	1,210,020	1,233,855	1,448,301	1,527,24

(iii) Raw Material Used and Production, 1936-37. 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, 1936-37.

Part	icular	s.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides		No.	628,657	924,415	138,685	17,298	41,832	3,000	1,753,887
Skins				' ' '	į i		1		1
Calf		,,	457,692	334.578	172,187	879	368		965,704
Goat		,,	580,689	516,019	(a)	411	(a)		b 1,108,360
Sheep		,,	1,174,924	86,277	(a)	149,299	(a)		b 1,468,512
Marsupial		,,	9,495	30,898	38,732	2,224	5,648		86,997
Reptile		,,	1	5,559					5,559
Other pelts	treat	ted ,,	2,183,977	473,596	(a)		(a)	• • •	b 2,891,677
Bark used-		• • • • • • • • • • • • • • • • • • • •	, 5,5	1.07-0			! ' !		
Wattle		ton	8,651	8,740	1,787	266	283	20	19,747
Other		,,	580	1.819	. 5	7	434		2,845
Tanning extr.	act us	ed Íb.	4,840,640	1,202,332	778,305	6,160	746,006	11,200	7,584,643
Leather made	·—		1		1		' ' '		
Sole		•••	10,188,100	12,808,892	2,571,984	(a)	1,491,904	(a)	627,172,254
Harness		•	622,254	388,390	438,225	77,819	118,549		1,645,237
Upholstery		sq. ft.	2,430,465	5,254,669	1		1		7,685,134
Patent and	other	r ^ ,,	6,945,860	13,783,401	1,514,411	247,035	133,892		22,624,599
Waxed kip	and o		(a)	91,303	97,074	143,790	82,642	(a)	553,417
Dressed from	skins			1 7 70 0	,,,,,,	13/12	i '''		1
Calf		sq. ft.	4,024,763	2,686,910	1,669,901	2,325	11,948		8,395,847
Goat	• •	٠,,	2,571,948	2,094,080	(a)	2,780	(a)		b 4,744,872
Sheep			11,135,968	2,270,808	(a)	886,843	(a)		14,881,434
Marsupial	• •	**	16,429	121,725	207,646	1,312	16,379	• ••	363,491

<sup>(</sup>a) Not available for publication.

16. Boot Factories.—(i) Boot and Shoe Factories, 1936-37. 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 overcome by the collection of separate statistics for each industry, and in the following table the details relate to boot and shoe factories as distinct from those devoted to repairing and bespoke work:—

BOOT AND SHOE FACTORIES, 1936-37.

	1	4			/		
Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	423,776 225,455 719,054 15,040 1,329,117 2,387,792	165 9,362 607,009 438,982 1,278,177 30,388 2,440,831 4,288,431 r,817,212	22 878 62,630 93,027 108,494 2,001 194,793 348,467 151,673	16 545 72,417 23,715 63,959 1,828 111,993 192,410 78,589	13 348 45,747 23,549 40,810 1,122 89,361 150,664 60,181	72 9,200 6,320 9,332 272 15,245 26,611 11,094	312 16,497 1,220,779 811,048 2,219,826 50,651 4,181,340 7,394,375 3,162,384
			4				•

<sup>(</sup>b) Including particulars for States' marked (a).

- (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 1936-37 the number amounted to 1,295 in which 2,196 persons were engaged in the industry. The sum of £127,023 was distributed in salaries and wages, and the output was valued at £739,812.
- (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, 1936-37.

Particulars.		N.S.W.	Victoria.	QTand.	S. Aust.	W. Aust.	Tas.	Australia
		<u> </u>	QUA	NTITY.	<u>-</u> -			·
Boots and shoes Slippers Uppers (a)	pairs	4,613,641 3,021,392 16,490	8,253,084 4,173,599 9,326	666,293 302,411 107,502	522,253 (b) 6,462	395,126 (b) (b)	53,983 (b)	14,504,380 c7,702,219 (c) 141,292
			VA	LUE.				
Boots and shoes Slippers Uppers (a)	£	2,058,896 298,650 6,436	3,654,576 504,245 7,370	310,754 20,701 13,845	184,006 (b) 2,063	126,987 (b) (b)	26,800 (b)	6,362,019 (c) 852,185 (c) 30,517

<sup>(</sup>a) Made for other than factory use. particulars for States marked (a).

17. Tailoring and Slop Clothing Factories.—(i) Details for each State, 1936-37. The importance of this industry in the several States is shown in the following table:—

#### TAILORING AND SLOP CLOTHING FACTORIES, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	434 11,405 1,475,784 129,596 1,206,906 23,284 1,953,178 3,813,890 1,837,428	3,449,824	2,689 267,957 25,260 262,333 6,194 455,892 938,704 476,618	120 1,919 256,127 19,599 184,827 5,209 197,627 482,881 280,045	81 999 163,620 13,316 112,143 2,591 153,024 341,762 186,147	25 381 61,225 3,941 42,821 697 46,368 111,241 64,176	1;163 25,546 3,053,302 317,812 2,732,213 61,097 4,796,324 9,138,302 4,280,881

(ii) Total for Australia, 1932-33 to 1936-37. Details for the last five years are as follows:—

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

Items.		1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 	1,019 18,681 2,493,180 257,416 1,895,349 48,831 3,635,773 6,653,256 2,968,652	1,040 20,951 2,516,492 273,000 2,126,826 51,887 4,112,707 7,627,067 3,462,473	1,115 23,579 2,776,968 316,908 2,446,429 56,857 4,573,477 8,407,294 3,776,960	1,157 24,877 2,885,076 327,333 2,578,597 58,556 4,826,010 8,939,837 4,055,271	1,163 '25,546 3,053,302 317,812 2,732,213 61,097 4,796,324 9,138,302 4,280,881

<sup>(</sup>b) Not available for publication.

<sup>(</sup>c) Including

18. Dressmaking and Millinery Establishments.—(i) Details for each State, 1936-37. Particulars of dressmaking and millinery establishments are given separately in the following tables:—

# DRESSMAKING ESTABLISHMENTS, 1936-37.

		<u>-</u>					
Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
		· · · - ,	-				
Number of factories	10,366 133,336 1,696 118,543 318,547	8,039  1,112,748   97,447   787,439	33 774 65,603 8,611 64,646 1,088 112,260 221,517 108,169	46 832 70,708 9,733 55,962 1,436 65,966 153,057 85,655	46 681 82,527 9,808 53,941 1,218 67,702 149,368 80,448	7 46 4,360 345 3,204 36 1,556 6,148 4,556	681 11,883 1,563,051 136,310 1,098,528 21,125 1,971,819 3,740,499 1,747,555

<sup>(</sup>a) Includes Millinery.

# MILLINERY ESTABLISHMENTS, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. W. Aust	Tas. (a)	Australia.
Number of factories	59 1,537 251,399 15,786 139,371 4,275 286,971 589,188 297,942	61 1,387 146,718 18,484 136,002 3,266 198,420 426,836 225,150	12 439 37,159 5,644 34,720 647 50,380 105,241 54,214	8 9 304 85 19,745 13,205 2,608 867 24,662 7,943 718 147 37,718 12,304 79,933 23,937 41,497 11,486		149 3,752 468,226 · 43,389 342,698 9,053 585,793 1,225,135 630,289

<sup>(</sup>a) Included in Dressmaking.

(ii) Total for Australia, 1932-33 to 1936-37. 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.	1932-33.	1933-34.	1934-35.	1935–36.	1936-37.	
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production		764 13,455 £ 1,710,482 £ 171,217 £ 1,187,875 £ 24,717 £ 2,354,141 £ 4,238,509 £ 1,859,651	812 14,212 1,795,265 176,845 1,237,581 27,205 2,327,141 4,298,999 1,944,653	854 15,166 1,898,295 177,241 1,316,645 28,225 2,439,034 4,534,059 2,066,800	863 15,683 1,897,903 180,934 1,391,348 30,245 2,559,119 4,869,311 2,279,947	830 15,635 2,031,277 179,699 1,441,226 30,178 2,557,612 4,965,634 2,377,844

19. Shirts, Collars and Underclothing.—(i) Details for each State, 1936-37. Particulars of this industry are shown in the subjoined table:—

## SHIRTS, COLLARS AND UNDERCLOTHING, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	4,365 311,158 70,997 381,125 7,516 1,058,542 1,654,243	118 4,918 439,641 150,352 497,232 12,975 1,256,683 2,100,399 830,741	18 894 55,808 11,508 69,996 1,370 183,447 287,482 102,665	27 494 39,345 7,919 37,557 1,179 49,101 104,205 53,925	13 442 (a) (a) (a) (a) (a) (a) (a)	(a) (a) (a) (a) (a) (a) (a) (a)	298 11,116 b 871,522 b 251,396 b1,029,221 b 23,692 b2,599,519 b4,252,677 b1,629,466

<sup>(</sup>a) Particulars not available for publication.
(c) Includes Handkerchiefs, Ties and Scarves.

(ii) Total for Australia, 1932-33 to 1936-37. The following table shows the progress of the industry since 1936-37:—

### SHIRTS, COLLARS AND UNDERCLOTHING.-AUSTRALIA.

Items.		1932-33.	1933-34.	1934-35.	1935-36.	1936–37
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	••	 294 9,608 810,630 214,796 822,985 21,430 2,278,086 3,623,179 1,323,663	307 10,444 836,669 224,827 850,459 22,812 2,506,226 3,879,571 1,350,533	314 10,925 872,923 235,546 929,192 22,947 2,663,522 4,174,304 1,487,835	308 11,214 842,896 253,736 1,001,615 22,844 2,708,887 4,311,566 1,579,835	298 11,116 871,522 251,396 1,029,221 23,692 2,599,512 4,252,677 1,629,466

20. Bacon-curing Factories.—(i) Details for each State, 1936-37. The table hereunder gives particulars of factories engaged in bacon-curing in each State for the year 1936-37:—

## BACON-CURING FACTORIES, 1936-37.

Items.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	£££££££££££	23 355 145,163 63,987 87,489 12,367 791,758 1,015,802 211,737		10 677 221,840 117 :	52,356	10 7,241 13,358 22,046 3,755 202,533 243,699 37,411	54 16,207 9,571 9,384 1,251 65,101 87,077 20,725	78 1,988 731,761 357,626 434,355 71,906 3,246,093 4,121,467 803,468

<sup>(</sup>b) Including Western Australia and Tasmania.

(ii) Quantity and Value of Production. The number of pigs cured and the quantity and value of the production of bacon-curing factories in each State for the year 1936-37 are given hereafter:—

BACON-CURING FACTORIES.—PIGS CURED, AND PRODUCTION, 1936-37.

Particu	lars	•	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia
			- · · · · · · · · · · · · · · · · · · ·	Pigs	CURED.		,		<u>'</u>
Number			257,041	192,002	251,189	80,241	46,373	20,575	847,421
				Pro	DUCTS.	·	·		
Bacon and ham Lard		'000 lb.	21,255 764	16,653 873	20,002 1,171	7,140 257	3,985 258	1,661 94	70,696 3,417
				VA	LUE.		·		
Bacon and ham Lard Other products	 	£	890,000 19,094 112,090	756,822 28,448 163,349	781,606 29,194 535,188	314,038 7,364 150,263	169,360 7,596 43,633	66,575 2,936 12,403	2,978,401 94,632 1,016,926

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

21. Butter, Cheese and Condensed Milk Factories.—(i) Details for each State, 1936-37. The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1936-37:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1936-37.

Items.	N.S.W.	Vietoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of persons engaged	 333,303 83,084 5,857,873 6,621,825	1,158,068 1,157,697 617,532 168,712 9,173,751	742,742 225,384 46,656 4,690,118 5,224,520	451 171,280 116,633 82,637 19,498 1,190,185	92,500 41,896 11,439 634,827 766,132	71,690 66,162 32,159 6,062 448,982 560,990	2,938,110 1,332,911 335,451 21,995,736 25,434,496

(ii) Total for Australia, 1932-33 to 1936-37. The progress of this industry during the last five years is set out hereunder:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES.—AUSTRALIA.

Items.	- AB 1990	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production		 520 5,703 2,533,470 2,749,218 1,179,007 311,254 17,996,224 21,035,968 2,728,490			517 5,062 2,635,863 2,849,645 1,265,898 310,250 22,627,448 25,869,089 2,931,381	25,434,496

(iii) Quantity and Value of Production. The next table shows the quantities and values of butter, cheese and condensed milk produced, and the quantities of milk used in butter, cheese and condensed milk factories in each State for the year 1936-37:—

## BUTTER, CHEESE AND CONDENSED MILK FACTORIES.—PRODUCTION, 1936-37.

	T ·			,			
Particulars.	N.s.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania	Australia
	MIL	k Used (	TIMO 000,	TED).			
Butter factories gals. Cheese factories , ,	219,526 7,308 3,923	295,488 13,108 28,837	174,236 7,567	32,389 11,416 626	21,081 997 616	16,755	759,475 43,297 34,002
	Pro	ODUCTS (,	OOO, OMIT	TED).	•		•
Butter lb. Cheese ,, Condensed and concentrated	7,145	13,041	84,401 7,772	12,165	10,642	8,149 2,834	374,196 43,967
milk lb. Powdered milk ,,	6,306			2,467	2,123	::	42,648 17,784
	<b>v</b> .	ALUE (,00	o omitti	ED).		•	
Butter £ Cheese £ Condensed and concentrated	5,917	8,370 432	4,797 251	· 940 394		453 89	21,133 1,517
milk £ Powdered milk £	145 68	669 418	• • •	65		• • • • • • • • • • • • • • • • • • • •	932 486

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

22. Meat and Fish Preserving Works.—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling 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 XIX. "Pastoral Production."

MEAT AND FISH PRESERVING WORKS,(a) 1936-37.

			;	1 .	:			
Items.		N.S.W.	· Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	_	7	8	12				32
		194	212	2,477		159		3,042
Value of land and buildings	£	63,210	54,398	1,261,566		379,174		1,758,348
Value of plant and machinery	£	19,579	17,739	744,316		396,186		1,177,820
Wages paid	£	35,804	31,147	767,511		55,142		889,604
Value of fuel used	£	5,307	3,638	109,630		6,619		125,194
Value of materials used	£	124,138		4,462,091		134,072 1		4,924,430
Total value of output	£	183,232	309,959	5,808,846		215,174		6,517,211
Value of production	£	53,787		1,237,125	• •	74,483	• •	1,467,587

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 XIX. "Pastoral Production."

23. Bakeries.—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1936-37 is given in the table below. It should be noted, however, that, as explained in § 1 par. 2 above the details refer to establishments coming within the definition of a factory. For that reason there are a large number of bakehouses omitted and consequently the table does not give complete details of the industry. This is true of all other industries covered by the statistics of manufacturing production but, in view of the omission of such a large number of establishments in this instance, special mention of this fact is deemed desirable.

BAKERIES (INCLUDING CAKES AND PASTRY), 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	. 556	556	242	110	123	66	1,662
Number of persons engaged .	2.672	3,374	1,347	834	525	1,129	10,881
	£ 1,891,450		473,400	230,736	171,074	325,478	4,250,437
Value of plant and machinery	£ 531,032	377,886	150,191	86,324	46,351	82,217	1,274,001
Wages paid	€ 665,546	510,826	199,147	125,842	78,454	139,990	1,719,805
Value of fuel used	€ 105,266	87,391	28,620	17,554	12,891	14,815	266,537
Value of materials used	€ 2,216,163	1,896,072	787,348	478,021	335,876	453,932	6,167,412
Total value of output	€ 3,772,803	3,114,907	1,265,798	765,803	532,411	741,213	10,192,935
Value of production	€ 1,451,374	1,131.444	449,830	270,228	183,644	272,466	3,758,986

<sup>(</sup>a) Includes Biscuits and Confectionery.

24. Jam and Fruit Preserving, Pickles, Sauces and Vinegar Factories.—(i) Details for each State, 1936-37. The subjoined table gives particulars of factories included in this class for the year 1936-37. 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, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	284,136 147,611 223,360 20,436 1,015,280 1,620,019	635,774 326,249 476,460 42,893 1,932,601	38,430 33,169 68,727 5,473 452,171 570,195	17 449 121,398 51,834 65,185 6,009 234,983 367,620 126,628		34,145 129,329 11,305 508,649 662,954	5,906 1,218,132

(ii) Total for Australia, 1932-33 to 1936-37. 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.		1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	£	115 4,786 1,025,310 525,057 709,572 66,231 3,185,285 4,919,037 1,667,521	65,724 2,831,602	5,213 1,103,291 521,800 795,621 78,144 3,312,257 5,428,876 2,038,475	125 5,773 1,125,204 549,413 929,792 89,227 3,965,338 6,276,112 2,221,547	5,906 1,218,132 598,126 971,768 87,019 4,177,792 6,298,642 2,033,831
				1		

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. In the year 1918–19 the production amounted to 142,290,000 lb. but with the termination of the war, the quantity declined to 90,140,000 lb. in 1920–21. During the succeeding years the production of jam varied considerably, falling to 66,120,000 lb in 1930–31 and subsequently improving to 90,302,000 lb. in 1935–36 only to fall again in 1936–37 to 74,708,000 lb. In 1936–37 the output of preserved fruit reached the record figure of 127,498,000 lb., nearly 11,000,000 lb. in excess of the previous maximum in 1935–36. The production of pickles and sauces again showed a satisfactory improvement.

(iii) Production. The following table shows the quantity and value of jams, pickles and sauces manufactured in each State in 1936-37:—

JAMS, PRESERVED FRUIT, PICKLES AND SAUCES .- OUTPUT, 1936-37.

Particulars		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
		Qυ	ANTITY (,	000 OMIT	TED).			'
Jams and Jellies Fruit Pulp Tomato Pulp Fruit, preserved Pickles	lb.	21,407 17 2,046 28,394 1,393 6,902	36,339 9,234 22,996 75,833 2,190 8,411	6,901 600 104 15,536 510 644	7,568 4,474 2,611 4,380 1,354 2,153	775 913 1,338 55 48 499	1,718 8,874 600 3,300 48 54	74,708 24,112 29,695 127,498 5,543 18,663
	-		Va	LUE.				
Jams and Jellies Fruit, preserved Pickles Sauces	£ £ £	469,078 438,172 54,838 342,845	754,450 1,207,377 78,832 261,586	146,346 352,698 20,257 19,782	132,980 78,989 52,876 63,614	14,633 854 5,737 18,320	385,340 88,161 1,732 1,191	1,902,827 2,166,251 214,272 707,338

25. Confectionery Factories.—(i) Details for each State, 1936-37. At the close of the year 1900 there were in New South Wales 16 establishments with 706 persons engaged and in Victoria 16 establishments, employing 731 persons, the plant and machinery in the former State being valued at £2,815, and in the latter at £19,070. The figures for the year 1936-37 given hereunder show the remarkable development since 1900:—

SUGAR CONFECTIONERY FACTORIES.(b) 1936-37.

Items.	N.S.W.	Vietoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	66 3,621 994,731 995,882 460,601 47,751 1,533,608 2,831,836 1,250,477	94 3,093 571,591 531,108 481,473 37,586 1,335,545 2,165,198 792,067	19 597 192,637 112,282 42,241 3,400 136,678 204,708 64,630	19 379 80,792 65,844 42,202 6,037 110,635 191,027 74,355	13 274 58,898 64,881 35,278 3,912 83,977 176,269 88,380	4,110	214 7,975 1,902,059 1,773,178 1,063,421 98,771 3,202,325 5,573,148 2,272,052

<sup>(</sup>a) Ice Cream factories—Other Confectionery included in Bakeries. and Ice Cream.

<sup>(</sup>b) Including Chocolate

(ii) Total for Australia, 1932-33 to 1936-37. Particulars of the confectionery industry during the last five years are shown in the following table:—

#### SUGAR CONFECTIONERY FACTORIES.—AUSTRALIA.

Items.		1932-33 (a)	1933-34. (a)	1934-35. (a)	1935-36. (a)	1936-37. (a)
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	EE	221 6,375 1,737,550 1,738,497 857,503 108,489 2,409,145 4,473,075 1,955,441	214 6,698 1,694,606 1,686,517 898,592 112,681 2,518,756 4,734,105 2,102,668	218 7,158 1,721,645 1,749,349 935,214 112,050 2,743,763 5,120,164 2,264,342	217 7,516 1,774,452 1,712,163 1,010,775 117,041 3,023,696 5,662,146 2,521,409	214 7.975 1,902,059 1,773,178 1,063,421 98,771 3,202,325 5,573,148 2,272,052

(a) See notes to previous table.

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

26. Grain Milling.—(i) Details for States, 1936-37. The following table shows the position of the flour-milling industry in each State in 1936-37:—

#### GRAIN MILLING. 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
	49 1,193 807,409 677,807 281,006 71,689 5,220,035 6,085,342 793,618		10 347 193,787 185,201 83,333 14,573 1,123,843 1,347,824 209,408	224,236 83,103 26,218 1,436,435	20 397 242 641 222,341 87,696 23,408 1,544,299 1,872,079 304,372	10 114 70,241 30,649 23,945 3,637 295,932 344,565 44,996	166 3,586 2,028,346 1,848,306 802,296 201,193 14,621,285 16,849,992 2,027,513

<sup>(</sup>a) The manufacture of cornilour, catmeal, etc, was also carried on in some of these establishments.

(ii) Productions of Flour and By-products, 1932-33 to 1936-37. 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.
1932-33 1933-34 1934-35 1935-36 1936-37	Tons.(a) 525,651 495,779 555,173 523,281 464,498	Tons.(a) 425,930 395,566 437,262 435,340 420,364	Tons.(a) • 91,498 84,159 86,246 86,142 82,423	Tons.(a) 129,225 121,811 136,716 124,021 119,192	Tons.(a) 127,574 122,000 124,130 118,340 122,723	Tons.(a) 19,372 19,253 19,260 20,492 19,579	Tons.(a) 1,319,250 1,238,568 1,358,787 1,307,616 1,228,779

(a) Tons of 2,000 lb.

2,388,905

The production of flour in Australia for the last year, 1,228,779 tons, was valued at £13,194,866. In addition, 519,187 tons of bran and pollard, valued at £3,246,824, were made. The quantity of wheat ground was 59,169,864 bushels.

27. Sugar Mills.—(i) Details for 1936-37. The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1936-37. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XX. "Agricultural Production."

Items.	Items.			Queensland.	Australia.
Number of factories			3	33	36
Number of persons engaged			195	4,381	4,576
Value of land and buildings		£	230,000	1,026,967	1,256,967
Value of plant and machinery		£	924,339	7,522,632	8,446,971
Wages paid		£	81,424	1,227,697	1,309,121
Value of fuel used		£	13,814	124,491	138,305
Value of materials used		£	466,747	8,722,953	9,189,700
Total value of output		£	690,634	11,026,276	11,716,910

SUGAR MILLS, 1936-37.

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.

210,073

Value of production

(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:—

Items.		1911.	1933-34.	1934–35.	1935-36.	1936-37.
Number of factories	tons	4	3	3	3	3
Number of employees		469	135	144	198	195
Cane crushed		147,799	230,918	227,424	280,472	275,169
Sugar produced		17,299	27,586	29,428	36,461	38,158
Molasses produced		796,440	1,163,700	1,059,555	1,390,180	11,329,660

SUGAR MILLS.-NEW SOUTH WALES.

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

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

SUGAR MILLS.—QUEENSLAND, 1911 TO 1936-37.

Items.	1911.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories	49	33	33	33	33
Number of persons engaged	4,295	5,132	4,436	4,176	4,381
Cane crushed tons	1,534,451	4,667,122	4,271,380	4,220,435	5,170,571
Sugar produced ,,	173,296	638,559	611,161	610,080	744,676
Molasses—	1		i	i	ì
Sold to distillers					
and others gals.	2,393,669	4,448,494	5,017,717	4,792,950	6,086,864
Used as fodder "	789,564	2,902,188	3,035,598	3,817,755	4,351,822
Used as manure ,,	223,000	1,793,101	2,227,905	2,559,528	3,211,423
Run to waste ,,	. 0 000	1,747,365	1,162,715	1,214,678	560,326
Burnt as fuel "	1,847,333	7,348,015	5,339,489	4,103,475	6,354,841
Sold or used for other					1
• purposes ,,					397,080
In stock ,,	1,197,626	634,022	1,673,607	• •	
Total molasses ,,	6,451,192	18,873,185	18,457,031	16,488,386	20,962,356

- 28. Sugar Refineries.—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1936–37 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 335,169 tons, for a yield of 323,713 tons of refined sugar, valued at £10,438,851.
- 29. Breweries.—(i) Details for each State, 1936-37. The following table gives particulars concerning breweries in each State:—

### BREWERIES, 1936-37.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of breweries Number of persons engaged Value of land and buildings Value of plant and machinery Value of fuel used Value of fuel used Value of materials used Total value of output Value of production  £	6 935 911,038 785,003 263,323 73,876 770,895 2,805,612 1,960,841	1,325 766,377 842,958 455,912 72,136 1,081,891 2,499,494 1,345,467	7 391 387,338 318,554 118,580 27,175 253,454 735,661 455,032	6 246 181,399 192,859 82,915 15,936 176,347 476,099 283,816	5 408 118,008 214,184 127,819 18,389 279,155 751,472 453,928		37 3,389 2,537,922 2,454,576 1,072,063 214,272 2,642,395 7,456,136 4,599,469

<sup>(</sup>a) Includes Malt Works.

(ii) Total for Australia 1932-33 to 1936-37. The next table shows the extent of this industry for the last five years:—

### BREWERIES.—AUSTRALIA.

Items.	Items.			1934-35. (a)	to 35-36.	1936–37. (a)
Number of breweries Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	£	2,888 2,378,417 2,535,431 858,371 183,428 1,905,147 5,235,923 3,147,348	42 2,995 2,423.574 2,507,559 886,597 189,902 2,011,957 5,625,876 3,424,017	41 3,097 2,411,446 2,476,600 952,127 194,863 2,262,174 6,439,227 3,892,190	37 3,228 2,426,415 2,440,700 1,018,985 202,367 2,552,497 7,121,946 4,367,082	37 3,389 2,537,922 2,454,576 1,072,063 214,272 2,642,395 7,456,136 4,599,469

The quantity of ale and stout brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter the production increased each year to 74,178,366 gallons in 1936-37. For a number of years prior to the depression the consumption of ale and stout exceeded 11 gallons per head of the population; it dropped to 7.32 gallons in 1931-32, but has now advanced to 10.34 gallons.

(iii) Materials Used and Production. The table below shows the quantities of raw material used and the quantity and value of alc and stout brewed in each State as furnished by the Excise Branch of the Department of Trade and Customs during the year 1936-37.

BREWERIES.-MATERIALS USED AND PRODUCTION, 1936-37.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
		Raw	MATERIAL	Used.	1		<u> </u>
Malt bushels Hops lb. Sugar cwt.	869,735 758,681 103,680	863,330 746,794 106,040	241,349 197,991 24,760	180,558 174,216 21,740	289,025 188,390 7,840	63,364 42,320 4,960	2,507,361 2,108,392 269,020
Raw Mar	rerial Use	D PER 1,00	o Gallon	s of Ale	and Stou	T PRODUC	ED.
Malt bushels Hops lb. Sugar cwt.	32.50 28.35 3.87	32.37 27.98 3.98	35.38 29.02 3.63	31.85 30.74 3.84	43.29 28.22 1.17	40.15 26.82 3.14	33.80 28.42 3.63
	<u>'                                    </u>	ALE AN	D STOUT	Brewed.		<u>,                                     </u>	<u> </u>
Quantity gallons Value (a) £	26,760,536 2,783,082	26,673,823 2,774,064	6,822,073 735,437	5,668,392 472,209	6,675,676 664,886	1,577,866	74,178,366 7,604,000

<sup>(</sup>a) Exclusive of Excise duty.

- 30. Distilleries.—Distilleries are located in all the States with the exception of Western Australia and Tasmania. The following information, which has been extracted from returns furnished by the Excise Branch of the Department of Trade and Customs, shows the materials used in distilleries in Australia and the quantity of spirits distilled therefrom for the year 1936-37:—Materials used: barley, 67,177 bushels; barley malt 49,700 bushels; molasses 1,120,308 cwt.; wine 13,553,628 gallons; raisins and currants 34,116 cwt.; grapes 101.563 cwt. The quantity of spirits distilled from barley, malt and grain was 289,091 gallons; from molasses 5,838,466 gallons; and from wine 2,537,706 gallons; other materials 465 gallons, total 8,665,728 gallons. The quantity of spirits denatured during the year was 3,709,055 gallons.
- 31. Tobacco, etc., Factories.—(i) Details for each State, 1936-37. During the year 1936-37 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, 1936-37.

Items.	•	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories Number of persons engagy value of land and buildin Value of plant and machi Vages paid Value of fuel used Value of materials used Total value of output Value of production	gs	 9 3,214 632,652 5,84,196 5,92,927 21,206 4,519,541 5,871,269 1,330,522	15 2,019 325,071 268,029 378,076 8,144 1,751,108 2,720,996 961,744	6 53 (a) (a) (a) (a) (a) (a) (a)	(a) (a) (a) (a) (a) (a) (a) (a) (a)	(a) (a) (a) (a) (a) (a)	32 5,447 b 1,001,236 b 870,430 b 996,665 b 29,938 b 6,345,214 b 8,714,581 b 2,339,429

<sup>(</sup>a) Not available for publication.
Australia.

<sup>(</sup>b) Including Queensland, South Australia and Western

(ii) Total for Australia. This industry was among the first to be established in Australia. In 1861 New South Wales had 11 factories, producing 177,744 lb. of manufactured tobacco; in the same year there was one factory in Victoria, but the quantity of tobacco manufactured is not available. The Australian market has for many years been largely supplied with local manufactures from the imported leaf. Imports during 1936-37 comprised—manufactured tobacco 555,837 lb., cigars 10,206 lb., and cigarettes 134,894 lb., while the quantities manufactured in Australian factories were respectively 15,733,223 lb., 262,481 lb., and 5,659,071 lb. The following tables show the extent of the industry in Australia for the last five years:—

TOBACCO, CIGAR AND CIGARETTE FACTORIES.—AUSTRALIA.

Items.		1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
· · · ·		<del></del> -	·	ļ		
Number of factories		30	31	29	31	32
Number of employees		4.142	4,395	4,818	5.155	5,447
Approx, value of land and buildings	£	910,547	916,971	927,122	936,521	1,001,236
Approx, value of plant and machinery	£	663,069	658,850	784,371	726,713	870,430
Wages paid	£	812,220	838,668	891,064	950,790	996,665
Value of fuel used	£	23,088	18,596	18,661	20,553	29,938
Value of materials used	£	4,823,564	5,003,766	5,373,582	6,082,506	6,345,214
Cotal value of output	£	6,591,780	6.894.327	7,216,139	8,529,491	8,714,581
Value of production	£	1,745,128	1,871,965	1,823.896	2,426,432	2,339,429

#### LEAF USED AND PRODUCTION.

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; in 1932–33 the quantity of local leaf used fell to 2.7 million lb., but it has since increased to 4.2 million lb. In this connexion, see item "Tobacco" in Chapter XX. "Agricultural Production."

32. Saw-mills, etc.—(i) Details for States, 1936-37. 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, 1936-37.

Items.	N.S.W.	   Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories Number of persons engaged Value of land and buildings£		316 3,548 397,627	440 4,809 390,640	51 940 182,040	119 2,376 213,523	228 1,515 93,242	1,591 18,284 2,015,040
Value of plant and machinery		44,196	676,997 782,273 44,261 1,871,294 3,161,677 1,246,122	127,011 169.394 7,482 624,079 909,733 278,172	429.415 501,561 26,189 696,774 1,444,048 721,085	13,418	7,942,375

(ii) Total for Australia, 1932-33 to 1936-37. The development of forest and other saw-mills, etc., since 1932-33 is shown in the following table:—

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

Items.		1932-33.	1933-34.	1934-35.	1935–36.	1936-37.
Number of establishments Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	£	1,229 10,102 1,897,933 2,449,908 1,643,210 103,361 3,285,202 5,968,080 2,579,517	1,276 12,298 1,899,729 2,460,647 1,926,400 115,438 4,022,263 7,211,573 3,073,872	1,405 15,333 2,010,001 2,595,995 2,519,745 139,572 5,604,845 9,814,197 4,069,780	1,443 17,297 1,974,918 2,702,063 2,927,960 170,705 6,663,907 11,515,591 4,680,979	1,591 18,284 2,015,040 2,671,982 3,188,cco 184,038 7,942,375 13,379,054 5,252,641

The table furnishes evidence of marked improvement during the past four years. The saw-mill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the height of the depression, had recovered to 643 million super. feet in 1936-37. Indications point to a further increase in 1937-38 as a result of developments in the building industry. Further reference is made to the saw-milling industry in Chapter XXII. "Forestry."

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

FURNITURE, CABINET MAKING AND UPHOLSTERY FACTORIES, 1936-37.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories  Number of persons engaged  Value of land and buildings £  Value of plant and machinery £  Wages paid £  Value of fuel used £  Value of materials used £  Total value of output £  Value of production . £	254 4,626 720,100 249,211 829,259 26,974 1,466,922 2,787,692 1,293,796	296 3,304 593,F10 139,321 473,783 18,538 822,500 1,655,149 814,111	108 1,400 212,847 68,678 252,392 8,135 374,022 780,683 398,526	64 916 131,699 67,487 137,605 7,165 244,041 464,201 212,995	87 718 108,112 29,838 113,437 3,478 187,640 379,710 188,592	14,130 42,515 1,236 40,232 102,311	844 11,253 1,793,967 568,665 1,848,991 65,526 3,135,357 6,169,746 2,968,863

34. Printing and Bookbinding Works.—Printing and bookbinding works rank high in importance among the industries of Australia, and in 1936-37 afforded employment for about 27,121 employees, and paid more than £5,400,000 in salaries and wages, while the value of output amounted to £15,228,000. The following table gives particulars of establishments engaged in general printing and bookbinding in each State for the year 1936-37. Government printing works are included, but establishments producing newspapers and periodicals are shown separately in the succeeding table:—

GENERAL PRINTING AND BOOKBINDING ESTABLISHMENTS, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Value of plant and machinery £ Wages paid £ Value of fuel used £ Value of materials used £ Total value of output £	1,182,506 1,206,841 39,447 1,378,007 3,480,448	6.546 1,558,789 1,075,706 1,107,107 38,352 1,213,355	99 1,736 375.233 202,297 293,566 9,743 243,995 746,101 492,363	63 1,139 225,022 231,247 197,212 9,005 175,428 487,862 303,429	79 858 204,992 150,326 140,600 5,711 140,647 390,735 245,377	68,713 92,946 2,224 56,240 205,796	1,015 17,549 3,749,329 2,910,795 3,038,272 103,482 3,207,672 8,421,702 5,110,548

ESTABLISHMENTS PRODUCING NEWSPAPERS AND PERIODICALS, 1936-37	<b>ESTABLISHMENTS</b>	PRODUCING	NEWSPAPERS A	AND	PERIODICALS.	1936-37
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ltems.	x.s.w.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Value of plant and machinery £ Wages paid . £ Value of fuel used . £ Value of materials used £ Total value of output £	211	116	65	38	38	6	474
	4,123	2,438	1,465	626	636	284	9,572
	1,672,270	700,578	497,748	365,276	418,350	27,105	3,681,327
	1,412,127	727,078	439,719	210,604	180,699	42,146	3,012,373
	1,051,725	659,473	323,492	153,654	167,143	66,719	2,422,206
	49,728	27,878	19,060	5,158	12,405	2,452	116,681
	1,116,431	830,612	288,498	179,553	145,501	40.693	2,601,288
	3,005,011	1,880,660	861,037	423,227	428,239	208,571	6,806,745
	1,838,852	1,022,170	553,479	238,516	270,333	165,426	4,088,776

35. Tyres, Motor and Cycle.—(i) Details for each State, 1936-37. During the last decade, the number of motor car and cycle users has shown a considerable advance and this necessarily has had a stimulating effect on the industry engaged in the manufacture of motor and cycle tyres. Particulars for each State during 1936-37 are shown hereunder:—

TYRES, MOTOR AND CYCLE, 1936-37.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	2,448,075	88 2,235 663,899 753,508 450,380 109,030 1,960,055 3,187,010 1,117,925	28 151 58,589 16,868 19,612 2,096 36,936 77,360 38,328	27 145 59,644 13,938 15,219 2,276 33,130 68,914 33,508	24 80 35,746 8,312 9,292 1,396 19,310 44,802 24,096	22,515 5,679 6,349 618 10,220 25,769 14,931	261 4,907 1,583,004 1,281,468 980,567 192,624 3.751,258 5.851,930 1,908,048

<sup>(</sup>a) Includes Boots and Shoes and Other Rubber Goods.

(ii) Total for Australia, 1932-33 to 1936-37. Prior to 1930-31 particulars regarding this industry were included with Rubber Goods but separate details are now available and are shown in the following table for the last five years:—

TYRES, MOTOR AND CYCLE.—AUSTRALIA.

Items.		1932-33. (a)	1933-34. (a)	1934-35. (a)	1935–36. (a)	1936-37. (a)
Number of factories Number of persons engaged Value of land and buildings Value of plant and machinery Wages paid Value of fuel used Value of materials used Total value of output Value of production	 	279 3,215 1,307,064 975,947 540,856 112,558 1,347,737 2,449,809 989,514	279 3,489 1,311,366 939,796 635,547 126,471 1,681,151 2,859,447 1,051,825	261 3,998 1,240,749 895,139 736,865 134,335 2,173,447 3,499,132 1,191,350	260 4,098 1,257,800 841,815 786,713 136,542 2,269,954 3,788,333 1,381,837	261 4,907 1,583,004 1,281,468 980,567 192,624 3,751,258 5,851,930 1,908,048

<sup>(</sup>a) Includes Boots and Shoes and Other Rubber Goods for Tasmania.

It will be noted that the value of output for the year 1936-37 is the greatest recorded since the manufacture of motor and cycle tyres was shown as a separate industry.

36. Electric Light and Power Works.—(i) Details for each State, 1936–37. The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1931–32 the production of electric light and power has increased from 2,507 to 3,909 million British units, or by more than 55 per cent. Particulars for the year 1936–37 are as follows:—

ELECTRIC LIGHT AND POWER WORKS, 1936-37.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	9,947,002 545,446 1,005,563	1,346 1,975,217 6,934,522 318,591	487,676 1,714,383 138,561	1,872,962 384,531 205,446	341,453 2,096,118 165,462 469,874	231,777 1,931,083 17,731	373 6,044 8,355,446 24,496,070 1,570,322 2,577,385 11,311,776

(ii) Production 1932-33 to 1936-37. The increase in the production of electric light and power in each of the States during the five years is clearly shown in the following table:—

ELECTRIC LIGHT AND POWER WORKS.—PRODUCTION.

Year.		N.S.W.	Victoria,	Q'land.	S. Aust.	W. Aust.	Fasmania.	Australia.
1932-33		1,000 K.W.H. 1.154,457	1,000 K.W.H. 778,650	1,000 K.W.H. 134,080	1,000 K.W.H. 148,348	1,000 K.W.H. 145,278	1,000 K.W.H. 354,749	1,000 K.W.H. 2,715,562
1933-34 · · · 1934-35 · · · · 1935-36 · · · · · · · · · · · · · · · · · · ·	• • •	1,227,873 1,349,248 1,464,898 1,626,833	830,910 900,247 974,722 1,049,768	168,996 202,030 224.014 256,784	165,598 176,434 200,488 215,714	160,130 171,209 204,373 237,185	356,670 399,887 459,408 522,491	2,910,177 3,199,055 3,527,903 3,908,775

37. Gas Works.—(i) Details for each State, 1936-37. Gas works are in operation in the majority of important towns in Australia. New South Wales returned seven coke factories and Queensland three, working as separate industries, but under the new classification these are included in Class I.—Treatment of Non-metalliferous Mine and Quarry Products. The subjoined table gives particulars of gas works in each State for the year 1936-37:—

GAS WORKS, 1936-37.

Items.	N.S.W. (a)	Vie.	Q'land.	S. Aust.,	W. Aust.	Tas.	Australia.
	43 1,144 844,282 3,129,453 261,962 197,507 659,485 2,174,599 1,317,607	39 724 399,448 1,959,846 186,489 137,974 670,387 1,367,838 550,477	16 229 186,469 567,541 57,470 4,374 143,372 314,112 166,366	587 26,590 1,164,065 142,463 2,092 122,787 489,010 364,131	22,193 276,096 24,813 13,684 77,566 137,308 46,058	2 49 48,929 149,027 11.407 (h) 23,389 86,634 63,245	108 2,846 1,527,911 7,246,028 684,604 355,631 1,705,986 4,569,501 2,507,884

<sup>(</sup>a) Includes Hydraulic Power.

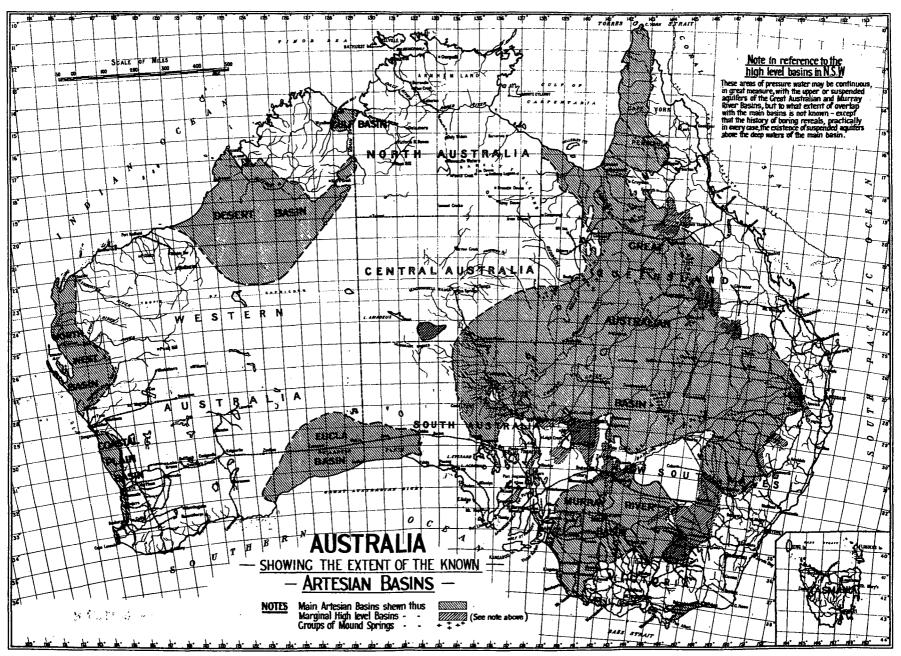
<sup>(</sup>b) Included in Value of Materials used.

(ii) Coal Used and Production, 1936-37. The following table gives details for the year 1936-37:—

# GAS WORKS .-- COAL USED AND PRODUCTION, 1936-37.

	Partic	ulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Ta≈.	Australia.
					Coal U	Jsed.			-	
Coal		•••	tons	560,174	368,963	87,629	71,154	25,094	11,583	1,124,597
					Ркорт	JCTS.				
Gas so Coke p	oduced ld, oroduced or sale	1,000 CI		10,377,602 8,937,788 399,848 319,296	5,827,528 217,396	1,190,811 50,094	902,910 43,966	451,071	173,396	17,483,504
					VAL	UE.				
Gas so Coke f	old for sale		. £	1,453,008 354,336	1,687,978 181,458	446,231 29,734	409,525 49,912	177,864	71,702 9,269	4,246,308 639.560

The maximum output of gas was 20,929,569 thousand cubic feet in 1929-30. The production declined to an average of 17,800,000 thousand cubic feet during the three years ended June, 1934, but in the past three years made notable gains to 20,147.939 thousand cubic feet in 1936-37.



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