

CHAPTER XXII.

MANUFACTURING INDUSTRY.

[NOTE].—For the year 1920-21 the Queensland, Western Australian and Tasmanian year ended 31st December, 1920, and that of the three remaining States ended 30th June, six months later. In 1923-24 Tasmania adopted the year ended 30th June, and Queensland fell into line during 1924-25, while Western Australia proposes to make the change in 1925-26.

In all tables relating to employees—except where specially mentioned—"Number of Employees" includes working proprietors.

§ 1. Number and Classification of Factories.

1. **General.**—The number of factories in each State does not necessarily furnish an accurate indication of the extent or progress of manufacturing throughout Australia, since the larger establishments in many cases tend to absorb smaller enterprises, while on the other hand new factories are constantly springing up, and small plants are as numerous as large ones.

2. **Number of Factories in each State, 1920-21 to 1924-25.**—The following table gives the number of factories in each State for the years 1920-21 to 1924-25:—

FACTORIES.—NUMBER IN EACH STATE, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1920-21 ..	5,837	6,132	1,795	1,438	895	616	17,113
1921-22 ..	6,356	6,753	1,810	1,432	986	686	18,023
1922-23 ..	6,702	7,096	1,878	1,609	1,199	689	19,173
1923-24 ..	7,321	7,289	1,912	1,698	1,188	781	20,189
1924-25 ..	7,906	7,425	1,890	1,711	1,188	675	20,795

(a) See general note above.

3. **Classification of Factories, Australia, 1920-21 to 1924-25.**—The following table shows the number of factories in Australia for each year from 1920-21 to 1924-25 classified in the groups agreed upon by the Conferences of Statisticians in 1902 and 1906. Details in regard to some of the principal industries in these groups will be found in § 9 hereinafter:—

FACTORIES.—CLASSIFICATION, AUSTRALIA, 1920-21 TO 1924-25.

Class of Industry.	1920-21. (a)	1921-22. (a)	1922-23. (a)	1923-24. (a)	1924-25. (a)
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	No. 772	No. 762	No. 810	No. 799	No. 780
II. Treating oils and fats, animal, vegetable, etc.	92	99	97	99	98
III. Processes in stone, clay, glass, etc.	707	736	782	845	871
IV. Working in wood	2,053	2,103	2,236	2,497	2,507
V. Metal Works, machinery, etc.	2,133	2,181	2,349	2,575	2,600
VI. Connected with food and drink, etc.	2,453	2,539	2,635	2,702	2,756
VII. Clothing and textile fabrics, etc.	3,409	3,893	4,225	4,408	4,616
VIII. Books, paper, printing and engraving	1,259	1,313	1,347	1,423	1,477
IX. Musical instruments, etc.	43	45	59	50	55
X. Arms and explosives	17	17	14	15	13
XI. Vehicles and fittings, saddlery and harness, etc.	1,634	1,778	1,913	2,189	2,338
XII. Ship and boat building and repairing	79	81	81	88	87
XIII. Furniture, bedding, and upholstery	916	927	1,010	1,160	1,192
XIV. Drugs, chemicals, and by-products	305	313	327	323	340
XV. Surgical and other scientific instruments	73	77	81	84	92
XVI. Jewellery, timepieces, and plated ware	233	247	254	258	262
XVII. Heat, light, and power	529	563	590	435	448
XVIII. Leatherware, n.e.l.	101	115	118	126	121
XIX. Minor wares, n.e.l.	215	234	245	113	142
Total	17,113	18,023	19,173	20,189	20,795

(a) See general note above.

CLASSIFICATION OF FACTORIES ACCORDING TO NUMBER OF EMPLOYEES. 769

For the purpose of the returns in the above table the definition of a factory adopted at the Conference of Statisticians in 1902 is used, viz., "Any factory, workshop or mill where four or more persons are employed or power is used."

The expansion in the number of factories in Australia has been particularly marked during recent years. Approximately 1,000 additional establishments have been added to the total number in each of the past four years. As previously pointed out, however, any increase or decrease in the number of factories from year to year does not necessarily indicate a change in the position of the industry.

4. Classification of Factories, States, 1924-25.—The following table shows the number of factories in each State during 1924-25 classified according to the nature of the industry :—

FACTORIES.—CLASSIFICATION, STATES, 1924-25.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Aust.
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	260	272	43	96	51	58	780
II. Treating oils and fats, animal, vegetable, etc.	42	27	12	11	4	2	98
III. Processes in stone, clay, glass, etc.	387	261	41	105	57	20	871
IV. Working in wood	976	704	340	140	167	180	2,507
V. Metal works, machinery, etc.	968	1,012	190	245	140	45	2,600
VI. Connected with food and drink, etc.	948	721	480	272	224	111	2,756
VII. Clothing and textile fabrics, etc.	1,748	2,000	274	326	178	90	4,616
VIII. Books, paper, printing, and engraving	581	545	137	102	91	21	1,477
IX. Musical instruments, etc.	27	20	1	5	2	..	55
X. Arms and explosives	3	9	..	1	..	..	13
XI. Vehicles and fittings, saddlery and harness, etc.	935	844	160	203	131	65	2,338
XII. Ship and boat building and repairing	48	11	9	10	4	5	87
XIII. Furniture, bedding and upholstery	420	467	109	96	59	41	1,192
XIV. Drugs, chemicals, and by-products	144	142	6	19	17	12	340
XV. Surgical and other scientific instruments	30	37	11	8	6	..	92
XVI. Jewellery, timepieces and plated ware	93	111	16	24	10	8	262
XVII. Heat, light, and power	188	138	44	30	34	14	448
XVIII. Leatherware, n.e.i.	42	59	9	6	3	2	121
XIX. Minor wares, n.e.i.	66	45	8	12	10	1	142
Total	7,906	7,425	1,890	1,711	1,188	675	20,795

(a) Year ended 31st December, 1924.

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

1. States, 1924-25.—A more satisfactory method of measuring the importance of the manufacturing industry in Australia may, perhaps, be obtained by grouping the factories according to the average number of employees therein.

The following table shows, for each State, the number of factories classified according to the number of hands employed, and the average number of hands employed therein, during 1924-25 :—

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1924-25.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	2,081	1,787	350	294	287	146	4,945
4 ..	767	764	142	143	128	92	2,036
5 to 10 ..	2,360	2,259	558	612	378	245	6,412
11 to 20 ..	1,196	1,169	369	290	173	82	3,279
21 to 50 ..	938	902	273	227	133	73	2,546
51 to 100 ..	303	312	90	97	56	24	882
Over 100 ..	261	232	108	48	33	13	695
Total ..	7,906	7,425	1,890	1,711	1,188	675	20,795

(a) Year ended 31st December, 1924.

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES,
1924-25—continued.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Australia.
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AVERAGE NUMBER OF HANDS EMPLOYED.

Under 4 ..	4,293	3,872	780	691	597	306	10,539
4 ..	3,068	3,056	568	572	512	368	8,144
5 to 10 ..	16,241	15,706	3,985	4,239	2,615	1,714	44,500
11 to 20 ..	17,369	17,068	5,368	4,119	2,566	1,211	47,701
21 to 50 ..	30,060	28,661	8,787	7,080	4,326	2,323	81,237
51 to 100 ..	20,450	21,960	6,104	6,587	3,826	1,609	60,536
Over 100 ..	74,279	63,835	23,330	15,065	7,316	3,467	187,292
Total ..	165,760	154,158	48,922	38,353	21,758	10,998	439,949

(a) Year ended 31st December, 1924.

2. Australia, 1920-21 to 1924-25.—For the period covered in the following table the number of factories has increased at a faster rate than that of employees, consequently a reduction has occurred in the average number of employees per factory. The same reason may be assigned for the decrease in the proportionate number of hands employed in the larger establishments, which dropped from 42.92 per cent. of the total employment in 1920-21 to 42.57 per cent. in 1924-25.

FACTORIES.—CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES,
AUSTRALIA, 1920-21 TO 1924-25.

Year.(a)	Establishments Employing on the Average—							
	20 hands and under.		20 to 100 hands.		101 hands and upwards.		Total.	
	Es- tablish- ments.	Hands.	Es- tablish- ments.	Hands.	Es- tablish- ments.	Hands.	Es- tablish- ments.	Hands.
1920-21—								
Number ..	13,396	96,379	3,066	124,307	651	165,953	17,113	386,639
Average per establishment ..	7.19	7.19	40.54	40.54	254.92	254.92	22.59	22.59
Percentage on total ..	78.28	24.93	17.92	32.15	3.80	42.92	100.00	100.00
1921-22—								
Number ..	14,211	100,301	3,163	127,692	649	167,432	18,023	395,425
Average per establishment ..	7.06	7.06	40.37	40.37	257.98	257.98	21.94	21.94
Percentage on total ..	78.86	25.37	17.54	32.29	3.60	42.34	100.00	100.00
1922-23—								
Number ..	15,176	104,545	3,337	137,998	660	169,867	19,173	412,410
Average per establishment ..	6.89	6.89	41.35	41.35	257.37	257.37	21.51	21.51
Percentage on total ..	79.15	25.35	17.41	33.46	3.44	41.19	100.00	100.00
1923-24—								
Number ..	16,086	109,673	3,421	141,549	682	178,768	20,189	429,990
Average per establishment ..	6.82	6.82	41.38	41.38	262.12	262.12	21.30	21.30
Percentage on total ..	79.68	25.51	16.94	32.92	3.38	41.57	100.00	100.00
1924-25—								
Number ..	16,672	110,884	3,428	141,773	695	187,292	20,705	439,949
Average per establishment ..	6.65	6.65	41.36	41.36	269.48	269.48	21.16	21.16
Percentage on total ..	80.17	25.20	16.49	32.23	3.34	42.57	100.00	100.00

(a) See general note on first page of this Chapter.

§ 3. Power used in Factories.

1. States, 1924-25.—The following table shows the number of factories using steam, gas, oil, electricity, or water, and the horse-power of engines or motors during 1924-25 :—

FACTORIES.—HORSE-POWER OF ENGINES USED, 1924-25.

State.	Number of Establishments.			Actual Horse-power of Engines Used.					
	Using Machinery worked by Steam, Gas, Oil, Electricity, or Water.	Others.	Total.	Steam.	Gas.	Oil.	Electricity.	Water.	Total.
	No.	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
N.S.W. ..	6,976	930	7,906	251,042	14,817	3,539	154,849	682	424,929
Victoria ..	6,151	1,274	7,425	233,290	17,869	5,380	117,525	(a)	374,064
Queensland ..	1,581	309	1,890	92,633	13,401	1,639	27,891	26	135,590
S. Australia ..	1,423	288	1,711	87,940	8,353	4,067	28,818	14	129,192
W. Australia ..	995	193	1,188	44,886	5,252	1,952	18,060		70,150
Tasmania ..	591	84	675	5,684	288	655	47,238	72,286	126,151
Australia ..	17,717	3,078	20,795	715,475	59,980	17,232	394,381	73,008	1,260,076

(a) Statistics of Water Power not collected.

The utilization of mechanical power in factories is greatest in New South Wales where the largest number of industries requiring a considerable amount of power is located. Victoria, on the other hand, has the largest number of establishments, such as those connected with clothing and textile fabrics, wherein much less power is utilized.

The number of establishments in Australia during 1924-25 using steam, gas, oil, electricity, or water was 17,717; or 85.19 per cent. of the total; 3,078 establishments, representing 14.81 per cent., used no mechanical power. The total actual horse-power in use was 1,260,076, distributed in the following proportions :—Steam, 56.78 per cent.; gas, 4.76 per cent.; oil, 1.37 per cent.; electricity, 31.30 per cent.; and water, 5.79 per cent.

2. Australia, 1920-21 to 1924-25.—The following table shows the horse-power of engines used in connexion with factories in Australia during each of the last five years :—

FACTORIES.—HORSE-POWER OF ENGINES USED, AUSTRALIA, 1920-21 TO 1924-25.

Year (a)	Number of Establishments.			Actual Horse-power of Engines Used.					
	Using Machinery worked by Steam, Gas, Oil, Electricity, or Water.	Others.	Total.	Steam.	Gas.	Oil.	Electricity.	Water.	Total.
	No.	No.	No.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
1920-21 ..	13,943	3,170	17,113	437,851	59,385	11,864	217,916	15,465	742,481
1921-22 ..	14,859	3,164	18,023	460,258	57,877	10,363	249,379	20,216	798,013
1922-23 ..	15,951	3,222	19,173	475,917	59,702	12,240	283,850	35,732	867,441
1923-24 ..	17,056	3,133	20,189	633,683	60,237	16,277	344,085	56,492	1,110,774
1924-25 ..	17,717	3,078	20,795	715,475	59,980	17,232	394,381	73,008	1,260,076

(a) See general note on first page of this Chapter.

The growth of electrical power has been one of the chief factors in the rapid increase of mechanical power which has taken place in factories during recent years. From 72,250 horse-power in 1913, or roughly one-sixth of the total horse-power of engines used, it has increased to 394,381 horse-power, or one-third of the total installations in 1924-25. Steam power continues to expand with the development of the larger industries, but the increase in the use of gas and oil engines is negligible. During the past four years 129,399 horse-power has been added each year to the plant actually in use.

3. Classes of Industry, States, 1924-25.—The following table gives a classification of the actual horse-power of engines used in factories of different descriptions in each State during 1924-25 :—

FACTORIES.—HORSE-POWER OF ENGINES USED IN EACH CLASS, 1924-25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treating raw material, product of agricultural and pastoral pursuits, etc. . .	8,932	9,584	1,300	2,033	799	577	23,225
II. Treating oils and fats, animal, vegetable, etc. . .	2,164	1,066	835	507	94	18	4,684
III. Processes in stone, clay, glass, etc. . .	26,791	14,955	3,268	5,146	2,893	2,079	55,132
IV. Working in wood . . .	24,653	19,693	11,670	3,480	9,937	3,502	72,035
V. Metal works, machinery, etc. . .	77,916	23,284	11,143	13,147	5,591	36,720	167,801
VI. Connected with food and drink, etc. . .	44,702	42,916	48,844	10,792	9,056	3,884	160,194
VII. Clothing and textile fabrics, etc. . .	10,600	20,089	2,584	1,384	573	1,408	36,638
VIII. Books, paper, printing, and engraving . . .	12,491	9,655	1,984	1,851	1,275	444	27,700
IX. Musical instruments, etc. . .	817	356	..	17	2	..	1,192
X. Arms and explosives . . .	673	664	..	2	..	..	1,339
XI. Vehicles and fittings, saddlery and harness, etc. . .	4,319	3,157	849	3,990	529	240	13,084
XII. Ship and boat building and repairing . . .	9,333	1,883	87	915	30	27	11,775
XIII. Furniture, bedding, and upholstery . . .	4,336	3,638	1,494	1,434	762	420	12,084
XIV. Drugs, chemicals, and by-products . . .	4,027	4,165	168	4,203	1,398	205	14,166
XV. Surgical and other scientific instruments . . .	105	95	53	20	17	..	290
XVI. Jewellery, timepieces, and plated ware . . .	495	581	49	85	26	15	1,251
XVII. Heat, light, and power . . .	190,255	211,424	51,145	80,148	37,047	76,586	646,605
XVIII. Leatherware, n.e.i. . .	205	513	33	5	48	1	805
XIX. Minor wares, n.e.i. . .	2,115	6,846	84	33	73	25	9,176
Total ..	424,929	374,064	135,590	129,192	70,150	126,151	1,260,076

(a) Year ended 31st December, 1924.

4. Classes of Industry, Australia, 1920-21 to 1924-25.—The following table shows a similar classification of the actual horse-power of engines used in manufacturing industries in Australia during the years 1920-21 to 1924-25 inclusive :—

FACTORIES.—HORSE-POWER OF ENGINES USED, AUSTRALIA, 1920-21 TO 1924-25.

Class of Industry.	1920-21. (a)	1921-22. (a)	1922-23. (a)	1923-24. (a)	1924-25. (a)
I. Treating raw material, product of agricultural and pastoral pursuits, etc. . .	22,475	23,439	23,976	24,319	23,225
II. Treating oils and fats, animal, vegetable, etc. . .	3,098	3,062	3,421	3,848	4,684
III. Processes in stone, clay, glass, etc. . .	38,290	41,031	42,787	48,614	55,132
IV. Working in wood . . .	60,363	58,677	60,343	68,234	72,935
V. Metal works, machinery, etc. . .	122,744	135,690	140,009	162,153	167,801
VI. Connected with food and drink, etc. . .	124,550	136,773	147,160	159,982	160,194
VII. Clothing and textile fabrics, etc. . .	24,342	28,451	30,382	35,295	36,638
VIII. Books, paper, printing, and engraving . . .	18,201	21,392	21,812	26,569	27,700
IX. Musical instruments, etc. . .	704	590	888	1,116	1,192
X. Arms and explosives . . .	1,446	1,691	809	1,236	1,339
XI. Vehicles and fittings, saddlery and harness, etc. . .	6,410	6,990	8,361	11,454	13,084
XII. Ship and boat building and repairing . . .	10,076	11,879	11,406	11,247	11,775
XIII. Furniture, bedding, and upholstery . . .	8,227	8,923	9,995	11,338	12,084
XIV. Drugs, chemicals, and by-products . . .	10,332	11,386	11,309	12,378	14,166
XV. Surgical and other scientific instruments . . .	156	179	209	218	290
XVI. Jewellery, timepieces, and plated wire . . .	885	945	1,066	1,120	1,251
XVII. Heat, light, and power . . .	280,589	297,409	344,373	522,621	646,605
XVIII. Leatherware, n.e.i. . .	616	651	708	760	805
XIX. Minor wares, n.e.i. . .	8,977	8,935	8,427	8,272	9,176
Total ..	742,481	798,093	867,441	1,110,774	1,260,076

(a) See general note on first page of this Chapter.

The actual horse-power of engines used increased in every branch of industry except two, viz., Class I. Treating Raw Materials, and Class X. Arms and Explosives, during the last four years. The industries using the greatest amount of power were Class XVII. Heat, light, and power; Class V. Metal works, machinery, etc.; and Class VI. Connected with food and drink. These three classes, which together accounted for 85.28 per cent. of the total power used in 1924-25 increased their horse-power from 527,883 to 1,074,600 during the four years under review, and are mainly responsible for the development of mechanical power in factories since 1920-21.

§ 4. Employment in Factories.

1. **Total Number Employed.**—Each person employed in and about a factory, in whatever capacity, is now included as a factory employee, consequently every proprietor who works in his own business is counted as an employee, and all "outworkers" (see sub-section 5 (ii) hereinafter) are also included. The individuals embraced may be classed under the following heads:—(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.

The following table shows, for each year from 1920-21 to 1924-25 inclusive, (a) the average numbers of persons (including both sexes and all ages) employed in manufacturing industries in each State: (b) the percentage of the numbers employed in each State on the total numbers employed in Australia; and (c) the numbers employed per ten thousand of the mean population in each State and Australia:—

FACTORIES.—EMPLOYMENT, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
AVERAGE NUMBER.							
1920-21 ..	145,011	140,743	43,196	30,430	17,034	10,225	386,639
1921-22 ..	148,876	144,876	42,248	31,171	18,127	10,127	395,425
1922-23 ..	152,266	152,625	43,403	34,695	19,097	10,324	412,410
1923-24 ..	159,674	156,162	44,948	37,275	19,712	12,219	429,990
1924-25 ..	165,760	154,158	48,922	38,353	21,758	10,998	439,949

PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
1920-21 ..	37.51	36.40	11.17	7.87	4.41	2.64	100.00
1921-22 ..	37.65	36.64	10.69	7.88	4.58	2.56	100.00
1922-23 ..	36.92	37.01	10.53	8.41	4.63	2.50	100.00
1923-24 ..	37.13	36.32	10.45	8.67	4.59	2.84	100.00
1924-25 ..	37.68	35.04	11.12	8.72	4.94	2.50	100.00

PER 10,000 OF MEAN POPULATION.

1920-21 ..	693	921	578	620	517	486	715
1921-22 ..	699	934	553	620	544	475	719
1922-23 ..	701	960	556	676	562	481	734
1923-24 ..	723	961	554	710	566	557	748
1924-25 ..	735	930	586	712	598	505	749

(a) See general note on first page of this Chapter.

2. Rates of Increase, 1919-1920 to 1924-25.—The following table shows the percentage of increase or decrease on the average number of persons employed for the preceding year in each of the years from 1919-20 to 1924-25.

FACTORY EMPLOYEES.—PERCENTAGE OF INCREASE, 1919-20 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	%	%	%	%	%	%	%
1919-20—1920-21..	0.39	3.39	5.64	0.36	10.55	2.09	2.63
1920-21—1921-22..	2.67	2.94	-2.20	2.44	6.42	-0.96	2.27
1921-22—1922-23..	2.28	5.35	2.73	11.31	5.35	1.95	4.30
1922-23—1923-24..	4.87	2.32	3.56	7.44	3.22	18.36	4.26
1923-24—1924-25..	3.81	-1.28	8.84	2.89	10.38	-10.00	2.32

NOTE.—The minus sign indicates decrease.

(a) See general note on first page of this Chapter.

3. Employees in Classes of Industry, Australia, 1920-21 to 1924-25.—The following table gives the average numbers of persons employed in factories under each group in Australia during the years 1920-21 to 1924-25 inclusive:—

FACTORY EMPLOYEES.—CLASSES, AUSTRALIA, 1920-21 TO 1924-25.

Class of Industry.	1920-21. (a)	1921-22. (a)	1922-23. (a)	1923-24. (a)	1924-25. (a)
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	10,494	10,925	11,394	10,842	10,289
II. Treating oils and fats, animal, vegetable, etc.	2,848	3,103	3,173	3,424	3,342
III. Processes in stone, clay, glass, etc.	18,311	16,974	18,666	20,256	20,342
IV. Working in wood	31,942	32,393	33,102	36,319	36,252
V. Metal works, machinery, etc.	80,550	76,798	78,614	88,213	90,888
VI. Connected with food and drink, etc.	57,599	59,252	60,888	61,550	64,712
VII. Clothing and textile fabrics, etc.	88,577	97,194	102,451	100,850	100,830
VIII. Books, paper, printing and engraving	27,522	28,673	31,015	32,659	33,043
IX. Musical instruments, etc.	1,065	1,154	1,415	1,357	1,441
X. Arms and explosives	1,504	1,372	433	803	819
XI. Vehicles and fittings, saddlery and harness, etc.	16,334	16,808	19,532	22,490	24,234
XII. Ship and boat building and repairing	6,702	7,035	6,053	5,794	6,230
XIII. Furniture, bedding, and upholstery	11,827	11,475	12,608	15,230	15,697
XIV. Drugs, chemicals, and by-products	6,805	6,933	6,844	7,215	7,511
XV. Surgical and other scientific instruments	548	570	582	608	690
XVI. Jewellery, timepieces, and plated ware	2,707	2,503	2,489	2,447	2,365
XVII. Heat, light, and power	12,770	13,431	14,112	12,967	13,735
XVIII. Leatherware, n.e.l.	2,191	2,414	2,476	2,576	2,506
XIX. Minor wares, n.e.l.	6,343	6,418	6,523	4,390	5,023
Total	386,639	395,425	412,410	429,990	439,949

(a) See general note on first page of this Chapter.

On the average during each of the last four years employment has been found for 13,328 additional persons in the manufacturing industries. The classes responsible for the bulk of the increase were Class VII. Clothing and Textile Fabrics, Class V. Metal Works, Class XI. Vehicles etc., and Class VI. Food and Drink, in several of the principal industries of which classes considerable development has occurred during the period.

4. *Employees in Classes of Industry, States, 1924-25.*—The following table gives a classification of employees in manufacturing industries in each State during 1924-25 :—

FACTORY EMPLOYEES.—CLASSES, STATES, 1924-25.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A. (a)	Tas.	Aus- tralia.
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	3,812	4,066	703	814	436	458	10,289
II. Treating oils and fats, animal, vegetable, etc.	1,726	950	245	291	84	46	3,342
III. Processes in stone, clay, glass, etc.	9,491	6,181	1,012	2,159	1,031	468	20,342
IV. Working in wood	10,330	10,161	5,675	2,021	5,975	2,090	36,252
V. Metal works, machinery, etc.	41,914	25,427	7,817	9,938	3,825	1,967	90,888
VI. Connected with food and drink, etc.	20,987	19,344	16,176	4,423	2,794	1,853	64,712
VII. Clothing and textile fabrics, etc.	33,270	49,633	7,236	5,773	3,034	1,824	100,830
VIII. Books, paper, printing and engraving	12,904	11,595	3,865	2,491	1,476	712	33,043
IX. Musical instruments, etc.	881	467	11	63	19	..	1,441
X. Arms and explosives	388	428	..	3	..	..	819
XI. Vehicles and fittings, saddlery, and harness, etc.	8,162	6,957	2,236	5,131	1,173	575	24,234
XII. Ship and boat building and repairing	5,083	432	84	578	14	34	6,230
XIII. Furniture, bedding, and upholstery	5,951	5,312	1,708	1,404	852	384	15,697
XIV. Drugs, chemicals, and by-products	2,998	2,882	129	946	488	63	7,511
XV. Surgical and other scientific instruments	275	236	93	52	34	..	690
XVI. Jewellery, timepieces, and plated ware	873	1,069	129	194	75	25	2,365
XVII. Heat, light, and power	4,389	5,423	1,353	1,779	340	451	13,735
XVIII. Leatherware, n.e.l.	1,175	940	180	142	55	11	2,506
XIX. Minor wares, n.e.l.	2,048	2,655	205	56	53	6	5,023
Total	165,760	154,158	48,922	38,353	21,758	10,998	439,949

(a) Year ended 31st December, 1924.

The largest number employed in any particular class in Australia during 1924-25 was in class VII., in which there were 100,830 employees, or 22.92 per cent. of the total in all classes. The class affording employment to the smallest number of hands was Class XV., in which there were 690 hands, or 0.16 per cent. of the total. Classes VI., VII., and VIII. include those industries in which female labour is largely employed. (See § 5, 5 hereof.)

5. *Employees According to Nature of Employment.*—(i) *General.* In the following table the average numbers of persons employed in each State during 1924-25 are classified according to the nature of their employment :—

FACTORY EMPLOYEES.—NATURE OF EMPLOYMENT, 1924-25.

State.	Average Number of Persons Employed.						Total.
	Working Proprietors.	Managers and Overseers.	Accountants and Clerks.	Engine-drivers and Firemen.	Workers, Skilled & Unskilled, in Factory Mill or Workshop. (a)	Carters, Messengers and Others.	
New South Wales ..	6,732	5,876	8,301	3,292	139,275	2,284	165,760
Victoria ..	7,255	5,043	6,827	2,142	129,434	3,457	154,158
Queensland ..	1,342	1,798	2,635	2,060	37,855	3,232	48,922
South Australia ..	1,407	1,378	2,329	545	31,960	734	38,353
Western Australia ..	701	984	1,008	552	16,845	1,668	21,758
Tasmania ..	470	449	731	317	8,814	217	10,998
Australia ..	17,907	15,528	21,831	8,908	364,183	11,592	439,949

(a) Including Outworkers.

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and technically embraces only those to whom work is given out by factory owners to be wrought upon 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 each year from 1920-21 to 1924-25 inclusive :—

FACTORIES.—OUTWORKERS(a), 1920-21 TO 1924-25.

Year.(b)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1920-1921 ..	471	1,151	41	68	14	45	1,790
1921-1922 ..	618	1,476	26	59	8	48	2,235
1922-1923 ..	547	1,228	33	84	8	32	1,932
1923-1924 ..	470	870	38	35	9	41	1,463
1924-1925 ..	461	728	32	62	4	19	1,306

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

(b) See general note on first page of this Chapter.

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

§ 5. Sex Distribution in Factories.

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

2. *Distribution of Employees according to Sex.*—(i) *General.* In New South Wales the ratio of the number of females employed in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and is now less 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 woman to three men, and at present is nearly one to two. In South Australia the ratio at the latest date was one female employed to every four males, and in the remaining States about one to five. The ratio for Australia was one to three. The employment of women is, however, mainly confined to a few trades.

Increasing activity in the clothing and textile industries is the principal cause of the growth in female employment. Certain occupations are regarded as specially suitable for women, such as clothing and textile manufacture, preparation of food, book-binding, and wrapping and packing connected with various industries. In common also with commercial establishments, a considerable number of factories employ women as clerks and typists.

(ii) *Average Number of Males and Females Employed, 1920-21 to 1924-25.* The following table shows the average number of male and female employees in factories in each State from 1920-21 to 1924-25 :—

FACTORIES.—MALES AND FEMALES EMPLOYED, 1920-21 TO 1924-25.

State.	1920-21.(a)	1921-22.(a)	1922-23.(a)	1923-24.(a)	1924-25.(a)
MALES.					
New South Wales ..	112,187	112,362	114,970	121,845	126,496
Victoria ..	96,379	97,789	103,092	107,578	105,984
Queensland ..	36,011	35,050	35,528	36,788	40,895
South Australia ..	24,548	25,006	27,988	30,261	31,238
Western Australia ..	14,329	15,514	15,851	16,439	18,316
Tasmania ..	8,746	8,525	8,453	10,046	9,016
Australia ..	292,200	294,246	305,882	322,957	331,945
FEMALES.					
New South Wales ..	32,824	36,514	37,296	37,829	39,264
Victoria ..	44,364	47,087	49,533	48,584	48,174
Queensland ..	7,185	7,198	7,875	8,160	8,027
South Australia ..	5,882	6,165	6,707	7,014	7,115
Western Australia ..	2,705	2,613	3,246	3,273	3,442
Tasmania ..	1,479	1,602	1,871	2,173	1,982
Australia ..	94,439	101,179	106,528	107,033	108,004

(a) See general note on first page of this Chapter.

During the years specified in the above table there has been an increase in the number of male factory employees in Australia of 39,745, or an annual average of 9,936, whilst the number of female employees increased by 13,565, or an annual average of 3,391.

(iii) *Average Number of Males and Females Employed per 10,000 of Mean Population, 1920-21 to 1924-25.* The following table shows the average number of male and female employees per 10,000 of the mean male and female population respectively in each State from 1920-21 to 1924-25 :—

MALE AND FEMALE FACTORY EMPLOYEES PER 10,000 OF MEAN MALE AND FEMALE POPULATION RESPECTIVELY, 1920-21 TO 1924-25.

State.	1920-21.(a)	1921-22.(a)	1922-23.(a)	1923-24.(a)	1924-25.(a)
MALES.					
New South Wales ..	1,051	1,037	1,038	1,081	1,099
Victoria ..	1,279	1,279	1,307	1,333	1,286
Queensland ..	910	869	862	868	929
South Australia ..	1,001	992	1,087	1,140	1,141
Western Australia ..	814	875	876	883	938
Tasmania ..	821	792	782	917	830
Australia ..	1,063	1,053	1,070	1,105	1,108

(a) See general note on first page of this Chapter.

MALE AND FEMALE FACTORY EMPLOYEES PER 10,000 OF MEAN MALE AND FEMALE POPULATION RESPECTIVELY—continued.

State.	1920-21.(a)	1921-22.(a)	1922-23.(a)	1923-24.(a)	1924-25.(a)
FEMALES.					
New South Wales ..	321	350	350	350	356
Victoria ..	573	599	618	593	578
Queensland ..	204	199	213	215	203
South Australia ..	239	246	262	274	269
Western Australia ..	176	168	205	202	204
Tasmania ..	142	152	175	198	181
Australia ..	356	374	386	380	375

(a) See general note on first page of this Chapter.

3. Rate of Variation for each Sex.—The percentages of annual increase or decrease during the years 1920-21 to 1924-25 in the average number of males and females employed in factories are shown below :—

PERCENTAGES OF ANNUAL INCREASE, MALE AND FEMALE FACTORY EMPLOYEES, 1920-21 TO 1924-25.

State.	1919-20— 1920-21.(a)	1920-21— 1921-22.(a)	1921-22— 1922-23.(a)	1922-23— 1923-24.(a)	1923-24— 1924-25.(a)
MALES.					
New South Wales ..	2.14	0.16	2.31	5.91	3.82
Victoria ..	4.64	1.46	5.42	4.35	-1.48
Queensland ..	6.38	-2.67	1.36	3.54	11.16
South Australia ..	4.75	1.87	11.93	8.12	3.23
Western Australia ..	12.04	8.27	2.17	3.71	11.42
Tasmania ..	2.86	-2.53	-0.84	18.84	-10.26
Total ..	4.17	0.70	3.95	5.58	2.78
FEMALES.					
New South Wales ..	-5.18	11.24	2.14	1.43	3.79
Victoria ..	-0.13	6.14	5.19	-1.92	-0.84
Queensland ..	2.06	0.18	9.41	3.62	-1.63
South Australia ..	-2.10	4.81	8.79	4.58	1.43
Western Australia ..	3.24	3.40	24.23	0.83	5.16
Tasmania ..	-2.25	8.32	16.79	16.14	-8.79
Total ..	-1.85	7.14	5.29	0.47	0.91

NOTE.—The minus sign indicates decrease.

(a) See general note on first page of this Chapter.

4. **Masculinity of Employees in Factories.**—The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of employees for each State for a series of years. The following table furnishes particulars for each of the years 1920-21 to 1924-25 inclusive :—

MASCULINITY (b) OF FACTORY EMPLOYEES, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1920-21 ..	54.7	37.0	66.7	61.3	68.2	71.1	51.1
1921-22 ..	51.0	35.0	65.9	60.4	71.2	68.4	48.8
1922-23 ..	51.0	35.1	63.7	61.3	66.0	63.8	48.3
1923-24 ..	52.6	37.8	63.7	62.4	66.8	62.0	50.2
1924-25 ..	52.6	37.5	67.2	62.9	68.4	64.0	50.9

(a) See general note on first page of this Chapter.

(b) Excess of males over females per 100 of both sexes combined.

The ratio of the sexes employed in factories in Australia has remained fairly constant during recent years, with a tendency towards increased masculinity in the latest two years. Fluctuations have, however, taken place in several of the States, the masculinity increasing in Victoria, Queensland, South Australia and Western Australia, and decreasing in New South Wales and Tasmania. The tables given in the succeeding sub-section show that the comparatively high proportions of females have been due not so much to the incursion of female labour into what may be termed men's trades, as to the activity in those trades in which women are ordinarily engaged, more especially in dressmaking, millinery, etc.

5. **Employment of Females in Particular Industries.**—The employment of women in manufacturing industries in Australia is mainly confined to a few trades, of which the more important are comprised in Classes VI., VII., and VIII., viz., in connexion with food, drink, etc., clothing and textile fabrics, and books, paper, printing, etc. The following tables show the average number of females employed in each of these classes in each State during 1924-25 and the percentages of the average number so employed on the total average number of females employed in all classes of factories :—

FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, AND PERCENTAGES ON AVERAGE TOTAL EMPLOYED, 1924-25.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
AVERAGE NUMBER.							
VI. Food, drink, etc. ..	6,261	5,169	994	912	512	494	14,342
VII. Clothing and textile fabrics ..	23,269	34,899	5,301	4,241	2,249	1,200	71,159
VIII. Books, paper, printing, etc. ..	3,693	3,282	894	773	326	141	9,114
All other classes ..	6,041	4,824	838	1,189	355	147	13,389
Total ..	39,264	48,174	8,027	7,115	3,442	1,982	108,004

PERCENTAGES ON AVERAGE TOTAL FEMALE EMPLOYEES.

VI. Food, drink, etc. ..	15.95	10.73	12.38	12.82	14.88	24.92	13.28
VII. Clothing and textile fabrics ..	59.26	72.44	66.04	59.61	65.34	60.54	65.88
VIII. Books, paper, printing, etc. ..	9.40	6.81	11.14	10.86	9.47	7.12	8.44
All other classes ..	15.39	10.02	10.44	16.71	10.31	7.42	12.40
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(a) Year ended 31st December, 1924.

The largest proportion of females is engaged in one or other of the three classes of industry indicated, Class VII. being the most important. The classification of the employment of females in the several industries in that class, and the relation of their number to that of the males so employed, are shown in the following table :—

FEMALES EMPLOYED IN EACH INDUSTRY IN CLASS VII. DURING 1924-25.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females	Femininity. (a)	Males.	Females	Femininity. (a)	Males.	Females	Femininity. (a)
Woolen and tweed mills	695	1,090	22.13	2,224	2,853	12.39	453	626	16.03
Knitting factories ..	489	2,034	61.23	648	3,779	69.16	27	220	78.14
Cotton mills ..	231	253	4.54	..	..	..	75	3	-92.31
Boots and shoes ..	4,022	2,142	-30.50	6,947	5,152	-14.84	1,853	1,104	-29.57
Clothing (tailoring and slop) ..	2,536	8,479	53.95	2,221	7,632	54.92	1,805	5,927	53.31
Clothing (waterproof and oilskin) ..	15	91	71.70	73	188	84.43	..	..	..
Dressmaking and millinery ..	120	3,630	93.60	423	7,916	92.06	32	2,702	97.66
Dyeworks and cleaning	242	167	-18.34	127	133	2.31	112	134	8.94
Furriers ..	205	270	13.68	197	406	34.66	40	91	38.93
Hats and caps ..	548	1,040	30.98	692	1,004	44.06	63	81	12.50
Shirts, ties, and scarves	349	3,532	82.01	442	5,237	70.73	136	1,873	86.46
Rope and cordage ..	258	79	-53.12	501	390	-12.46	183	39	-64.86
Tents and tarpaulins	142	146	1.39	134	102	-13.56	104	74	-16.30
Bags and sacks ..	149	316	35.91	105	107	0.94	53	117	37.65
Total, Class VII. ..	10,001	23,269	39.88	14,734	34,899	40.63	4,936	12,991	44.93

NOTE.—The minus sign denotes excess of males over females.

(a) Excess of females over males per 100 of both sexes combined.

§ 6. Child Labour in Factories.

1. **Conditions of Child Labour.**—The employment of young persons in factories in each State of Australia 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 general object of the restrictions imposed is to assure that a proper period shall be devoted to primary education, and that the early years of toil shall not exhaust the worker before the attainment of full growth.

2. **Average Number of Children Employed, 1920-21 to 1924-25.**—In the statistical compilations of the various States the term "child" may be taken to denote any person

under sixteen years of age. The following table shows the average number of children of each sex employed in manufacturing industries in each State during the years 1920-21 to 1924-25 :—

CHILDREN EMPLOYED IN FACTORIES, 1920-21 TO 1924-25.

State.	1920-21.(a)	1921-22.(a)	1922-23.(a)	1923-24.(a)	1924-25.(a)
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MALES.

New South Wales ..	3,673	3,911	3,995	4,128	3,968
Victoria ..	3,715	3,780	4,031	4,057	4,027
Queensland ..	1,266	1,077	1,119	1,236	1,507
South Australia ..	991	996	1,125	1,199	1,080
Western Australia ..	448	401	452	530	552
Tasmania ..	315	287	282	360	238
Australia ..	10,408	10,452	11,004	11,510	11,372

FEMALES.

New South Wales ..	3,610	4,150	4,288	4,038	4,256
Victoria ..	2,798	3,120	3,163	3,422	3,223
Queensland ..	738	774	969	972	979
South Australia ..	679	714	795	773	839
Western Australia ..	311	235	251	200	254
Tasmania ..	193	135	266	294	190
Australia ..	8,329	9,128	9,732	9,699	9,741

TOTAL.

New South Wales ..	7,283	8,061	8,283	8,166	8,224
Victoria ..	6,513	6,900	7,194	7,479	7,250
Queensland ..	2,004	1,851	2,088	2,208	2,486
South Australia ..	1,670	1,710	1,920	1,972	1,919
Western Australia ..	759	636	703	730	806
Tasmania ..	508	422	548	654	428
Australia ..	18,737	19,580	20,736	21,209	21,113

(a) See general note on first page of this Chapter.

3. Percentage of Children on Total Number of Employees.—The foregoing table shows a general increase in the number of children employed in factories during the past four years. This increase is greater among the females than is the case with the males, the respective gains being 1,412 and 964. Examined in conjunction with the total number of persons employed the percentage of children has decreased since 1920-21.

**PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF FACTORY EMPLOYEES,
1920-21 TO 1924-25.**

State.	1920-21.(a)	1921-22.(a)	1922-23.(a)	1923-24.(a)	1924-25.(a)
	%	%	%	%	%
New South Wales ..	5.02	5.41	5.44	5.11	4.96
Victoria ..	4.63	4.76	4.71	4.79	4.70
Queensland ..	4.64	4.38	4.81	4.91	5.08
South Australia ..	5.49	5.49	5.53	5.29	5.00
Western Australia ..	4.46	3.51	3.68	3.70	3.70
Tasmania ..	4.97	4.17	5.31	5.35	3.89
Australia ..	4.85	4.95	5.03	4.93	4.80

(a) See general note on first page of this Chapter.

4. Industries Employing Child Labour.—The employment of children is largely confined to a limited number of industries, the most important of which are specified in the next table, which shows the average number of children of each sex employed during 1924-25 in the several industries indicated.

CHILDREN EMPLOYED.—VARIOUS INDUSTRIES, 1924-25.

Class.	Industry.	N.S.W.		Victoria.		Q'land.		S. Aust.		W. Aust. (a)		Tas.		Australia.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
II.	Soap and candles ..	49	31	18	21	13	2	9	18	6	1	..	..	95	73
III.	Bricks, tiles, pottery, and earthenware ..	165	11	58	2	20	..	25	..	14	7	4	..	286	20
IV.	Joinery, boxes, cases, etc. ..	88	3	150	3	32	1	36	1	22	1	6	..	334	9
"	Saw mills ..	50	2	12	..	103	3	17	3	27	..	23	..	232	8
V.	Agricultural imple- ments ..	20	..	89	7	3	..	39	1	4	..	..	..	155	8
"	Engineering, ironworks, and foundries ..	327	23	506	4	83	..	127	9	70	..	3	..	1,116	36
"	Galvanized ironwork- ing and tinsmithing ..	139	40	180	22	67	3	37	1	..	..	1	..	424	66
"	Railway carriage, rail- way and tramway workshops ..	66	..	173	..	24	..	21	..	3	..	..	..	287	..
"	Wire working ..	115	2	19	1	9	..	6	2	5	..	..	..	154	5
VI.	Meat and fish preserving ..	..	..	13	1	135	6	..	..	1	..	..	..	149	6
"	Biscuits ..	233	212	108	90	12	22	17	15	38	14	..	..	408	353
"	Confectionery ..	77	221	30	60	29	37	7	55	3	15	51	45	197	433
"	Jams, pickles, sauces, etc. ..	26	12	44	10	14	16	16	25	1	8	10	6	111	77
"	Condiments, coffee, spices, etc. ..	34	49	7	23	..	..	54	11	12	1	..	..	107	84
"	Tobacco, cigars, etc. ..	56	109	81	33	..	..	..	2	6	10	..	..	143	154
VII.	Woollen and tweed mills ..	86	154	200	262	6	17	6	9	..	..	28	51	324	493
"	Boots and shoes ..	155	247	319	479	46	84	36	45	35	17	17	18	608	890
"	Clothing (tailoring and slop) ..	81	772	76	377	54	298	30	152	9	53	15	14	265	1,666
"	Dressmaking and mil- linery ..	9	430	15	555	..	96	..	126	1	46	1	27	26	1,280
"	Shirts, ties, scarves, etc. ..	19	455	21	330	7	142	2	67	..	23	1	12	50	1,029
"	Hats and caps ..	38	142	48	33	..	8	3	9	..	..	..	..	89	189
"	Knitting factories ..	33	282	25	337	..	12	1	25	..	5	..	4	59	665
"	Rope and cordage ..	11	23	70	32	15	1	3	..	8	2	..	..	107	63
VIII.	Printing and binding ..	390	257	331	76	234	103	99	66	72	21	18	7	1,144	530
"	Paper making, paper boxes, etc. ..	92	207	98	117	7	35	19	99	2	12	..	..	218	470
XI.	Coach and wagon building ..	35	2	67	1	23	..	13	..	12	..	6	..	156	3
"	Cycles and motors ..	234	12	211	..	107	4	164	4	48	1	17	..	781	21
XIII.	Billiard tables, cabinet making and furniture ..	113	7	166	4	69	2	69	2	30	..	8	..	455	15
"	Bedding, flock, and upholstery ..	52	36	40	24	8	2	13	3	3	..	2	1	118	66
XIV.	Chemicals, drugs, and medicines ..	39	83	19	48	..	8	3	16	7	6	2	..	70	161
XVIII.	Leather belting, etc. ..	77	81	34	30	13	11	10	35	..	..	1	1	135	158

(a) Year ended 31st December, 1924.

5. Apprenticeship.—In all the States Acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

§ 7. Salaries and Wages Paid and Value of Production.

[NOTE.]—In all tables relating to Salaries and Wages paid in Factories the amounts given are exclusive of all 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 1924–25 was £380,843,986, of which amount the sum of £221,993,978 represents the value of the raw materials used, and £11,713,250 the value of the fuel and light used. The difference between the sum of the two latter amounts and the value of the output, viz., £147,136,758, represents the amount by which the value of the raw materials was enhanced in the process of manufacture. The total amount of salaries and wages paid in factories during 1924–25 was £81,360,021.

2 Salaries and Wages Paid.—(i) *Total Amount, 1924–25.* The total amount of salaries and wages paid during the year 1924–25 in various classes of factories in Australia is shown in the following table :—

SALARIES AND WAGES PAID IN FACTORIES, 1924–25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	724,150	810,507	118,655	142,566	61,081	31,496	1,888,455
II. Treating oils and fats, animal, vegetable, etc.	315,612	195,772	48,556	51,705	18,676	7,678	637,999
III. Processes in stone, clay, glass, etc.	2,058,986	1,359,389	184,169	456,961	194,230	96,856	4,350,591
IV. Working in wood	1,976,956	2,065,041	1,058,878	405,677	1,345,090	331,611	7,183,253
V. Metal works, machinery, etc.	9,582,173	5,321,302	1,666,462	2,182,746	780,708	472,457	20,005,848
VI. Connected with food and drink, etc.	3,721,700	3,779,328	3,446,134	798,805	515,945	314,861	12,576,773
VII. Clothing and textile fabrics, etc.	4,170,403	6,375,886	835,191	653,401	337,573	201,185	12,573,639
VIII. Books, paper, printing, and engraving	2,471,130	2,262,649	783,400	435,490	308,745	154,404	6,415,818
IX. Musical instruments, etc.	202,165	104,273	1,856	7,585	3,244	..	319,123
X. Arms and explosives	100,142	89,274	..	549	..	..	189,965
XI. Vehicles and fittings, saddlery and harness, etc.	1,460,028	1,228,762	350,410	948,439	192,556	93,940	4,274,135
XII. Ship and boat building and repairing	1,255,922	103,674	11,026	120,140	3,245	4,959	1,498,966
XIII. Furniture, bedding, and upholstery	1,029,304	900,163	293,345	243,038	154,128	56,848	2,676,826
XIV. Drugs, chemicals, and by-products	594,270	574,060	17,390	100,393	97,838	9,635	1,483,586
XV. Surgical and other scientific instruments	46,949	40,620	16,144	9,445	4,649	..	117,807
XVI. Jewellery, timepieces, and plated ware	167,033	109,488	22,153	34,897	12,438	2,936	438,945
XVII. Heat, light & power	1,130,520	1,376,178	332,699	449,132	83,944	107,436	3,479,909
XVIII. Leatherware, n.e.l.	173,274	139,015	22,888	12,100	7,973	1,030	356,280
XIX. Minor wares, n.e.l.	340,132	518,760	19,098	7,589	5,776	748	892,103
Total	31,520,849	27,444,141	9,228,454	7,150,658	4,127,839	1,888,080	81,360,021

(a) Year ended 31st December, 1924.

The maximum amount of salaries and wages paid in any particular class during 1924-25 was in Class V., the amount being £20,005,848 ; or 24.59 per cent. on the total amount ; the minimum amount was in Class XV., £117,807, or 0.14 per cent. on the total. The State in which the largest amount was paid was New South Wales.

(ii) *Totals and Averages, 1920-21 to 1924-25.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, during each of the years 1920-21 to 1924-25. The figures are exclusive of working proprietors and of the amounts drawn from the business by them :—

SALARIES AND WAGES PAID IN FACTORIES.—TOTAL AND AVERAGE PER ANNUM PER EMPLOYEE, 1920-21 TO 1924-25.

Year. (a)	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
1920-21	Total amount paid ..	25,618,591	21,377,216	6,718,905	4,866,211	2,870,567	1,480,228	62,931,718
	Average per employee ..	182.39	159.41	161.12	166.96	173.60	150.86	169.28
1921-22	Total amount paid ..	26,783,242	23,846,495	7,217,773	5,313,927	3,386,550	1,502,874	68,050,861
	Average per employee ..	186.21	172.84	177.12	177.76	191.94	156.93	179.24
1922-23	Total amount paid ..	27,050,730	25,547,192	7,447,959	5,943,745	3,500,625	1,642,901	71,133,152
	Average per employee ..	184.44	175.79	173.16	178.83	189.32	167.23	179.92
1923-24	Total amount paid ..	29,772,994	27,472,084	7,764,929	6,727,398	3,640,959	1,899,901	77,278,265
	Average per employee ..	194.08	184.80	179.21	188.17	190.22	163.60	187.61
1924-25	Total amount paid ..	31,520,849	27,444,141	9,228,454	7,150,658	4,127,839	1,888,080	81,300,021
	Average per employee ..	198.21	186.81	193.96	193.54	196.03	179.34	192.78

(a) See general note on first page of this Chapter.

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 VII., comprising a heavy percentage of women and children. The highest average wage per employee in 1924-25 was paid in New South Wales, where the percentage of industries requiring highly skilled labour is largest.

The salaries and wages paid in factories have advanced considerably during recent years in consequence of the rapid rise in the cost of living. During the past four years the average wage increased by £23.50 or 13.88 per cent., while the additional outlay for wage increases amounted in the aggregate to £10,000,000.

(iii) *Earnings of Males and Females, 1924-25.* 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 1924-25 :—

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES, 1924-25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
MALES.							
I. Treating raw material product of agricultural and pastoral pursuits, etc. ..	700,995	805,704	117,998	141,275	60,782	31,374	1,858,128
II. Treating oils and fats, animal, vegetable, etc. ..	274,646	178,380	45,749	47,574	18,018	6,763	571,130
III. Processes in stone, clay, glass, etc. ..	2,042,764	1,341,040	182,141	454,685	189,614	96,574	4,306,818
IV. Working in wood ..	1,956,032	2,047,602	1,047,147	399,855	1,343,350	330,813	7,124,799
V. Metal works, machinery, etc. ..	9,451,979	5,248,402	1,654,712	2,164,178	776,400	467,850	19,763,521

(a) Year ended 31st December, 1924.

SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES,
1924-25—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
MALES—continued.							
	£	£	£	£	£	£	£
VI. Connected with food and drink, etc. . .	3,138,866	3,218,624	3,361,541	720,560	478,189	272,730	11,190,510
VII. Clothing and textile fabrics, etc. . .	1,883,636	2,870,862	372,038	259,794	131,574	111,810	5,629,714
VIII. Books, paper, printing, and engraving . .	2,109,705	1,910,622	697,347	374,923	274,362	139,694	5,506,653
IX. Musical instruments, etc. . .	188,919	101,940	1,770	7,380	3,088	..	303,097
X. Arms and explosives . .	99,249	72,371	..	549	..	..	172,169
XI. Vehicles and fittings, saddlery and harness, etc. . .	1,425,550	1,210,239	333,918	907,166	187,547	90,501	4,154,921
XII. Ship and boat building and repairing . .	1,249,208	103,275	11,026	120,140	3,245	4,959	1,491,853
XIII. Furniture, bedding, and upholstery . .	952,898	835,785	278,637	233,539	147,038	53,887	2,501,784
XIV. Drugs, chemicals, and by-products . .	499,898	494,146	11,264	177,195	93,380	8,907	1,284,790
XV. Surgical and other scientific instruments . .	42,851	38,801	15,153	8,616	4,217	..	109,638
XVI. Jewellery, timepieces, and plated ware . .	157,312	187,475	21,081	33,452	12,162	2,936	414,418
XVII. Heat, light, & power . .	1,120,288	1,301,531	326,783	438,576	83,775	106,200	3,377,153
XVIII. Leatherware, n.e.i. . .	130,729	106,321	17,430	7,732	6,243	887	269,402
XIX. Minor wares, n.e.i. . .	245,418	442,441	12,528	7,221	4,946	748	713,302
Total . .	27,670,943	22,515,561	8,508,263	6,504,470	3,817,930	1,726,633	70,743,800

FEMALES.

I. Treating raw material product of agricultural and pastoral pursuits, etc. . .	23,155	4,803	657	1,291	299	122	30,327
II. Treating oils and fats, animal, vegetable, etc. . .	40,966	17,392	2,807	4,131	658	915	66,869
III. Processes in stone, clay, glass, etc. . .	16,222	18,349	2,028	2,276	4,616	232	43,773
IV. Working in wood . .	20,924	17,439	11,731	5,822	1,740	798	58,454
V. Metal works, machinery, etc. . .	130,194	72,900	11,750	18,568	4,308	4,607	242,327
VI. Connected with food and drink, etc. . .	582,834	560,704	84,593	78,245	37,756	42,131	1,386,263
VII. Clothing and textile fabrics, etc. . .	2,236,767	3,505,024	463,153	393,607	205,999	89,375	6,943,925
VIII. Books, paper, printing, and engraving . .	361,425	352,027	86,053	60,567	34,383	14,710	909,165
IX. Musical instruments, etc. . .	13,246	2,333	86	205	156	..	16,026
X. Arms and explosives . .	893	16,903	..	..	..	..	17,796
XI. Vehicles and fittings, saddlery and harness, etc. . .	34,478	18,523	16,492	41,273	5,009	3,439	119,214
XII. Ship and boat building and repairing . .	6,714	399	..	..	..	..	7,113
XIII. Furniture, bedding, and upholstery . .	76,406	64,378	14,708	9,499	7,090	2,961	175,042
XIV. Drugs, chemicals, and by-products . .	94,372	79,914	6,126	13,198	4,458	728	198,796
XV. Surgical and other scientific instruments . .	4,098	1,819	991	829	432	..	8,169
XVI. Jewellery, timepieces, and plated ware . .	9,721	12,013	1,072	1,445	276	..	24,527
XVII. Heat, light, & power . .	10,232	74,647	5,916	10,556	169	1,236	102,756
XVIII. Leatherware, n.e.i. . .	42,545	37,604	5,458	4,308	1,730	143	86,878
XIX. Minor wares, n.e.i. . .	94,714	76,319	6,570	368	830	..	178,891
Total . .	3,849,906	4,928,580	720,191	646,188	309,909	161,447	10,616,221

(a) Year ended 31st December, 1924.

(iv) *Total and Average Earnings of Males and Females, 1920-21 to 1924-25.* Similar information for the last five years is given in the table hereunder :—

**SALARIES AND WAGES.—MALE AND FEMALE FACTORY EMPLOYEES,
1920-21 TO 1924-25.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
1920-21. Amount paid . . £	22,766,216	17,668,917	6,168,744	4,430,269	2,647,957	1,376,822	55,058,925
Per cent. on total . . .	88.87	82.65	91.81	91.04	92.25	93.01	87.49
Average per employee £	210.99	195.63	178.49	190.05	191.16	165.07	197.85
1921-22. Amount paid . . £	23,466,566	19,497,451	6,506,101	4,827,612	3,155,091	1,388,741	58,931,562
Per cent. on total . . .	87.62	81.76	91.39	90.85	93.17	92.41	86.60
Average per employee £	218.03	213.07	196.28	203.02	209.65	173.57	210.79
1922-23. Amount paid . . £	23,456,421	20,799,146	6,781,882	5,392,340	3,217,347	1,499,750	61,146,886
Per cent. on total . . .	86.71	81.41	91.06	90.72	91.91	91.29	85.06
Average per employee £	213.83	215.56	199.57	202.85	210.53	187.99	210.84
1923-24. Amount paid . . £	26,166,890	22,581,677	7,058,196	6,115,958	3,345,430	1,739,153	67,007,304
Per cent. on total . . .	87.89	82.20	90.90	90.91	91.88	91.54	86.71
Average per employee £	225.71	224.08	200.39	212.48	210.39	183.75	218.93
1924-25. Amount paid . . £	27,670,943	22,515,561	8,508,263	6,504,470	3,817,930	1,726,633	70,743,800
Per cent. on total . . .	87.78	82.04	92.20	90.96	92.49	91.45	86.95
Average per employee £	230.23	220.49	214.83	217.70	216.26	201.69	224.41

FEMALES.

1920-21. Amount paid . . £	2,852,375	3,708,299	550,161	435,942	222,610	103,405	7,872,793
Per cent. on total . . .	11.13	17.35	8.19	8.96	7.75	6.99	12.51
Average per employee £	87.61	84.71	77.04	74.71	82.04	70.30	84.23
1921-22. Amount paid . . £	3,316,676	4,340,044	621,672	486,315	231,459	114,133	9,119,299
Per cent. on total . . .	12.38	18.24	8.61	9.15	8.83	7.59	13.40
Average per employee £	91.62	93.60	87.01	79.54	89.19	72.42	91.11
1922-23. Amount paid . . £	3,584,309	4,748,046	666,077	551,405	283,278	143,151	9,986,266
Per cent. on total . . .	13.29	18.59	8.94	9.28	8.09	7.71	14.04
Average per employee £	97.23	97.21	85.13	82.87	88.30	75.55	94.80
1923-24. Amount paid . . £	3,606,104	4,800,407	706,733	611,440	295,529	160,748	10,270,961
Per cent. on total . . .	12.11	17.80	9.10	9.09	8.12	8.46	13.29
Average per employee £	96.22	102.12	87.20	87.75	91.21	74.83	97.05
1924-25. Amount paid . . £	3,849,906	4,928,580	720,191	646,158	309,909	161,447	10,616,221
Per cent. on total . . .	12.22	17.96	7.80	9.04	7.51	8.55	13.05
Average per employee £	100.20	103.74	90.30	91.42	91.07	82.08	99.41

(a) See general note on first page of this Chapter.

(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, 1924-25.**

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Overseers, Accountants, and Clerks.		All other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
I. Treating raw material product of agricultural and pastoral pursuits, etc. . .	£	£	£	£	£	£	£
II. Treating oils and fats, animal, vegetable, etc. . .	229,958	12,310	1,628,170	18,017	1,858,128	30,327	1,888,455
III. Processes in stone, clay, glass, etc. . .	123,687	21,671	447,443	45,198	571,130	66,869	637,999
IV. Working in wood . .	455,184	22,776	3,851,634	20,997	4,306,818	43,773	4,350,591
V. Metal works, machinery, etc. . .	745,783	46,354	6,379,016	12,100	7,124,799	58,454	7,183,253
VI. Connected with food and drink, etc. . .	2,032,836	123,674	17,730,685	118,653	19,763,521	242,327	20,005,848
VII. Clothing and textile fabrics, etc. . .	1,964,832	199,462	9,225,678	1,186,801	11,190,510	1,386,263	12,576,773
VIII. Books, paper, printing and engraving . .	984,676	372,611	4,645,038	6,571,314	5,629,714	6,943,925	12,573,639
IX. Musical instruments, etc. . .	996,309	178,506	4,510,344	730,659	5,506,653	909,165	6,415,818
X. Arms and explosives	33,514	6,057	269,583	9,969	303,097	16,026	319,123
	28,696	1,834	143,473	15,962	172,169	17,796	189,965

SALARIES AND WAGES.—MANAGERS, OVERSEERS, AND OTHER
FACTORY EMPLOYEES, AUSTRALIA, 1924-25—continued.

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Overseers, Accountants, and Clerks.		All Other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
XI. Vehicles and fittings, saddlery and harness, etc.	£ 482,024	£ 76,036	£ 3,671,997	£ 43,178	£ 4,154,921	£ 119,214	£ 4,274,135
XII. Ship and boat building and repairing...	161,234	5,547	1,330,619	1,566	1,491,853	7,113	1,498,966
XIII. Furniture, bedding, and upholstery	210,155	37,014	2,291,629	138,028	2,501,784	175,042	2,676,826
XIV. Drugs, chemicals, and by-products	297,902	46,857	986,888	151,939	1,284,790	198,796	1,483,586
XV. Surgical and other scientific instruments	17,021	2,793	92,617	5,376	109,638	8,169	117,807
XVI. Jewellery, timepieces, and plated ware ...	36,196	8,833	378,222	15,694	414,416	24,527	438,945
XVII. Heat, light, and power	698,983	49,347	2,678,170	53,409	3,377,153	102,756	3,479,909
XVIII. Leatherware, n.e.i. ...	40,930	8,239	228,472	78,639	269,402	86,878	356,280
XIX. Minor wares, n.e.i. ...	94,122	9,715	619,180	169,086	713,302	178,801	892,103
Total	9,634,942	1,229,636	61,108,858	9,386,585	70,743,800	10,616,221	81,360,021
Average paid per employee	340.04	136.26	212.99	96.01	224.41	99.41	192.78

3. Value of Fuel and Light Used.—(i) *Total Amount, 1924-25.* The expenditure in factories on fuel and light is of considerable importance; in 1924-25 it amounted to £11,713,250. The classes of industry in which fuel was most extensively used were Class V., Metal Works, Machinery, etc., £3,472,793; Class XVII., Heat, Light, Power, etc., £2,748,256, of which amount £2,408,753 was expended on generating electric light and power; Class VI., Connected with Food, Drink, etc., £2,040,674; and Class III., Stone, Clay, Glass, etc., £1,495,471. The following table shows the value of fuel and light used in the different classes of industry during 1924-25:—

VALUE OF FUEL AND LIGHT USED IN FACTORIES, 1924-25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	£ 117,061	£ 108,709	£ 17,129	£ 18,913	£ 6,454	£ 2,242	£ 270,508
II. Treating oils and fats, animal, vegetable, etc.	60,411	39,706	4,589	9,178	1,829	1,048	116,761
III. Processes in stone, clay, glass, etc.	686,891	452,766	37,288	208,461	59,509	50,556	1,495,471
IV. Working in wood	75,755	57,868	22,952	12,680	10,987	12,976	193,218
V. Metal works, machinery, etc.	2,315,832	304,487	73,932	377,675	47,804	353,063	3,472,793
VI. Connected with food and drink, etc.	673,319	656,848	423,642	164,216	79,215	43,434	2,040,674
VII. Clothing and textile fabrics, etc.	121,929	253,318	18,651	20,557	6,056	24,057	444,568
VIII. Books, paper, printing, and engraving	117,459	115,860	24,863	16,138	8,764	4,962	288,036
IX. Musical instruments, etc.	5,263	2,652	..	160	35	..	8,110
X. Arms and explosives	3,895	12,000	..	10	..	..	16,805
XI. Vehicles and fittings, saddlery and harness, etc.	47,453	41,274	6,981	31,918	7,044	3,082	137,752
XII. Ship and boat building and repairing	69,163	5,001	170	6,740	8	154	81,236
XIII. Furniture, bedding and upholstery	23,949	27,753	7,477	7,393	3,130	1,382	71,084
XIV. Drugs, chemicals, and by-products	64,987	71,960	2,031	32,891	11,136	716	183,121
XV. Surgical and other scientific instruments	1,441	1,179	560	513	182	..	3,875
XVI. Jewellery, timepieces, and plated ware	5,759	7,554	603	1,820	358	176	16,270
XVII. Heat, light, and power	1,461,180	715,905	139,755	244,764	149,425	37,227	2,748,256
XVIII. Leatherware, n.e.i.	1,969	4,042	299	200	304	17	6,840
XIX. Minor wares, n.e.i.	30,878	84,853	1,462	666	513	..	117,872
Total	5,883,494	2,964,635	782,384	1,154,902	382,753	535,082	11,713,250

(a) Year ended 31st December, 1924.

(ii) *Total Amount, 1920-21 to 1924-25.* The following table gives the sums expended on fuel and light during the past five years :—

VALUE OF FUEL AND LIGHT USED IN FACTORIES, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
1920-21 ..	3,608,744	2,184,006	766,590	704,775	273,061	155,222	7,692,488
1921-22 ..	3,983,730	2,329,760	668,224	798,495	324,619	151,553	8,256,381
1922-23 ..	4,021,068	2,443,681	690,656	948,455	361,990	193,765	8,659,615
1923-24 ..	5,129,848	2,803,239	708,888	1,008,557	380,499	265,409	10,296,404
1924-25 ..	5,883,494	2,964,635	782,384	1,154,902	392,753	535,082	11,713,250

(a) See general note on first page of this Chapter.

4. *Value of Raw Materials Used.*—(i) *Total Amount, 1924-25.* The value of raw materials worked up (i.e., exclusive of fuel, lubricants, etc.) in factories in Australia during 1924-25 was £221,993,978, which represents 58.29 per cent. of the total value of the final output. (See next sub-section.) The following table shows the value of the raw materials worked up in various classes of industry in each State :—

VALUE OF RAW MATERIALS USED IN FACTORIES, 1924-25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	6,370,830	4,610,049	2,335,301	725,591	616,907	244,978	14,903,656
II. Treating oils and fats, animal, vegetable, etc.	1,915,261	1,146,009	156,291	246,080	86,900	30,213	3,581,744
III. Processes in stone, clay, glass, etc.	1,758,339	852,617	147,921	343,473	111,436	38,159	3,251,945
IV. Working in wood	4,925,714	2,515,981	1,895,917	1,427,483	395,321	224,125	11,384,541
V. Metal works, machinery, etc.	24,967,739	6,764,017	1,778,720	6,370,572	1,074,833	1,317,151	42,273,032
VI. Connected with food and drink, etc.	34,517,251	20,623,668	20,658,400	5,881,956	2,689,909	1,311,859	91,683,049
VII. Clothing and textile fabrics, etc.	7,538,604	13,310,534	2,012,791	1,149,009	647,286	376,369	25,034,593
VIII. Books, paper, printing, and engraving	3,009,145	2,560,152	520,753	473,640	235,636	91,341	6,890,667
IX. Musical instruments, etc.	305,995	121,132	2,582	17,605	385	..	447,699
X. Arms and explosives	20,126	186,100	..	1,282	..	..	207,517
XI. Vehicles and fittings, saddlery and harness, etc.	1,326,139	1,062,177	480,443	1,401,121	380,257	56,142	4,706,259
XII. Ship and boat building and repairing..	584,620	28,123	13,468	145,644	2,160	3,862	777,877
XIII. Furniture, bedding, upholstery	1,823,821	1,406,183	431,329	324,247	190,417	52,227	4,228,224
XIV. Drugs, chemicals, and by-products	2,444,541	1,792,235	56,103	614,647	466,270	55,287	5,429,083
XV. Surgical and other scientific instruments	46,082	33,252	7,904	9,558	7,538	..	104,334
XVI. Jewellery, timepieces, and platedware	154,226	252,748	11,772	28,680	13,330	939	461,695
XVII. Heat, light, and power	1,931,138	1,406,379	151,241	159,888	52,093	87,641	3,828,380
XVIII. Leatherware, n.e.i.	342,335	330,785	36,722	32,496	17,484	1,207	761,029
XIX. Minor wares, n.e.i.	699,422	1,287,643	28,790	16,920	5,479	400	2,038,654
Total	94,681,328	66,290,693	30,726,434	19,409,892	6,993,731	3,891,900	221,993,978

(a) Year ended 31st December, 1924.

The largest value of raw materials used was in Class VI., "Connected with Food and Drink, etc." the total being £91,683,049. The next in order of importance was Class V., "Metal Works, Machinery, etc.," in which raw materials valued at £42,273,032 were used. The minimum value appears in Class XV., "Surgical and other Scientific Instruments," the total being only £104,334.

(ii) *Total Amount, 1920-21 to 1924-25.* The following table presents particulars of the values of raw materials used in factories during the past five years :—

VALUE OF RAW MATERIALS USED IN FACTORIES, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1920-21 ..	91,104,505	65,401,425	24,073,200	14,375,430	6,677,414	4,234,308	205,866,282
1921-22 ..	82,090,396	60,352,561	24,808,420	14,087,936	6,087,693	2,983,265	190,410,265
1922-23 ..	77,222,401	62,658,163	21,403,740	16,015,552	5,553,347	3,221,460	186,082,663
1923-24 ..	85,568,596	62,217,874	22,110,052	17,463,156	5,897,549	3,781,499	197,038,726
1924-25 ..	94,681,328	66,290,693	30,726,434	19,409,392	6,993,731	3,891,900	221,993,978

(a) See general note on first page of this Chapter.

5. *Total Value of Output.* (i) *Total, 1924-25.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State during 1924-25 is shown in the following table. The figures given represent not only the increase in value due to the process of manufacture, but also include the value of the raw materials and the 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 sub-section 6 hereof) is the real value of production from manufactories.

TOTAL VALUE OF OUTPUT OF FACTORIES, 1924-25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc. ..	7,698,337	6,254,372	2,483,348	981,408	767,964	311,115	18,496,544
II. Treating oils and fats, animal, vegetable, etc. ..	2,933,238	1,724,696	304,585	363,546	116,482	51,122	5,493,669
III. Processes in stone, clay, glass, etc. ..	6,064,262	3,726,707	670,228	1,313,265	466,457	256,169	12,497,088
IV. Working in wood ..	8,020,954	5,928,283	3,820,538	2,031,341	2,120,248	689,376	22,610,740
V. Metal works, machinery, etc. ..	42,494,404	14,903,234	4,282,891	9,869,486	2,100,060	2,600,697	76,250,772
VI. Connected with food and drink, etc. ..	45,732,840	36,560,899	28,207,722	7,734,066	4,032,723	1,949,776	124,218,026
VII. Clothing and textile fabrics, etc. ..	14,834,883	23,990,812	3,382,332	2,170,516	1,111,214	707,570	46,197,327
VIII. Books, paper, printing, and engraving ..	7,300,440	6,390,870	1,808,376	1,237,620	858,446	311,502	17,907,254
IX. Musical instruments, etc. ..	641,850	280,812	6,382	32,346	4,725	..	966,115
X. Arms and explosives ..	152,727	361,712	..	2,142	..	..	516,581
XI. Vehicles and fittings, saddlery and harness, etc. ..	3,563,375	3,044,934	1,682,180	2,780,246	681,924	193,372	11,946,031
XII. Ship and boat building and repairing ..	2,004,282	163,696	31,808	297,401	5,566	12,520	2,515,273
XIII. Furniture, bedding, and upholstery ..	3,475,812	2,913,265	870,427	723,379	386,764	142,053	8,511,700
XIV. Drugs, chemicals, and by-products ..	4,646,287	3,146,338	106,638	1,045,106	760,514	88,685	9,793,568
XV. Surgical and other scientific instruments ..	127,252	108,657	39,519	33,303	15,803	..	324,534
XVI. Jewellery, timepieces, and plated ware ..	419,938	600,070	48,579	87,240	29,840	6,172	1,191,839
XVII. Heat, light, and power ..	7,553,733	5,384,044	1,254,395	1,357,405	428,099	518,076	16,493,752
XVIII. Leatherware, n.e.i. ..	638,212	569,910	68,930	49,826	27,929	2,664	1,357,471
XIX. Minor wares, n.e.i. ..	1,306,047	2,124,087	73,558	34,351	16,024	1,635	3,555,702
Total ..	159,608,873	118,177,398	49,142,436	32,143,993	13,928,782	7,842,504	380,843,986

(a) Year ended 31st December, 1921.

New South Wales far exceeds the other States in respect of the total value of output, the value being £159,608,873, or 41.91 per cent. on the total for all States. Next in order of value is Victoria, which produced 31.03 per cent.; the value of the output of Queensland was 12.90 per cent.; of South Australia 8.44 per cent.; of Western Australia 3.66 per cent.; and of Tasmania 2.06 per cent. The two most important classes in order of value of output (Classes VI. and V.) are the same as in order of value of raw materials used.

(ii) *Totals and Averages, 1920-21 to 1924-25.* The following statement shows the value of output of factories, value per employee, and value per head of mean population in each State during the five years ended 1924-25 :—

TOTAL VALUE OF OUTPUT OF FACTORIES, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
TOTAL.							
	£	£	£	£	£	£	£
1920-21 ..	137,841,386	106,008,294	39,190,242	22,358,109	11,443,080	7,151,972	323,993,083
1921-22 ..	132,820,065	106,243,181	40,334,298	23,854,857	11,291,739	5,796,625	320,340,765
1922-23 ..	132,735,140	111,286,343	37,824,101	26,903,775	11,321,551	6,426,226	326,497,136
1923-24 ..	146,359,260	113,921,927	38,867,603	29,650,995	11,976,310	7,801,488	348,577,583
1924-25 ..	159,608,873	118,177,398	49,142,436	32,148,993	13,928,782	7,842,504	380,843,986

PER EMPLOYEE.

	£	£	£	£	£	£	£
1920-21 ..	951	753	907	735	672	699	838
1921-22 ..	892	733	955	765	623	572	810
1922-23 ..	872	729	871	775	593	622	792
1923-24 ..	917	730	865	795	608	638	811
1924-25 ..	963	767	1,005	838	640	713	866

PER HEAD OF MEAN POPULATION.

	£	£	£	£	£	£	£
1920-21 ..	65.90	69.38	52.54	45.54	34.67	34.00	59.96
1921-22 ..	62.42	68.51	52.87	47.48	33.83	27.18	58.27
1922-23 ..	61.09	69.98	48.43	52.42	33.33	29.62	58.11
1923-24 ..	66.24	70.09	48.42	56.51	34.39	35.61	60.76
1924-25 ..	70.80	71.32	58.86	59.69	38.25	36.00	64.84

(a) See general note on first page of this Chapter.

6. *Value added in Process of Manufacture.*—(i) *Total in Classes, 1924-25.* The difference between the figures given in sub-section 5 and the sum of the corresponding figures in sub-sections 3 and 4 represents the amount added to the value of the raw materials by the process of manufacture. This is the real measure of the value of production of manufacturing industries. The following table shows the value added in this manner during 1924-25 in each State for the various classes of factories :—

VALUE ADDED IN PROCESS OF MANUFACTURE, 1924-25.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
I. Treating raw material, product of agricultural and pastoral pursuits, etc. . .	£ 1,210,446	£ 1,535,614	£ 130,918	£ 236,904	£ 144,603	£ 63,895	£ 3,322,380
II. Treating oils and fats, animal, vegetable, etc. . .	957,566	538,081	143,705	108,288	27,663	19,861	1,795,164
III. Processes in stone, clay, glass, etc. . .	3,619,032	2,421,324	485,019	761,331	295,512	167,454	7,749,672
IV. Working in wood . .	3,019,485	3,354,434	1,901,669	591,178	1,713,940	452,275	11,032,981
V. Metal works, machinery, etc. . .	15,210,833	7,834,730	2,430,239	3,121,239	977,423	930,483	30,504,947
VI. Connected with food and drink, etc. . .	10,542,270	9,280,383	7,125,674	1,687,894	1,263,599	594,483	30,494,303
VII. Clothing and textile fabrics, etc. . .	7,174,350	10,426,960	1,350,890	1,000,950	457,872	307,144	20,718,166
VIII. Books, paper, printing and engraving . .	4,173,836	3,714,858	1,262,760	747,842	614,046	215,209	10,728,551
IX. Musical instruments, etc. . .	330,592	157,028	3,800	14,581	4,305	..	510,306
X. Arms and explosives . .	128,706	162,703	..	850	..	..	292,259
XI. Vehicles and fittings, saddlery and harness etc. . .	2,189,783	1,941,483	1,194,776	1,347,207	294,623	134,148	7,102,020
XII. Ship and boat building and repairing . .	1,350,499	130,572	18,170	145,017	3,398	8,504	1,656,160
XIII. Furniture, bedding, and upholstery . .	1,628,042	1,479,329	431,621	391,739	193,217	88,444	4,212,392
XIV. Drugs, chemicals, and by-products . .	2,137,359	1,282,143	48,504	397,568	283,108	32,682	4,181,364
XV. Surgical & other scientific instruments . .	79,729	74,226	31,055	23,232	8,083	..	216,325
XVI. Jewellery, timepieces, and platedware . .	259,953	339,768	36,204	56,740	16,152	5,057	713,874
XVII. Heat, light and power . .	4,161,415	3,261,760	963,399	912,753	224,581	393,208	9,917,116
XVIII. Leatherware, n.e.i. . .	293,908	235,083	31,909	17,121	10,141	1,410	589,602
XIX. Minor wares, n.e.i. . .	576,247	751,591	43,306	16,765	10,032	1,235	1,399,176
Total . .	59,044,051	48,922,070	17,633,618	11,579,199	6,542,298	3,415,522	147,136,758

(a) Year ended 31st December, 1924.

(ii) *Totals and Averages, 1920-21 to 1924-25.* The amount of the value added is in much the same order as in the case of value of output, the six most important classes being V., VI., VII., IV., VIII. and XVII., in the order named. The value added to raw materials by process of manufacture and the amount per employee and per head of mean population are shown in the following table for the years 1920-21 to 1924-25:—

**FACTORIES.—VALUE ADDED IN PROCESS OF MANUFACTURE,
1920-21 TO 1924-25.**

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
1920-21 ..	£ 43,128,137	£ 38,422,773	£ 14,350,452	£ 7,277,904	£ 4,492,605	£ 2,762,442	£ 110,434,313
1921-22 ..	46,745,039	43,560,860	14,857,654	8,968,432	4,879,427	2,661,807	121,674,119
1922-23 ..	51,491,671	46,184,499	15,729,705	9,939,768	5,406,214	3,003,001	131,754,858
1923-24 ..	55,660,816	48,900,814	16,048,663	11,170,282	5,698,262	3,754,580	141,242,417
1924-25 ..	59,044,051	48,922,070	17,633,618	11,579,199	6,542,298	3,415,522	147,136,758

(a) See general note on first page of this chapter.

FACTORIES—VALUE ADDED IN PROCESS OF MANUFACTURE, 1920-21 TO 1924-25—*continued.*

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PER EMPLOYEE.							
	£	£	£	£	£	£	£
1920-21 ..	297	273	332	239	264	270	286
1921-22 ..	314	300	352	288	269	263	308
1922-23 ..	338	303	362	286	283	291	319
1923-24 ..	349	313	357	300	289	307	328
1924-25 ..	356	317	360	302	301	311	334

PER HEAD OF MEAN POPULATION.							
	£	£	£	£	£	£	£
1920-21 ..	20.62	25.15	19.24	14.82	13.61	13.13	20.44
1921-22 ..	21.97	28.09	19.47	17.85	14.62	12.48	22.13
1922-23 ..	23.70	29.00	20.14	19.37	15.92	13.98	23.45
1923-24 ..	25.19	30.09	19.99	21.30	16.36	17.14	24.62
1924-25 ..	26.19	29.52	21.12	21.50	17.97	15.68	25.05

(a) See general note on first page of this Chapter.

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1924-25 was estimated at £380,843,986, there remained, after payment of £221,993,978, the value of the raw materials used, of £81,360,021 for salaries and wages and of £11,713,250 for fuel, the sum of £65,776,737 to provide for all other expenditure 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 1924-25 :—

FACTORIES.—VALUE OF OUTPUT AND COST OF PRODUCTION, 1924-25.

State.	Raw Materials Used.	Fuel and Light.	Salaries and Wages.	All other Expenditure, Interest, and Profits.	Total Value of Output.
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VALUE AND COST, ETC.

	£	£	£	£	£
New South Wales ..	94,681,328	5,883,494	31,520,849	27,523,202	159,608,873
Victoria ..	66,290,693	2,964,635	27,444,141	21,477,929	118,177,398
Queensland ..	30,726,434	782,384	9,228,454	8,405,164	49,142,436
South Australia ..	19,409,892	1,154,902	7,150,658	4,428,541	32,143,993
Western Australia ..	6,993,731	392,753	4,127,839	2,414,459	13,928,782
Tasmania ..	3,891,900	535,082	1,888,080	1,527,442	7,842,504
Australia ..	221,993,978	11,713,250	81,360,021	65,776,737	380,843,986

PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

	%	%	%	%	%
New South Wales ..	59.32	3.69	19.75	17.24	100.00
Victoria ..	56.09	2.51	23.22	18.18	100.00
Queensland ..	62.53	1.59	18.78	17.10	100.00
South Australia ..	60.38	3.59	22.25	13.78	100.00
Western Australia ..	50.21	2.82	29.64	17.33	100.00
Tasmania ..	49.63	6.82	24.07	19.48	100.00
Australia ..	58.29	3.08	21.36	17.27	100.00

§ 8. Value of Land, Buildings, Plant, and Machinery.

1. *General.*—As an indication of the permanent character and stability of the industries which have been established in Australia, it may be noted that the values of land and buildings and of plant and machinery used in the factories are rapidly increasing. Thus, for the whole of Australia the total value of land and buildings and plant and machinery has increased from 1920–21 to 1924–25 by £70,998,069, i.e., from £129,486,738 to £200,484,807, or at the rate of £17,749,517 per annum.

The following statement shows the values of land and buildings and of plant and machinery used in connexion with manufacturing industries in each State during the year 1924–25 :—

VALUE OF LAND, BUILDINGS, PLANT, AND MACHINERY, 1924–25.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	41,351,080	28,468,160	7,873,660	6,882,119	4,562,184	2,104,704	91,241,907
Plant and machinery	43,553,900	32,563,815	14,002,476	7,529,854	4,864,253	6,728,602	109,242,900
Total	84,904,980	61,031,975	21,876,136	14,411,973	9,426,437	8,833,306	200,484,807

(a) Year ended 31st December, 1924.

The total capital invested in land, buildings, plant, and machinery in manufacturing industries in Australia during the year 1924–25 was approximately £200,484,807 (or £34 2s. 8d. per head of population); of that sum £91,241,907 was invested in land and buildings occupied as manufacturing, the remaining £109,242,900 being the value of the plant and machinery used in connexion therewith.

2. *Value of Land and Buildings.*—(i) *Total, Australia, 1920–21 to 1924–25.* The value of the land and buildings occupied in connexion with manufacturing industries may be conveniently classified according to the nature of the industry concerned.

The following table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries of various classes during each year from 1920–21 to 1924–25 inclusive :—

VALUE OF LAND AND BUILDINGS.—AUSTRALIA, 1920–21 TO 1924–25.

Class of Industry.	1920–21.(a)	1921–22.(a)	1922–23.(a)	1923–24.(a)	1924–25.(a)
	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	1,811,005	1,910,816	1,983,100	2,085,336	2,249,180
II. Treating oils and fats, animal, vegetable, etc.	680,763	741,683	831,004	952,566	1,024,779
III. Processes in stone, clay, glass, etc.	2,814,447	3,067,776	3,242,782	3,582,378	4,247,108
IV. Working in wood	3,061,888	3,359,738	3,889,858	4,101,394	4,322,832
V. Metal works, machinery, etc.	10,409,753	10,607,622	11,396,988	12,090,237	14,389,282
VI. Connected with food and drink, etc.	14,218,716	15,306,571	17,064,884	18,277,106	19,568,157
VII. Clothing and textile fabrics, etc.	8,265,497	10,122,483	11,588,846	13,247,960	14,841,895
VIII. Books, paper, printing, and engraving	4,738,597	5,158,723	6,132,123	6,747,855	7,376,113
IX. Musical instruments, etc.	195,072	226,751	304,432	254,266	325,792
X. Arms and explosives	275,482	277,562	207,500	298,217	417,831
XI. Vehicles and fittings, saddlery and harness, etc.	3,093,034	3,576,519	4,145,937	5,166,587	6,175,406
XII. Ship and boat building and repairing	1,391,113	1,860,720	1,796,690	1,789,464	1,822,238
XIII. Furniture, bedding, and upholstery	1,663,270	1,839,005	2,109,655	2,498,679	2,691,412
XIV. Drugs, chemicals, and by-products	1,687,207	2,059,410	2,171,915	2,351,728	2,453,897
XV. Surgical and other scientific instruments	132,161	156,048	189,777	221,256	274,283
XVI. Jewellery, timepieces, and plated ware	487,763	578,963	580,094	620,686	629,775
XVII. Heat, light, and power	4,867,348	5,138,371	5,277,183	6,102,870	7,170,768
XVIII. Leatherware, n.e.i.	304,506	310,904	359,636	394,402	401,588
XIX. Minor wares, n.e.i.	733,756	1,022,793	1,108,904	860,074	857,571
Total	60,831,468	67,322,458	74,381,308	82,562,061	91,241,907

(a) See general note on first page of this Chapter.

As shown in the above table, the total net increase during the four years was £30,410,439, or an annual average of £7,602,610. The largest increases were in Classes VII., VI., V., XI., VIII. and XVII., and amounted to £6,576,398; £5,349,441; £3,979,529; £3,082,372; £2,637,516 and £2,303,420 respectively.

(ii) *Value in each State, 1924-25.* The following table gives similar information for each State for the past year :—

VALUE OF LAND AND BUILDINGS.—STATES, 1924-25.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	992,874	931,200	111,300	130,096	67,227	16,483	2,249,180
II. Treating oils and fats, animal, vegetable, etc.	618,541	221,105	89,134	68,155	19,527	8,317	1,024,779
III. Processes in stone, clay, glass, etc.	2,177,541	1,129,700	150,114	369,207	233,223	187,323	4,247,106
IV. Working in wood	1,926,931	1,038,135	439,977	284,483	529,082	104,224	4,322,832
V. Metal works, machinery, etc.	7,512,401	3,634,625	744,259	1,323,381	766,724	407,892	14,389,282
VI. Connected with food and drink, etc.	7,375,561	5,253,495	3,682,660	1,411,546	1,257,062	587,833	19,568,157
VII. Clothing and textile fabrics, etc.	6,142,723	6,449,935	703,663	757,708	408,019	379,847	14,841,895
VIII. Books, paper, printing, and engraving	3,279,887	2,468,880	684,083	526,791	317,945	98,527	7,376,113
IX. Musical instruments, etc.	158,942	145,960	900	12,650	7,340	..	325,792
X. Arms and explosives	150,571	263,460	..	3,800	..	..	417,831
XI. Vehicles and fittings, saddlery and harness, etc.	2,860,461	1,557,605	461,878	800,443	344,635	150,384	6,175,406
XII. Ship and boat building and repairing	1,490,038	272,875	8,567	44,808	2,725	3,225	1,822,238
XIII. Furniture, bedding, and upholstery	1,110,205	982,325	219,938	195,313	142,036	43,595	2,693,412
XIV. Drugs, chemicals, and by-products	1,340,335	670,780	27,315	260,857	135,935	18,675	2,453,897
XV. Surgical and other scientific instruments	121,196	75,810	26,017	26,910	24,350	..	274,283
XVI. Jewellery, timepieces, and plated ware	250,452	257,555	29,329	51,520	25,815	15,104	629,775
XVII. Heat, light, and power	3,329,233	2,483,485	453,167	571,636	252,304	80,943	7,170,768
XVIII. Leatherware, n.e.i.	192,288	163,690	23,333	11,475	9,570	1,232	401,588
XIX. Minor wares, n.e.i.	320,900	467,540	18,026	31,340	18,665	1,100	857,571
Total	41,351,080	28,468,160	7,873,660	6,882,119	4,562,184	2,104,704	91,241,907

(a) Year ended 31st December, 1924.

The maximum value for Australia of land and buildings in any particular class was in Class VI., amounting to £19,568,157, or 21.45 per cent. on the total value. The next in order of importance were Classes VII., V., VIII., XVII. and XI., in which the values were £14,841,895; £14,389,282; £7,376,113; £7,170,768, and £6,175,406 respectively. The sum of the values for the six classes mentioned amounted to £69,521,621, or 76.19 per cent. on the total value for all classes.

(iii) *Value in each State, 1920-21 to 1924-25.* The total value of factory land and buildings at the end of each year from 1920-21 to 1924-25 is given hereunder.

VALUE OF LAND AND BUILDINGS, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1920-21	28,428,917	17,313,350	6,261,266	4,495,667	3,350,608	981,660	60,831,468
1921-22	32,052,303	19,810,170	6,373,504	4,711,022	3,206,295	1,169,164	67,322,458
1922-23	34,559,510	22,428,525	6,615,350	5,324,484	4,001,366	1,452,073	74,381,308
1923-24	37,979,192	24,972,560	7,284,212	6,312,553	4,206,874	1,806,670	82,562,061
1924-25	41,351,080	28,468,160	7,873,660	6,882,119	4,562,184	2,104,704	91,241,907

(a) See general note on first page of this Chapter.

Since 1920-21 there has been a general increase throughout Australia, the States showing the greatest progress being New South Wales, Victoria, and South Australia, with annual average increases of £3,230,541, £2,788,703, and £596,613 respectively.

3. Value of Plant and Machinery.—(i) *Total, Australia, 1920-21 to 1924-25.* The following table shows for Australia as a whole the approximate value of plant and machinery used in factories during each year from 1920-21 to 1924-25 inclusive:—

VALUE OF PLANT AND MACHINERY.—AUSTRALIA, 1920-21 TO 1924-25.

Class of Industry.	1920-21.(a)	1921-22.(a)	1922-23.(a)	1923-24.(a)	1924-25.(a)
	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	1,823,119	1,915,266	2,064,189	2,170,405	2,065,838
II. Treating oils and fats, animal, vegetable, etc.	829,390	881,060	1,035,461	1,147,029	1,166,482
III. Processes in stone, clay, glass, etc.	3,565,083	4,281,438	4,841,188	5,462,976	5,781,144
IV. Working in wood	4,083,711	4,543,992	4,734,078	5,291,155	5,405,755
V. Metal works, machinery, etc.	14,688,625	15,833,262	16,701,195	18,410,074	19,723,951
VI. Connected with food and drink, etc.	16,472,128	18,037,602	20,214,770	20,948,905	22,845,337
VII. Clothing and textile fabrics, etc.	3,781,164	4,840,385	5,775,392	6,722,006	7,164,675
VIII. Books, paper, printing, and engraving	4,246,439	4,890,224	5,800,029	6,706,697	7,282,913
IX. Musical instruments, etc.	58,078	66,274	86,660	94,453	111,238
X. Arms and explosives	304,800	271,845	216,667	252,658	309,017
XI. Vehicles and fittings, saddlery and harness, etc.	853,259	941,849	1,047,440	1,277,937	1,524,491
XII. Ship and boat building and repairing	1,520,756	2,161,809	2,035,576	2,045,117	1,888,127
XIII. Furniture, bedding, and upholstery	466,952	505,870	559,354	673,810	743,217
XIV. Drugs, chemicals, and by-products	1,497,619	1,646,119	1,785,912	2,094,340	2,289,112
XV. Surgical and other scientific instruments	32,299	36,542	39,577	45,919	55,094
XVI. Jewellery, timepieces, and plated ware	114,892	125,764	137,512	146,907	144,983
XVII. Heat, light, and power	13,515,725	16,032,361	17,887,923	25,030,504	29,538,177
XVIII. Leatherware, n.e.l.	66,544	76,251	91,306	106,574	99,684
XIX. Minor wares, n.e.l.	734,687	997,767	1,027,676	925,073	1,103,665
Total	68,655,270	78,085,680	86,081,910	99,552,539	109,242,900

(a) See general note on first page of this Chapter.

During the past four years there has been a steady and substantial net increase amounting in all to £40,587,630, or an annual average of £10,146,908. All classes of industry participated, the largest increase being in Class XVII., "Heat, Light, and Power," where it amounted to £16,022,452, while the next in order were Class VI., "Connected with Food and Drink, etc.," £6,373,209, and Class V., "Metal Works, Machinery, etc.," £5,035,326.

(ii) *Value in each State, 1920-21 to 1924-25.* The figures in the previous table refer to Australia as a whole. In the following table results are shown for each State, and it will be seen that the increase is general throughout the States. Victoria shows the largest advance, viz., £14,384,430; while New South Wales comes next with £12,438,456.

VALUE OF PLANT AND MACHINERY.—STATES, 1920-21 TO 1924-25.

Year.(a)	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1920-21	31,115,444	18,179,385	9,615,509	4,473,247	3,340,158	1,931,527	68,655,270
1921-22	35,229,530	21,182,110	10,253,104	4,896,264	3,596,877	2,927,795	78,085,680
1922-23	37,548,766	23,994,715	11,098,375	5,519,035	4,218,550	3,702,469	86,081,910
1923-24	41,141,890	28,223,915	12,321,440	6,929,821	4,496,082	6,439,391	99,552,539
1924-25	43,553,900	32,563,815	14,002,476	7,529,854	4,864,253	6,728,602	109,242,900

(a) See general note on first page of this Chapter.

(iii) *Value according to Industry, 1924-25.* The following table shows the value of plant and machinery used in factories in each State during 1924-25, classified according to the nature of the industry in which used :—

VALUE OF PLANT AND MACHINERY.—INDUSTRIES, 1924-25.

Class of Industry.	N.S.W.	Vic.	Q'Land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treating raw material, product of agricultural and pastoral pursuits, etc.	920,290	734,965	156,211	115,252	75,160	63,960	2,065,838
II. Treating oils and fats, animal, vegetable, etc.	646,562	263,325	101,657	139,865	10,706	4,367	1,166,482
III. Processes in stone, clay, glass, etc.	3,159,831	1,217,620	335,689	524,355	311,187	232,462	5,781,144
IV. Working in wood ..	1,638,393	1,196,235	783,551	168,730	1,339,222	279,624	5,405,755
V. Metal works, machinery, etc.	11,336,058	3,367,055	1,420,438	1,206,106	671,518	1,722,776	19,723,951
VI. Connected with food and drink, etc.	7,533,795	5,448,320	7,159,221	1,309,358	1,040,272	354,371	22,845,337
VII. Clothing and textile fabrics, etc.	2,093,667	4,172,360	273,510	226,154	78,040	320,944	7,164,675
VIII. Books, paper, printing, and engraving	3,295,430	2,609,205	538,398	396,151	313,123	130,606	7,282,913
IX. Musical instruments, etc.	67,496	41,110	150	1,832	650	..	111,238
X. Arms and explosives ..	40,232	268,395	..	390	..	..	309,017
XI. Vehicles and fittings, saddlery and harness, etc.	586,886	411,325	95,941	344,495	60,430	25,414	1,524,491
XII. Ship and boat building and repairing	1,680,676	85,025	26,419	92,707	1,150	2,150	1,888,127
XIII. Furniture, bedding and upholstery	287,348	242,510	81,907	70,008	38,075	23,369	743,217
XIV. Drugs, chemicals, and by-products	853,215	742,185	29,559	426,231	179,146	58,796	2,289,112
XV. Surgical and other scientific instruments	25,570	15,125	7,150	5,631	1,618	..	55,094
XVI. Jewellery, timepieces, and plated ware ..	54,638	68,045	5,764	12,011	2,657	1,868	144,983
XVII. Heat, light and power	8,978,899	10,868,700	2,974,879	2,484,550	725,749	3,505,400	29,538,177
XVIII. Leatherware, n.e.l. ..	42,424	44,735	3,909	1,156	7,180	280	99,684
XIX. Minor wares, n.e.l. ..	312,490	767,575	8,143	4,872	8,370	2,215	1,103,665
Total ..	43,553,900	32,563,815	14,002,476	7,529,854	4,864,253	6,728,602	109,242,900

(a) Year ended 31st December, 1924.

The greatest value for any particular class of industry is for class XVII., "Heat, Light, and Power," and amounts to £29,538,177, or 27.04 per cent. on the total for all classes. The next in order of importance is Class VI., "Connected with Food and Drink, etc.," amounting to £22,845,337, or 20.91 per cent. on the total, followed by Class V., "Metal Works, Machinery, etc.," which amounts to £19,723,951, or 18.05 per cent. on the total value. The total for these three classes amounts to £72,107,465, or 66.00 per cent. on the total value for all classes.

§ 9. Individual Industries.

1. *General.*—The preceding remarks and tables furnish a general view of the recent development of particular classes of industries in Australia treated under the nineteen categories adopted by the Conference of Statisticians in 1906. In order to make the information complete, it is necessary to furnish details of the development of individual industries. While it is not possible, within the limits of this work, to give a full and detailed account of all the manufacturing industries of Australia, it is proposed to deal herein with such particular industries as are of special importance by reason of the number of persons employed, the number of factories, the amount of capital invested therein, the value of the production, or other features of special interest. In cases where there are only one or two establishments of a particular class in any State, returns relative to output are not published, in order to avoid disclosing information as to the operations of individual factories.

2. **Tanneries.**—(i) *Details for each State, 1924–25.* In Class I. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser class of leathers, but there are now very few kinds which cannot be produced locally, and by reason of their superiority an export trade has been built up in some varieties.

TANNERIES, 1924–25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A. (a)	Tas.	Aus- tralia.
Number of factories	73	47	16	10	6	3	155
Number of employees	1,205	2,356	281	186	112	49	4,189
Actual horse-power of engines employed ..	2,567	4,365	443	338	280	156	8,149
Approx. value of land and buildings £	292,324	491,745	23,916	28,408	30,581	12,211	879,185
Approx. value of plant and machinery £	202,249	401,375	36,065	22,669	23,780	8,465	694,603
Total amount of wages paid during year £	267,321	521,601	51,105	36,251	23,462	6,752	906,492
Value of fuel used	£ 23,158	47,261	3,342	4,615	2,078	404	80,858
Value of raw material worked up	£ 1,311,599	1,692,544	251,161	110,600	97,999	43,875	3,507,778
Total value of output	£ 1,780,906	2,673,149	349,171	165,017	140,508	62,254	5,171,005
Value added in process of manufacture £	446,149	933,344	94,668	49,802	40,431	17,975	1,582,369

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920–21 to 1924–25.* The development of the tanning industry during the period 1920–21 to 1924–25 is shown in the following table :—

TANNERIES.—AUSTRALIA, 1920–21 TO 1924–25.

Items.	1920–21.	1921–22.	1922–23.	1923–24.	1924–25.
Number of factories	164	164	163	166	155
Number of employees	4,026	4,438	4,542	4,485	4,189
Actual horse-power of engines used	6,868	7,697	7,740	8,182	8,149
Approx. value of land and buildings £	684,892	721,699	769,328	818,212	879,185
Approx. value of plant and machinery £	520,400	581,008	627,560	684,329	694,603
Total amount of wages paid	£ 825,751	935,009	963,526	964,563	906,492
Value of fuel used	£ 62,247	72,581	75,064	80,117	80,858
Value of raw material worked up	£ 4,596,271	3,684,000	3,765,981	3,630,198	3,507,778
Value of final output	£ 6,179,417	5,451,596	5,568,358	5,475,956	5,171,005
Value added in process of manufacture £	1,520,899	1,695,015	1,727,313	1,765,641	1,582,369

Compared with the results for the years 1922–23 and 1923–24 there was a decline in all items during 1924–25, while the production of leather decreased from 55,913,930 lbs. in 1922–23 to 48,911,506 lbs. in 1924–25. The output in the latter year, however, was nearly four million lbs. greater than that of 1920–21, although higher prices in the earlier year were responsible for the greater value of the production returned therein.

(iii) *Raw Materials Used and Production, 1924–25.* The quantities of raw materials used and leather produced in tanneries in each State are shown in the following table :—

TANNERIES.—RAW MATERIALS USED AND PRODUCTION, 1924–25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Hides and calf skins No.	884,195	1,340,469	178,889	56,138	58,159	11,614	2,529,464
Sheep pelts	1,742,335	1,282,105	62,064	76,710	..	..	3,163,264
Other skins	669,357	567,470	143,405	5,534	5,852	1,080	1,392,698
Bark tons	10,639	12,085	1,839	967	1,211	270	27,011
Leather made lbs.	19,276,236	22,070,564	3,739,421	1,241,414	2,181,093	402,778	48,911,506
Basils produced	1,559,111	1,519,222	62,064	76,716	..	..	3,217,113

(a) Year ended 31st December, 1924.

3. **Fellmongering and Wool-scouring Works.**—(i) *Details for each State, 1924-25.* The next industry in importance in Class I. is that of fellmongering and wool-scouring, one of the earliest industries established in Australia. The following table gives particulars of the industry in each State during the past year :—

FELLMONGERING AND WOOL-SCOURING WORKS, 1924-25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A. (a)	Tas.	Aus- tralia.
Number of factories	40	29	18	31	4	..	94
Number of employees	1,031	459	337	74	46	..	1,997
Actual horse-power of engines used ..	2,968	1,555	532	192	211	..	5,458
Approx. value of land and buildings ..	271,117	193,020	72,747	14,938	18,436	..	570,258
Approx. value of plant and machinery ..	351,679	165,940	99,135	25,420	26,786	..	668,960
Total amount of wages paid	189,136	96,648	49,416	13,437	8,301	..	356,938
Value of fuel used	34,146	25,456	10,864	2,218	3,022	..	75,706
Value of raw material worked up	3,550,456	1,783,543	1,997,244	232,923	249,234	..	7,813,400
Value of final output	3,792,603	2,020,893	2,009,722	252,124	268,631	..	8,343,973
Value added in process of manufacture ..	208,001	211,894	1,614	16,983	16,375	..	454,867

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The following return furnishes particulars of fellmongering and wool-scouring establishments in Australia for the last five years :—

**FELLMONGERING AND WOOL-SCOURING WORKS.—AUSTRALIA,
1920-21 TO 1924-25.**

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	97	97	99	102	94
Number of employees	2,707	2,571	2,576	2,161	1,997
Actual horse-power of engines used ..	6,278	6,657	6,530	6,250	5,458
Approx. value of land and buildings ..	£ 548,084	541,561	542,373	594,547	570,258
Approx. value of plant and machinery ..	£ 681,366	720,972	733,919	766,689	668,960
Total amount of wages paid	£ 510,286	533,705	546,015	422,788	356,938
Value of fuel used	£ 84,833	99,741	108,019	84,445	75,706
Value of raw material worked up	£ 6,682,138	5,660,278	6,848,785	8,158,925	7,813,400
Value of final output	£ 7,913,477	6,699,452	8,602,162	8,977,412	8,343,973
Value added in process of manufacture ..	£ 1,146,506	939,433	1,645,358	734,042	454,867

The wool-scouring industry developed considerably under the régime of the Central Wool Committee, and during 1919-20 the record output of 107,726,653 lbs. of scoured wool was produced. The production declined considerably since that date, however, and during 1924-25 only 82,240,117 lbs. of greasy wool and 3,329,237 skins were treated for an output of 46,956,822 lbs. of scoured wool.

4. **Soap and Candle Factories.**—(i) *Details for each State, 1924-25.* In Class II, soap and candle factories are the most important establishments. The manufacture of these two products is frequently carried on in the same factory, so that separate returns cannot be obtained; it may, however, be noted that the manufacture of soap is the more important. The following table gives particulars of soap and candle factories in each State during the year 1924-25 :—

SOAP AND CANDLE FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A. (c)	Tas.	Australia.
Number of factories	29	17	11	5	4	1	67
Number of employees	1,165	714	186	231	84	45	2,425
Actual horse-power of engines employed	1,250	806	210	374	94	10	2,744
Approx. value of land and buildings £	351,427	165,460	43,210	49,978	(a)	(b)	637,819
Approx. value of plant and machinery £	389,029	201,400	52,251	117,344	(a)	(b)	775,027
Total amount of wages paid during year £	206,561	141,838	35,961	43,435	(a)	(b)	454,149
Value of fuel used	£ 41,095	27,877	3,011	8,282	(a)	(b)	83,138
Value of raw material worked up	£ 847,548	743,210	123,829	205,724	(a)	(b)	2,037,505
Total value of output	£ 1,483,824	1,176,919	227,145	309,548	(a)	(b)	3,365,010
Value added in process of manufacture £	595,181	405,832	100,305	95,542	(a)	(b)	1,244,367

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(c) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The following table gives similar particulars for the last five years as regards Australia as a whole :—

SOAP AND CANDLE FACTORIES.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21. <i>a b</i>	1921-22. <i>b</i>	1922-23. <i>b</i>	1923-24. <i>b</i>	1924-25. <i>b</i>
Number of factories	62	69	69	70	67
Number of employees	2,008	2,329	2,419	2,556	2,425
Actual horse-power and engines used	1,782	2,015	2,320	2,622	2,744
Approx. value of land and buildings £	426,339	479,872	563,216	650,163	637,819
Approx. value of plant and machinery £	537,534	610,418	759,192	834,678	775,027
Total amount of wages paid	£ 326,449	394,567	415,681	438,748	454,149
Value of fuel used	£ 88,728	94,204	75,728	77,976	83,138
Value of raw material worked up	£ 2,119,957	1,755,252	1,790,540	1,729,946	2,037,505
Value of final output	£ 2,941,833	3,007,286	3,042,506	2,915,030	3,365,010
Value added in process of manufacture	£ 733,148	1,157,830	1,176,238	1,107,108	1,244,367

(a) Excluding three soap and candle establishments in Western Australia.

(b) Including other small establishments in Western Australia.

(iii) *Raw Materials Used and Production, 1920-21 to 1924-25.* The following statement shows the quantities of certain raw materials used, together with the production, in soap and candle factories in Australia during the years 1920-21 to 1924-25 :—

SOAP AND CANDLE FACTORIES.—RAW MATERIALS USED, AND PRODUCTION, AUSTRALIA, 1920-21 TO 1924-25.

Particulars.	1920-21. <i>a</i>	1921-22. <i>a</i>	1922-23. <i>a</i>	1923-24. <i>a</i>	1924-25. <i>a</i>
Tallow used cwt.	353,001	460,164	482,422	434,622	483,756
Alkali used "	120,882	134,994	144,092	140,923	168,587
Coconut oil used gal.	459,013	591,117	662,161	739,377	796,400
Soap made cwt.	692,192	824,002	878,238	883,644	997,902
Candles made "	87,304	91,116	101,586	86,684	80,771

(a) Exclusive of Western Australia.

5. Saw-mills, etc.—(i) *Details for States, 1924-25.* The most important industry in Class IV. 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 joinery, moulding, and box factories, have been combined in the following table :—

SAW-MILLS, FOREST AND OTHER ; JOINERY, ETC., 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories ..	863	661	321	128	167	172	2,312
Number of employees ..	9,318	9,346	5,413	1,934	5,975	2,055	34,041
Actual horse-power of engines employed ..	22,661	18,754	11,045	3,398	9,937	3,304	69,099
Approximate value of land and buildings .. £	1,648,279	913,710	410,241	270,588	529,082	98,105	3,870,005
Approximate value of plant and machinery .. £	1,471,187	1,101,665	731,392	165,009	1,339,222	272,964	5,081,439
Total amount of wages paid during year .. £	1,799,690	1,878,216	1,012,885	391,382	1,345,090	326,865	6,754,128
Value of fuel used .. £	66,218	52,154	19,702	12,304	10,987	12,475	173,840
Value of raw material worked up .. £	4,624,876	2,349,589	1,777,212	1,393,943	395,321	217,558	10,758,499
Total value of output .. £	7,379,459	5,471,210	3,612,683	1,971,783	2,120,248	673,583	21,228,966
Value added in process of manufacture .. £	2,688,365	3,069,467	1,815,760	565,536	1,713,940	443,550	10,296,627

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The development of forest and other saw-mills, etc., since 1920-21 is shown in the following table :—

**SAW-MILLS, FOREST AND OTHER ; JOINERY, ETC.—AUSTRALIA,
1920-21 TO 1924-25.**

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of establishments ..	1,897	1,943	2,067	2,315	2,312
Number of employees ..	30,074	30,522	31,173	34,092	34,041
Actual horse-power of engines used ..	57,947	56,046	57,615	64,580	69,099
Approx. value of land and buildings .. £	2,773,952	3,036,444	3,525,233	3,693,174	3,870,005
Approx. value of plant and machinery .. £	3,868,390	4,271,225	4,446,516	4,955,110	5,081,439
Total amount of wages paid .. £	5,248,331	5,701,531	5,832,137	6,576,474	6,754,128
Value of fuel used .. £	102,195	115,049	128,106	140,152	173,840
Value of raw material worked up .. £	9,344,674	8,348,619	9,104,572	10,344,024	10,758,499
Value of final output .. £	17,446,035	16,832,110	17,912,365	20,755,852	21,228,966
Value added in process of manufacture .. £	7,099,166	8,368,442	8,679,687	10,271,676	10,296,627

The pre-war development in Australia in the building and other trades using timber received a temporary check during the war years, but the all-round increases since 1920-21 in the number of employees, in wages, value of materials used, and final output, as well as in capital invested in land and buildings and plant and machinery, show that the industries concerned have practically regained their normal rate of progression. The saw-mill output of native timber increased from 601,248,000 super. feet in 1920-21 to 664,550,000 super. feet in 1924-25.

6. *Agricultural Implement Works.*—(i) *General.* The manufacture of agricultural implements is an important industry in Australia, and is of particular interest, owing 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 header and stripper-harvesters, strippers, reapers and binders, reaper threshers, stump-jump and other ploughs, harrows, disc and other cultivators, winnowers, corn-shellers and baggers, drills, 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 exported to many countries.

(ii) *Details for States, 1924-25.* The following table gives particulars of the agricultural implement works in each State for the year 1924-25:—

AGRICULTURAL IMPLEMENT WORKS, 1924-25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	30	64	7	46	6	..	153
Number of employees	571	3,208	275	1,255	226	..	5,535
Actual horse-power of engines employed	377	2,443	241	1,021	267	..	4,349
Approx. value of land and buildings £	165,707	223,565	36,125	157,556	42,814	..	625,767
Approx. value of plant and machinery £	55,176	315,620	24,595	156,991	7,031	..	559,413
Total amount of wages paid during year £	127,344	731,162	48,528	230,948	43,590	..	1,181,572
Value of fuel used	4,393	47,178	1,809	15,345	1,955	..	70,680
Value of raw material worked up £	147,883	817,032	129,866	202,237	272,438	..	1,569,456
Total value of output	370,530	1,847,949	198,278	529,069	337,182	..	3,283,008
Value added in process of manufacture £	218,254	983,739	66,603	311,487	62,789	..	1,642,872

(a) Year ended 31st December, 1924.

(iii) *Development in Australia, 1920-21 to 1924-25.* The Agricultural Implement industry declined considerably during the war years, but steady development has taken place since 1920-21, and substantial increases have occurred in all the items enumerated in the following table. Details for the past five years are as follows:—

AGRICULTURAL IMPLEMENT WORKS.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21. ^a	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	141	140	154	160	153
Number of employees	4,299	4,696	4,674	5,584	5,535
Actual horse-power of engines used	2,576	3,312	3,619	3,807	4,349
Approx. value of land and buildings £	392,870	435,233	499,987	590,060	625,767
Approx. value of plant and machinery £	431,152	478,896	508,921	595,151	559,413
Total amount of wages paid	794,534	987,610	941,778	1,126,002	1,181,572
Value of fuel used	55,709	60,410	54,546	63,096	70,680
Value of raw material worked up	1,064,611	1,387,571	1,190,905	1,442,679	1,569,456
Value of final output	2,288,713	2,893,875	2,685,542	3,132,305	3,283,008
Value added in process of manufacture £	1,168,393	1,415,894	1,439,891	1,626,530	1,642,872

(a) Excluding three establishments in Western Australia.

7. *Engineering Works, Ironworks, and Foundries.*—(i) *Details for States, 1924-25.* The classification in these industries is not very satisfactory. Generally, engineering shops, ironworks, and foundries are included, as also are factories for making safes, patterns, meters, and springs. Railway workshops, agricultural implement factories, metal extraction and ore reduction works, galvanized iron works, stove and oven-making works, and wire-working establishments are not included. The combination of industries is rendered necessary owing to the limited classification still adopted by some of the States.

ENGINEERING WORKS, IRONWORKS, AND FOUNDRIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	522	554	60	89	99	23	1,347
Number of employees	14,898	10,945	2,433	2,888	1,520	387	33,071
Actual horse-power of engines employed	32,292	13,015	2,694	2,449	2,253	398	53,101
Approximate value of land and buildings £	2,662,568	1,598,150	225,771	269,226	215,932	41,617	5,011,264
Approximate value of plant and machinery £	4,080,914	1,626,700	302,424	310,611	291,467	52,159	6,664,275
Total amount of wages paid during year	3,362,823	2,313,685	481,678	552,087	304,833	80,227	7,095,333
Value of fuel used	433,125	173,634	25,423	46,406	23,713	7,272	709,573
Value of raw materials worked up	10,163,896	2,675,677	667,531	770,415	349,519	44,837	14,671,875
Total value of output	15,270,907	6,398,790	1,415,277	1,557,472	842,422	159,871	25,644,739
Value added in process of manufacture	4,673,886	3,549,479	722,323	740,651	469,190	107,762	10,263,291

(a) Year ended 31st December 1924.

In addition to engineering works which supply ordinary requirements, there is now a large number of establishments which engage in the manufacture of special classes of machinery and implements. The manufacture of mining, smelting, and textile machinery and apparatus forms an important section of this industry.

(ii) *Development in Australia, 1920-21 to 1924-25.* The development of engineering works, ironworks, and foundries in Australia since 1920-21 is shown in the following table :—

**ENGINEERING WORKS, IRONWORKS, AND FOUNDRIES.—AUSTRALIA,
1920-21 TO 1924-25.**

Items.	1920-21. ^a	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	1,248	1,281	1,368	1,343	1,347
Number of employees	33,914	30,628	31,872	33,052	33,071
Actual horse-power of engines used ..	48,852	51,780	51,328	52,051	53,101
Approx. value of land and buildings £	4,108,640	4,197,014	4,560,030	4,570,486	5,011,264
Approx. value of plant and machinery £	5,702,388	5,933,667	6,201,317	6,348,433	6,664,275
Total amount of wages paid ..	6,523,651	6,265,599	6,078,966	6,949,295	7,095,333
Value of fuel used	£ 631,032	623,273	560,783	685,916	709,573
Value of raw material worked up £	14,247,190	11,727,407	8,794,023	13,386,286	14,671,875
Value of final output	£ 24,361,080	21,468,595	18,260,945	24,151,439	25,644,739
Value added in process of manufacture £	9,482,358	9,117,915	8,906,139	10,079,237	10,263,291

(a) Including three agricultural implement establishments in Western Australia.

The expansion of local industry during recent years has necessitated an increased provision of machinery, and the difficulty of obtaining overseas supplies during the war and for some years after created an opportunity of which the Australian engineering trade has availed itself largely. The industry has grown to large proportions, but its progress during the past two years was restricted by the severe competition encountered from overseas, while the depression in 1921-22 and 1922-23 was caused by the closing down of the Broken Hill Proprietary Company's Steel Works for the greater part of that period. These industries are all large consumers of Australian materials, and for this reason their progress is doubly important.

8. Railway and Tramway Workshops.—(i) *Details for each State, 1924-25.* The railway and tramway workshops which form an important item in Class V. are chiefly State-owned institutions. The following table giving details concerning them includes, however, private and municipal establishments for manufacturing and repairing rolling-stock :—

RAILWAY AND TRAMWAY WORKSHOPS, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories ..	45	18	11	22	20	7	123
Number of employees ..	12,122	5,888	3,121	2,888	1,955	371	26,345
Actual horse-power of engines employed ..	7,930	4,156	3,331	2,260	2,965	323	20,965
Approximate value of land and buildings ..	2,066,186	821,770	292,440	520,721	471,893	1,165	4,174,175
Approximate value of plant and machinery ..	2,379,636	809,250	244,664	314,215	364,642	91,847	4,204,254
Total amount of wages paid during year ..	£ 2,919,222	1,289,834	705,398	721,439	413,030	91,753	6,140,676
Value of fuel used ..	£ 82,780	34,510	12,099	22,913	21,082	2,376	175,760
Value of raw material worked up ..	£ 2,128,349	1,582,517	408,272	364,313	402,736	33,541	4,919,728
Total value of output ..	£ 5,700,235	3,254,715	1,050,843	1,397,810	835,211	145,363	12,384,177
Value added in process of manufacture ..	£ 3,489,106	1,637,688	630,472	1,010,584	411,393	109,446	7,288,689

(a) Year ended 31st December, 1924.

In addition to the above, a railway workshop is in operation in the Northern Territory. The work is confined almost exclusively to repairs to rolling-stock, etc., no new goods being manufactured. For the sake of convenience this establishment is not included in any of the tables in this chapter.

(ii) *Development in Australia, 1920-21 to 1924-25.* The following table shows the development of railway and tramway workshops in Australia since 1920-21 :—

RAILWAY AND TRAMWAY WORKSHOPS.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	103	101	112	122	123
Number of employees	23,670	23,802	23,672	25,130	26,345
Actual horse-power of engines used ..	16,142	15,889	16,603	17,830	20,965
Approx. value of land and buildings £	3,123,818	3,287,393	3,429,066	3,887,082	4,174,175
Approx. value of plant and machinery £	2,810,282	3,111,789	3,299,252	3,867,175	4,204,254
Total amount of wages paid .. £	5,273,942	5,609,957	5,591,520	5,799,183	6,140,676
Value of fuel used .. £	132,956	143,357	155,795	159,651	175,760
Value of raw material worked up .. £	3,808,850	4,518,058	4,459,599	4,596,829	4,919,728
Value of final output .. £	9,488,649	10,610,662	10,603,049	11,652,306	12,384,177
Value added in process of manufacture £	5,546,843	5,949,247	5,987,655	6,895,826	7,288,689

The growth of the railway and tramway systems, conjointly with heavy increases in passenger and goods traffic throughout Australia, has resulted in corresponding activity in workshops engaged in the manufacture or repair of rolling-stock, etc. During the war the operations of these establishments were restricted to necessary work, but since 1920-21 the rate of expansion has been rapid. The number of employees has risen from 23,670 to 26,345, and the value of the output has increased by more than 30 per cent. during the past four years.

9. *Metal Extraction and Ore Reduction Works.*—The following table gives particulars of metal extraction and ore reduction works. The classification of these works is not uniform in the several States, and the combination of industries is, therefore, somewhat unsatisfactory. The returns do not include particulars of plants used on mines.

METAL EXTRACTION AND ORE REDUCTION WORKS, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	Aust.	W.A. (a)	Tas.	Australia.
Number of factories	20	8	8	2	..	3	41
Number of employees	3,058	71	576	1,506	..	1,094	6,305
Actual horse-power of engines employed ..	25,185	57	4,234	6,693	..	35,937	72,106
Approx. value of land and buildings £	595,839	18,385	18,978	b	..	b	c 1,167,481
Approx. value of plant and machinery £	2,903,221	9,420	686,277	b	..	b	c 5,470,841
Total amount of wages paid during year £	928,845	13,035	169,179	b	..	b	c 1,836,078
Value of fuel used .. £	1,608,547	2,544	28,074	b	..	b	c 2,261,916
Value of raw material worked up .. £	7,192,207	113,857	154,505	b	..	b	c 13,330,722
Total value of output .. £	12,098,116	149,563	794,765	b	..	b	c 20,913,201
Value added in process of manufacture £	3,297,362	33,162	612,186	b	..	b	c 5,320,563

(a) See second paragraph on next page. (b) Information not available for publication.

(c) Including South Australia and Tasmania.

The position of the base metals, with the exception of copper and tin, has shown considerable improvement since 1921, when the industry suffered a serious depression owing to the fall in metal prices.

In Western Australia all the plants are worked on the mines, and are therefore not included.

10. Bacon-curing Factories.—(i) *Details for each State, 1924-25.* The following table gives particulars of factories engaged in bacon-curing in each State during the past year:—

BACON-CURING FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Aus- tralia.
Number of factories	25	21	6	11	6	5	74
Number of employees	359	531	485	191	59	34	1,659
Actual horse-power of engines employed	596	1,542	708	430	266	97	3,639
Approximate value of land and buildings £	161,016	173,875	127,235	39,874	33,616	9,704	545,320
Approximate value of plant and machinery £	75,078	96,185	76,623	24,579	14,624	3,251	290,340
Total amount of salaries and wages paid £	90,787	123,300	108,893	33,906	13,646	6,677	377,209
Value of fuel used £	16,419	20,539	13,446	3,841	2,856	2,102	59,203
Value of raw material worked up ..	891,639	1,262,862	740,650	279,133	153,249	82,380	3,409,913
Total value of output £	1,092,347	1,571,357	1,092,502	355,829	196,730	99,439	4,408,204
Value added in process of manu- facture £	184,289	287,956	338,406	72,855	40,625	14,957	939,088

(a) Year ended 31st December, 1924.

(ii) *Quantity and Value of Production.* The following table shows the number of pigs killed and the quantity and value of the production of bacon-curing factories in each State for the year 1924-25:—

BACON-CURING FACTORIES.—PIGS KILLED, AND PRODUCTION, 1924-25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (b)	Tasmania.	Aus- tralia.
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PIGS KILLED.

Number	225,297	218,158	206,454	57,281	(a)19,657	18,357	745,204
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PRODUCTS (,000 OMITTED).

Bacon and ham lbs.	19,765	20,432	15,335	4,786	2,608	1,677	64,603
Lard „	668	985	766	172	103	72	2,766

VALUE.

Bacon and ham £	961,623	1,360,116	699,516	299,038	167,164	87,952	3,575,409
Lard £	21,097	31,094	24,325	7,326	4,540	2,631	91,013
Other products £	95,842	180,147	368,661	49,665	13,940	8,856	717,111

(a) In Western Australia, a portion of the bacon and ham treated in factories is imported and subsequently smoked in that State.

(b) Year ended 31st December, 1924.

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

11. Butter, Cheese, and Condensed Milk Factories.—(i) *Details for each State, 1924-25.* The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1924-25 :—

BUTTER, CHEESE, AND CONDENSED MILK FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A. (a)	Tas.	Aus- tralia.
Number of factories	183	186	128	62	8	33	600
Number of employees	1,454	2,427	1,386	362	50	147	5,826
Actual horse-power of engines employed	5,428	5,543	3,369	1,023	303	268	15,934
Approximate value of land and buildings £	517,904	817,060	292,216	181,249	15,809	39,201	1,863,439
Approximate value of plant and machinery £	694,569	995,465	498,083	143,547	18,500	34,863	2,385,027
Total amount of wages paid ..	363,360	559,953	269,219	63,634	10,208	21,315	1,287,689
Value of fuel used £	90,969	159,178	42,008	12,806	1,342	5,382	311,685
Value of raw material worked up £	6,753,812	6,879,638	4,265,426	829,571	94,380	257,912	19,080,739
Total value of output	7,602,383	8,212,788	5,449,950	1,007,676	121,429	331,988	22,726,214
Value added in process of manu- facture £	757,602	1,173,972	1,142,516	165,299	25,707	68,694	3,333,790

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The following table shows the progress of the factories in this industry during the past five years :—

**BUTTER, CHEESE, AND CONDENSED MILK FACTORIES.—AUSTRALIA,
1920-21 TO 1924-25.**

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	579	591	573	583	600
Number of employees	4,981	5,368	5,141	5,233	5,826
Actual horse-power of engines used ..	11,920	11,947	13,149	14,836	15,934
Approx. value of land and buildings ..	£ 1,229,904	1,335,760	1,490,729	1,770,157	1,863,439
Approx. value of plant and machinery ..	£ 1,491,974	1,711,169	2,184,761	2,155,632	2,385,027
Total amount of wages paid	£ 844,783	1,109,860	1,091,218	1,112,425	1,287,689
Value of fuel used	£ 225,356	263,585	244,144	249,488	311,685
Value of raw material worked up	£ 22,096,843	18,062,449	17,464,258	16,542,862	19,080,739
Value of final output	£ 25,400,335	22,003,615	20,746,782	19,526,119	22,726,214
Value added in process of manufacture ..	£ 3,078,136	3,677,581	3,038,380	2,733,269	3,333,790

(iii) *Quantity and Value of Production.* The following table shows the quantity and value of butter, cheese, and condensed milk produced, and the quantity of milk used in butter, cheese, and condensed milk factories in each State during the past year :—

BUTTER, CHEESE, AND CONDENSED MILK FACTORIES.—PRODUCTION, 1924-25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Aus- tralia.
MILK USED (,000 OMITTED).							
Butter factories .. gals.	238,115	214,835	137,190	24,327	3,405	10,385	628,257
Cheese	7,907	6,868	12,458	3,579	..	682	31,494
Condensed milk factories ..	2,010	12,961	2,658	..	..	..	17,629

PRODUCTS (,000 OMITTED).

	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Aus- tralia.
Butter lbs.	112,505	95,434	67,916	12,433	1,660	4,590	294,558°
Cheese	7,602	5,964	12,639	3,743	..	693	30,641
Condensed and concentrated milk lbs.	3,695	33,819	10,512	..	..	..	48,026
Powdered milk	2,109	11,874	..	..	..	..	13,983

(a) Year ended 31st December, 1924.

BUTTER, CHEESE, AND CONDENSED MILK FACTORIES.—PRODUCTION
1924-25—*continued.*

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Aus- tralia.
VALUE (£,000 OMITTED).							
Butter £	6,953	6,263	4,691	856	125	308	19,196
Cheese £	257	197	466	120	..	24	1,064
Condensed and concentrated milk £	114	1,005	289	..	..	..	1,408
Powdered Milk £	181	498	..	..	..	..	629

(a) Year ended 31st December, 1924.

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

12. Meat and Fish Preserving, Ice and Refrigerating Works.—These industries are now of considerable importance in Australia. Large freezing works have been installed at many ports throughout the continent for the purpose of freezing produce chiefly for export, while insulated space for the carriage of frozen produce is provided by a number of steamship companies trading between Australia and other parts of the world.

The details given in the subjoined table include ice-making and freezing works, also meat-canning factories, separate particulars for each item for all the States not being available.

MEAT AND FISH PRESERVING, ICE AND REFRIGERATING WORKS, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Aus- tralia.
Number of factories	175	54	69	19	37	14	365
Number of employees	1,744	1,317	4,272	205	390	74	8,002
Actual horse-power of engines employed	12,563	8,674	13,024	1,882	2,787	356	39,286
Approximate value of land and buildings £	1,307,014	938,025	1,631,423	199,452	519,481	60,200	4,655,595
Approximate value of plant and machinery £	1,250,395	769,095	1,103,528	146,953	384,501	27,500	3,681,972
Total amount of wages paid during year £	356,121	253,539	995,739	42,219	105,590	12,124	1,765,332
Value of fuel used £	132,515	64,188	127,051	20,758	23,569	3,398	371,479
Value of raw material worked up	6,268,329	1,836,381	4,087,929	135,954	229,272	3,131	12,560,996
Total value of output £	7,277,417	2,376,531	5,646,271	223,171	441,601	27,808	15,992,799
Value added in process of manufacture £	876,573	475,962	1,431,291	66,459	188,760	21,279	3,060,324

(a) Year ended 31st December, 1924.

Exclusive of Victoria, for which State particulars are not available, the returns show that 227,601 tons of ice, valued at £516,684, were manufactured in Australia in 1924-25.

Full particulars regarding quantities and values of beef, mutton, and lamb preserved by cold process, exported from Australia during a series of years, will be found in Chapter XVI.

13. Biscuit Factories.—The following table gives particulars regarding establishments at which the manufacture of biscuits, cakes, etc., was carried on in each State during the year 1924-25 :—

BISCUIT, ETC., FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas. (b)	Aus- tralia.
Number of factories ..	63	8	25	14	18	..	128
Number of employees ..	2,815	1,440	713	393	343	..	5,704
Actual horse-power of engines employed ..	1,277	533	347	295	168	..	2,620
Approximate value of land and buildings ..	£ 512,666	120,095	116,105	88,370	44,688	..	881,924
Approximate value of plant and machinery ..	£ 219,525	136,345	63,035	59,864	23,542	..	507,311
Total amount of wages paid during year ..	£ 452,947	220,255	135,247	59,697	46,355	..	914,501
Value of fuel used ..	£ 55,647	22,064	5,519	7,501	5,759	..	97,390
Value of raw material worked up ..	£ 1,520,652	677,272	238,940	205,425	167,926	..	2,810,215
Total value of output ..	£ 2,657,695	1,134,206	539,586	324,699	251,900	..	4,908,086
Value added in process of manufacture ..	£ 1,081,396	433,970	295,127	111,773	78,215	..	2,000,481

(a) Year ended 31st December, 1924.

(b) Included with confectionery.

14. Jam and Fruit Preserving, Pickles, Sauces, and Vinegar Factories.—(i) *Details for each State, 1924-25.* The subjoined table gives particulars of factories at which these industries were carried on in each State during the year 1924-25. Separate returns for the different branches of the industry are not available for most of the States.

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Aus- tralia.
Number of factories ..	44	52	16	17	14	21	164
Number of employees ..	1,971	2,501	385	684	108	629	6,278
Actual horse-power of engines employed ..	752	1,161	404	266	106	1,300	3,989
Approximate value of land and buildings ..	£ 351,447	288,180	57,176	102,681	23,146	114,658	937,288
Approximate value of plant and machinery ..	£ 161,757	267,725	51,854	78,400	11,809	45,130	616,675
Total amount of wages paid during year ..	£ 204,568	411,818	53,533	101,280	11,049	99,069	881,317
Value of fuel used ..	£ 17,282	30,948	2,930	7,142	787	10,063	69,152
Value of raw material worked up ..	£ 912,404	1,237,953	246,128	315,264	58,584	357,260	3,127,593
Total value of output ..	£ 1,475,925	2,090,690	342,664	474,786	85,699	525,907	4,995,671
Value added in process of manufacture ..	£ 546,239	821,789	93,606	152,380	26,328	158,584	1,798,926

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The following table refers to jam and fruit preserving, etc., establishments in Australia for the last five years:—

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories ..	154	164	170	175	164
Number of employees ..	6,243	5,958	5,983	6,600	6,278
Actual horse-power of engines employed ..	2,996	3,257	3,698	3,941	3,989
Approx. value of land and buildings ..	£ 760,855	830,484	895,513	981,354	997,288
Approx. value of plant and machinery ..	£ 516,348	556,801	606,716	599,857	616,675
Total amount of wages paid ..	£ 749,980	685,017	781,429	885,104	881,317
Value of fuel used ..	£ 58,737	48,987	56,718	63,406	69,152
Value of raw material worked up ..	£ 3,465,562	2,541,268	2,704,356	2,939,187	3,127,593
Total value of output ..	£ 5,262,608	3,975,779	4,549,216	4,722,383	4,995,671
Value added in process of manufacture ..	£ 1,738,309	1,385,524	1,788,142	1,719,790	1,798,926

The progress of the jam industry was very marked during the war years, when an important export trade was built up. During the past four years, however, the exports have declined to insignificant proportions, and the production of jams and jellies fell from 90,140,566 lbs. in 1920-21 to 64,657,052 lbs. in 1924-25. The output of preserved fruit, however, is growing steadily, and during 1924-25, 65,874,977 lbs. were processed, while the production of pickles and sauces is also on the increase.

(iii) *Production.* The following table shows the quantity and value of jams, pickles, and sauces manufactured in each State during 1924-25 :—

JAMS, PRESERVED FRUIT, PICKLES AND SAUCES.—OUTPUT, 1924-25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (b)	Tasmania.	Aus- tralia.
QUANTITY (,000 OMITTED).							
Jams .. lbs.	18,187	24,659	3,911	7,416	(a)	10,484	64,657
Pulp	3,379	16,959	823	5,993	(a)	5,787	32,921
Fruit, preserved ..	17,010	31,624	8,505	4,743	(a)	3,984	65,875
Pickles .. pints	2,413	2,057	439	536	160	18	5,623
Sauces	5,976	7,894	1,001	3,402	179	31	18,483
VALUE.							
Jams £	485,553	658,348	99,530	184,220	(a)	308,773	1,738,424
Pulp £	22,543	113,135	3,546	27,570	(a)	91,751	258,545
Fruit, preserved ..	407,951	758,064	163,511	93,571	(a)	88,638	1,511,735
Pickles £	76,604	65,320	16,501	20,174	5,514	900	185,013
Sauces £	339,115	447,973	21,117	125,171	5,678	1,150	940,204

(a) Particulars not available.

(b) Year ended 31st December, 1924.

15. Confectionery Factories.—(i) *Details for each State, 1924-25.* The growth of this industry will be apparent when it is stated that at the close of 1900 there were in New South Wales only 16 establishments, with 706 employees, and in Victoria 16 establishments, employing 731 persons, the plant and machinery in the former State being valued at £2,815, and in the latter at £19,070. Returns for 1924-25 are given hereunder :—

CONFECTIONERY FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas. (b)	Aus- tralia.
Number of factories ..	99	117	13	22	15	10	276
Number of employees ..	2,907	3,787	637	459	339	689	8,818
Actual horse-power of engines employed ..	3,700	6,766	317	484	332	1,126	12,725
Approximate value of land and buildings .. £	955,311	611,255	72,314	74,235	62,459	245,865	2,021,439
Approximate value of plant and machinery .. £	880,227	894,075	52,753	75,585	52,637	148,931	2,104,208
Total amount of wages paid during year .. £	419,344	637,363	89,510	56,811	39,192	107,497	1,349,717
Value of fuel used .. £	47,160	84,139	3,374	7,191	3,872	9,314	155,050
Value of raw material worked up .. £	1,280,069	1,757,052	107,646	166,636	122,793	184,809	3,619,005
Total value of output .. £	2,437,771	3,054,726	329,145	288,307	181,082	332,797	6,623,828
Value added in process of manufacture .. £	1,110,542	1,213,535	218,125	114,480	54,417	138,674	2,849,773

(a) Year ended 31st December, 1924.

(b) Including Biscuits.

(ii) *Development in Australia, 1920-21 to 1924-25.* The growth of the confectionery industry during the past four years is exhibited in the following table :—

CONFECTIONERY FACTORIES.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25. (a)
Number of factories ..	200	223	258	258	276
Number of employees ..	7,137	7,399	7,945	8,724	8,818
Actual horse-power of engines employed ..	4,862	5,313	6,434	11,668	12,725
Approx. value of land and buildings .. £	1,041,380	1,185,539	1,593,346	1,773,340	2,021,439
Approx. value of plant and machinery .. £	1,278,882	1,419,984	1,746,738	1,951,422	2,104,208
Total amount of wages paid during year .. £	937,538	1,046,797	1,159,980	1,262,099	1,349,717
Value of fuel used .. £	93,975	105,479	114,947	126,547	155,050
Value of raw material worked up .. £	3,421,474	3,220,680	3,336,349	3,318,428	3,619,005
Total value of output .. £	5,419,985	5,597,920	5,941,691	6,162,631	6,623,828
Value added in process of manufacture .. £	1,904,536	2,271,761	2,490,395	2,717,656	2,849,773

(a) Including Biscuits in Tasmania.

The confectionery industry has expanded considerably during recent years, largely as a result of the stimulus afforded by the embargo placed on the importation of luxuries during the period of the war. The establishments engaged therein found employment for 8,818 persons in 1924-25, and the value of the output amounted to £6,623,828, or more than 22 per cent. greater than the value of the production in 1920-21. The Australian market has been captured, and an export trade is being developed. Several large British manufacturers of confectionery have established branch works in Australia.

16. Flour Mills.—(i) *Details for States, 1924-25.* The following table shows the position of the flour-milling industry in each State in 1924-25 :—

FLOUR MILLS, 1924-25.

Items.	N.S.W.	Victoria.	Q'land. (a)	S. Aust. (a)	W. Aust. (b)	Tas. (a)	Australia.
Number of factories ..	58	46	12	36	18	11	181
Number of employees ..	1,181	1,064	311	519	453	116	3,644
Actual horse-power of engines employed ..	6,868	5,363	1,352	3,029	2,986	428	20,026
Approximate value of land and buildings ..	£ 676,378	£ 338,605	£ 132,827	£ 170,126	£ 169,773	£ 41,470	£ 1,529,179
Approximate value of plant and machinery ..	£ 836,493	£ 487,990	£ 165,925	£ 256,905	£ 218,768	£ 30,155	£ 1,996,236
Total amount of wages paid during year ..	£ 285,510	£ 257,583	£ 66,565	£ 109,135	£ 96,287	£ 23,584	£ 838,664
Value of fuel used ..	£ 65,174	£ 58,196	£ 9,472	£ 28,678	£ 19,162	£ 2,866	£ 183,548
Value of raw material worked up ..	£ 5,290,904	£ 5,371,466	£ 806,120	£ 1,715,355	£ 1,441,326	£ 322,736	£ 14,947,907
Total value of output ..	£ 6,260,197	£ 6,218,248	£ 1,044,603	£ 1,988,828	£ 1,829,667	£ 385,849	£ 17,727,392
Value added in process of manufacture ..	£ 904,119	£ 788,586	£ 229,011	£ 244,795	£ 369,179	£ 60,247	£ 2,595,937

(a) The manufacture of cornflour, oatmeal, etc., was also carried on in some of these establishments.
(b) Year ended 31st December, 1924.

(ii) *Production of Flour and By-products, 1920-21 to 1924-25.* The production of flour by the mills in each State for the years 1920-21 to 1924-25 was as follows :—

FLOUR MILLS.—PRODUCTION OF FLOUR, 1920-21 TO 1924-25.

Year (b).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Tons. a	Tons. a	Tons. a	Tons. a	Tons. a	Tons. a	Tons. a
1920-21 ..	244,818	260,032	54,383	98,557	120,125	23,596	801,511
1921-22 ..	336,572	308,532	54,694	108,893	82,148	20,613	911,452
1922-23 ..	354,704	352,002	51,476	109,761	94,316	23,220	985,479
1923-24 ..	409,645	382,204	54,244	113,436	107,990	25,337	1,092,856
1924-25 ..	395,409	359,597	52,592	117,042	122,192	21,866	1,068,698

(a) Tons of 2,000 lbs. (b) See general note on first page of this Chapter.

The total production of flour in Australia for the last year, viz., 1,068,698 tons, was valued at £13,884,581. In addition, 442,472 tons of bran and pollard, valued at £2,902,704, were made. The total quantity of wheat ground was 50,805,093 bushels.

17. Sugar Mills.—(i) *Details for 1924-25.* The following table shows the position of the cane-crushing branch of the sugar-making industry in Queensland and New South Wales in 1924-25. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XVII., "Agricultural Production."

SUGAR MILLS, 1924-25.

Items.	N.S.W.	Queensland.	Australia.
Number of factories	3	37	40
Number of employees	445	6,250	6,695
Actual horse-power of engines employed ..	2,028	25,144	27,172
Approximate value of land and buildings £	119,505	774,468	893,973
Approximate value of plant and machinery £	478,020	4,433,542	4,911,562
Total amount of wages paid during year ..	99,737	1,414,026	1,513,763
Value of fuel used	16,611	161,346	177,957
Value of raw material worked up	476,062	8,478,513	8,954,575
Total value of output	754,191	11,005,855	11,760,046
Value added in course of manufacture ..	261,518	2,365,996	2,627,514

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, and part is used for manuring land, but a considerable quantity is allowed to run to waste.

(ii) *Progress of Industry.* (a) *New South Wales.* The following table shows the progress of this industry in New South Wales since 1920-21 :—

SUGAR MILLS.—NEW SOUTH WALES, 1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories ..	3	3	3	3	3
Number of employees ..	437	428	446	445	445
Cane crushed .. tons	131,313	149,474	147,992	132,084	228,978
Sugar produced .. tons	15,124	17,806	18,580	16,829	26,682
Molasses produced gals.	649,800	940,700	816,720	752,650	1,313,400

The number of New South Wales mills has been reduced to three during recent years owing chiefly to the tendency towards concentration of cane-crushing in mills fitted with modern machinery, and the consequent closing of the small home mill. On the north coast of New South Wales some land formerly devoted to sugar-cane has been turned into pasture in connexion with the dairying industry, but a revival in cane-growing in this district has led to a movement for the erection of additional mills to treat the increased production.

(b) *Queensland.* Details for Queensland from 1911 onwards are given hereunder.

SUGAR MILLS.—QUEENSLAND, 1911 TO 1924.

Items.	1911.	1921.	1922.	1923.	1924.
Number of factories ..	49	43	38	37	37
Number of employees ..	4,295	6,091	5,589	5,555	6,250
Cane crushed .. tons	1,534,451	2,287,416	2,167,990	2,045,808	3,175,377
Sugar produced .. tons	173,296	282,198	287,785	269,175	400,645
Molasses—					
Sold to distillers and others .. gals.	2,393,669	2,738,795	1,774,224	2,657,252	5,367,352
Used as fodder .. gals.	789,564	2,053,338	1,916,393	2,448,595	2,236,788
Used as manure .. gals.	223,000	78,720	322,113	209,600	196,080
Run to waste or burnt (a) .. gals.	1,847,333	4,866,272	5,503,099	4,883,071	5,921,246
In Stock .. gals.	1,197,626	997,274	803,050	866,460	1,398,837
Total Molasses a .. gals.	6,451,192	10,734,399	10,318,879	11,064,978	15,120,303

(a) Quantity recorded; large quantities run to waste of which no record is kept.

18. **Sugar Refineries.**—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated upon being originally brought chiefly from Mauritius and the East. In 1924-25 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 and South Australia. The returns for the individual States cannot be disclosed.

In the six refineries, an average number of 1,620 hands was employed during the year. The approximate value of land and buildings was £741,605, of plant and machinery, £1,415,410; and the total amount of wages paid during the year was £385,829. The value of all materials used in sugar refineries was £9,692,768, while the total output reached £11,366,270. The amount of crude sugar used was 319,636 tons, and of refined sugar produced 308,601 tons, valued at £11,131,595.

19. **Breweries.**—(i) *Details for each State, 1924-25.* The following table gives particulars concerning breweries in each State :—

BREWERIES, 1924-25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a), (b)	Tas.	Australia.
Number of breweries	13	14	9	7	11	2	56
Number of employees	1,235	1,263	534	360	471	102	3,965
Actual horse-power of engines employed	3,502	5,204	1,785	1,093	1,582	237	13,403
Approximate value of land and buildings £	801,409	568,335	214,669	108,650	248,081	55,500	1,996,644
Approximate value of plant and machinery £	1,121,200	722,440	224,103	152,586	234,953	51,002	2,506,284
Total amount of wages paid during year £	352,157	342,569	135,914	108,942	126,455	27,286	1,093,323
Value of fuel used £	94,267	80,406	18,906	20,882	18,433	9,024	241,018
Value of raw material worked up £	1,130,651	1,091,574	180,239	295,788	247,070	74,270	3,019,592
Total value of output £	2,655,195	2,479,619	666,234	563,474	563,971	188,536	7,117,029
Value added in process of manufacture £	1,430,277	1,307,639	467,089	246,804	298,468	105,242	3,855,519

(a) Includes malting. (b) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The following table shows the progress of this industry during the past four years :—

BREWERIES.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of breweries	67	64	61	57	56
Number of employees	3,752	3,814	3,774	3,854	3,965
Actual horse-power of engines used	10,833	12,132	11,492	12,761	13,403
Approx. value of land and buildings £	1,619,027	1,676,471	1,710,321	1,778,442	1,996,644
Approx. value of plant and machinery £	1,882,956	1,993,699	2,140,654	2,247,811	2,506,284
Total amount of wages paid £	937,563	1,032,430	1,027,689	1,063,250	1,093,323
Value of fuel used £	195,135	214,803	194,324	197,596	241,018
Value of raw material worked up £	3,341,707	3,087,460	2,913,409	2,787,891	3,019,592
Value of final output £	6,991,770	6,798,223	6,872,682	6,887,462	7,117,029
Value added in process of manufacture £	3,454,928	3,495,960	3,764,949	3,901,975	3,855,519

The main feature in the history of the brewing industry, which was established at an early date in Australia, has been the change from the small local brewery in every township of moderate size to the large centralized city brewery. This, however, has not been so much in evidence during the period embraced in the above table, the reduction of the number of establishments during recent years being mainly due to amalgamations. The total value of output of breweries in Australia increased from £6,991,770 in 1920-21 to £7,117,029 in 1924-25, but the increase was wholly due to higher

prices, for the quantity of ale and stout brewed decreased during the period, the respective totals for the years 1920–1921 and 1924–25 being 70,235,740 and 67,188,370 gallons. The consumption of ale and stout per head of the population declined slightly in Australia during the past four years, and for 1924–25 the quantity consumed amounted to about 11 gallons.

(iii) *Materials Used and Production.* The table below shows the quantity of raw materials used and the quantity and value of ale and stout brewed in each State during the year 1924–25.

BREWERIES.—MATERIALS USED AND PRODUCTION, 1924–25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. ^b	Tasmania.	Australia.
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RAW MATERIALS USED.

Malt .. bushels	850,326	744,048	209,995	170,088	164,867	53,899	2,193,223
Hops .. lb.	813,957	784,080	209,504	183,916	177,977	76,295	2,245,729
Sugar .. cwt.	107,462	113,729	25,125	25,612	25,709	5,679	303,316

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

Malt .. bushels	34.68	30.88	32.36	30.73	31.73	39.61	32.64
Hops .. lb.	32.20	32.54	32.29	33.23	34.25	56.07	33.42
Sugar .. cwt.	4.38	4.72	3.87	4.63	4.95	4.17	4.51

ALE AND STOUT BREWED.

Quantity	gallons	24,519,876	24,089,435	6,488,405	5,533,982	5,195,998	1,360,674	67,188,370
Value(a)	£	2,622,583	2,479,619	666,234	558,689	559,490	188,368	7,074,983

(a) Exclusive of excise duty.

(b) Year ended 31st December, 1924.

20. *Distilleries.*—The subjoined table gives particulars of distilleries in four States. There are no distilleries in Western Australia or Tasmania.

DISTILLERIES, 1924–25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	Australia.
Number of distilleries	4	10	4	27	45
Number of employees	42	117	76	180	415
Actual horse-power of engines employed	251	572	243	485	1,551
Approx. value of land and buildings	£ 24,033	132,395	41,571	152,860	350,859
Approx. value of plant and machinery	£ 68,071	144,195	108,350	153,767	474,383
Total amount of wages paid during year	£ 11,928	28,333	16,678	32,316	89,255
Value of fuel used	£ 6,369	8,987	7,919	14,886	38,161
Value of raw materials worked up	£ 102,092	55,085	33,203	206,607	396,987
Total value of output	£ 146,807	129,655	108,458	315,274	695,194
Value added in process of manufacture	£ 38,346	65,583	62,336	93,781	260,046

The total quantity of spirit distilled during the year was 5,473,347 proof gallons, while the materials used comprised 787,279 cwt. of molasses, 94,866 bushels of malt, and 7,322,152 gallons of wine.

21. *Tobacco, etc., Factories.*—(i) *Details for each State, 1924–25.* During the year 1924–25 there were twenty-seven establishments in which the manufacture of tobacco, cigars, and cigarettes was carried on. There were no factories engaged in this industry in Queensland or Tasmania.

TOBACCO, CIGAR, AND CIGARETTE FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	S. Aust.	W. Aust. (c)	Australia.
Number of factories	10	13	1	3	27
Number of employees	2,454	1,818	26	123	4,421
Actual horse-power and engines employed	931	711	..	34	1,676
Approx. value of land and buildings	£ 369,827	235,985	(a)	(a)	b 620,694
Approx. value of plant and machinery	£ 316,894	169,970	(a)	(a)	b 497,034
Total amount of wages paid during year	£ 423,051	343,005	(a)	(a)	b 781,471
Value of fuel used	£ 20,356	6,483	(a)	(a)	b 27,172
Value of raw material worked up ..	£ 3,264,793	1,326,182	(a)	(a)	b4,613,357
Total value of output	£ 4,662,652	2,200,459	(a)	(a)	b6,927,087
Value added in process of manufacture	£ 1,377,503	867,794	(a)	(a)	b2,286,558

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

(c) Year ended 31st December, 1924.

(ii) *Development in Australia.* This industry was among the first to be established in Australia. In 1861 New South Wales had eleven 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. The imports into Australia during 1924-25 comprised—manufactured tobacco 645,020 lb., cigars 97,789 lb., and cigarettes 328,503 lb., while the quantities manufactured in Australian factories were respectively 14,978,410 lb., 470,330 lb., and 4,872,711 lb. The following tables show the development of the tobacco manufacturing industry in Australia during recent years :—

TOBACCO, CIGAR, AND CIGARETTE FACTORIES.—AUSTRALIA,
1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	40	36	29	28	27
Number of employees	4,525	4,340	4,319	4,312	4,421
Actual horse-power of engines used	1,186	1,203	1,466	1,609	1,676
Approx. value of land and buildings	£ 490,494	490,414	493,597	531,273	620,694
Approx. value of plant and machinery	£ 369,267	413,119	427,825	478,477	497,034
Total amount of wages paid ..	£ 706,218	724,919	734,071	742,697	781,471
Value of fuel used	£ 18,201	20,354	20,612	18,954	27,172
Value of raw material worked up ..	£ 5,091,272	4,925,066	4,603,218	4,500,304	4,613,357
Value of final output	£ 6,709,298	6,710,757	6,690,701	6,645,451	6,927,087
Value added in process of manufacture	£ 1,599,825	1,765,337	2,066,871	2,126,193	2,286,558

LEAF USED AND PRODUCTION.

	1,000 lb.				
Leaf used	16,636	16,867	17,104	17,104	18,073
Tobacco made	13,268	14,216	14,636	14,145	14,978
Cigars	544	508	483	431	470
Cigarettes	5,324	4,907	4,384	4,794	4,873

Although the manufacturing side of the tobacco industry is so firmly established in Australia, the production of locally-grown leaf is comparatively small, and manufacturers are dependent on imported leaf for the supply of their raw material. The respective quantities of Australian and imported leaf used during 1924-25 were 1,066,763 and 17,006,274 lb.

22. *Woollen, Cotton, and Tweed Mills.*—(i) *Details for each State, 1924-25.* The manufacture of woollens and tweeds was established in Australia at an early period in its history, and was under Government control, the first record in New South Wales dating back to 1801, when a few blankets were made by the convicts; the first record

in Victoria was in 1867. A woollen mill was recently established at Albany in Western Australia, and the results of its operations will be included in the returns for 1925-26. The following table, which gives particulars for 1924-25, shows that the industry is now well established :—

WOOLLEN AND TWEED MILLS, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A. (c)	Tas.	Australia.
Number of factories	12	23	2	2	..	5	49
Number of employees	1,785	5,077	275	204	..	600	7,941
Actual horse-power of engines employed	3,180	10,773	690	420	..	1,242	16,310
Approx. value of land and buildings ..	333,129	1,013,350	(a)	(a)	..	225,095	b 1,620,318
Approx. value of plant and machinery	645,941	2,233,395	(a)	(a)	..	293,535	b 3,297,229
Total amount of wages paid during year	£ 258,194	£ 717,568	(a)	(a)	..	£ 65,129	b 1,102,718
Value of fuel used	£ 32,785	£ 103,532	(a)	(a)	..	£ 21,110	b 165,724
Value of raw material worked up	£ 649,589	£ 2,214,423	(a)	(a)	..	£ 203,680	b 3,197,778
Total value of output	£ 1,083,977	£ 3,433,231	(a)	(a)	..	£ 325,944	b 5,071,124
Value added in process of manufacture	£ 401,603	£ 1,115,276	(a)	(a)	..	£ 101,154	b 1,707,622

(a) Information not available for publication.

(b) Including Queensland and South Australia.

(c) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The progress of woollen and tweed milling in Australia during the last four years is shown in the following table :—

WOOLLEN AND TWEED MILLS.—AUSTRALIA, 1920-21 TO 1924-25.

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	34	36	40	47	49
Number of employees	5,783	6,101	6,928	7,532	7,941
Actual horse-power of engines used	9,617	11,630	12,347	15,406	16,310
Approx. value of land and buildings ..	£ 751,858	£ 940,578	£ 1,131,396	£ 1,426,493	£ 1,620,318
Approx. value of plant and machinery ..	£ 1,378,903	£ 1,849,919	£ 2,428,133	£ 3,043,586	£ 3,297,229
Total amount of wages paid	£ 762,131	£ 842,683	£ 991,801	£ 1,043,298	£ 1,102,718
Value of fuel used	£ 92,691	£ 109,514	£ 127,573	£ 128,487	£ 165,724
Value of raw material worked up	£ 2,090,892	£ 1,940,050	£ 2,511,204	£ 2,824,176	£ 3,197,778
Value of annual output	£ 4,241,964	£ 4,096,808	£ 4,712,964	£ 4,893,657	£ 5,071,124
Value added in process of manufacture ..	£ 2,057,381	£ 2,047,244	£ 2,074,187	£ 1,910,994	£ 1,707,622

(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 during 1924-25 was 4,131,991 yards. In New South Wales 1,834,218 yards of tweed and cloth, and in Victoria 1,898,647 yards were manufactured. The production of flannel amounted to 6,035,901 yards, while blankets, shawls, and rugs to the number of 1,139,376 were manufactured. The output of yarn reported was 3,339,651 lb., most of which was produced in Victoria.

In addition to the woollen and tweed factories, there were 252 hosiery and knitting mills operating throughout Australia during 1924-25. These establishments provided employment for 7,197 persons, of whom 6,033 were females, and the value of their output amounted to £3,785,168.

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 during 1923-24 the first up-to-date mill for the manufacture of cotton goods was erected. There were eight establishments treating cotton in Australia during 1924-25, and these employed 562 hands, while the value of the output was £562,329.

23. **Boot Factories.**—(i) *Details for each State, 1924–25.* Among the manufactories of Australia the boot and shoe industry holds an important place in regard to employment afforded and extent of output. The following table gives particulars of this industry for each State during 1924–25 :—

BOOT AND SHOE FACTORIES, 1924–25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	603	430	32	69	26	12	1,172
Number of employees	6,164	12,099	1,378	866	466	247	21,220
Actual horse-power of engines employed	2,219	3,249	341	341	193	84	6,427
Approx. value of land and buildings £	1,249,007	1,142,870	74,375	125,237	65,332	19,704	2,676,525
Approx. value of plant and machinery £	345,134	605,945	43,870	50,919	23,939	9,672	1,079,479
Total amount of wages paid during year £	920,816	1,886,118	202,279	122,168	65,322	39,174	3,235,877
Value of fuel used £	17,897	41,029	2,325	3,221	1,100	388	65,960
Value of raw material worked up £	1,320,852	2,943,105	306,043	161,681	125,365	50,854	4,908,260
Total value of output £	2,787,375	5,832,625	550,422	332,969	199,569	108,262	9,811,222
Value added in process of manufacture £	1,448,626	2,848,491	241,694	168,067	73,104	57,020	4,837,002

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920–21 to 1924–25.* The progress of the industry in the last four years is shown in the following table :—

BOOT AND SHOE FACTORIES.—AUSTRALIA, 1920–21 TO 1924–25.

Items.	1920–21.	1921–22.	1922–23.	1923–24.	1924–25.
Number of factories	592	744	896	1,030	1,172
Number of employees	16,573	20,390	21,487	21,464	21,220
Actual horse-power of engines used	4,746	5,130	5,837	6,281	6,427
Approx. value of land and buildings £	1,258,361	1,612,781	1,975,873	2,317,210	2,676,525
Approx. value of plant and machinery £	617,721	711,449	881,298	998,200	1,079,479
Total amount of wages paid £	2,198,586	3,050,125	3,302,811	3,295,088	3,235,877
Value of fuel used £	41,077	49,244	56,636	61,504	65,960
Value of raw material worked up £	5,208,627	5,291,027	5,263,889	4,838,929	4,908,260
Value of final output £	8,895,411	10,241,279	10,486,294	9,899,903	9,811,222
Value added in process of manufacture £	3,645,707	4,901,008	5,165,769	4,999,470	4,837,002

The inclusion of boot-repairing establishments in the returns is largely responsible for the increases recorded in the numbers of factories and hands employed in boot factories during the past four years. The output of boots and shoes is increasing, and the production of slippers rose from 1,140,632 pairs to 1,919,021 pairs during the period.

(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, 1924–25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (b)	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Boots and shoes .. pairs	3,715	7,496	778	463	345	156	12,951
Slippers	636	1,167	19	18	73	6	1,919
Uppers (a)	39	16	3	9	2	3	72
VALUE.							
Boots and shoes .. £	2,164,184	4,366,600	501,352	212,355	169,242	100,318	7,514,051
Slippers £	120,960	222,190	5,903	5,181	4,862	2,715	361,811
Uppers (a) £	13,575	5,550	1,529	3,485	1,161	1,095	26,395

(a) Made for other than factory use.

(b) Year ended 31st December, 1924.

24. **Clothing (Tailoring and Slop) Factories.**—(i) *Details for each State, 1924-25.* The importance of this industry in the several States is shown in the following table :—

CLOTHING (TAILORING AND SLOP) FACTORIES, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	530	534	145	150	73	40	1,472
Number of employees	11,015	9,853	3,306	2,506	1,362	558	28,600
Actual horse-power of engines employed	699	608	256	115	113	32	1,823
Approximate value of land and buildings £	1,941,157	1,343,325	366,476	351,944	191,540	97,239	4,291,681
Approximate value of plant and machinery £	141,031	123,085	56,598	28,523	16,241	8,601	374,079
Total amount of wages paid during year £	1,393,508	1,212,870	369,302	285,811	157,327	63,618	3,482,436
Value of fuel used £	19,956	22,778	5,746	6,568	2,646	1,249	58,943
Value of raw material worked up .. £	1,959,552	2,085,605	615,310	417,622	265,870	63,717	5,407,676
Total value of output £	4,170,060	3,965,405	1,233,755	854,769	492,167	165,528	10,881,684
Value added in process of manufacture £	2,190,552	1,857,022	612,699	430,579	223,651	100,562	5,415,065

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The development in the tailoring and slop branch of the clothing industry during the past four years, despite the high range of prices, may be accepted as an indication of the general prosperity of the community. The number of employees rose by 2,797, and increases were recorded in the power used and the capital invested in land, buildings, plant and machinery. It is not possible to measure the growth of the output owing to price fluctuations. Employment in this industry is, however, nearly 2,000 less than the highest pre-war figure. Details for the past five years are as follows :—

**CLOTHING (TAILORING AND SLOP) FACTORIES.—AUSTRALIA,
1920-21 TO 1924-25.**

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	1,272	1,379	1,418	1,440	1,472
Number of employees	25,803	27,616	28,522	28,148	28,600
Actual horse-power of engines used	1,408	1,386	1,617	1,655	1,823
Approx. value of land and buildings .. £	2,753,171	3,230,794	3,445,473	3,899,477	4,291,681
Approx. value of plant and machinery .. £	263,067	290,453	322,347	358,603	374,079
Total amount of wages paid £	2,859,971	3,189,402	3,370,258	3,402,069	3,482,436
Value of fuel used £	44,042	49,525	56,194	56,492	58,943
Value of raw material worked up £	6,020,891	5,978,992	5,521,496	5,257,702	5,407,676
Total value of output £	10,679,919	10,782,182	10,719,900	10,527,577	10,881,684
Value added in process of manufacture .. £	4,614,986	4,753,665	5,142,210	5,213,383	5,415,065

25. **Dressmaking and Millinery Establishments.**—(i) *Details for each State, 1924-25.* Particulars of dressmaking and millinery establishments are given in the following table :—

DRESSMAKING AND MILLINERY ESTABLISHMENTS, 1924-25.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	256	492	48	48	56	22	922
Number of employees	3,750	8,339	810	980	709	235	14,823
Actual horse-power of engines employed	147	473	10	24	39	6	699
Approximate value of land and buildings £	876,843	1,188,265	55,375	95,127	87,848	17,519	2,270,977
Approximate value of plant and machinery £	41,451	103,145	4,732	7,900	7,469	1,405	166,102
Total amount of wages paid during year £	342,137	808,148	67,129	85,894	62,994	16,836	1,383,138
Value of fuel used £	3,658	12,895	356	1,201	582	350	19,042
Value of raw material worked up .. £	549,962	1,716,614	127,620	131,682	103,582	19,355	2,648,815
Total value of output £	1,167,015	3,047,653	213,247	274,080	175,999	42,656	4,920,650
Value added in process of manufacture £	613,395	1,318,144	85,271	141,197	71,835	22,951	2,252,708

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The development of dressmaking and millinery establishments in Australia during the past four years is shown in the following table :—

**DRESSMAKING AND MILLINERY ESTABLISHMENTS.—AUSTRALIA,
1920-21 TO 1924-25.**

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of factories	880	910	922	926	922
Number of employees	16,856	16,572	16,213	15,623	14,823
Actual horse-power of engines used	673	709	693	701	699
Approximate value of land and buildings £	1,392,868	1,579,428	1,732,865	2,047,288	2,270,977
Approximate value of plant and machinery £	150,475	146,814	150,242	155,011	166,102
Total amount of wages paid	£ 1,350,596	1,467,066	1,435,885	1,448,046	1,383,138
Value of fuel used	£ 15,864	17,207	18,252	18,680	19,042
Value of raw material worked up	£ 2,782,042	2,695,834	2,514,140	2,658,051	2,648,815
Value of final output	£ 4,051,519	5,000,412	4,815,441	4,999,412	4,920,650
Value added in process of manufacture £	2,153,613	2,287,371	2,283,049	2,322,681	2,252,793

26. **Electrotyping, Stereotyping, Printing, and Binding Works.**—(i) *Details for each State, 1924-25.* Printing ranks high in importance among the industries of Australia. It affords employment for more than 25,000 employees, and pays nearly £6,000,000 in salaries and wages. During 1924-25 the total value of the output amounted to £13,621,903.

The following table gives particulars of these industries in each State for the year 1924-25 :—

**ELECTROTYPING, STEREOTYPING, PRINTING, AND BINDING ESTABLISHMENTS,
1924-25.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	487	431	129	89	81	21	1,238
Number of employees	9,747	8,073	3,561	1,829	1,352	712	25,279
Actual horse-power of engines employed	6,956	6,137	1,902	1,548	1,216	444	18,203
Approximate value of land and buildings	£ 2,454,481	1,777,475	636,658	442,700	299,580	98,527	5,709,421
Approximate value of plant and machinery	£ 2,488,611	1,857,145	520,505	325,323	302,297	130,606	5,624,487
Total amount of wages paid during year	£ 1,992,977	1,695,194	743,523	351,126	294,816	154,404	5,232,040
Value of fuel used	£ 63,375	50,570	23,985	13,782	8,382	4,952	165,046
Value of raw materials worked up	£ 2,101,519	1,681,452	488,233	323,409	218,582	91,341	4,904,536
Total value of output	£ 5,426,183	4,433,726	1,694,591	936,139	819,762	311,502	13,621,903
Value added in process of manufacture	£ 3,261,289	2,701,704	1,182,373	598,948	592,798	215,209	8,552,321

(a) Year ended 31st December, 1924.

(ii) *Development in Australia, 1920-21 to 1924-25.* The development of electrotyping, stereotyping, printing, and binding in Australia since 1920-21 is shown in the following table :—

**ELECTROTYPING, STEREOTYPING, PRINTING AND BINDING ESTABLISHMENTS.—
AUSTRALIA, 1920-21 TO 1924-25.**

Items.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Number of establishments	1,132	1,175	1,203	1,194	1,238
Number of employees	23,053	23,992	25,857	25,162	25,279
Actual horse-power of engines used	12,534	13,257	13,262	17,225	18,203
Approximate value of land and buildings £	3,976,321	4,219,547	5,134,668	5,260,806	5,709,421
Approximate value of plant and machinery £	3,392,044	3,849,895	4,613,369	5,132,411	5,624,487
Total amount of wages paid	£ 4,083,732	4,557,165	5,182,861	5,253,593	5,232,040
Value of fuel used	£ 126,657	135,188	146,889	148,927	165,046
Value of raw materials worked up	£ 6,526,081	6,434,932	5,658,994	4,879,459	4,904,536
Value of final output	£ 13,845,574	14,408,689	15,382,659	14,577,413	13,621,903
Value added in process of manufacture £	7,192,836	7,838,569	9,576,776	9,549,027	8,552,321

Since 1920–21 the expansion in this industry has necessitated the employment of 2,000 additional workers and nearly 6,000 extra horse-power units, while the salaries bill increased by more than £1,000,000. Fluctuations in prices obscure the actual development, but the value added in process of manufacture increased from £7,192,836 to £8,552,321.

27. **Coach and Wagon Building Works.**—This industry forms one of the principal branches of manufacture in Class XI. Particulars of the operations of these establishments in 1924–25 are given in the subjoined table :—

COACH AND WAGON BUILDING WORKS, 1924–25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	204	286	52	69	45	24	680
Number of employees	1,198	2,575	356	560	315	212	5,216
Actual horse-power of engines employed	759	1,287	257	466	177	99	3,045
Approximate value of land and buildings £	294,226	403,960	60,165	86,930	44,218	34,460	923,959
Approximate value of plant and machinery £	75,935	121,105	16,383	26,781	15,877	7,461	263,542
Total amount of wages paid during year £	189,203	465,510	50,480	85,147	48,971	29,192	868,503
Value of fuel used £	10,949	15,110	1,489	7,486	4,126	1,490	40,650
Value of raw material worked up .. £	205,734	455,815	65,966	116,443	60,366	28,943	933,267
Total value of output £	526,328	1,152,252	150,980	250,476	142,548	82,717	2,305,301
Value added in process of manu- facture £	309,645	681,327	83,525	126,547	78,056	52,284	1,331,384

(a) Year ended 31st December, 1924.

28. **Cycle and Motor Works.**—This industry has made rapid progress in recent years owing to the increasing use of motor-propelled vehicles. The imposition of a heavy tariff duty on imported bodies has had the effect of establishing a local body-building industry, and the majority of cars now purchased in Australia are fitted with locally-made bodies. The classification of the various branches of this industry is not uniform in the States, consequently combined results are given in the following table. An endeavour is being made to obtain separate particulars in respect of motor-repairing and assembling, motor-body building and repairing, and motor cycle and bicycle building and repairing.

CYCLE AND MOTOR WORKS, 1924–25.

Item.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	675	505	82	124	76	34	1,496
Number of employees	6,354	3,867	1,585	4,436	680	313	17,235
Actual horse-power of engines employed	3,266	1,768	490	3,496	338	135	9,493
Approximate value of land and buildings £	2,447,985	1,041,180	331,487	690,333	240,052	109,206	4,860,243
Approximate value of plant and machinery £	470,833	268,320	60,065	311,900	40,040	16,503	1,167,661
Total amount of wages paid during year £	1,160,130	681,319	253,513	838,913	112,663	58,528	3,105,066
Value of fuel used £	35,217	25,016	5,093	23,959	2,744	1,487	93,516
Value of raw material worked up £	978,577	483,711	361,312	1,250,169	271,788	16,740	3,362,297
Total value of output £	2,732,272	1,625,386	1,402,173	2,464,705	451,522	91,087	8,767,145
Value added in process of manu- facture £	1,718,478	1,116,659	1,035,768	1,190,577	176,990	72,860	5,311,332

(a) Year ended 31st December, 1924.

29. **Furniture and Cabinet Making and Billiard Table Making Factories.**—These industries constitute the principal manufactures in Class XIII. The following table gives particulars for each State :—

FURNITURE AND CABINET MAKING AND BILLIARD TABLE MAKING FACTORIES, 1924-25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	259	326	79	53	40	25	782
Number of employees	3,741	3,528	1,274	984	577	257	10,361
Actual horse-power of engines employed	3,239	2,718	1,280	1,052	596	394	9,270
Approximate value of land and buildings £	682,346	666,825	154,629	103,721	101,048	32,795	1,741,364
Approximate value of plant and machinery £	205,890	162,790	66,949	47,460	28,255	21,235	532,579
Total amount of wages paid during year £	685,849	611,226	233,864	174,034	115,411	41,460	1,861,844
Value of fuel used £	16,287	19,003	6,233	5,371	2,524	1,117	50,535
Value of raw material used £	1,006,443	759,262	325,442	191,443	135,320	28,808	2,446,718
Total value of output £	2,051,307	1,767,538	675,322	458,340	283,825	95,386	5,331,718
Value added in process of manufacture £	1,028,577	989,273	343,647	261,526	145,981	65,461	2,834,465

(a) Year ended 31st December, 1924.

30. Electric Light and Power Works.—Particulars of the electric light and power works of Australia are given in the subjoined table. In 1920-21 there were 260 establishments employing 4,044 hands; in 1924-25 the figures had increased to 298 establishments and 6,075 hands, while the production of electric light and power rose during the four years from 647,938,875 to 1,536,853,348 British units.

ELECTRIC LIGHT AND POWER WORKS, 1924-25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories	125	84	26	22	30	11	298
Number of employees	1,802	2,011	704	1,079	268	211	6,075
Actual horse-power of engines employed	182,316	205,777	50,598	73,782	36,822	72,666	626,961
Approximate value of land and buildings £	2,237,949	1,730,865	219,579	546,544	175,736	10,634	4,921,307
Approximate value of plant and machinery £	5,280,887	7,900,455	1,961,153	1,810,688	609,845	3,254,702	20,817,730
Total amount of wages paid during year £	488,125	549,080	177,258	278,499	64,760	47,458	1,605,180
Value of fuel used £	1,233,573	684,785	129,853	210,278	142,478	7,786	2,408,753
Total value of output £	3,573,374	2,382,582	744,858	802,971	338,198	316,932	8,158,915

(a) Year ended 31st December, 1924.

31. Gas and Coke Works.—(i) *Details for each State, 1924-25.* Gas works are in operation in nearly all the chief towns in Australia. In New South Wales there are fourteen and in Queensland two coke factories which are worked as separate industries. The subjoined table gives particulars of gas and coke works in each State for the year 1924-25 :—

GAS AND COKE WORKS, 1924-25.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (c)	Tas.	Australia.
Number of factories	61	45	18	8	4	2	138
Number of employees	2,475	2,464	649	700	72	134	6,494
Actual horse-power of engines employed	7,279	2,009	547	1,366	225	140	11,566
Approximate value of land and buildings £	1,042,611	466,115	233,588	(a)	76,568	(a)	1,880,024
Approximate value of plant and machinery £	3,627,636	1,970,100	1,013,726	(a)	115,904	(a)	6,756,629
Total amount of wages paid during year £	627,014	667,754	155,441	(a)	19,184	(a)	1,670,436
Value of fuel used £	222,620	10,622	9,902	(a)	6,947	(a)	291,232
Value of raw material used £	1,857,315	809,709	151,045	(a)	37,484	(a)	3,089,508
Total value of output £	3,882,896	2,087,358	509,537	(a)	87,901	(a)	6,725,094
Value added in process of manufacture £	1,802,961	1,267,027	348,590	(a)	43,470	(a)	3,869,354

(a) Information not available for publication.

(b) Including South Australia and Tasmania.

(c) Year ended 31st December, 1924.

(ii) *Coal Used and Production, 1924-25.* The following table shows the quantity and value of the production of gas and coke works in each State during the year 1924-25 :—

GAS AND COKE WORKS.—COAL USED AND PRODUCTION, 1924-25.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
COAL USED.							
Coal tons	1,653,187	406,868	106,476	(b)	13,534	(b)	c2,282,070
PRODUCTS.							
Gas .. 1,000 cubic feet	9,786,898	5,608,313	1,308,498	(b)	217,117	(b)	c18,377,039
Coke tons	1,063,690	266,436	61,734	(b)	6,682	(b)	c1,462,021
VALUE.							
Gas £	1,879,917	1,540,000	515,492	(b)	72,761	(b)	c4,510,742
Coke £	1,500,453	266,436	59,795	(b)	10,982	(b)	c1,944,832

(a) Year ended 31st December, 1924.

(b) Not available for publication.

(c) Including South Australia and Tasmania.

In order to cope with the general industrial expansion, the production of gas increased from 16,757,216 cubic feet in 1920-21 to 18,377,039 cubic feet in 1924-25, while the output of coke rose from 1,278,939 to 1,462,021 tons during the same period.