

CHAPTER IX.

MANUFACTURING INDUSTRY.

§ 1. General.

1. **Introduction.**—A complete statistical account of the growth of the manufacturing industry in Australia cannot be given owing to the fact that prior to 1906 the necessary statistics were not collected by the several States on a definite and uniform basis. A standard classification of manufacturing industries was formulated at a conference of Australian Statisticians in 1902 and adopted by all States in 1906. Figures on this basis were prepared for 1907 and subsequent years.

Prior to the federation of the Australian States in 1901, the manufacturing industry in Australia was primarily engaged in the production of goods for local use, mainly of food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.

After federation, steady expansion of the manufacturing industry resulted from the removal of interstate trade barriers and the operation of a uniform protective tariff. This expansion was quickened as a result of the demands created by the 1914-18 War, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development took place, iron and steel works and many related and subsidiary industries were established, extensive manufacture of machinery was begun, and a wide range of high-grade products—textiles, metal manufactures, electrical goods, etc.—was added to the list of commodities made in Australia.

A check was made in this expansion by the world-wide economic depression of 1929-33, but subsequently returning general prosperity and the opportunities opened to local manufacturers by import restrictions, together with depreciation of Australian currency, gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties and primage were reduced, but without materially prejudicing the progress of local manufactures.

When war broke out in September, 1939, Australia became a major source of supply for British countries east of Suez and in meeting these demands, as well as those arising locally because of interruption of oversea importations, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibilities for supplies in the South-west Pacific Area, gave added impetus to these developments, and manufacturing in Australia outstripped all previous levels.

The cessation of war production and the transition of industry to a peace-time basis temporarily retarded progress, but after 1945-46 there was renewed expansion of the manufacturing industries to which an inflow of capital from overseas contributed.

2. **Decentralization of Manufacturing Industries.**—Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Commonwealth and State Ministers in August, 1945 to formulate a national policy for the decentralization of secondary industries. It was agreed that the State Governments should seek to promote decentralization along the lines appropriate to each, providing necessary services, assistance and concessions to the full extent of State resources. The Commonwealth undertook to collaborate in all matters of Commonwealth industrial policy affecting the development and location of industry, to investigate in association with the States the prospects of developing secondary industries in selected areas, to advise the States of developments desirable for defence purposes, and to provide financial assistance for projects of national importance where the cost would be great relative to the State's resources.

The Commonwealth has assisted decentralization by allocating to private industry munitions and other defence buildings in decentralized areas and accommodating migrants in provincial centres with prospects of development. Oversea firms contemplating establishment in Australia are encouraged to select locations in rural areas or the less industrialized States.

3. **Commonwealth Division of Industrial Development.**—The functions of the Division of Industrial Development (formed in February, 1945 as the Secondary Industries Division of the Department of Post-war Reconstruction) were extended in August, 1948 to include the encouragement of industrial development, the exercising of Commonwealth responsibilities for the decentralization of industry, the promotion of industrial efficiency (especially the study of technical, production and managerial problems and the dissemination and application of new knowledge and methods), the encouragement of the development of technological institutes and the publication of studies of the structure and operation of Australian manufacturing industries. The Division was attached to the Ministry of National Development when formed in March, 1950 to plan the development of national resources and to promote decentralization and regional development in conjunction with the States.

At the same time the Secondary Industries Commission which was established in 1943 to investigate post-war uses for munitions factories, to plan for the transition of secondary industries from war-time to peace-time activities, and generally to seek to increase industrial efficiency and to explore opportunities for new industries was disbanded in April, 1950.

4. **Customs and Excise Tariffs and Bounties on Manufactures.**—Particulars of Australian customs and excise tariffs, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia, are given in Chapter VIII.—Trade.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The Statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

5. **Scientific Research and Standardization.**—(i) *The Commonwealth Scientific and Industrial Research Organization.* The function of this Organization, reference to which also appears in Chapter XXIX., is to initiate and conduct research in connexion with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

(ii) *The Standards Association of Australia.* This Association, which is referred to also in Chapter XXIX., acts as the national standardizing organization of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry, and standards are evolved and accepted by general consent.

(iii) *The National Association of Testing Authorities.* The National Association of Testing Authorities organizes national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily in respect of tests within their competence and the Association ensures the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

6. *Definitions in Factory Statistics.*—The statistics relating to factories have been compiled from returns supplied annually by manufacturers to, and tabulated by, the several State Statisticians, in the terms of the Statistical Acts of the States. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries) but does not cover smallgoods makers, laundries, furriers, photography studios, florists and seedsmen, and most abattoirs. It should be noted that details relating to small establishments not classified for statistical purposes as factories are not included in the figures contained in this chapter.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry if practicable.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc., of their employees, the value of premises and equipment, the horse-power of machinery, the value, and in most cases the quantities, of raw materials and fuel used, and quantities and values of principal materials and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income or expenditure of factories nor to show the profits or losses of factories collectively or individually.

The *average number of persons* employed is quoted on two different bases: the average during the period of operation and the average over the whole year. Of these the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

Working proprietors are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the goods at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article.

The *value of production* is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel, and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges).

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the sawmills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

In the special case of Government factories and workshops, the value of output is, in most cases, estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs, including salaries and wages paid.

7. **Classification of Factories.**—In the compilation of statistical data relating to factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian Statisticians in 1902 and revised from time to time, was used until the year 1929-30. A new classification was introduced in 1930-31, and this in turn was revised and extended (principally in regard to the placement and composition of sub-classes) in accordance with decisions of the Statisticians' Conference, 1945.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or total factory activity. Particulars of certain of the sub-classes shown below are published in the latter portion of this chapter and full details for all sub-classes may be found in the *Secondary Industries Bulletin*, published annually.

The principal classes and sub-classes in the current classification of factories are as follows :—

CLASSIFICATION OF FACTORIES.

CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.
Briquetting and Pulverized Coal.
Carbide.
Lime, Plaster of Paris, Asphalt.
Fibrous Plaster and Products.
Marble, Slate, etc.
Cement.
Asbestos Cement Sheets, etc.
Other Cement Goods.
Other.

CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles, Fire Bricks and Fire-clay Goods.
Earthenware, China, Porcelain, Terra-cotta.
Glass (other than Bottles).
Glass Bottles.
Other.

CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE.

Industrial and Heavy Chemicals and Acids.
Pharmaceutical and Toilet Preparations.
Explosives.
White Lead, Paints, Varnish.
Oils, Vegetable.
Oils, Mineral.
Oils, Animal.
Boiling Down, Tallow Refining.
Soap and Candles.
Chemical Fertilizers.
Inks, Polishes, etc.
Matches.
Other.

CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES.

Smelting, Converting, Refining and Rolling of Iron and Steel.
Foundries—Ferrous.
Plant, Equipment and Machinery.
Other Engineering:
Extracting and Refining of other Metals, Alloys.
Electrical Machinery, Cables and Apparatus.
Construction and Repair of Vehicles (no groups).
Ship and Boat Building and Repairing, Marine Engineering.
Cutlery and Small Hand Tools.
Agricultural Machines and Implements.
Non-Ferrous Metals—
Rolling and Extrusion.
Foundries, Casting, etc.
Iron and Steel Sheets.
Sheet Metal Working, Pressing, and Stamping.
Pipes, Tubes and Fittings—Ferrous.
Wire and Wire Netting (including Nails).
Stoves, Ovens and Ranges.
Gas Fittings and Meters.
Lead Mills.

CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES—continued.

Sewing Machines.
Arms, Ammunition (excluding Explosives).
Wireless and Amplifying Apparatus.
Other Metal Works.

CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE.

Jewellery.
Watches and Clocks (including Repairs).
Electroplating (Gold, Silver, Chromium).

CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton Ginning.
Cotton Spinning and Weaving.
Wool—Carding, Spinning, Weaving.
Hosiery and other Knitted Goods.
Silk, Natural.
Rayon, Nylon and other Synthetic Fibres.
Flax Mills.
Rope and Cordage.
Canvas Goods, Tents, Tarpaulins, etc.
Bags and Sacks.
Other.

CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furriers and Fur Dressing.
Woolscouring and Fellmongery.
Tanning, Currying, and Leather Dressing.
Saddlery, Harness, Whips.
Machine Belting.
Bags, Trunks, etc.

CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready-made Clothing.
Waterproof and Oilskin Clothing.
Dressmaking.
Millinery.
Shirts, Collars, Underclothing.
Foundation Garments.
Handkerchiefs, Ties, Scarves.
Hats and Caps.
Gloves.
Boots and Shoes (not rubber).
Boot and Shoe Repairing.
Boot and Shoe Accessories.
Umbrellas and Walking Sticks.
Dyeworks and Cleaning.
Other.

CLASS IX.—FOOD, DRINK AND TOBACCO.

Flour Milling.
Cereal Foods and Starch.
Animal and Bird Foods.
Chaffcutting and Corn Crushing.
Bakeries (including Cakes and Pastry).
Biscuits.
Sugar Mills.

CLASS IX.—FOOD, DRINK AND TOBACCO—
continued.

Sugar Refining.
Sugar Confectionery (including Chocolate).
Jam, Fruit and Vegetable Canning.
Pickles, Sauces, Vinegar.
Bacon Curing.
Butter Factories.
Cheese Factories.
Condensed and Dried Milk Factories.
Margarine.
Meat and Fish Preserving.
Condiments, Coffee, Spices, etc.
Ice and Refrigerating.
Salt Refining.
Aerated Waters, Cordials, etc.
Breweries.
Distilleries.
Wine Making.
Cider and Perry Making.
Malting.
Bottling.
Tobacco, Cigars, Cigarettes, Snuff.
Dehydrated Fruit and Vegetables.
Ice-cream.
Sausage Skins.
Arrowroot.
Other.

CLASS X.—SAWMILLS, JOINERY, BOXES, ETC.,
WOOD TURNING AND CARVING.

Sawmills.
Plywood and Veneer Mills.
Bark Mills.
Joinery.
Cooperage.
Boxes and Cases.
Basketware and Wickerware (including Sea-grass and Bamboo Furniture).
Perambulators.
Wall and Ceiling Boards (not Plaster or Cement).
Other.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.

Billiard Tables, Cabinet and Furniture Making and Upholstery.
Bedding and Mattresses.
Furnishing Drapery, etc.

CLASS XII.—FURNITURE OF WOOD, BEDDING,
ETC.—*continued.*

Picture Frames.
Blinds.
Other.

CLASS XIII.—PAPER, STATIONERY, PRINTING,
BOOKBINDING, ETC.

Newspapers and Periodicals.
Printing—
Government.
General, including Bookbinding.
Manufactured Stationery.
Sterotyping and Electrotyping.
Process and Photo Engraving.
Cardboard Boxes, Cartons and Containers.
Paper Bags.
Paper Making.
Pencils, Penholders, Chalks, Crayons.
Other.

CLASS XIV.—RUBBER.

Rubber Goods and Tyres Made.
Tyre Retreading and Repairing.

CLASS XV.—MUSICAL INSTRUMENTS

Gramophones and Gramophone Records.
Pianos, Piano-Players, Organs.
Other.

CLASS XVI.—MISCELLANEOUS PRODUCTS.

Linoleum, Leather Cloth, Oil Cloth, etc.
Bone, Horn, Ivory and Shell.
Plastic Moulding and Products.
Brooms and Brushes.
Optical Instruments and Appliances.
Surgical and other Scientific Instruments and Appliances.
Photographic Materials, including Developing and Printing.
Toys, Games and Sports Requisites.
Artificial Flowers.
Other.

CLASS XVII.—HEAT, LIGHT, AND POWER

Electric Light and Power.
Gas Works.

8. Factory Development since 1901—Australia.—The development of the manufacturing industries in Australia at intervals since 1901 is summarized in the following table :—

FACTORIES : AUSTRALIA.

Year.	Fac- tories.	Employ- ment.(a)	Salaries and Wages Paid.(b)	Value of—				
				Materials and Fuel Used.	Output.	Pro- duction. (c)	Land and Build- ings.	Plant and Ma- chinery.
	No.	'000.	£'000. (d)	£'000. (d)	£'000. (d)	£'000. (d)	£'000. (d)	£'000. (d)
1901	11,143	198	11,143	11,143	11,143	11,143	11,143	11,143
1911	14,455	312	27,528	81,763	133,022	51,259	32,701	31,516
1920-21	17,113	367	62,932	213,579	323,993	110,434	60,831	68,655
1930-31	21,751	339	62,455	172,489	290,799	118,310	112,211	124,498
1938-39	26,941	565	106,743	297,003	500,420	203,417	130,920	143,662
1945-46	31,184	745	205,819	515,324	867,648	352,324	186,939	185,545
1948-49	40,070	890	339,219	856,609	1,425,378	568,769	232,740	246,494
1949-50	41,596	917	385,797	983,924	1,645,456	661,532	259,549	285,602
1950-51	43,147	960	491,718	1,306,963	2,150,835	843,872	302,785	336,615
1951-52	45,844	978	611,789	1,609,839	2,634,706	1,024,867	359,490	410,144
1952-53	47,740	933	635,245	1,637,142	2,720,004	1,082,862	414,446	493,534
1953-54	49,576	990	705,137	1,868,431	3,095,476	1,227,045	484,431	580,715

(a) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (b) Excludes drawings by working proprietors. (c) Value of output less value of materials and fuel, etc., used. (d) Not available.

Single year tables in this issue relate to the year 1953-54 and in the immediately preceding issue to the year 1951-52. Corresponding tables for 1952-53 may be found in the *Secondary Industries Bulletin* 1952-53, No. 47.

§ 2. Number of Factories.

1. Number of Factories in each State.—The following table shows the number of factories operating in each State in the years 1938-39 and 1948-49 to 1953-54 :—

FACTORIES : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	9,464	9,250	3,087	2,067	2,129	944	26,941
1948-49 ..	16,087	12,702	4,083	2,927	2,925	1,346	40,070
1949-50 ..	16,346	13,231	4,494	3,046	3,023	1,456	41,596
1950-51 ..	17,129	13,504	4,776	3,141	3,111	1,486	43,147
1951-52 ..	18,144	14,758	4,918	3,245	3,267	1,512	45,844
1952-53 ..	19,251	15,154	5,068	3,339	3,424	1,504	47,740
1953-54 ..	20,199	15,533	5,199	3,577	3,523	1,545	49,576

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during 1938-39 and 1949-50 to 1953-54 classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902. Details of some of the principal industries included in the table will be found in § 11, page 359.

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
I. Treatment of Non-metaliferous Mine and Quarry Products ..	564	1,126	1,235	1,316	1,276	1,280
II. Bricks, Pottery, Glass, etc. ..	471	561	583	601	623	639
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	666	1,006	1,020	1,049	1,090	1,099
IV. Industrial Metals, Machines, Conveyances ..	7,255	12,362	13,106	14,513	15,672	16,868
V. Precious Metals, Jewellery and Plate ..	290	619	629	662	681	720
VI. Textiles and Textile Goods (not Dress)	611	1,155	1,190	1,246	1,270	1,336
VII. Skins and Leather (not Clothing or Footwear) ..	533	751	761	785	778	783
VIII. Clothing (except Knitted) ..	4,314	6,620	6,684	6,989	7,036	7,260
IX. Food, Drink and Tobacco ..	5,202	6,796	6,865	7,033	7,248	7,379
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	2,822	4,893	5,165	5,546	5,790	5,769
XI. Furniture of Wood, Bedding, etc. ..	1,149	1,820	1,936	2,052	2,157	2,180
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,816	1,981	2,010	2,084	2,121	2,179
XIII. Rubber ..	299	404	411	430	446	465
XIV. Musical Instruments ..	34	59	66	68	69	75
XV. Miscellaneous Products ..	413	985	1,032	1,039	1,035	1,095
Total, Classes I. to XV. ..	26,439	41,138	42,693	45,413	47,292	49,127
XVI. Heat, Light and Power ..	502	458	454	431	448	449
Grand Total ..	26,941	41,596	43,147	45,844	47,740	49,576

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. Except for the two war years 1941-42 and 1942-43, when there were decreases, the number of factories increased each year from 1931-32 to 1953-54; in the latter year the number of factories in Australia reached the record total of 49,576 or 84.0 per cent. greater than in 1938-39.

(ii) *States, 1953-54.* The following table shows the number of factories in each State classified according to the nature of the industry :—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, 1953-54.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	427	427	88	168	119	51	1,280
II. Bricks, Pottery, Glass, etc. ..	308	150	54	60	50	17	639
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	543	340	66	74	52	24	1,099
IV. Industrial Metals, Machines, Conveyances ..	7,010	5,101	1,737	1,327	1,264	429	16,868
V. Precious Metals, Jewellery and Plate ..	317	240	41	50	66	6	720
VI. Textiles and Textile Goods (not Dress) ..	477	731	31	45	40	12	1,336
VII. Skins and Leather (not Clothing or Footwear) ..	351	294	55	42	32	9	783
VIII. Clothing (except Knitted) ..	3,304	2,560	536	381	407	72	7,260
IX. Food, Drink and Tobacco ..	2,675	2,089	1,051	675	585	304	7,379
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	2,265	1,411	873	315	440	465	5,769
XI. Furniture of Wood, Bedding, etc. ..	765	709	290	161	172	83	2,180
XII. Paper, Stationery, Printing, Book-binding, etc. ..	917	702	187	133	117	33	2,179
XIII. Rubber ..	176	133	63	46	28	19	465
XIV. Musical Instruments ..	35	24	5	6	5	..	75
XV. Miscellaneous Products ..	506	431	52	47	49	10	1,095
Total Classes I. to XV. ..	20,076	15,432	5,129	3,530	3,426	1,534	49,127
XVI. Heat, Light and Power ..	123	101	70	47	97	11	449
Grand Total ..	20,199	15,533	5,199	3,577	3,523	1,545	49,576

§ 3. Classification of Factories according to Number of Persons Employed.

1. *General.*—The size classification of factories is based on the average weekly number of persons employed during the period of operation (including working proprietors). Prior to 1945-46 there was no dissection of the "over 100 employees" group, but for that and subsequent years this group was subdivided into the seven size groups as shown in the table below.

2. *States, 1953-54.*—The following table shows, for each State, the number of factories classified according to the average number of persons employed :—

FACTORIES : CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1953-54.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Aust.
NUMBER OF FACTORIES.							
Under 4 ..	7,788	5,474	1,714	1,128	1,559	640	18,303
4 ..	1,655	1,251	496	329	166	162	4,059
5 to 10 ..	5,043	3,841	1,480	960	888	391	12,603
11 to 20 ..	2,646	2,179	686	533	454	168	6,666
21 to 50 ..	1,825	1,660	495	371	279	116	4,746
51 to 100 ..	648	572	158	132	110	37	1,657
101 to 200 ..	322	307	85	63	44	15	836
201 to 300 ..	92	109	50	28	14	6	299
301 to 400 ..	44	41	13	8	6	1	113
401 to 500 ..	34	30	6	7	..	3	80
501 to 750 ..	43	39	8	7	1	2	100
751 to 1,000 ..	23	12	4	3	1	1	44
Over 1,000 ..	36	18	4	8	1	3	70
Total ..	20,199	15,533	5,199	3,577	3,523	1,545	49,576

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

FACTORIES : CLASSIFICATION OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1953-54.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4	14,927	10,725	3,600	2,408	3,237	1,292	36,189
4	6,620	5,004	1,984	1,316	664	648	16,236
5 to 10	34,850	26,824	10,258	6,667	5,856	2,594	87,149
11 to 20	38,492	32,035	10,025	7,652	6,486	2,463	97,153
21 to 50	57,343	52,602	15,652	11,840	8,789	3,671	149,897
51 to 100	45,173	40,617	10,814	9,420	7,338	2,571	115,933
101 to 200	44,734	42,525	11,765	8,478	5,879	1,960	115,341
201 to 300	22,512	26,975	12,121	6,921	3,546	1,411	73,486
301 to 400	15,204	14,195	4,358	2,832	2,045	350	38,984
401 to 500	15,066	13,328	2,715	3,133	..	1,096	35,338
501 to 750	26,192	24,003	4,966	4,391	566	1,343	61,461
751 to 1,000	20,368	10,588	3,472	2,666	876	917	38,887
Over 1,000	64,363	33,833	7,024	18,324	2,755	4,768	131,067
Total	405,844	333,254	98,754	86,048	48,037	25,184	997,121
Average per Factory	20.09	21.46	19.00	24.06	13.64	16.30	20.11

3. Australia, 1938-39 and 1948-49 to 1953-54.—In the following table factories in Australia are classified according to the number of persons employed in conformity with the practice prior to 1945-46.

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS EMPLOYED, AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.
1938-39—								
Number	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average per establish- ment .. ..	..	5.89	..	42.60	..	287.55	..	21.23
1948-49—								
Number	32,394	200,889	6,226	257,204	1,450	439,595	40,070	897,688
Average per establish- ment .. ..	..	6.20	..	41.31	..	303.17	..	22.40
1949-50—								
Number	33,673	207,600	6,442	266,027	1,481	455,187	41,596	928,814
Average per establish- ment .. ..	..	6.17	..	41.37	..	307.16	..	22.33
1950-51—								
Number	34,885	214,044	6,665	274,621	1,597	488,245	43,147	976,910
Average per establish- ment .. ..	..	6.14	..	41.20	..	305.84	..	22.65
1951-52—								
Number	37,634	224,763	6,635	271,611	1,575	489,579	45,844	985,953
Average per establish- ment .. ..	..	5.97	..	40.94	..	310.84	..	21.51
1952-53—								
Number	40,066	230,549	6,234	257,099	1,440	453,657	47,740	941,305
Average per establish- ment .. ..	..	5.75	..	41.24	..	315.04	..	19.72
1953-54—								
Number	41,631	236,727	6,403	265,830	1,542	494,564	49,576	997,121
Average per establish- ment .. ..	..	5.69	..	41.52	..	320.73	..	20.11

§ 4. Power Equipment in Factories.

1. **General.**—In 1936-37 statistics of power equipment in factories were collected on a basis different from that previously in use. Information now obtained relates to the "rated horse-power" of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of Central Electric Stations are collected in greater detail. To avoid duplication it is essential that some distinction should be made between Central Electric Stations and other classes of industries. In the following tables Central Electric Stations have been treated separately from other factories.

In para. 2 below, 555 factories are shown in 1953-54 as using no power other than hand-power, the distribution of these factories among the various industries being as follows:—Fibrous Plaster and Products, 33; Galvanized Ironworking, Tinsmithing, 23; Tailoring and Ready-made Clothing, 128; Dressmaking, 26; Millinery, 13; Bakeries, 56; Cabinet and Furniture Making, 12; all other industries, 264.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories using power-driven machinery, those using manual labour only, and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1953-54:—

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1953-54.

State.	Number of Establishments.(a)			Rated Horse-power of Engines and Motors.(a)	
	Using Power.	Others.	Total.	Ordinarily in use.(b)	In Reserve or Idle (omitting obsolete).
New South Wales ..	20,089	26	20,115	1,598,121	290,824
Victoria ..	15,362	104	15,466	1,089,697	155,315
Queensland ..	4,976	169	5,145	426,868	55,672
South Australia ..	3,444	89	3,533	295,291	39,843
Western Australia ..	3,293	137	3,430	169,694	24,566
Tasmania ..	1,506	30	1,536	193,611	25,118
Australia ..	48,670	555	49,225	3,773,282	591,338

(a) Includes Gas Works but excludes Central Electric Stations.

(b) Excludes motors driven by electricity generated by factories.

3. **Rated Horse-power of Engines and Electric Motors Ordinarily in Use.**—(i) *According to Type, States.* Particulars of the types and the total rated horse-power of engines, etc., ordinarily in use in each State are given below:—

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1953-54.

State.	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
N.S.W. ..	100,496	85,536	1,300	48,097	47,809	202	1,314,681	75,737	1,598,121
Victoria ..	24,516	42,467	1,680	23,950	19,629	1,317	976,138	75,070	1,089,697
Queensland ..	92,402	33,620	3,584	14,921	15,879	..	266,462	75,476	426,868
S. Australia ..	6,984	9,150	1,537	4,636	11,157	10	261,817	22,069	295,291
W. Australia ..	11,002	130	355	9,482	13,786	..	134,939	7,480	169,694
Tasmania ..	2,133	11	1	8,833	1,033	242	181,358	85	193,611
Australia ..	237,533	170,914	8,157	109,919	109,293	1,771	3,135,395	255,917	3,773,282

(a) Includes Gas Works but excludes Central Electric Stations.

(b) Excludes Particulars in column (c).

(ii) *According to Type, Australia.* In the following table details of the total rated horse-power of the various types of engines in use are given for Australia for the years 1938-39, and 1948-49 to 1953-54.

FACTORIES(a) : TYPES AND TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, AUSTRALIA.

Year.	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
1938-39 ..	268,409	84,149	32,916	17,971	55,799	1,616	1,017,912	179,890	1,478,772
1948-49 ..	229,953	120,289	16,024	55,158	72,165	1,515	2,249,360	177,296	2,744,464
1949-50 ..	232,047	135,217	15,035	67,986	92,151	1,703	2,421,174	186,566	2,965,313
1950-51 ..	230,664	140,145	15,879	91,415	135,260	1,882	2,635,713	181,788	3,250,958
1951-52 ..	232,512	149,435	13,684	122,704	160,142	1,826	2,764,321	205,729	3,444,624
1952-53 ..	232,570	171,824	10,268	109,172	150,342	1,666	2,913,521	214,617	3,589,363
1953-54 ..	237,533	170,914	8,457	109,919	109,293	1,771	3,135,395	255,917	3,773,282

(a) Includes Gas Works but excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1953-54.* The next table shows the total rated horse-power of engines and electric motors ordinarily in use in the various classes of industry in each State.

FACTORIES(a) : TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1953-54.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metallic ferous Mine and Quarry Products	70,849	45,234	13,324	16,711	10,809	13,581	170,508
II. Bricks, Pottery, Glass, etc. . .	45,415	29,481	8,378	7,137	9,838	1,776	102,025
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	96,179	88,470	8,744	15,885	12,178	3,571	225,027
IV. Industrial Metals, Machines, Conveyances	760,284	327,908	88,819	132,646	45,617	44,432	1,399,706
V. Precious Metals, Jewellery and Plate	4,527	5,932	453	1,020	614	68	12,614
VI. Textiles and Textile Goods (not Dress)	52,151	90,358	5,454	7,491	2,601	5,311	163,366
VII. Skins and Leather (not Cloth- ing or Footwear)	18,585	20,179	5,297	5,198	2,486	484	52,229
VIII. Clothing (except Knitted) ..	24,496	27,640	3,825	3,175	2,129	716	61,981
IX. Food, Drink and Tobacco ..	199,795	173,700	180,430	51,639	32,644	17,269	655,477
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	166,584	111,701	86,841	27,900	39,819	32,576	465,421
XI. Furniture of Wood, Bedding, etc.	17,616	17,713	7,726	6,647	4,121	1,832	55,655
XII. Paper, Stationery, Printing, Bookbinding, etc.	58,096	78,690	8,027	13,488	4,569	71,166	234,036
XIII. Rubber	46,749	42,608	6,922	2,965	535	381	100,160
XIV. Musical Instruments	2,279	595	44	13	7	..	2,938
XV. Miscellaneous Products ..	19,174	19,748	450	1,850	525	337	42,084
Total, Classes I. to XV. ..	1,582,779	1,079,957	424,734	293,765	168,492	193,500	3,743,227
XVI. Gas Works	15,342	9,740	2,134	1,526	1,202	111	30,055
Grand Total	1,598,121	1,089,697	426,868	295,291	169,694	193,611	3,773,282

(a) Excludes Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—
(i) *According to Type, Australia.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1953-54 are given in the following table :—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA, 1953-54.

Particulars.	Capacity of Engines and Generators.						
	Steam.		Internal Combustion.			Water.	Total.
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		
Engines installed.. Rated H.P.	10,313	3,841,909	16,597	9,916	324,183	531,156	4,734,074
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	7,281	2,794,973	11,425	7,378	214,843	380,709	3,416,609
Effective capacity .. „	6,921	2,527,587	8,775	5,837	195,781	376,334	3,121,235
Horse-power equivalent—							
Total installed .. H.P.	9,759	3,746,606	15,314	9,889	287,993	510,333	4,579,894
Effective capacity .. „	9,277	3,388,180	11,762	7,823	262,441	504,469	4,183,952

NOTE.—The number of establishments classified as Central Electric Stations in 1953-54 was 351.

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1953-54 are given in the next table.

CENTRAL ELECTRIC STATIONS : NUMBER AND POWER EQUIPMENT, 1953-54.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Central Electric Stations No.	84	67	54	44	93	9	351
Engines installed... Rated H.P.	1,970,787	1,169,152	537,014	(a)	278,017	(a)	4,734,074
Generators installed— Kilowatt capacity—							
Total installed... K.W.	1,421,951	829,405	308,625	(a)	198,982	(a)	3,416,609
Effective capacity... „	1,271,871	805,937	292,211	(a)	187,799	(a)	3,121,235
Horse-power equivalent—							
Total installed... H.P.	1,906,097	1,111,799	534,349	(a)	266,732	(a)	4,579,894
Effective capacity... „	1,704,918	1,080,342	391,703	(a)	251,740	(a)	4,183,952

(a) Not available for publication.

§ 5. Employment in Factories.

1. *Number Employed.*—(i) *General.* All persons employed in the manufacturing activities of a factory, including proprietors who work in their own business and “outworkers” (see para. 4 (ii), page 337), are counted as factory employees, while those employed in selling and distributing, such as salesmen, travellers, collectors, carters employed solely on outward delivery of manufactured goods and retailing storemen are excluded. Prior to 1945-46 the occupational grouping collected was (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) workers in factory, skilled and unskilled; (vi) carters and messengers; and (vii) persons working regularly at home for the establishment. This grouping did not record separate details for technical staff (e.g., chemists, draftsmen, etc.) and supervisory staff and in 1945-46 the set-up on the collection form was amended to obtain the following groupings :—(i) Working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen and other laboratory and research staff; (iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers and persons working regularly at home.

Prior to the year 1928-29 average employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures therefore represented the average number employed over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29 the figures represent the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of persons employed (*see* § 3, page 329), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia.* Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for the years 1938-39 and 1948-49 to 1953-54 in the following table:—

FACTORIES : EMPLOYMENT, AUSTRALIA.

Year.	Males.			Females.			Persons.		
	Number Em- ployed.	Increase on Preceding Year.		Number Em- ployed.	Increase on Preceding Year.		Number Em- ployed.	Increase on Preceding Year.	
		Number.	Per Cent.		Number.	Per Cent.		Number.	Per Cent.
1938-39 ..	412,591	3,089	0.98	152,515	1,957	1.30	565,106	5,946	1.06
1948-49 ..	669,961	29,036	4.53	220,156	12,205	5.87	890,117	41,241	4.86
1949-50 ..	689,347	19,386	2.90	228,152	7,996	3.63	917,499	27,382	3.08
1950-51 ..	726,051	36,704	5.33	242,867	14,715	6.45	968,918	51,419	5.60
1951-52 ..	741,971	15,920	2.19	235,546	7,321	3.02	977,517	8,599	0.89
1952-53 ..	723,404	18,567	2.50	209,857	25,689	10.91	933,261	44,256	4.53
1953-54 ..	758,508	35,104	4.85	231,034	21,177	10.09	989,542	56,281	6.03

NOTE.—Minus sign (—) indicates decrease.

(iii) *States.* The following table shows, for the same years, (a) the average number of persons employed in manufacturing industries in each State; (b) for each State, the percentage of the total number employed in factories in Australia; and (c) the number so employed per ten thousand of the mean population in each State and Australia.

FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).							
1938-39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106
1948-49 ..	378,380	292,006	82,945	75,830	38,354	22,602	890,117
1949-50 ..	382,385	303,476	88,993	78,436	40,733	23,506	917,499
1950-51 ..	406,965	316,792	94,579	82,994	43,761	23,827	968,918
1951-52 ..	405,994	324,143	94,349	83,907	45,097	24,027	977,517
1952-53 ..	380,213	310,759	93,123	80,483	45,188	23,495	933,261
1953-54 ..	402,595	331,277	98,119	85,503	47,459	24,589	989,542
PERCENTAGE OF AUSTRALIAN TOTAL							
1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00
1948-49 ..	42.51	32.80	9.32	8.52	4.31	2.54	100.00
1949-50 ..	41.68	33.08	9.70	8.55	4.44	2.56	100.00
1950-51 ..	42.00	32.69	9.76	8.57	4.52	2.46	100.00
1951-52 ..	41.53	33.16	9.65	8.58	4.62	2.46	100.00
1952-53 ..	40.74	33.30	9.98	8.62	4.84	2.52	100.00
1953-54 ..	40.68	33.48	9.92	8.64	4.80	2.48	100.00

FACTORIES: EMPLOYMENT—*continued*.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PER 10,000 OF POPULATION.							
1938-39	836	1,078	537	729	497	581	815
1948-49	1,235	1,382	731	1,140	734	843	1,141
1949-50	1,206	1,398	765	1,129	746	847	1,140
1950-51	1,243	1,416	793	1,167	766	829	1,166
1951-52	1,208	1,409	773	1,150	763	801	1,145
1952-53	1,112	1,315	746	1,074	737	761	1,067
1953-54	1,182	1,367	754	1,088	753	795	1,112

2. Rates of Increase, 1938-39 and 1948-49 to 1953-54.—The percentage increase on the average number of persons employed in the preceding year is shown below for each State:—

FACTORIES: ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1948-49	4.13	4.94	8.07	3.38	6.64	6.75	4.86
1949-50	1.06	3.93	7.26	3.44	6.20	4.00	3.08
1950-51	6.43	4.39	6.31	5.81	7.43	1.37	5.60
1951-52	-0.24	2.32	-0.24	1.10	2.99	0.84	0.89
1952-53	-6.35	-4.13	-1.30	-4.08	0.20	-2.21	-4.53
1953-54	5.89	6.60	5.36	6.24	5.03	4.66	6.03

NOTE.—Minus sign (-) indicates decrease.

3. Persons Employed in Classes of Industry.—(i) *Australia*. The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1938-39 and 1949-50 to 1953-54:—

FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
I. Treatment of Non-metalliferous Mine and Quarry Products	10,343	16,598	18,436	19,365	18,752	18,748
II. Bricks, Pottery, Glass, etc. ..	15,709	19,241	20,449	20,912	19,571	21,708
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	19,816	34,525	36,323	38,248	36,139	37,988
IV. Industrial Metals, Machines, Conveyances	177,677	344,313	373,798	389,252	376,398	397,713
V. Precious Metals, Jewellery and Plate ..	3,726	6,638	6,344	5,953	5,398	5,970
VI. Textiles and Textile Goods (not Dress)	46,082	65,528	68,280	63,548	60,087	60,482
VII. Skins and Leather (not Clothing or Footwear)	10,767	16,277	15,801	14,324	14,126	14,676
VIII. Clothing (except Knitted)	86,092	118,757	122,464	116,705	105,681	112,520
IX. Food, Drink and Tobacco	83,846	122,783	124,350	122,734	120,668	123,073
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	30,739	53,169	56,300	59,664	56,084	58,932
XI. Furniture of Wood, Bedding, etc. ..	15,287	21,021	22,818	22,156	20,353	20,975
XII. Paper, Stationery, Printing, Book-binding, etc.	39,913	53,002	55,328	56,455	53,219	56,119
XIII. Rubber	7,502	12,382	13,526	14,021	12,288	14,962
XIV. Musical Instruments	451	1,456	1,614	1,581	1,267	1,575
XV. Miscellaneous Products	7,727	18,561	19,401	18,176	17,240	19,565
Total, Classes I. to XV.	555,677	904,251	955,232	963,094	918,171	974,006
XVI. Heat, Light and Power	9,429	13,248	13,686	14,423	15,000	15,536
Grand Total	565,106	917,499	968,918	977,517	933,261	989,542

(ii) *States.* Particulars of the numbers employed in each industrial class are shown in the following table for each State :—

FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, 1953-54.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	7,520	5,629	1,535	1,524	1,737	703	18,748
II. Bricks, Pottery, Glass, etc.	11,049	5,532	1,216	2,046	1,539	326	21,708
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	17,157	14,104	1,525	2,968	1,846	388	37,988
IV. Industrial Metals, Machines, Conveyances	176,527	116,812	32,690	45,209	18,241	8,234	397,713
V. Precious Metals, Jewellery and Plate	2,214	2,777	336	365	260	18	5,970
VI. Textiles and Textile Goods (not Dress)	24,288	37,753	2,098	2,082	863	2,398	69,482
VII. Skins and Leather (not Clothing or Footwear)	5,741	5,436	1,299	1,400	684	116	14,676
VIII. Clothing (except Knitted)	44,892	47,196	9,125	5,920	4,453	934	112,520
IX. Food, Drink and Tobacco	38,614	37,740	25,914	10,598	6,073	4,134	123,073
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	19,902	14,595	10,672	4,353	6,342	3,068	58,932
XI. Furniture of Wood, Bedding, etc.	7,870	6,048	3,028	2,068	1,460	501	20,975
XII. Paper, Stationery, Printing, Bookbinding, etc.	23,457	18,898	4,822	3,495	2,216	3,231	56,119
XIII. Rubber	6,856	5,371	1,485	902	187	161	14,962
XIV. Musical Instruments	1,176	298	44	41	16	..	1,575
XV. Miscellaneous Products	8,659	8,937	607	797	380	185	19,565
Total. Classes I. to XV.	395,022	327,120	96,396	83,868	46,297	197	974,006
XVI. Heat, Light and Power	6,673	4,151	1,723	1,635	1,162	102	15,536
Grand Total	402,595	331,277	98,119	85,503	47,459	24,589	989,542

4. *Persons Employed According to Occupational Grouping.*—(i) *General.* In the following table the average number of persons employed in each State during 1953-54 are classified according to their occupational grouping. As mentioned previously, persons employed in factories are now classified on a basis different from that adopted prior to 1945-46. The nature of this change is indicated in § 5, para. 1, above.

FACTORIES : PERSONS EMPLOYED—OCCUPATIONAL GROUPING, 1953-54.

State.	Average Number of Persons Employed.						Total.
	Working Proprietors.	Managerial and Clerical Staff, etc.(a)	Chemists, Draftsmen, etc.	Foremen and Overseers.	Workers in Factory (Skilled and Unskilled).	Carters (excluding Delivery only) and Messengers, etc. (b)	
New South Wales ..	15,611	44,663	5,353	16,816	317,532	2,620	402,595
Victoria ..	13,722	33,789	4,299	14,193	262,916	2,358	331,277
Queensland ..	4,609	8,981	834	3,454	79,585	656	98,119
South Australia ..	2,602	9,491	1,236	3,639	68,156	379	85,503
Western Australia	2,539	3,647	308	1,855	38,993	117	47,459
Tasmania ..	928	2,389	373	1,036	19,740	123	24,589
Total Males ..	35,914	63,866	11,475	37,948	604,250	5,055	758,508
Total Females ..	4,097	39,094	928	3,045	182,672	1,198	231,034
Total Persons ..	40,011	102,960	12,403	40,993	786,922	6,253	989,542

(a) Includes salaried managers and working directors. at home.

(b) Includes persons working regularly

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and embraces only persons to whom work is given out by factories to be done at home. Owing to the amended employment groupings adopted in 1945-46 (see § 5. 1.) persons working regularly at home for factories are now included with carters, messengers and others and separate details are no longer available. The number of "outworkers" employed by factories in 1944-45 was 1,049.

5. *Monthly Employment, 1938-39 and 1949-50 to 1953-54.*—(i) *Australia.* The following table shows the number of persons (excluding working proprietors) employed in factories on the pay-day nearest to the 15th of each month for years up to 1949-50 and on the last pay-day of the month thereafter.

FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA.

(EXCLUDING WORKING PROPRIETORS.)

Month.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
MALES.						
July	387,693	584,186	682,797	710,373	688,679	704,109
August	389,979	622,085	685,454	711,656	682,882	707,438
September	391,576	646,928	685,873	712,284	680,026	710,246
October	393,977	652,463	687,498	714,424	679,901	715,338
November	395,192	655,097	692,615	716,300	680,398	719,230
December	394,438	655,306	690,565	708,848	678,174	716,202
January	385,742	658,082	692,678	710,357	680,298	722,277
February	392,056	664,547	694,602	709,453	689,012	727,754
March	395,146	669,336	696,262	707,701	694,516	732,000
April	391,005	669,389	700,154	702,571	697,202	731,923
May	393,609	674,263	702,628	696,475	698,711	734,340
June	390,973	677,513	704,515	694,871	701,500	738,002
FEMALES.						
July	147,282	195,016	229,987	243,646	201,464	212,322
August	149,294	211,519	232,090	244,629	200,393	214,644
September	151,159	219,867	233,914	244,712	199,910	218,078
October	152,473	222,680	236,282	245,285	201,107	222,255
November	152,806	225,063	238,740	242,831	201,346	224,672
December	151,165	223,894	237,141	237,174	199,707	224,100
January	141,853	223,213	236,018	231,186	201,596	228,838
February	151,883	228,232	242,902	229,047	209,939	232,678
March	154,854	231,238	243,181	225,487	213,470	236,354
April	152,614	230,354	243,011	216,845	211,725	234,175
May	150,693	231,345	243,768	212,036	211,392	232,333
June	148,601	231,206	244,268	207,163	211,551	232,009
PERSONS.						
July	534,975	779,202	912,784	954,019	890,143	916,431
August	539,273	833,604	917,544	956,285	883,275	922,082
September	542,735	866,795	919,787	956,996	879,936	928,324
October	540,450	875,143	923,780	959,709	881,008	937,593
November	547,998	880,160	931,355	959,131	881,744	943,902
December	545,603	879,200	927,706	946,022	877,881	940,302
January	527,595	881,295	928,696	941,543	881,894	951,115
February	543,939	892,779	937,504	938,500	898,951	960,432
March	550,000	900,574	939,443	933,188	907,986	968,354
April	543,619	899,743	943,165	919,416	908,927	966,098
May	544,302	905,608	946,396	908,511	910,103	966,673
June	539,574	908,719	948,783	902,034	913,051	970,011

(ii) *States.* Particulars of the numbers employed in each State on the last pay-day of each month in 1953-54 are shown in the following table:—

FACTORIES: MONTHLY EMPLOYMENT, 1953-54.

(EXCLUDING WORKING PROPRIETORS.)

Month.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
July	283,739	221,333	77,888	65,666	37,288	18,195	704,109
August	284,407	222,799	78,920	65,870	37,237	18,205	707,438
September ..	286,102	223,637	78,157	66,372	37,566	18,412	710,246
October	288,626	225,798	77,267	67,212	37,685	18,750	715,338
November ..	290,357	227,090	76,995	67,723	38,060	19,005	719,230
December ..	289,630	227,419	73,786	68,061	38,062	19,244	716,202
January	291,795	230,002	73,449	69,277	38,053	19,701	722,277
February ..	294,410	231,210	75,134	69,360	38,208	19,432	727,754
March	295,300	233,108	75,793	69,604	38,521	19,674	732,000
April	295,443	232,739	75,962	69,713	38,314	19,752	731,923
May	296,112	232,348	77,925	69,695	38,511	19,749	734,340
June	297,064	233,182	79,894	69,847	38,434	19,581	738,002

FEMALES.

July	89,826	83,294	15,750	13,087	6,494	3,871	212,322
August	91,063	84,149	15,791	13,210	6,568	3,863	214,644
September ..	92,648	85,488	15,878	13,534	6,681	3,849	218,078
October	94,609	87,318	15,995	13,716	6,753	3,864	222,255
November ..	95,806	88,223	15,893	14,025	6,833	3,892	224,672
December ..	94,621	87,883	15,751	14,980	6,794	4,071	224,100
January	95,305	90,012	16,199	16,002	6,791	4,529	228,838
February ..	97,146	91,988	16,863	15,413	7,030	4,238	232,678
March	98,590	93,735	16,748	15,419	7,262	4,600	236,354
April	97,537	92,829	16,332	15,444	7,265	4,768	234,175
May	97,675	91,174	16,458	15,011	7,206	4,809	232,333
June	97,645	90,967	16,613	14,961	7,073	4,750	232,009

PERSONS.

July	373,565	304,627	93,638	78,753	43,782	22,066	916,431
August	375,470	306,948	94,711	79,080	43,805	22,068	922,082
September ..	378,750	309,125	94,035	79,906	44,247	22,261	928,324
October	383,235	313,116	93,262	80,928	44,438	22,614	937,593
November ..	386,163	315,313	92,888	81,748	44,893	22,897	943,902
December ..	384,251	315,302	89,537	83,041	44,856	23,315	940,302
January	387,100	320,014	89,648	85,279	44,844	24,230	951,115
February ..	391,556	323,198	91,997	84,773	45,238	23,670	960,432
March	393,890	326,843	92,541	85,023	45,783	24,274	968,354
April	392,980	325,568	92,294	85,157	45,579	24,520	966,098
May	393,787	323,522	94,383	84,706	45,717	24,558	966,673
June	394,709	324,149	96,507	84,808	45,507	24,331	970,011

6. Distribution of Employees According to Age.—The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 onwards, instead of three as in previous years. The particulars are collected as at June. The numbers employed in each age-group on the last pay-day in June, 1953 and 1954 are given below :—

**FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1953
AND 1954.**

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1953.			June, 1954.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years	9,011	6,874	15,885	9,294	7,228	16,522
16 years	12,451	8,303	20,754	12,874	8,945	21,819
17 "	13,893	9,072	22,965	14,947	9,899	24,846
18 "	13,655	9,237	22,892	14,591	9,702	24,293
19 "	12,383	8,623	21,006	12,971	8,719	21,690
20 "	12,293	7,945	20,238	12,426	7,807	20,233
21 " and over	627,814	161,497	789,311	660,899	179,709	840,608
Total	701,500	211,551	913,051	738,002	232,009	970,011

As comparative details based on the new age grouping are not available for the years prior to 1945-46, the following table shows the age distribution in sexes for Australia in June, 1939, and 1949 to 1954 on the old basis.

**FACTORIES : DISTRIBUTION OF EMPLOYEES IN JUNE, ACCORDING TO AGE,
AUSTRALIA.**

(EXCLUDING WORKING PROPRIETORS.)

In June—	Under 16 Years.		16 and under 21 Years.		21 Years and Over.		Total.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
MALES.								
1939 ..	16,109	4.12	76,418	19.55	298,436	76.33	390,963	100
1949 ..	7,791	1.21	66,030	10.23	572,440	88.56	646,261	100
1950 ..	7,812	1.15	63,310	9.35	606,391	89.50	677,513	100
1951 ..	8,219	1.17	60,913	8.64	635,383	90.19	704,515	100
1952 ..	9,079	1.31	59,616	8.58	626,176	90.11	694,871	100
1953 ..	9,011	1.28	64,675	9.22	627,814	89.50	701,500	100
1954 ..	9,294	1.26	67,809	9.19	660,899	87.55	738,002	100
FEMALES.								
1939 ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100
1949 ..	6,326	2.88	51,563	23.47	161,763	73.65	219,652	100
1950 ..	6,055	2.62	48,021	20.77	177,130	76.61	231,206	100
1951 ..	6,236	2.55	46,848	19.18	191,184	78.27	244,268	100
1952 ..	5,669	2.74	40,431	19.52	161,063	77.74	207,163	100
1953 ..	6,874	3.25	43,180	20.41	161,497	76.34	211,551	100
1954 ..	7,228	3.11	45,072	19.43	179,709	77.46	232,009	100
PERSONS.								
1939 ..	31,606	5.86	132,691	24.59	375,267	69.55	539,564	100
1949 ..	14,117	1.63	117,593	13.58	734,203	84.79	865,913	100
1950 ..	13,867	1.53	111,331	12.25	783,521	86.22	908,719	100
1951 ..	14,455	1.52	107,761	11.36	826,567	87.12	948,783	100
1952 ..	14,748	1.64	100,047	11.09	787,239	87.27	902,034	100
1953 ..	15,885	1.74	107,855	11.81	789,311	86.45	913,051	100
1954 ..	16,522	1.70	112,881	11.64	840,608	86.66	970,011	100

§ 6. Sex Distribution in Factories.

1. *Distribution According to Sex of Persons Employed.*—(i) *General.* In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and in 1951-52 was one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and in 1951-52 was about two to five. For Australia as a whole the ratio of females employed in factories was highest in 1943-44 at about two females to five males but by 1946-47 the ratio had declined to the level of one female to three males, where it has since remained.

(ii) *Average Number of Males and Females Employed.* The following table shows the average number of males and females employed in factories in each State for 1938-39 and 1949-50 to 1953-54 :—

FACTORIES : MALES AND FEMALES EMPLOYED.

State.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
MALES.						
New South Wales ..	167,172	284,055	301,307	304,808	291,704	305,040
Victoria ..	136,218	216,198	224,919	233,699	228,724	240,698
Queensland..	43,941	72,948	77,182	77,673	77,627	81,425
South Australia ..	35,406	63,133	66,840	68,045	67,114	70,657
Western Australia ..	18,704	33,711	36,349	37,812	38,614	40,439
Tasmania ..	11,150	19,302	19,454	19,934	19,621	20,249
Australia ..	412,591	689,347	726,051	741,971	723,404	758,508
FEMALES.						
New South Wales ..	61,609	98,330	105,658	101,186	88,509	97,555
Victoria ..	65,613	87,278	91,873	90,444	82,035	90,579
Queensland..	10,169	16,015	17,397	16,676	15,496	16,694
South Australia ..	7,965	15,303	16,154	15,862	13,369	14,846
Western Australia ..	4,507	7,022	7,412	7,285	6,574	7,020
Tasmania ..	2,652	4,204	4,373	4,093	3,874	4,340
Australia ..	152,515	228,152	242,867	235,546	209,857	231,034

2. *Rate of Variation for each Sex.*—The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown below for the years 1938-39 and 1949-50 to 1953-54 :—

FACTORIES : ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
MALES.						
New South Wales ..	1.69	0.62	6.07	1.16	-4.30	4.57
Victoria ..	0.04	3.85	4.03	3.90	-2.13	5.24
Queensland..	3.79	6.67	5.80	0.64	-0.06	4.89
South Australia ..	-2.39	3.68	5.87	1.80	-1.37	5.28
Western Australia ..	-0.30	6.40	7.83	4.02	2.12	4.73
Tasmania ..	4.40	4.29	0.79	2.47	-1.57	3.20
Total ..	0.98	2.89	5.32	2.19	-2.50	4.85
FEMALES.						
New South Wales ..	1.88	2.35	7.45	-4.23	-12.44	10.22
Victoria ..	-0.03	4.12	5.26	-1.56	-9.30	10.42
Queensland..	3.96	9.99	8.63	-4.14	-7.08	7.73
South Australia ..	1.98	2.43	5.56	-1.81	-15.72	11.05
Western Australia ..	3.06	5.25	5.55	-1.71	-9.76	6.78
Tasmania ..	6.51	2.60	4.02	-6.40	-5.35	12.03
Total ..	1.30	3.63	6.45	-3.01	-10.91	10.09

NOTE.—Minus sign (—) indicates decrease.

3. **Masculinity of Persons Employed 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 persons employed in each State. The following table shows particulars for the years 1938-39 and 1948-49 to 1953-54 :—

FACTORIES : MASCULINITY(a) OF PERSONS EMPLOYED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39	271	208	432	445	415	420	271
1948-49	294	248	470	408	475	452	304
1949-50	289	248	455	413	480	459	302
1950-51	285	245	444	414	490	445	299
1951-52	301	258	466	429	519	487	315
1952-53	330	279	501	502	587	506	345
1953-54	313	266	488	476	576	467	328

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 300 males employed in factories for every 100 females, but by 1932-33, as a result of the particularly severe effect of the depression on the heavier industries where males predominate in number, there were only 239 males employed to every 100 females. With the subsequent recovery of employment in the heavier industries the proportion of males per 100 females increased to 271 in 1937-38 and 1938-39. The enlistment of men in the armed services and the expansion of industry and the consequential absorption of women brought about by the 1939-45 War caused a decrease in masculinity from 1938-39 to 1943-44. However, following the cessation of hostilities in 1945 and the return of servicemen to civilian life, the number of females employed in factories declined and masculinity increased, and in 1953-54 there were 328 males to every 100 females employed in factories.

4. **Employment of Females in Particular Industries.**—(i) *General.* The majority of females in manufacturing industries are employed in four classes, namely:—IV., Industrial Metals, Machines, etc.; VI., Textiles; VIII., Clothing; and IX., Food, Drink and Tobacco. In 1953-54 these industries accounted for 79.68 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 129 females to every 100 males and in Class VIII., Clothing, with 230 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1953-54 :—

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1953-54.

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
IV. Industrial Metals, etc. ..	158,529	105,395	30,945	41,094	17,478	7,885	361,326
VI. Textiles and Textile Goods (not Dress) ..	10,206	17,015	709	1,048	469	929	30,376
VIII. Clothing (except Knitted) ..	12,062	14,836	2,623	1,897	1,362	366	34,046
IX. Food, Drink and Tobacco ..	27,272	27,927	22,261	7,862	4,705	2,928	92,955
All Other Classes ..	90,071	75,325	24,887	18,756	16,425	8,141	239,805
Total ..	305,040	240,695	81,425	70,657	40,439	20,249	758,508
FEMALES.							
IV. Industrial Metals, etc. ..	17,998	11,417	1,745	4,115	763	349	36,387
VI. Textiles and Textile Goods (not Dress) ..	14,082	20,738	1,389	1,034	394	1,469	39,106
VIII. Clothing (except Knitted) ..	31,930	32,360	6,502	4,023	3,091	568	78,474
IX. Food, Drink and Tobacco ..	11,342	9,813	3,653	2,736	1,368	1,206	30,118
All Other Classes ..	22,203	16,251	3,405	2,938	1,404	748	46,949
Total ..	97,555	90,579	16,604	14,846	7,020	4,340	231,034

(ii) *Females Employed in Clothing Manufacture.* The employment of females in the several industries of Class VIII., Clothing—in which class the largest number of females is employed—and the relation of their number to that of the males so employed are shown in the following table.

MALES AND FEMALES EMPLOYED IN CLOTHING INDUSTRIES, 1953-54.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Fe- males.	Femi- ninity. (a)	Males.	Fe- males.	Femi- ninity. (a)	Males.	Fe- males.	Femi- ninity (a)
Tailoring and Ready-made Clothing ..	3,109	13,977	450	3,139	7,454	237	1,313	4,272	325
Waterproof and Oilskin Clothing ..	104	593	570	123	320	260	15	95	633
Dressmaking, Hemstitching ..	217	2,235	1,030	1,459	8,738	599	169	2,990	1,769
Millinery ..	265	1,445	545	240	863	347	43	524	1,219
Shirts, Collars and Under-clothing ..	374	3,371	901	599	4,676	781	154	1,982	1,287
Foundation Garments ..	118	1,427	1,209	193	1,264	655	20	168	840
Handkerchiefs, Ties and Scarves ..	179	1,044	583	83	377	454	13	127	977
Hats and Caps ..	650	787	121	305	246	81	31	138	445
Gloves ..	126	369	293	68	362	533	35	174	497
Boots and Shoes ..	3,738	3,806	102	5,710	5,692	100	2,162	1,789	83
Boot and Shoe Repairing ..	1,482	71	5	669	30	4	665	36	5
Boot and Shoe Accessories ..	228	134	59	376	219	58	32	4	13
Umbrellas and Walking Sticks ..	54	112	207	23	65	283	16	41	256
Dyeworks and Cleaning (In- cluding Renovating and Repairing) ..	2,259	2,149	95	1,728	1,681	97	1,580	1,844	117
Other ..	59	410	695	112	373	333	..	..	..
Total ..	12,962	31,930	247	14,836	32,360	218	6,248	17,184	227

(a) Number of females per 100 males.

§ 7. Child Labour in Factories.

1. Conditions of Child Labour.—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.

2. Number of Children Employed, 1939, 1953 and 1954.—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The decline in the number of children employed from the peak of 33,553 reached in June, 1940 to 16,522 in June, 1954 which is most marked in all States excepting Western Australia, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate which occurred about 1929, and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

The following table shows the number of children of each sex employed in manufacturing industries in June of the years mentioned.

FACTORIES : CHILDREN(a) EMPLOYED, JUNE.

State.	1939.			1953.			1954.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New Sth. Wales ..	5,759	7,084	12,843	2,563	2,221	4,784	2,671	2,257	4,928
Victoria ..	6,167	5,005	11,172	2,972	2,432	5,404	3,093	2,527	5,620
Queensland ..	1,790	1,334	3,124	1,712	1,106	2,818	1,768	1,198	2,966
South Australia ..	1,296	1,053	2,349	797	701	1,498	819	750	1,569
Western Aust. ..	705	521	1,226	846	344	1,190	835	430	1,265
Tasmania ..	392	500	892	121	70	191	108	66	174
Australia ..	16,109	15,497	31,606	9,011	6,874	15,885	9,294	7,228	16,522

(a) Under sixteen years of age.

3. Industries Employing Child Labour.—The distribution of children employed in factories in June, 1954 and the proportion of children employed to total employees are given in the following table according to the class of industry :—

FACTORIES : CHILDREN EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1954.

Class of Industry.	Children Employed.		Total Employees. (a)		Proportion (per cent.) of Children Employed to Total Employees. (a)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Convey- ances	4,157	724	357,880	38,336	1.16	1.89
Textiles and Textile Goods (not Dress)	581	1,366	29,656	39,492	1.96	3.46
Clothing (except Knitted) ..	613	3,086	28,489	77,850	2.15	3.96
Food, Drink and Tobacco ..	1,019	786	88,285	28,367	1.15	2.77
Sawmills, Joinery, Boxes, etc.	1,712	77	52,267	2,556	3.28	3.01
Furniture of Wood, Bedding, etc.	520	69	15,909	3,225	3.27	2.14
Paper, Stationery, Printing, Bookbind- ing	667	546	41,250	15,274	1.62	3.57
All other Industries ..	25	574	124,266	26,909	0.02	2.13
Total ..	9,294	7,228	738,002	232,009	1.26	3.16

(a) Excludes working proprietors.

4. 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.

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

Note.—In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

1. General.—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1953–54 was £3,095,476,000, of which amount £1,747,973,000 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £120,458,000 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, namely, £1,227,045,000, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e., “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production.” The total amount of salaries and wages paid in factories in 1953–54 was £705,136,920. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £69,892,000 or 11 per cent. on that for the previous year.

2. Salaries and Wages Paid.—(i) *In Classes of Industry, 1953–54.* The amounts of salaries and wages paid in the various classes of industry in each State are shown in the following table.

FACTORIES : SALARIES AND WAGES PAID, 1953-54.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	6,345	4,275	1,108	1,230	1,304	516	14,778
II. Bricks, Pottery, Glass, etc. ..	8,757	4,171	842	1,600	1,138	280	16,788
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	13,705	11,248	1,089	2,335	1,529	343	30,249
IV. Industrial Metals, Machines, Conveyances ..	137,660	89,637	20,969	35,538	12,408	5,951	302,163
V. Precious Metals, Jewellery and Plate ..	1,371	1,960	173	224	144	10	3,882
VI. Textiles and Textile Goods (not Dress) ..	15,776	24,546	1,071	1,342	544	1,459	44,738
VII. Skins and Leather (not Clothing or Footwear) ..	4,192	3,949	864	1,061	474	88	10,628
VIII. Clothing (except Knitted) ..	23,824	26,556	4,218	3,008	2,022	463	60,091
IX. Food, Drink and Tobacco ..	27,117	27,395	19,185	7,159	4,142	2,783	87,781
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	13,381	9,641	6,447	3,135	4,192	2,082	38,878
XI. Furniture of Wood, Bedding, etc. ..	5,137	3,702	1,612	1,245	816	286	12,798
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	17,455	14,359	3,131	2,556	1,500	2,699	41,709
XIII. Rubber ..	5,776	4,533	952	716	119	117	12,213
XIV. Musical Instruments ..	841	206	24	25	9	..	1,105
XV. Miscellaneous Products ..	6,062	6,034	247	408	216	112	12,060
Total, Classes I. to XV. ..	287,300	232,212	62,028	61,672	30,560	17,100	601,061
XVI. Heat, Light and Power ..	6,187	3,825	1,405	1,438	1,020	101	11,076
Grand Total ..	293,487	236,037	63,433	63,110	31,580	17,381	705,137

(ii) *Totals and Averages, 1938-39 and 1948-49 to 1953-54.*—The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years indicated. The figures exclude working proprietors and the amounts drawn by them :—

FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.

Year.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
TOTAL AMOUNT PAID (£'000).							
1938-39.. ..	44,606	36,027	10,887	8,169	4,574	2,480	106,743
1948-49.. ..	146,536	112,410	29,447	29,442	12,928	8,456	339,219
1949-50.. ..	162,147	130,255	34,748	33,708	15,293	9,646	385,797
1950-51.. ..	211,339	163,207	42,837	42,940	19,658	11,737	497,718
1951-52.. ..	263,652	202,586	51,906	53,558	25,384	14,703	611,789
1952-53.. ..	265,910	210,878	57,591	56,546	28,344	15,976	635,245
1953-54.. ..	293,586	236,037	63,433	63,110	31,590	17,381	705,137
AVERAGE PER EMPLOYEE (£).							
1938-39.. ..	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1948-49.. ..	401.06	399.86	371.11	398.93	357.18	389.57	395.57
1949-50.. ..	439.04	429.21	408.67	441.70	397.13	428.29	436.56
1950-51.. ..	537.13	534.64	473.80	531.59	474.15	513.74	526.34
1951-52.. ..	673.13	650.79	576.57	656.54	594.67	637.29	650.61
1952-53.. ..	728.11	709.15	640.94	724.52	664.59	707.89	710.21
1953-54.. ..	758.65	743.29	678.35	761.27	703.26	734.60	742.62

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there is a large number of hands employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1953-54 were paid in South Australia, New South Wales and Victoria, in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a record high level of £291 was attained as a result of war-time conditions. In 1944-45 the average dropped to £285 and remained at this level in 1945-46. From 1945-46 average earnings rose each year and in 1953-54 reached a new record level of over £742.

(iii) *Total and Average Earnings of Males and Females, 1938-39 and 1948-49 to 1953-54.* Particulars for these years are given in the table on the following page.

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

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39 ..	38,272	29,006	9,920	7,488	4,129	2,234	91,049
1948-49 ..	123,263	90,765	26,331	26,072	11,555	7,503	285,189
1949-50 ..	135,875	105,135	30,948	29,809	13,692	8,538	323,997
1950-51 ..	176,031	130,923	37,870	37,786	17,620	10,336	410,566
1951-52 ..	220,885	163,688	46,087	47,194	22,870	13,056	513,780
1952-53 ..	224,745	171,897	51,519	50,594	25,756	11,249	538,760
1953-54 ..	245,749	190,573	56,608	56,299	28,684	15,320	593,233
AVERAGE PER EMPLOYEE (£).							
1938-39 ..	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1948-49 ..	455.88	457.85	405.20	441.83	390.29	425.40	446.17
1949-50 ..	499.33	510.86	446.87	487.39	433.41	465.46	492.20
1950-51 ..	609.05	610.44	516.83	583.37	515.67	558.67	591.41
1951-52 ..	756.84	736.68	625.91	716.25	643.68	687.09	725.57
1952-53 ..	807.77	793.11	701.45	779.90	711.80	761.21	782.87
1953-54 ..	844.05	833.71	733.34	824.49	754.20	791.86	820.08
FEMALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39 ..	6,334	7,021	967	681	445	246	15,694
1948-49 ..	23,273	21,645	3,116	3,370	1,373	953	53,730
1949-50 ..	26,272	25,120	3,800	3,899	1,601	1,108	61,800
1950-51 ..	35,308	32,284	4,967	5,154	2,038	1,401	81,152
1951-52 ..	42,767	38,998	5,819	6,364	2,514	1,647	98,009
1952-53 ..	41,165	38,981	6,072	5,952	2,588	1,727	96,485
1953-54 ..	47,837	45,464	6,825	6,811	2,906	2,061	111,904
AVERAGE PER EMPLOYEE (£).							
1938-39 ..	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1948-49 ..	245.02	261.17	216.90	227.81	208.35	234.25	246.83
1949-50 ..	270.27	291.34	240.93	257.31	231.57	265.37	274.12
1950-51 ..	338.08	355.57	289.82	322.03	279.55	322.46	338.12
1951-52 ..	428.40	436.60	354.96	405.70	351.30	404.71	422.04
1952-53 ..	473.28	483.46	400.48	451.80	400.32	448.58	467.79
1953-54 ..	499.19	510.96	418.23	465.95	421.93	477.84	493.10

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1953-54 and shows the amounts paid to managerial and clerical staff including salaried managers and working directors, chemists, draftsmen and other laboratory and research staff, and those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

FACTORIES : SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC., AND OTHER EMPLOYEES, AUSTRALIA, 1953-54.

Class of Industry.	Managers, Clerical Staff, Chemists, Draftsmen, etc.		All Other Employees.	
	Males.	Females.	Males.	Females.
	£'000.	£'000.	£'000.	£'000.
I. Treatment of Non-metaliferous Mine and Quarry Products ..	1,649	257	12,790	82
II. Bricks, Pottery, Glass, etc. ..	1,270	323	14,676	519
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	5,860	1,344	19,838	3,207
IV. Industrial Metals, Machines, Conveyances ..	39,147	8,326	244,796	9,894
V. Precious Metals, Jewellery and Plate ..	384	148	2,942	408
VI. Textiles and Textile Goods (not Dress) ..	3,570	1,401	21,876	17,891
VII. Skins and Leather (not Clothing or Footwear) ..	1,085	211	7,990	1,342
VIII. Clothing (except Knitted) ..	3,444	1,828	19,439	35,380
IX. Food, Drink and Tobacco ..	10,474	2,870	62,787	11,650
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	3,702	751	34,055	370
XI. Furniture of Wood, Bedding, etc. ..	1,102	346	10,210	1,140
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	5,142	1,758	29,472	5,337
XIII. Rubber ..	1,594	358	8,905	1,356
XIV. Musical Instruments ..	116	48	834	107
XV. Miscellaneous Products ..	1,616	528	8,448	2,668
Total, Classes I. to XV. ..	80,155	20,497	499,058	91,351
XVI. Heat, Light and Power ..	1,241	45	12,779	11
Grand Total ..	81,396	20,542	511,837	91,362
Average paid per employee ..	£ 1,080	£ 513	£ 791	£ 489

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1953-54.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1953-54 it amounted to a new high level of £120,458,000, an increase of £11,121,000 as compared with the previous year and nearly eight times the corresponding value in 1938-39. The following table shows the value of power, fuel and light, etc., used in the different classes of industry:—

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), 1953-54.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,889	1,431	450	674	664	254	5,362
II. Bricks, Pottery, Glass, etc. ..	3,234	1,839	287	499	545	138	6,542
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	3,315	1,961	208	760	363	102	6,709
IV. Industrial Metals, Machines, Conveyances ..	21,551	4,288	1,327	4,807	720	785	33,478
V. Precious Metals, Jewellery and Plate ..	102	103	9	23	11	1	249
VI. Textiles and Textile Goods (not Dress) ..	1,423	1,786	51	148	48	116	3,572
VII. Skins and Leather (not Clothing or Footwear) ..	420	419	63	134	53	6	1,095
VIII. Clothing (except Knitted) ..	790	707	141	117	80	27	1,862
IX. Food, Drink and Tobacco ..	5,544	4,684	2,488	1,198	993	366	15,183
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	1,226	533	333	124	289	174	2,679
XI. Furniture of Wood, Bedding, etc. ..	143	76	34	35	22	6	316
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,032	1,097	110	230	71	806	3,346
XIII. Rubber ..	871	774	110	80	15	15	1,865
XIV. Musical Instruments ..	58	12	(b)	(b)	(b)	..	70
XV. Miscellaneous Products ..	395	338	16	42	9	3	803
Total, Classes I. to XV. ..	41,993	20,048	5,627	8,871	3,793	2,799	83,131
XVI. Heat, Light and Power ..	16,454	9,032	5,028	3,629	3,179	5	37,327
Grand Total	58,447	29,080	10,655	12,500	6,972	2,804	120,458

(a) Includes value of lubricants and water.

(b) Less than £500.

(ii) *Values of Items, 1953-54.* The following table shows the values of the various items of power, fuel and light used in factories in each State, during the year:—

FACTORIES: VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a), 1953-54.
(£'000.)

Particulars.	N.S.W.	Victoria	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal, Black	21,171	4,212	6,030	(b) 4,507	2,892	866	39,678
" Brown .. ..	..	5,528	..	..	..	..	5,528
Brown Coal Briquettes ..	..	2,527	..	..	..	..	2,527
Coke	11,581	842	315	2,692	147	251	15,828
Wood	423	747	406	390	462	190	2,618
Fuel Oil	4,383	4,986	1,047	1,335	1,392	365	13,508
Tar (Fuel)	746	427	3	82	14	18	1,290
Electricity	14,709	7,186	2,059	2,629	1,535	904	29,022
Gas	2,245	734	155	205	72	34	3,445
Other (Charcoal, etc.) ..	673	352	38	253	121	60	1,497
Water	1,586	890	267	202	152	52	3,149
Lubricating Oils	930	649	335	205	185	64	2,368
Total	58,447	29,080	10,655	12,500	6,972	2,804	120,458

(a) Includes value of lubricants and water.
Leigh Creek coal.

(b) Includes £1,223,000, the value of 434,000 tons of

(iii) *Quantities of Fuel Used, 1953-54.* The following table shows the quantities of fuel used in factories in each State during the year :—

FACTORIES : QUANTITIES OF FUEL USED, 1953-54.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black	'ooo tons	5,457	590	1,456	(a) 926	568	206	9,203
" Brown	"	"	7,007	"	"	"	"	7,007
Brown Coal Briquettes	"	"	557	"	"	"	"	557
Coke	"	1,986	106	31	307	18	16	2,404
Wood	"	198	450	263	163	359	100	1,533
Fuel Oil	'ooo gals.	58,224	71,474	12,193	18,293	15,518	3,851	179,553
Tar (Fuel)	"	29,609	7,735	122	2,100	431	432	40,429

(a) Includes 434,000 tons of Leigh Creek coal.

(iv) *Total Value, 1938-39 and 1948-49 to 1953-54.* The next table shows the amounts expended on power, fuel and light during these years :—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39	7,652	4,000	1,423	1,018	1,169	438	15,700
1948-49	21,611	11,337	4,086	5,123	2,745	1,160	46,062
1949-50	25,536	13,695	5,119	5,942	3,184	1,354	54,830
1950-51	35,381	17,371	6,295	7,267	3,759	1,609	71,682
1951-52	48,664	21,990	8,286	10,409	5,173	2,107	96,629
1952-53	53,630	25,626	9,624	11,806	6,175	2,476	109,337
1953-54	58,447	29,080	10,655	12,500	6,972	2,804	120,458

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1953-54.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1953-54 reached £1,747,973,000, representing 56.5 per cent. of the value of the final output (see para. 5). The following table shows the value of the materials used in various classes of industry in each State :—

FACTORIES : VALUE OF MATERIALS USED, 1953-54.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	20,849	8,434	2,541	2,685	2,299	924	37,732
II. Bricks, Pottery, Glass, etc. ..	7,120	3,648	496	1,446	691	181	13,582
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	62,749	41,531	5,675	9,314	6,745	1,104	127,115
IV. Industrial Metals, Machines, Conveyances	279,971	138,305	35,024	73,898	17,192	12,052	556,442
V. Precious Metals, Jewellery and Plate	1,296	2,339	83	157	85	3	3,963
VI. Textiles and Textile Goods (not Dress)	42,275	62,602	4,295	3,412	3,025	5,139	120,748
VII. Skins and Leather (not Clothing or Footwear)	13,869	12,712	2,877	7,525	1,373	213	38,569
VIII. Clothing (except Knitted) ..	39,611	44,038	5,703	3,184	2,450	338	95,324
IX. Food, Drink and Tobacco ..	143,312	146,320	128,855	33,341	26,892	12,814	491,534
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	31,990	19,879	13,067	7,371	6,459	3,956	82,722
XI. Furniture of Wood, Bedding, etc.	9,634	7,064	3,090	2,513	1,688	357	24,346
XII. Paper, Stationery, Printing, Bookbinding, etc.	35,502	31,369	4,917	4,033	2,245	4,513	82,579
XIII. Rubber	13,377	11,551	2,496	1,294	196	170	29,084
XIV. Musical Instruments	1,236	242	8	4	1	"	1,491
XV. Miscellaneous Products	9,564	11,681	420	787	173	65	22,690
Total, Classes I. to XV.	712,355	541,715	209,547	150,964	71,514	41,829	1,727,924
XVI. Heat, Light and Power	8,956	6,396	1,904	1,626	954	213	20,049
Grand Total	721,311	548,111	211,451	152,590	72,468	42,042	1,747,973

(ii) *Total Amount, 1938-39 and 1948-49 to 1953-54.* The following table shows the values of materials used in factories for these years :—

FACTORIES : VALUE OF MATERIALS USED.

(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39	120,502	82,971	42,596	20,309	9,604	5,321	281,303
1948-49	336,914	253,741	97,045	75,227	29,199	19,422	810,548
1949-50	384,467	293,528	108,682	83,277	34,750	24,390	929,094
1950-51	522,422	382,002	134,457	117,547	46,452	32,401	1,235,281
1951-52	647,291	477,617	150,427	139,198	58,652	40,025	1,513,210
1952-53	627,954	476,439	187,572	133,818	63,913	38,029	1,527,805
1953-54	721,311	548,111	211,451	152,590	72,468	42,042	1,747,973

5. *Value of Output.*—(i) *In Classes of Industry, 1953-54.* The value of the output of factories in the various classes in each State in 1953-54 is shown in the following table. It represents the selling value at the factory of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the real value of factory production (*see para. 6*).

FACTORIES : VALUE OF OUTPUT, 1953-54.

(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	33,660	17,595	4,928	6,006	5,296	2,176	69,661
II. Bricks, Pottery, Glass, etc. ..	24,074	11,692	2,090	4,550	3,244	704	46,354
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	108,089	70,837	8,919	15,603	10,616	2,080	216,144
IV. Industrial Metals, Machines, Conveyances	514,534	281,162	69,987	132,283	36,909	23,343	1,058,218
V. Precious Metals, Jewellery and Plate	3,766	5,546	375	554	359	18	10,618
VI. Textiles and Textile Goods (not Dress)	70,974	108,248	6,179	5,510	4,144	7,823	202,878
VII. Skins and Leather (not Clothing or Footwear)	20,686	19,596	4,380	9,113	2,165	337	56,277
VIII. Clothing (except Knitted) ..	78,247	86,031	12,291	7,521	5,618	1,040	190,748
IX. Food, Drink and Tobacco ..	210,784	206,235	166,325	46,315	36,438	18,500	664,597
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	56,934	36,796	24,043	11,994	13,745	7,619	151,131
XI. Furniture of Wood, Bedding, etc.	18,360	13,441	5,735	4,522	3,151	821	46,030
XII. Paper, Stationery, Printing, Bookbinding, etc.	69,586	59,839	10,402	9,109	5,281	11,020	165,237
XIII. Rubber	22,271	21,621	4,768	2,566	439	386	52,051
XIV. Musical Instruments	2,705	549	45	34	14	..	3,407
XV. Miscellaneous Products	20,780	22,376	972	1,674	501	227	46,530
Total, Classes I. to XV.	1,255,510	961,564	321,439	257,354	127,920	76,094	2,999,881
XVI. Heat, Light and Power	44,291	23,941	10,922	7,957	6,667	1,817	95,595
Grand Total	1,299,801	985,505	332,361	265,311	134,587	77,911	3,095,476

(ii) *Total, 1938-39 and 1948-49 to 1953-54.* The following table shows the value of output in each State during these years :—

FACTORIES : VALUE OF OUTPUT.

(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39	218,420	152,967	63,321	35,005	19,549	11,158	500,420
1948-49	609,724	446,838	154,670	124,072	53,417	36,657	1,425,378
1949-50	693,203	526,466	175,156	141,573	63,978	45,080	1,645,456
1950-51	923,912	675,033	216,212	192,623	84,431	58,624	2,150,835
1951-52	1,139,346	833,967	250,043	232,853	106,571	71,926	2,634,706
1952-53	1,139,326	860,147	295,405	234,813	119,310	71,003	2,720,004
1953-54	1,299,801	985,505	332,361	265,311	134,587	77,911	3,095,476

6. Value of Production.—(i) *In Classes of Industry, 1953-54.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production”.

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

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 9, para. 4, was recorded as £47,197,000 for 1953-54. Many miscellaneous expenses, such as taxation, insurance, advertising and other sundry charges, have not been taken into account. Therefore, it must not be inferred that when wages and salaries are deducted from the value of production the whole of the “surplus” is available for interest and profit.

The value of factory production therefore approximates “net value added” in the manufacturing process. It amounted in 1953-54 to £1,227 million to which Class IV., Industrial Metals, etc., with £468 million or nearly eight times the value of production of this class in 1938-39, made the greatest contribution. This total value of production in 1953-54 represented an increase of £144 million over the figure for 1952-53 and £1,024 million (503 per cent.) over the value of production recorded in 1938-39.

The following table shows the value of production in 1953-54 in each State for the various classes of industry.

FACTORIES : VALUE OF PRODUCTION, 1953-54.

(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	10,921	7,730	1,937	2,646	2,334	999	26,507
II. Bricks, Pottery, Glass, etc. ..	13,720	6,205	1,307	2,605	2,008	384	26,229
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	42,025	27,346	3,036	5,529	3,508	873	82,317
IV. Industrial Metals, Machines, Conveyances ..	213,012	138,569	33,636	53,578	18,997	10,506	468,298
V. Precious Metals, Jewellery and Plate ..	2,367	3,103	284	374	263	15	6,406
VI. Textiles and Textile Goods (not Dress) ..	27,276	43,860	1,833	1,950	1,071	2,568	78,558
VII. Skins and Leather (not Clothing or Footwear) ..	6,397	6,464	1,440	1,454	740	118	16,613
VIII. Clothing (except Knitted) ..	37,846	41,286	6,447	4,221	3,087	676	93,563
IX. Food, Drink and Tobacco ..	61,929	55,231	34,982	11,776	8,643	5,320	177,881
X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving ..	23,719	16,383	10,643	4,500	6,997	3,489	65,731
XI. Furniture of Wood, Bedding, etc. ..	8,584	6,301	2,610	1,974	1,441	457	21,367
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	33,052	27,373	5,375	4,846	2,965	5,701	79,312
XIII. Rubber ..	8,022	9,296	2,162	1,193	227	202	21,102
XIV. Musical Instruments ..	1,471	296	37	29	12	..	1,845
XV. Miscellaneous Products ..	10,821	10,357	536	844	320	159	23,037
Total, Classes I. to XV. ..	501,162	399,800	106,265	97,519	52,613	31,467	1,188,826
XVI. Heat, Light and Power ..	18,881	8,514	3,990	2,702	2,534	1,598	38,219
Grand Total ..	520,043	408,314	110,255	100,221	55,147	33,065	1,227,045

(ii) *Total and Averages, 1938-39 and 1948-49 to 1953-54.* The value of production and the amount per person employed and per head of population are shown in the following table. For Australia as a whole the value of production per head of population increased from £29.34 per head in 1938-39 to £137.86 per head in 1953-54. For value per person employed, the increase was not quite so pronounced (from £360 per head in 1938-39 to £1,240 in 1953-54) owing to the considerable increase in the number of persons employed in 1953-54 as compared with 1938-39.

FACTORIES : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE. (£'000.)							
1938-39 ..	90,266	65,996	19,302	13,678	8,776	5,399	203,417
1948-49 ..	251,199	182,700	53,540	43,722	21,474	16,074	568,769
1949-50 ..	283,201	219,244	61,354	52,353	26,044	19,336	661,532
1950-51 ..	366,109	275,660	75,460	67,809	34,220	24,614	843,872
1951-52 ..	443,391	334,360	91,330	83,246	42,746	29,794	1,024,867
1952-53 ..	457,742	358,032	98,209	89,189	49,192	30,498	1,082,862
1953-54 ..	520,043	408,314	110,255	100,221	55,147	33,065	1,227,045
PER PERSON EMPLOYED. (£.)							
1938-39 ..	395	327	357	315	378	391	360
1948-49 ..	664	626	645	577	560	711	639
1949-50 ..	741	722	690	667	639	823	721
1950-51 ..	900	870	798	817	782	1,033	871
1951-52 ..	1,092	1,032	968	992	947	1,249	1,045
1952-53 ..	1,204	1,152	1,055	1,108	1,089	1,208	1,160
1953-54 ..	1,292	1,233	1,124	1,172	1,162	1,345	1,240
PER HEAD OF POPULATION. (£.)							
1938-39 ..	33.00	35.25	19.14	22.98	18.80	22.72	29.34
1948-49 ..	81.98	86.49	47.18	65.73	41.12	59.92	72.93
1949-50 ..	89.28	101.02	52.75	76.22	47.72	69.71	82.18
1950-51 ..	111.82	123.24	63.26	95.37	59.89	85.59	101.53
1951-52 ..	132.12	145.28	74.79	114.14	72.31	91.79	120.02
1952-53 ..	133.84	151.55	78.64	119.00	80.28	98.72	123.79
1953-54 ..	152.70	168.53	84.78	127.50	87.44	106.85	137.86

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1953-54 was recorded as £3,095,476,000 there remained, after payment of £1,747,973,000 for the value of the materials used, £705,137,000 for salaries and wages and £120,458,000 for power, fuel and light, a balance of £521,908,000 to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit. The following table gives corresponding particulars for each State for the year 1953-54:—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1953-54.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance. (Output less Materials, Fuel and Wages.)(c)	Total Value of Output.
VALUE AND COST, ETC. (£'000.)					
New South Wales ..	721,311	58,447	293,586	226,457	1,299,801
Victoria ..	548,111	29,080	236,037	172,277	985,505
Queensland ..	211,451	10,655	63,433	46,822	332,361
South Australia ..	152,590	12,500	63,110	37,111	265,311
Western Australia ..	72,468	6,972	31,590	23,557	134,587
Tasmania ..	42,042	2,804	17,381	15,684	77,911
Australia ..	1,747,973	120,458	705,137	521,908	3,095,476

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
(b) Includes lubricants and water. (c) See paragraph preceding this table.

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

1. General.—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1953-54 :—

FACTORIES : VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1953-54.

(£'000.)

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia
Land and buildings	196,724	158,389	40,003	36,579	21,739	26,997	483,431
Plant and machinery	233,022	181,058	64,160	46,788	28,195	27,492	580,715
Total ..	429,746	339,447	104,163	83,367	52,934	54,489	1,064,146

(a) Includes estimated value of rented premises and plant.

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. Value of Land and Buildings.—(i) *Total for Australia.* The following table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39, and 1949-50 to 1953-54.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), AUSTRALIA.
(£'000.)

Class of Industry.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,779	4,851	6,281	6,905	7,431	8,091
II. Bricks, Pottery, Glass, etc. . .	2,953	4,719	5,883	6,761	7,723	8,535
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease . .	7,377	22,076	20,920	25,262	30,996	36,931
IV. Industrial Metals, Machines, Conveyances . .	34,841	81,682	97,021	117,513	137,724	159,325
V. Precious Metals, Jewellery and Plate . .	633	1,674	1,688	2,037	2,311	2,523
VI. Textiles and Textile Goods (not Dress) . .	6,000	14,838	18,004	20,845	22,482	25,443
VII. Skins and Leather (not Clothing or Footwear) . .	2,096	4,158	4,764	5,382	5,734	6,072
VIII. Clothing (except Knitted) . .	10,624	19,763	22,128	24,768	26,359	28,584
IX. Food, Drink and Tobacco . .	33,273	52,197	60,217	68,916	78,278	86,625
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving . .	4,107	9,442	11,680	14,505	16,361	18,297
XI. Furniture of Wood, Bedding, etc. . .	2,533	4,828	5,776	6,812	7,256	8,069
XII. Paper, Stationery, Printing, Bookbinding, etc. . .	10,639	16,234	20,207	24,691	27,284	30,444
XIII. Rubber . .	1,676	3,038	3,792	4,620	5,530	6,668
XIV. Musical Instruments . .	105	325	387	380	398	468
XV. Miscellaneous Products . .	1,433	4,360	5,035	6,266	6,705	7,570
Total, Classes I. to XV. . .	121,069	244,125	283,783	355,663	382,572	433,645
XVI. Heat, Light and Power . .	9,851	15,424	19,002	23,827	31,874	49,786
Grand Total . .	130,920	259,549	302,785	359,490	414,446	483,431

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1953-54.* The following table gives particulars of the various classes of industry in each State.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), 1953-54.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	3,517	2,467	499	549	492	567	8,091
II. Bricks, Pottery, Glass, etc. . .	4,182	1,861	611	705	993	183	8,535
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease . .	17,029	13,229	1,092	2,233	2,514	834	36,931
IV. Industrial Metals, Machines, Conveyances . .	73,126	50,913	10,431	13,762	7,268	3,825	159,325
V. Precious Metals, Jewellery and Plate . .	896	1,237	110	135	133	12	2,523
VI. Textiles and Textile Goods (not Dress) . .	9,421	13,002	573	635	436	476	25,443
VII. Skins and Leather (not Clothing or Footwear) . .	2,376	2,445	312	576	184	172	6,072
VIII. Clothing (except Knitted) . .	12,753	10,687	2,138	1,440	1,210	351	28,584
IX. Food, Drink and Tobacco . .	29,518	27,163	14,171	7,335	4,991	3,447	86,625
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving . .	7,638	4,829	1,875	1,658	1,559	798	18,297
XI. Furniture of Wood, Bedding, etc. . .	3,150	2,582	991	614	577	155	8,069
XII. Paper, Stationery, Printing, Bookbinding, etc. . .	11,882	10,905	1,939	1,383	837	3,408	30,444
XIII. Rubber . .	2,819	2,633	535	378	188	115	6,668
XIV. Musical Instruments . .	338	104	4	12	10	..	468
XV. Miscellaneous Products . .	3,093	3,809	194	267	158	49	7,570
Total, Classes I. to XV. . .	181,743	148,856	35,422	31,682	21,550	14,392	433,645
XVI. Heat, Light and Power . .	14,981	9,533	4,581	4,897	3,139	12,605	49,786
Grand Total . .	196,724	158,389	40,003	36,579	24,740	26,997	483,431

(a) Includes estimated value of rented premises.

(iii) *Totals in each State.* The following table shows the value of land and buildings in each State for the years 1938-39 and 1948-49 to 1953-54 :—

FACTORIES : VALUE OF LAND AND BUILDINGS.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39..	57,353	42,026	12,299	8,711	6,814	3,717	130,920
1948-49..	101,241	73,384	18,508	22,218	10,054	7,335	232,740
1949-50..	110,597	84,124	20,806	24,317	11,055	8,650	259,549
1950-51..	130,468	101,326	23,958	23,303	13,380	10,350	302,785
1951-52..	153,662	119,465	28,610	28,507	16,747	12,499	359,490
1952-53..	176,576	135,324	34,720	31,904	20,960	14,962	414,446
1953-54..	196,724	158,389	40,003	36,579	24,739	26,997	483,431

(a) Includes estimated value of rented premises.

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ended 1932-33, there was a decline of £12 million to £105.8 million, but since that year the value has risen annually and stood at £483.4 million in 1953-54.

3. Value of Plant and Machinery.—(i) *Total for Australia, 1938-39 and 1949-50 to 1953-54.* The following table shows for Australia the approximate value of plant and machinery used in factories.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), AUSTRALIA.
(£'000.)

Class of Industry.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
I. Treatment of Non-metalliferous Mine and Quarry Products..	7,028	8,055	9,239	11,911	16,155	17,829
II. Bricks, Pottery, Glass, etc..	3,145	4,991	6,057	7,461	8,811	9,741
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease..	6,754	23,518	26,247	30,559	39,024	53,528
IV. Industrial Metals, Machines, Conveyances..	33,038	77,597	90,801	112,940	131,857	148,178
V. Precious Metals, Jewellery and Plate..	197	770	808	955	1,012	1,002
VI. Textiles and Textile Goods (not Dress)..	6,657	17,485	21,218	23,973	25,030	27,567
VII. Skins and Leather (not Clothing or Footwear)..	973	2,535	2,994	3,647	3,894	4,031
VIII. Clothing (except Knitted)..	2,557	7,792	9,294	10,403	11,181	12,363
IX. Food, Drink and Tobacco..	32,101	48,318	56,489	66,712	77,512	90,624
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving..	3,908	10,377	12,614	15,869	17,851	19,002
XI. Furniture of Wood, Bedding, etc..	728	1,679	2,035	2,483	2,692	2,871
XII. Paper, Stationery, Printing, Bookbinding, etc..	9,188	19,193	25,301	33,613	38,129	41,866
XIII. Rubber..	1,368	2,754	3,456	4,171	4,875	5,677
XIV. Musical Instruments..	12	154	227	302	305	458
XV. Miscellaneous Products..	758	3,275	4,008	4,674	5,075	5,966
Total Classes I. to XV..	108,412	228,493	270,788	329,668	383,403	440,707
XVI. Heat, Light and Power..	35,250	57,109	65,827	80,476	110,131	140,008
Grand Total..	143,662	285,602	336,615	410,144	493,534	580,715

(a) Includes estimated value of rented plant and machinery.

Except for the years 1930-31 to 1933-34, when decreases were recorded, there has been a continuous increase in the value of plant and machinery in factories in Australia. The increase in 1953-54 of £87.2 million over 1952-53 extended over all industrial classes except Class V. The greatest increase occurred in Class XVI., Heat, Light and Power.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1938-39 and 1948-49 to 1953-54. During 1953-54 increases occurred in all States, Victoria showing the largest increase, £33.7 million.

FACTORIES : VALUE OF PLANT AND MACHINERY.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39..	62,693	38,627	18,095	9,750	8,095	6,402	143,662
1948-49..	99,812	76,080	25,757	22,792	9,800	12,253	246,494
1949-50..	113,864	92,748	28,904	24,901	11,457	13,728	285,602
1950-51..	136,491	107,261	34,235	26,759	14,713	17,156	336,615
1951-52..	166,437	128,934	41,290	32,177	20,716	20,590	410,144
1952-53..	207,733	147,305	51,670	40,111	24,035	22,620	493,534
1953-54..	233,022	181,058	64,160	46,788	28,195	27,492	580,715

(a) Includes estimated value of rented plant and machinery.

(iii) *Value according to Class of Industry, 1953-54.* The following table shows the value of plant and machinery used in factories in each State during 1953-54 according to class of industry.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), 1953-54.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	10,034	2,962	1,292	2,489	705	347	17,829
II. Bricks, Pottery, Glass, etc. ..	4,889	2,085	910	594	1,032	231	9,741
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	23,110	21,036	1,105	3,291	2,947	2,039	53,528
IV. Industrial Metals, Machines, Conveyances ..	78,589	39,687	7,868	14,870	4,642	2,522	148,178
V. Precious Metals, Jewellery and Plate ..	382	479	36	57	42	6	1,002
VI. Textiles and Textile Goods (not Dress) ..	9,835	15,469	866	434	333	630	27,567
VII. Skins and Leather (not Clothing or Footwear) ..	1,674	1,393	353	381	186	47	4,034
VIII. Clothing (except Knitted) ..	4,703	5,292	983	709	518	158	12,363
IX. Food, Drink and Tobacco ..	26,046	23,980	26,284	6,666	4,229	2,519	90,624
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	6,947	4,462	3,068	1,284	1,768	1,473	19,002
XI. Furniture of Wood, Bedding, etc. ..	1,018	875	382	293	239	63	2,870
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	11,573	16,633	2,142	1,808	1,326	8,384	41,866
XIII. Rubber ..	2,369	2,287	501	340	104	76	5,677
XIV. Musical Instruments ..	368	85	3	1	1	..	458
XV. Miscellaneous Products ..	2,384	3,153	94	253	63	21	5,968
Total, Classes I. to XV.	184,821	139,878	45,887	33,470	18,135	18,516	440,707
XVI. Heat, Light and Power ..	48,201	41,180	18,273	13,318	10,060	8,976	140,008
Grand Total ..	233,022	181,058	64,160	46,788	28,195	27,492	580,715

(a) Includes estimated value of rented plant and machinery.

4. *Depreciation of Land and Buildings and Plant and Machinery, 1953-54.*—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State as recorded by factory proprietors at the annual census of factory production.

**FACTORIES: ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS
AND PLANT AND MACHINERY, 1953-54.**

(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,099	267	101	262	116	24	1,869
II. Bricks, Pottery, Glass, etc. ..	557	262	145	57	113	31	1,165
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	2,112	1,431	165	357	338	427	4,830
IV. Industrial Metals, Machines, Conveyances ..	6,687	5,843	976	1,525	435	420	13,886
V. Precious Metals, Jewellery and Plate ..	26	40	2	4	2	..	74
VI. Textiles and Textile Goods (not Dress) ..	1,051	1,801	72	76	41	76	3,117
VII. Skins and Leather (not Clothing or Footwear) ..	105	113	22	29	17	3	289
VIII. Clothing (except Knitted) ..	430	404	61	43	40	17	995
IX. Food, Drink and Tobacco ..	2,358	2,545	2,095	555	357	218	8,128
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	645	446	255	121	174	167	1,808
XI. Furniture of Wood, Bedding, etc. ..	85	59	33	24	19	5	225
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,192	1,411	179	204	69	437	3,492
XIII. Rubber ..	606	562	96	62	11	10	1,347
XIV. Musical Instruments ..	59	8	..	..	..	..	67
XV. Miscellaneous Products ..	309	390	10	23	6	4	742
Total, Classes I. to XV.	17,321	13,582	4,212	3,342	1,738	1,839	42,034
XVI. Heat, Light and Power ..	3,129	200	789	398	497	150	5,163
Grand Total ..	20,450	13,782	5,001	3,740	2,235	1,989	47,197

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1938-39 and 1948-49 to 1953-54.—The following table summarizes the recorded totals for Australia, in this section, and also includes particulars of additions and replacements.

**FACTORIES: VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY,
AUSTRALIA.**

(£'000.)

Year.	Book Values as at 30th June.(a)		Additions and Replacements during year.		Depreciation allowed during year.	
	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.
1938-39 ..	130,920	143,662	5,578	17,781	1,911	8,736
1948-49 ..	232,740	246,494	15,029	47,226	2,864	21,666
1949-50 ..	259,549	285,602	18,551	59,562	2,983	25,906
1950-51 ..	302,785	336,615	26,710	81,003	3,859	33,006
1951-52 ..	359,490	410,144	37,702	96,370	3,634	30,479
1952-53 ..	414,446	493,534	48,006	119,790	4,683	33,039
1953-54 ..	483,431	580,715	55,668	128,453	5,673	41,524

(a) Includes estimated value of rented premises, plant and machinery.

§ 10. Principal Factory Products.

The monthly factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau and in the *Secondary Industries Bulletin*.

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1952 to 1954. A more complete list, together with values, where available, is published in the *Secondary Industries Bulletin*.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES : AUSTRALIA.

Article.	Unit of Quantity.	1951-52.	1952-53.	1953-54.
Acid—				
Nitric	Ton	9,344	8,693	11,501
Sulphuric	"	650,239	627,283	731,897
Aerated and Carbonated Waters	'000 gals.	57,092	53,221	56,624
Asbestos Cement Building Sheets	'000 sq. yds.	23,321	24,260	26,084
Bacon and Ham	Ton	33,163	34,254	33,651
Bags—				
Leather, Fibre, etc.—				
Handbags—				
Leather	No.	820,879	918,485	957,810
Plastic	"	579,406	512,158	470,379
Other	"	156,841	148,891	134,873
School Bags	"	109,223	136,186	137,316
Suitcases (a)	"	1,061,316	958,099	1,189,899
Trunks	"	4,976	2,161	2,902
All other	"	269,029	249,110	229,090
Baking Powder	lb.	638,253	775,982	771,227
Bath Heaters—				
Electric	No.	25,618	17,510	19,045
Gas	"	29,264	23,367	27,360
Solid Fuel	"	59,056	41,087	42,325
Bathing Suits	Doz.	115,726	135,743	156,509
Baths, C.I.P.E.	No.	76,848	64,720	89,387
Batteries, Wet Cell type	"	1,164,623	1,145,715	1,398,985
Beer (excluding Waste Beer)	'000 gals.	182,506	192,344	208,557
Biscuits	'000 lb.	149,947	148,278	150,475
Blankets	Pair	645,256	469,713	601,163
Boots, Shoes and Slippers (not Rubber)—				
Boots and Shoes	'000 pairs	16,795	16,249	18,071
Sandals	"	1,715	1,459	1,878
Slippers	"	7,578	6,966	8,558
Bran (Wheaten)	Ton (2,000 lb.)	318,108	304,394	274,307
Brassieres	Doz.	377,980	329,745	416,889
Bricks, Clay	'000	719,860	667,055	801,998
Brooms	Gross	20,379	18,747	18,539
Brushes (b)	"	116,513	127,017	128,845
Butter	Ton	131,166	163,589	156,117
Candles	Cwt.	16,931	14,256	8,611
Cardigans, Sweaters, etc.	Doz.	684,673	700,566	989,529
Cement, Portland	Ton	1,237,461	1,439,096	1,700,127
Cheese	"	40,582	46,592	49,043
Cigarettes	'000 lb.	11,749	13,879	18,393
Cleansing and Scouring Powders	Cwt.	83,426	94,447	99,187
Cloth—				
Cotton	'000 sq. yds.	32,365	25,716	33,618
Woolen and Worsted (c)	"	29,790	29,400	34,832
Coke—				
Metallurgical	Ton	1,636,982	1,858,428	2,010,404
Other	"	1,203,602	1,071,106	839,793
Confectionery—				
Chocolate	'000 lb.	61,276	58,961	62,599
Other	"	78,735	76,644	76,872
Coppers—				
Electric	No.	41,045	24,673	20,935
Gas	"	37,889	25,039	28,047
Inserts (all types)	"	107,069	79,407	85,300
Cordials and Syrups	'000 gals.	7,204	5,628	3,967
Corsets and Corselets	Doz.	131,305	122,262	155,408
Cosmetic Creams and Lotions—				
Face Cream	Cwt.	3,934	4,923	5,412
Hand Creams and Lotions	"	2,089	3,124	4,800
Other Skin Creams and Lotions	"	9,264	6,958	9,102
Custard Powder	'000 lb.	5,598	5,745	6,155
Cycles, Assembled	No.	84,931	75,378	85,063

(a) Includes Kitbags.

(b) Excludes Industrial Metal and Bristle.

(c) Includes Mixtures.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA—continued.

Article.	Unit of Quantity.	1951-52.	1952-53.	1953-54.
Dynamos—				
Alternators	No.	508	200	293
Generators	"	16,256	8,194	9,331
Electricity	Mill. kWh	11,297	12,045	13,707
Enamels, Natural and Synthetic	'000 gals.	2,093	2,108	2,698
Engines—				
Diesel, other than Marine	No.	4,225	4,919	3,787
Petrol—				
Marine	"	2,112	1,232	1,357
Other (a)	"	26,206	16,527	23,680
Essences, Flavouring—				
Domestic	Gal.	93,125	92,592	96,359
Industrial	"	258,651	198,092	245,312
Face Powder	Cwt.	2,848	2,898	3,396
Fans, Electric	No.	75,264	39,292	42,283
Fats, Edible—				
Dripping	Cwt.	280,799	426,010	357,802
Other	"	261,427	237,902	264,267
Fibrous Plaster Sheets	'000 sq. yds.	16,470	15,418	16,185
Fish, Tinned (including Fish Loaf)	'000 lb.	7,295	7,705	6,605
Floorboards—				
Australian Timber	'000 super. ft.	76,147	87,009	110,536
Imported Timber	"	9,272	3,943	3,845
Flour, Wheaten (b)	Ton (2,000 lb.)	1,721,151	(c) 1,726,300	(c) 1,600,058
Flour, Self-raising	Cwt.	1,255,099	1,105,835	1,116,278
Fruit Juices	'000 gals.	1,134	2,075	3,161
Gas	Mill. cubic ft.	40,391	40,722	42,100
Gloves—				
Dress—				
Leather	Doz. pairs	15,393	25,254	12,113
Other	"	53,668	90,397	112,892
Work, All types	"	241,984	158,543	214,496
Golf Clubs	Doz.	11,371	8,961	15,563
Handkerchiefs—				
Men's	"	1,047,452	979,959	1,224,162
Women's	"	909,141	882,164	1,538,067
Hats and Caps	"	491,512	510,102	530,521
Rose, Rubber	'000 lin. ft.	20,336	13,412	12,531
Ice	Ton	1,032,823	960,034	877,803
Ice Cream	'000 gals.	17,306	13,425	13,678
Iron and Steel—				
Pig Iron	'000 tons	1,430	1,692	1,827
Ingot Steel	"	1,521	1,801	2,117
Blooms and Billets	"	1,361	1,638	1,921
Irons, Electric	No.	226,207	179,842	229,910
Jams and Preserves—				
Jams	'000 lb.	108,173	77,521	85,687
Fruit, Preserved (d)	"	256,133	228,370	338,562
Vegetables, Preserved	"	100,446	66,306	40,265
Jelly Crystals	"	11,927	9,553	11,028
Kalsomine	"	7,363	3,787	3,396
Lacquer, Clear and Colours	Gal.	1,190,663	1,012,782	1,306,661
Lard	Cwt.	35,363	41,266	40,973
Lawn Mowers—				
Electric	No.	28,717	12,849	21,922
Petrol	"	818	5,614	9,849
Hand	"	97,142	54,186	85,867
Leather—				
Sole and Belting	'000 lb.	38,636	38,298	38,675
Harness, Skirt, etc.	"	1,881	1,607	1,546
Upholstery	'000 sq. ft.	10,095	10,343	13,097
Dressed from Hides	"	44,753	46,541	50,333
Dressed from Skins	"	25,270	22,561	26,811
Lim—Quick	ton	123,876	119,731	123,774
Hydrated	"	37,422	36,877	44,047
Agricultural	"	87,942	90,883	108,746
Linseed Oil—from Local Crushing	'000 gals.	252	1,475	338
from Unrefined	"	4,264	1,911	3,946
Lubricating Oil	"	15,880	11,290	14,241

(a) Excludes Motor Car, Motor Cycle, Tractor and Aero Engines. (b) Includes Wheatmeal for Baking.
(c) Includes Sharps. (d) Includes Canned Apple, all types.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA—continued.

Article.	Unit of Quantity.	1951-52.	1952-53.	1953-54.
Malt, Barley	'ooo bus.	6,073	6,620	7,078
Margarine—				
Table	'ooo lb.	15,952	15,856	21,866
Other	"	56,168	49,337	49,939
Mattresses—Wire	No.	221,880	236,527	268,930
Inner Spring	"	280,084	320,604	418,811
Soft Filled, etc.	"	399,348	349,426	367,116
Meat, Tinned	'ooo lb.	161,868	209,376	160,268
Milk—				
Condensed	'ooo lb.	117,527	124,063	94,944
Concentrated (Whole)	"	37,503	32,465	43,599
Powdered (Whole) (a)	"	66,899	72,651	68,643
Mops, Floor	Gross	9,396	9,658	11,964
Motor Bodies made	No.	98,470	9,822	14,745
Motor Spirit (Including Benzol)	'ooo gals	96,108	106,793	182,319
Motors, Electric	No.	610,363	601,659	972,887
Nails	Ton	24,751	18,392	22,008
Neckties	Doz.	412,755	522,590	589,142
Newsprint	Ton	32,648	34,010	60,406
Oatmeal including Rolled Oats	Cwt.	363,398	381,237	400,095
Paint—Water	'ooo lb.	22,543	24,796	31,930
Oil	'ooo gals	5,513	4,300	5,180
Peanut Butter and Paste	'ooo lb.	3,209	3,419	4,313
Perambulators	No.	111,357	131,699	152,048
Pickles	'ooo pints	9,748	7,388	6,896
Pigments—Colours ground in oil	Cwt.	14,337	18,028	19,047
Zinc Oxide	"	223,448	87,260	172,807
White Lead	"	181,764	68,284	337,794
Other, including Dry Colours	"	257,882	204,684	161,581
Plywood, $\frac{1}{8}$ inch basis	'ooo sq. ft.	159,153	115,728	161,581
Pollard	Ton (2,000 lb.)	358,883	360,243	335,890
Pyjamas—				
Men's and Boy's (Suits only)	Doz.	226,961	180,147	273,423
Women's and Girl's (incl. Nightdresses)	"	300,401	289,104	322,010
Racquet Frames (all types)	"	14,948	17,391	22,224
Refrigerators—Commercial	No.	1,925	1,127	1,442
Domestic	"	192,812	182,134	274,487
Rice (Cleaned)	Cwt.	659,470	718,556	904,207
Ropes and Cables (excluding Wire)	"	141,420	105,519	115,182
Sauce	'ooo pints	30,643	25,977	25,770
Sausage Casings	Cwt.	78,294	70,603	62,824
Semolina	"	217,709	109,253	108,382
Shirts (Men's and Boys')	Doz.	1,161,548	881,447	1,239,471
Sink Heaters	No.	33,001	20,565	24,907
Soap—				
Household	Cwt.	641,274	593,201	568,754
Flakes and Chips (b)	"	67,666	70,601	77,406
Industrial (including Wool Scouring Soap)	"	88,676	84,173	99,983
Sand	"	41,006	28,982	22,045
Toilet and Hand	"	316,050	272,630	300,248
Shaving, including Sticks and Creams	"	7,039	7,095	7,076
Soft	"	18,858	14,512	18,954
Liquid	"	116,608	124,098	144,215
Shampoo	"	7,810	7,561	8,547
Soap Extracts and Powders	"	929,310	885,158	890,241
Socks and Stockings—				
Men's	Doz. pairs	1,461,517	1,574,846	1,894,936
Women's	"	1,867,261	2,337,332	2,793,050
Children's	"	461,505	422,406	570,167
Soup (Tinned)	'ooo pints	38,877	22,621	25,509
Spades and Shovels	Doz.	31,257	21,821	25,322
Starch—Edible	Cwt.	329,947	312,188	334,298
Inedible	"	137,565	70,385	90,339
Steel, Structural, Fabricated	Ton	119,205	130,029	134,607
Stoves, Ovens and Ranges—				
Domestic Cooking—				
Solid Fuel	No.	71,695	47,933	50,376
Gas	"	51,007	35,731	43,040
Electric (c)	"	101,769	63,385	81,508
Sugar—Raw (94 net titre)	Ton	745,401	948,886	1,254,387
Refined	"	493,486	440,326	449,015
Sulphate of Ammonia	"	63,815	70,174	70,811
Superphosphate	"	1,597,080	1,581,001	1,771,196

(a) Includes Malted Milk and Infants' and Invalids' Foods.
chips.

(c) Includes Stovettes, Cookers, etc.

(b) Includes Industrial flakes and

**QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA—continued.**

Article.	Unit of Quantity.	1951-52.	1952-53.	1953-54.
Talcum Powder	Cwt.	20,944	24,637	30,153
Tallow—				
Inedible	"	833,236	1,120,308	1,101,114
Edible	"	232,024	317,722	383,222
Tiles, Roofing—				
Cement	'000	66,483	46,934	44,651
Terracotta	"	48,859	57,977	63,782
Timber—				
From Native Logs—				
Hardwood	'000 super. ft.	1,166,114	1,115,423	1,159,163
Softwood	"	226,652	224,374	235,383
From Imported Logs—				
Hardwood	"	13,468	13,588	20,627
Softwood	"	198,599	117,815	154,560
Toasters, Electric (Domestic)	No.	21,615	22,334	23,400
Tobacco	'000 lb.	1,003,804	1,863,640	622,314
Tomato Juice	Gal.	506,965	626,672	659,987
Towels	Doz.			
Transformers and Converters—				
Above 20 k.v.a.	No.	3,039	3,250	2,949
Below 20 k.v.a.	"	235,612	207,084	309,901
Twine (all types)	Cwt.	110,557	86,465	107,629
Tyres, Pneumatic—				
Motor Car and Motor Cycle	No.	1,874,857	1,288,352	2,214,041
Truck and Omnibus	"	587,806	329,848	509,663
All Other (excl. Bicycle)	"	114,653	75,834	165,865
Umbrellas	"	367,306	338,548	430,422
Underwear	'000 doz.	3,681	3,243	4,239
Vacuum Cleaners (Domestic)	No.	64,065	38,398	57,275
Varnishes	'000 gals.	3,575	2,930	3,135
Washing Machines, Household, Electric	No.	99,429	91,384	146,259
Weatherboards—				
Australian Timber	'000 super. ft.	20,921	20,944	24,880
Imported Timber	"	4,680	3,003	3,271
Wheatmeal (a)	Ton (2,000 lb.)	90,255	88,101	137,732
Wheelbarrows (Metal)	No.	67,573	62,364	78,874
Wireless—				
Cabinets—				
Wood	No.	78,186	55,044	82,603
Other	"	288,296	190,008	304,452
Receiving Sets	"	358,379	298,955	437,513
Wool Scoured—				
For Sale	'000 lb.	38,843	37,348	40,536
For use in own works	"	30,116	29,218	38,246
On Commission	"	51,839	57,479	57,785
Wool Tops	"	24,815	26,467	32,755
Yarn (b)				
Cotton	"	34,461	27,611	38,101
Woollen	"	17,002	15,468	19,868
Worsted	"	19,500	20,141	26,076
Zinc Oxide (See Pigments)				

(a) Excludes Wheatmeal for Baking Included with Flour.

(b) Including mixtures predominantly of the fibre mentioned.

§ 11. Individual Industries.

1. General.—Particulars in pages 328-55, §§ 2-9 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State or the Commonwealth, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

The statistics in the following tables should be read in the light of the following definitions.

Factory. A factory is taken to be a manufacturing establishment in which four or more persons are employed or in which power, other than manual, is used.

Average Number of Persons Employed. All persons employed in the manufacturing activities of a factory are counted as factory employees, including working proprietors and "out-workers". The average number of persons employed means, in general, the average number over the whole year and not the average over the period worked.

Value of Materials Used. This item includes the value, in the usual sense, of the materials used, stores used, containers, tools replaced, and materials used in repairs to plant.

Value of Fuel, etc., Used. This item includes also the cost of power and light used, of lubricants and of water.

Value of Output. The amounts given under this heading represent the selling value at the factory of goods made or processed during the year, including by-products, also the value of other work done.

Value of Production. The value of production is obtained by deducting "Value of materials used" and "Value of fuel used", as defined above, from the "Value of output". This method of valuing factory production has been adopted by the Statistical offices throughout Australia.

Rated Horse-power of Engines Used. Statistics of power used in factories other than Central Electric Stations relate to the "rated horse-power" of engines ordinarily in use.

For more detailed definitions see § 1, par. 6 of this chapter, page 325.

Details of some of the principal articles produced in factories in Australia during the years 1951-52 to 1953-54 are shown in the table in the preceding pages (§ 10).

2. *Portland Cement and Cement Goods.*—The manufacture of Portland Cement and Cement Goods is an important industry included in Class I. Particulars for the three industries under this general heading are shown for 1953-54 and for a selected number of years in the following table.

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS.

AUSTRALIA, 1953-54.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories	13	16	450	479
Number of persons employed	2,727	2,314	4,263	9,304
Salaries and wages paid £	2,330,546	1,977,141	3,127,316	7,435,003
Value of power, fuel, etc., used £	3,642,068	178,984	128,710	3,949,762
Value of materials used £	4,850,898	4,376,761	6,784,812	16,012,491
Value of production £	5,358,132	3,381,432	5,458,863	14,198,427
Total value of output £	13,851,098	7,937,177	12,372,405	34,160,680
Value of land and buildings £	1,652,966	903,092	1,650,410	4,206,468
Value of plant and machinery £	7,543,725	1,288,664	1,963,358	10,795,747
Horse-power of engines ordinarily in use h.p.	67,337	9,060	12,863	89,260

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories	132	450	526	559	504	479
Number of persons employed	3,932	8,033	9,192	9,851	9,352	9,304
Salaries and wages paid £'000	897	3,673	4,860	6,469	6,942	7,435
Value of power, fuel, etc., used £'000	562	1,444	1,794	2,418	3,436	3,950
Value of materials used £'000	1,542	6,671	9,025	12,608	14,303	16,013
Value of production £'000	2,385	6,540	8,635	11,169	12,197	14,198
Total value of output £'000	4,489	14,655	19,454	26,285	29,936	34,161
Value of land and buildings £'000	1,350	2,283	3,250	3,466	3,890	4,206
Value of plant and machinery £'000	2,516	3,970	4,691	6,455	10,018	10,796
Horse-power of engines ordinarily in use h.p.	39,617	71,000	75,584	81,691	91,880	89,260

3. *Chemicals, Drugs and Medicines.*—In 1945-46 the classification of factories was amended to provide for the separate tabulation of factories engaged in the production of Industrial and Heavy Chemicals and Acids and those engaged in producing Pharmaceutical and Toilet Preparations, which previously had been combined. Details for each of these industries are given in the next two tables for 1953-54 with comparisons with previous years. However, it should be noted that in order to avoid the publication of confidential information, particulars relating to Industrial and Heavy Chemicals include details for the Explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES).

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	124	76	15	9	9	1	234
Number of persons employed ..	4,742	5,727	258	730	(a)	(a)	11,765
Salaries and wages paid ..	£ 4,795,444	£ 4,665,155	192,893	624,965	(a)	(a)	9,906,692
Value of power, fuel, etc., used ..	£ 1,435,389	£ 653,136	46,515	544,230	(a)	(a)	2,756,787
Value of materials used ..	£ 13,981,705	£ 9,560,899	266,344	1,006,412	(a)	(a)	25,157,890
Value of production ..	£ 9,715,615	£ 8,207,762	436,121	1,849,361	(a)	(a)	20,643,776
Total value of output ..	£ 25,132,709	£ 18,421,797	748,980	3,400,003	(a)	(a)	48,558,393
Value of land and buildings ..	£ 6,906,646	£ 5,422,095	103,782	705,645	(a)	(a)	13,389,044
Value of plant and machinery ..	£ 13,770,583	£ 7,545,472	165,874	1,630,483	(a)	(a)	23,572,816
Horse-power of engines ordinarily in use .. h.p.	38,332	43,428	1,584	4,539	(a)	(a)	90,807

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	165	199	207	219	229	234
Number of persons employed ..	10,228	9,749	10,615	11,504	11,253	11,765
Salaries and wages paid ..	£'000 3,450	£'000 4,890	£'000 6,243	£'000 8,539	£'000 8,928	£'000 9,907
Value of power, fuel, etc., used ..	£'000 618	£'000 1,064	£'000 1,546	£'000 2,110	£'000 2,210	£'000 2,757
Value of materials used ..	£'000 6,007	£'000 10,522	£'000 16,857	£'000 21,097	£'000 19,538	£'000 25,158
Value of production ..	£'000 6,627	£'000 9,075	£'000 13,373	£'000 17,180	£'000 16,879	£'000 20,643
Total value of output ..	£'000 13,252	£'000 20,661	£'000 31,776	£'000 40,387	£'000 38,627	£'000 48,558
Value of land and buildings ..	£'000 11,697	£'000 10,696	£'000 7,770	£'000 8,828	£'000 11,923	£'000 13,389
Value of plant and machinery ..	£'000 10,964	£'000 9,708	£'000 11,043	£'000 12,507	£'000 19,612	£'000 23,573
Horse-power of engines ordinarily in use .. h.p.	69,399	72,183	74,613	76,890	85,254	90,807

(a) Not available for publication; included with total for Australia.

PHARMACEUTICAL AND TOILET PREPARATIONS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	121	62	5	13	4	3	208
Number of persons employed ..	3,006	2,303	(a)	480	102	(a)	6,012
Salaries and wages paid ..	£ 1,865,322	£ 1,629,862	(a)	290,633	56,176	(a)	3,898,486
Value of power, fuel, etc., used ..	£ 74,173	£ 132,321	(a)	26,642	3,319	(a)	237,817
Value of materials used ..	£ 6,105,137	£ 4,509,185	(a)	1,085,653	124,676	(a)	12,017,485
Value of production ..	£ 8,433,736	£ 3,754,452	(a)	462,928	174,398	(a)	12,968,772
Total value of output ..	£ 14,013,066	£ 8,395,958	(a)	1,575,223	302,393	(a)	25,224,074
Value of land and buildings ..	£ 1,658,301	£ 2,754,349	(a)	173,836	115,281	(a)	4,755,228
Value of plant and machinery ..	£ 630,444	£ 1,045,369	(a)	78,939	28,947	(a)	1,792,512
Horse-power of engines ordinarily in use .. h.p.	3,513	7,680	(a)	1,295	187	(a)	12,777

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	215	205	201	208	206	208
Number of persons employed ..	5,514	5,157	5,538	6,149	5,363	6,012
Salaries and wages paid ..	£'000 1,699	£'000 1,840	£'000 2,423	£'000 3,433	£'000 3,468	£'000 3,898
Value of power, fuel, etc., used ..	£'000 57	£'000 73	£'000 91	£'000 150	£'000 197	£'000 238
Value of materials used ..	£'000 5,402	£'000 6,371	£'000 8,291	£'000 9,877	£'000 9,784	£'000 12,017
Value of production ..	£'000 4,790	£'000 6,566	£'000 8,985	£'000 10,314	£'000 10,188	£'000 12,969
Total value of output ..	£'000 10,249	£'000 13,010	£'000 17,667	£'000 20,341	£'000 20,160	£'000 25,224
Value of land and buildings ..	£'000 1,534	£'000 1,706	£'000 1,063	£'000 3,332	£'000 3,931	£'000 4,755
Value of plant and machinery ..	£'000 598	£'000 767	£'000 823	£'000 1,286	£'000 1,569	£'000 1,793
Horse-power of engines ordinarily in use .. h.p.	6,324	7,816	8,357	10,618	12,238	12,777

(a) Not available for publication; included with total for Australia.

4. White Lead, Paint and Varnish.—The following table shows particulars of this industry for each State during 1953-54 and for Australia for a series of years.

WHITE LEAD, PAINTS AND VARNISH.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	77	57	17	13	8	2	174
Number of persons employed ..	2,768	1,306	292	480	(a)	(a)	4,934
Salaries and wages paid .. £	2,119,824	1,021,726	195,245	360,585	(a)	(a)	3,756,752
Value of power, fuel, etc., used .. £	233,251	65,789	12,816	21,420	(a)	(a)	337,126
Value of materials used .. £	9,793,104	4,969,046	1,338,015	2,114,382	(a)	(a)	18,603,030
Value of production .. £	4,750,134	3,170,397	805,743	924,162	(a)	(a)	9,891,088
Total value of output .. £	14,776,439	8,205,232	2,156,574	3,059,964	(a)	(a)	28,831,244
Value of land and buildings .. £	2,032,348	1,071,618	246,727	618,610	(a)	(a)	4,065,912
Value of plant and machinery .. £	945,044	766,301	133,052	344,586	(a)	(a)	2,230,202
Horse-power of engines ordinarily in use .. h.p.	13,640	5,979	1,100	1,466	(a)	(a)	22,719

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	102	149	154	158	175	174
Number of persons employed ..	2,271	4,526	4,985	5,141	4,622	4,934
Salaries and wages paid .. £'000	535	2,097	2,784	3,378	3,346	3,757
Value of power, fuel, etc., used .. £'000	45	171	229	303	258	337
Value of materials used .. £'000	2,275	10,903	14,157	16,623	14,657	18,603
Value of production .. £'000	1,585	5,296	7,010	8,112	8,583	9,891
Total value of output .. £'000	3,905	16,370	21,396	24,038	23,498	28,831
Value of land and buildings .. £'000	761	2,038	2,831	3,213	3,669	4,066
Value of plant and machinery .. £'000	324	1,345	1,548	1,842	2,113	2,230
Horse-power of engines ordinarily in use .. h.p.	7,696	17,681	19,875	21,412	22,769	22,719

(a) Not available for publication; figures are included in the total for Australia.

5. Soap and Candle Factories.—The following table shows particulars of factories in the Soap and Candle industry in each State for 1953-54 and for Australia for a series of years:—

SOAP AND CANDLES.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	48	23	8	4	3	3	89
Number of persons employed ..	1,884	680	282	133	(a)	(a)	3,058
Salaries and wages paid .. £	1,631,281	562,584	194,986	104,081	(a)	(a)	2,544,461
Value of power, fuel, etc., used .. £	170,656	219,289	17,464	13,308	(a)	(a)	427,661
Value of materials used .. £	5,801,573	3,264,735	630,805	252,984	(a)	(a)	10,213,932
Value of production .. £	4,319,477	1,773,247	392,345	136,668	(a)	(a)	6,731,952
Total value of output .. £	10,291,706	5,257,274	1,040,614	402,360	(a)	(a)	17,373,485
Value of land and buildings .. £	601,286	718,249	108,837	77,072	(a)	(a)	1,505,269
Value of plant and machinery .. £	932,894	1,070,399	133,836	77,765	(a)	(a)	2,243,993
Horse-power of engines ordinarily in use .. h.p.	4,532	2,711	862	513	(a)	(a)	8,795

(a) Not available for publication; figures are included in total for Australia.

AUSTRALIA.

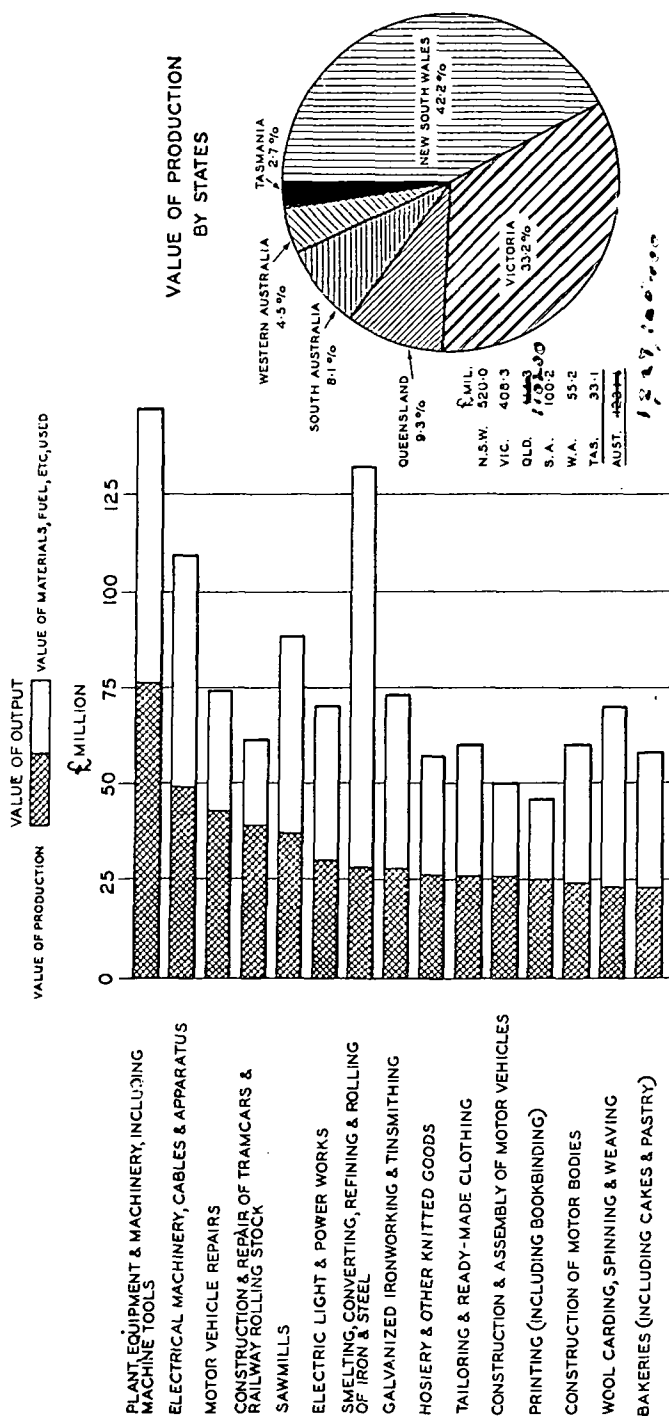
Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	65	90	93	88	89	89
Number of persons employed ..	2,620	3,646	3,502	3,440	3,028	3,058
Salaries and wages paid .. £'000	501	1,605	1,974	2,555	2,460	2,544
Value of power, fuel, etc., used .. £'000	76	285	353	453	475	427
Value of materials used .. £'000	1,568	5,499	6,330	8,384	8,846	10,214
Value of production .. £'000	1,886	4,442	4,609	4,638	6,324	6,732
Total value of output .. £'000	3,530	10,226	11,292	13,475	15,645	17,373
Value of land and buildings .. £'000	666	1,115	1,200	1,301	1,487	1,565
Value of plant and machinery .. £'000	577	1,201	1,341	1,693	1,985	2,244
Horse-power of engines ordinarily in use .. h.p.	5,267	7,515	7,447	8,769	8,606	8,795
Materials used—						
Tallow .. cwt.	535,511	1,008,257	1,123,895	1,134,935	1,024,772	1,120,828
Alkali for Soap (a) ..	194,869	326,648	343,378	403,241	386,176	377,451
Coconut oil—refined and unrefined .. cwt.	138,954	78,893	91,404	113,203	95,825	86,576
Articles produced—						
Soap (b) .. cwt.	978,113	1,174,605	1,365,669	1,304,987	1,208,853	1,247,228
Soap Extracts and Powders ..	191,232	697,848	754,758	929,310	885,158	890,241
Candles made ..	28,649	21,245	12,871	16,931	14,256	8,611

(a) Includes Soda Ash. (b) Soap made in all factories including those not classified as "Soap and Candle" factories.

NOTE.—Preliminary figures of production in 1954-55 were Soap, 1,268,488 cwt.; Soap Extracts and Powders, 1,003,592 cwt.

VALUE OF OUTPUT AND VALUE OF PRODUCTION

PRINCIPAL MANUFACTURING INDUSTRIES, AUSTRALIA, 1953-54



6. Chemical Fertilizers.—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1953-54 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XXI.—Agricultural Production.

CHEMICAL FERTILIZERS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	14	9	8	7	5	1	51
Number of persons employed ..	1,066	1,336	(a)	860	889	(a)	4,531
Salaries and wages paid .. £	968,553	1,210,919	(a)	735,765	769,629	(a)	3,987,924
Value of power, fuel, etc., used £	433,929	176,998	(a)	82,650	126,291	(a)	824,303
Value of materials used .. £	3,376,396	6,141,686	(a)	3,542,292	4,827,575	(a)	20,520,982
Value of production .. £	1,610,328	2,922,067	(a)	1,312,569	1,566,225	(a)	8,109,740
Total value of output .. £	5,420,653	9,240,751	(a)	4,937,511	6,514,091	(a)	29,472,427
Value of land and buildings .. £	2,394,091	754,092	(a)	495,985	1,518,466	(a)	6,067,213
Value of plant and machinery .. £	2,665,728	1,148,388	(a)	963,111	1,530,319	(a)	8,066,852
Horse-power of engines ordinarily in use .. h.p.	12,622	13,717	(a)	6,399	4,864	(a)	41,641

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	36	51	49	49	51	51
Number of persons employed ..	2,540	3,889	4,012	4,325	4,483	4,531
Salaries and wages paid .. £'000	601	2,051	2,540	3,361	3,759	3,988
Value of power, fuel, etc., used .. £'000	114	407	440	589	786	842
Value of materials used .. £'000	3,231	12,737	14,014	20,297	21,100	20,521
Value of production .. £'000	1,600	3,998	4,312	5,998	7,255	8,109
Total value of output .. £'000	4,945	17,142	18,766	26,884	29,131	29,472
Value of land and buildings .. £'000	1,449	3,633	3,900	4,244	4,791	6,067
Value of plant and machinery .. £'000	2,353	4,849	5,418	5,804	6,218	8,067
Horse-power of engines ordinarily in use .. h.p.	18,165	30,855	36,274	38,220	39,551	41,641

(a) Not available for publication; figures are included in the total for Australia.

7. Iron and Steel Works and Engineering.—(i) *General.* In 1945-46 the classification of factories was amended to provide for the tabulation in four separate groups of those industries previously included under Iron and Steel and Engineering. The first group (Smelting, Converting, Refining and Rolling of Iron and Steel) covers blast furnaces, steel works and rolling mills. The second group, Foundries (Ferrous), covers those engaged in the founding of iron and steel. The third group (Plant, Equipment and Machinery including Machine Tools) covers those industries engaged in the production of boilers, engines, machines and machinery, machine tools, structural steel fabrications, steel furniture, etc. The fourth group (Other Engineering) includes jobbing and general engineers, not elsewhere included.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table particulars are shown for each State for 1953-54 and for Australia in selected years for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	19	10	..	3	1	..	33
Number of persons employed ..	15,218	1,133	..	(a)	(a)	..	16,688
Salaries and wages paid .. £	14,302,365	1,006,430	..	(a)	(a)	..	15,608,816
Value of power, fuel, etc., used .. £	13,359,219	242,561	..	(a)	(a)	..	15,430,293
Value of materials used .. £	87,472,332	886,147	..	(a)	(a)	..	88,802,180
Value of production .. £	25,443,829	1,302,276	..	(a)	(a)	..	27,994,696
Total value of output .. £	126,275,380	2,430,984	..	(a)	(a)	..	132,227,178
Value of land and buildings .. £	5,941,965	514,280	..	(a)	(a)	..	6,508,440
Value of plant and machinery .. £	23,369,632	682,764	..	(a)	(a)	..	24,278,983
Horse-power of engines ordinarily in use .. h.p.	276,331	8,650	..	(a)	(a)	..	287,619

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	27	30	30	30	32	33
Number of persons employed ..	10,413	11,509	13,419	14,192	16,188	16,688
Salaries and wages paid .. £'000	4,164	6,978	9,245	11,904	14,455	15,609
Value of power, fuel, etc., used .. £'000	2,777	5,516	7,896	11,186	14,683	15,431
Value of materials used .. £'000	19,134	29,747	40,580	53,342	76,983	88,802
Value of production .. £'000	7,393	12,784	16,594	20,311	27,336	27,995
Total value of output .. £'000	29,304	48,047	65,070	84,830	118,404	132,227
Value of land and buildings .. £'000	2,197	2,812	3,259	4,064	5,278	6,508
Value of plant and machinery .. £'000	5,669	7,185	9,191	14,092	20,753	24,279
Horse-power of engines ordinarily in use .. h.p.	198,317	213,529	216,617	218,857	248,440	287,619

(a) Not available for publication; figures are included in the total for Australia.

Particulars of the production of pig-iron and steel will be found in Chapter XXVI.—Mineral Industry.

(iii) *Foundries (Ferrous).* Particulars covering those industries classified as founding of iron and steel are shown for each State for 1953-54 and for Australia in selected years in the following table :—

FOUNDRIES—FERROUS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	91	204	22	23	17	..	357
Number of persons employed ..	2,599	2,430	652	540	390	..	6,611
Salaries and wages paid .. £	2,110,312	1,827,025	461,005	428,681	301,695	..	5,128,778
Value of power, fuel, etc., used .. £	265,816	227,737	37,642	89,116	81,577	..	701,908
Value of materials used .. £	1,451,376	1,477,273	375,815	413,507	338,896	..	4,056,867
Value of production .. £	2,780,733	2,700,264	871,005	692,255	425,433	..	7,469,450
Total value of output .. £	4,497,925	4,405,294	1,284,522	1,194,878	845,606	..	12,228,225
Value of land and buildings .. £	953,949	814,130	257,266	167,962	106,172	..	2,298,579
Value of plant and machinery .. £	915,374	595,382	302,151	199,017	111,361	..	2,123,285
Horse-power of engines ordinarily in use .. h.p.	9,940	8,022	2,567	2,561	2,325	..	25,415

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	312	353	358	365	373	357
Number of persons employed ..	5,344	6,346	7,198	7,243	6,584	6,611
Salaries and wages paid .. £'000	1,612	2,985	4,134	5,252	4,980	5,129
Value of power, fuel, etc., used .. £'000	161	341	475	633	642	702
Value of materials used .. £'000	1,210	2,116	3,262	4,331	4,026	4,057
Value of production .. £'000	2,341	4,648	6,024	7,622	7,337	7,469
Total value of output .. £'000	3,712	7,105	9,761	12,586	12,005	12,228
Value of land and buildings .. £'000	988	1,207	1,570	1,736	2,144	2,299
Value of plant and machinery .. £'000	619	1,063	1,357	1,574	1,923	2,123
Horse-power of engines ordinarily in use h.p.	13,381	19,306	23,076	25,107	24,467	25,415

(iv) *Plant, Equipment and Machinery (including Machine Tools).* The next table shows particulars for this group for each State during 1953-54 and for Australia for the years 1945-46 and 1949-50 to 1953-54 :—

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	953	616	112	145	82	3	1,911
Number of persons employed ..	24,012	20,260	5,599	8,186	2,653	130	60,840
Salaries and wages paid .. £	19,212,170	16,120,490	3,764,549	6,521,264	1,903,496	97,757	47,619,726
Value of power, fuel, etc., used .. £	900,878	677,928	165,357	389,234	83,859	1,329	2,218,585
Value of materials used .. £	27,440,068	23,199,455	4,460,730	10,634,311	2,454,591	99,215	68,288,370
Value of production .. £	30,402,028	26,363,060	5,810,365	10,169,326	3,121,083	131,344	75,997,206
Total value of output .. £	58,742,074	50,240,443	10,436,452	21,192,871	5,659,533	231,888	146,504,161
Value of land and buildings .. £	10,988,658	9,318,213	1,761,275	2,254,175	1,394,980	141,290	25,258,591
Value of plant and machinery .. £	8,836,964	8,031,872	1,179,074	2,134,396	1,052,654	100,068	21,335,028
Horse-power of engines ordinarily in use .. h.p.	82,219	67,228	14,908	24,096	9,351	498	198,300

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	1,038	1,498	1,555	1,684	1,787	1,911
Number of persons employed ..	46,123	56,344	60,990	64,066	60,140	60,840
Salaries and wages paid .. £'000	14,259	20,495	35,215	45,434	45,414	47,620
Value of power, fuel, etc., used .. £'000	605	1,075	1,434	1,937	2,095	2,219
Value of materials used .. £'000	16,455	38,457	53,040	68,943	63,134	68,288
Value of production .. £'000	21,044	40,958	55,934	71,810	70,790	75,997
Total value of output .. £'000	38,104	80,490	110,408	142,690	136,019	146,504
Value of land and buildings .. £'000	7,227	12,680	15,904	19,383	22,332	25,259
Value of plant and machinery .. £'000	7,046	12,571	14,968	17,870	19,784	21,335
Horse-power of engines ordinarily in use h.p.	101,810	158,402	205,736	190,664	197,031	198,300

(v) *Other Engineering.* Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1953-54 and for Australia in selected years in the following table.

OTHER ENGINEERING.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	743	787	124	160	143	54	2,041
Number of persons employed ..	5,641	8,702	1,371	2,929	908	1,430	20,981
Salaries and wages paid ..	£ 3,866,688	6,582,568	847,675	2,121,462	557,517	1,123,657	15,099,567
Value of power, fuel, etc., used ..	£ 158,533	208,746	26,223	72,159	32,863	32,211	530,735
Value of materials used ..	£ 4,023,214	7,810,002	851,908	2,042,321	631,312	1,038,025	16,426,782
Value of production ..	£ 6,372,264	10,461,303	1,334,530	3,078,026	914,336	1,594,301	23,754,760
Total value of output ..	£ 10,554,011	18,510,051	2,212,661	5,192,506	1,578,511	2,664,537	41,714,277
Value of land and buildings ..	£ 3,006,163	4,224,179	465,185	1,109,771	430,812	664,385	9,900,495
Value of plant and machinery ..	£ 1,877,506	3,363,449	398,345	806,362	224,558	373,379	7,043,599
Horse-power of engines ordinarily in use .. h.p.	15,605	28,618	3,617	7,925	2,712	4,297	62,774

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	903	1,495	1,627	1,853	1,975	2,041
Number of persons employed ..	13,112	16,798	18,487	20,398	20,005	20,981
Salaries and wages paid ..	£'000 3,634	6,977	9,495	13,124	13,804	15,100
Value of power, fuel, etc., used ..	£'000 162	241	291	413	460	530
Value of materials used ..	£'000 3,599	6,637	9,855	14,268	14,041	16,427
Value of production ..	£'000 5,432	11,086	15,323	20,681	21,551	23,755
Total value of output ..	£'000 9,193	17,964	25,469	35,362	36,052	40,712
Value of land and buildings ..	£'000 2,369	5,191	5,089	7,021	8,285	9,900
Value of plant and machinery ..	£'000 2,091	3,515	4,098	5,434	6,366	7,744
Horse-power of engines ordinarily in use .. h.p.	26,095	41,668	47,396	56,397	59,024	62,774

8. Extracting and Refining of Non-ferrous Metals ; Alloys.—The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore, for each State during 1953-54 and for Australia for a series of years. It should be noted that as "Ore Beneficiation and Concentration", formerly included as part of this section of Manufacturing Industry, was transferred to the Mining Industry in 1952-53 details for that and later years are not comparable with those for 1951-52 and earlier years.

EXTRACTING AND REFINING OF NON-FERROUS METALS : ALLOYS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
				(a)			
Number of factories ..	27	21	6	3	..	2	59
Number of persons employed ..	1,363	258	462	(b)	..	(b)	6,592
Salaries and wages paid ..	£ 1,253,657	228,228	569,820	(b)	..	(b)	6,060,180
Value of power, fuel, etc., used ..	£ 489,711	344,966	554,456	(b)	..	(b)	3,062,733
Value of materials used ..	£ 10,046,410	1,999,559	11,127,630	(b)	..	(b)	53,710,725
Value of production ..	£ 2,105,338	562,013	1,724,719	(b)	..	(b)	12,648,166
Total value of output ..	£ 12,641,459	2,596,068	13,406,805	(b)	..	(b)	69,421,624
Value of land and buildings ..	£ 571,809	186,757	972,917	(b)	..	(b)	2,742,576
Value of plant and machinery ..	£ 782,391	102,584	1,309,101	(b)	..	(b)	5,389,983
Horse-power of engines ordinarily in use .. h.p.	8,461	655	16,192	(b)	..	(b)	65,067

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
					(c)	(c)
Number of factories ..	42	62	65	67	54	59
Number of persons employed ..	5,532	7,394	7,664	7,812	6,983	6,502
Salaries and wages paid ..	£'000 1,613	4,324	5,268	6,515	6,085	6,669
Value of power, fuel, etc., used ..	£'000 593	1,908	2,323	3,130	2,803	3,663
Value of materials used ..	£'000 16,844	38,993	59,735	71,097	44,181	53,711
Value of production ..	£'000 3,892	15,718	20,435	27,496	14,163	12,648
Total value of output ..	£'000 21,334	56,619	82,493	101,723	61,447	69,122
Value of land and buildings ..	£'000 1,177	1,861	2,017	2,075	2,669	2,743
Value of plant and machinery ..	£'000 3,526	4,605	4,723	4,936	4,371	5,390
Horse-power of engines ordinarily in use .. h.p.	54,450	79,320	88,410	81,567	70,424	65,067

(a) In Western Australia the majority of the plants are worked at the mines and are therefore not included. (b) Not available for publication ; figures are included in the total for Australia. (c) See table above table.

9. Electrical Machinery, Cables and Apparatus.—The following table shows particulars of this industry for each State during 1953-54 and for Australia for a series of years.

ELECTRICAL MACHINERY, CABLES AND APPARATUS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	495	331	62	62	64	14	1,028
Number of persons employed ..	25,481	8,875	1,620	1,473	770	158	38,377
Salaries and wages paid ..	£19,840,824	6,486,409	1,060,749	978,432	486,829	115,673	28,968,916
Value of power, fuel, etc., used ..	£1,064,108	241,900	29,422	32,037	18,255	4,828	1,391,150
Value of materials used ..	£41,566,222	12,879,319	1,705,546	1,183,403	666,059	175,752	58,236,901
Value of production ..	£34,571,341	10,299,214	1,717,417	1,354,022	849,771	240,207	49,031,972
Total value of output ..	£77,201,071	23,420,433	3,512,385	2,570,062	1,534,685	420,787	108,600,223
Value of land and buildings ..	£8,850,994	3,771,110	399,790	430,876	309,538	66,631	13,828,945
Value of plant and machinery ..	£6,270,726	2,552,583	479,190	202,908	104,307	99,679	9,709,393
Horse-power of engines ordinarily in use ..	h.p. 48,806	17,213	5,022	1,559	1,225	263	74,088

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	360	811	867	928	965	1,028
Number of persons employed ..	10,666	30,956	35,494	36,772	31,949	38,377
Salaries and wages paid ..	£2,031	13,563	18,816	24,277	22,903	28,969
Value of power, fuel, etc., used ..	£105	453	637	976	991	1,391
Value of materials used ..	£3,195	21,149	31,680	40,704	36,668	58,237
Value of production ..	£3,655	21,154	30,867	38,244	38,633	49,032
Total value of output ..	£6,955	42,756	63,184	79,924	76,292	108,660
Value of land and buildings ..	£1,627	6,293	8,224	9,631	11,270	13,829
Value of plant and machinery ..	£897	4,127	5,719	6,957	8,168	9,709
Horse-power of engines ordinarily in use ..	h.p. 12,043	43,095	55,854	62,813	66,512	74,088

10. Railway and Tramway Workshops (Government and Local Authority).—The railway and tramway workshops, which form an important part of Class IV., are chiefly owned by State Governments and Local Authorities. *Workshops (fifteen in 1953-54) controlled by non-public bodies are not included in the figures below :—*

TRAMCARS AND RAILWAY ROLLING STOCK.(a)

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	44	24	12	14	23	7	124
Number of persons employed ..	16,423	7,257	6,405	4,556	3,707	914	39,262
Salaries and wages paid ..	£12,122,399	5,432,022	4,192,054	3,475,385	2,561,761	640,026	28,424,547
Value of power, fuel, etc., used ..	£418,936	197,534	112,104	159,740	83,116	22,445	993,875
Value of materials used ..	£6,102,964	4,153,593	2,451,163	2,619,507	1,460,337	302,169	17,092,733
Value of production ..	£14,270,078	6,997,850	4,969,832	4,242,601	3,040,165	833,431	34,353,987
Total value of output ..	£20,791,978	11,349,007	7,536,009	7,021,848	4,583,618	1,158,045	52,440,595
Value of land and buildings ..	£5,222,594	1,682,676	590,820	1,196,788	403,697	633,970	9,729,945
Value of plant and machinery ..	£7,802,648	723,295	907,545	1,490,901	922,949	318,213	12,165,551
Horse-power of engines ordinarily in use ..	h.p. 41,289	10,910	16,257	17,540	10,233	3,249	108,478

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	117	127	126	126	123	124
Number of persons employed ..	27,310	38,432	38,253	38,499	39,073	39,262
Salaries and wages paid ..	£6,721	18,057	20,914	26,281	28,002	28,425
Value of power, fuel, etc., used ..	£226	500	617	812	907	994
Value of materials used ..	£4,076	11,133	12,165	15,151	16,706	17,093
Value of production ..	£8,021	21,643	25,738	31,375	33,875	34,354
Total value of output ..	£13,223	33,276	38,520	47,338	51,488	52,441
Value of land and buildings ..	£6,737	8,051	7,983	8,786	9,279	9,730
Value of plant and machinery ..	£5,390	7,925	8,277	9,218	10,701	12,166
Horse-power of engines ordinarily in use ..	h.p. 53,671	89,864	93,567	97,585	98,251	108,478

(a) Government and Local Authority only.

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

11. Motor Vehicles.—The industries catering for the motor trade are included in Class IV., Industrial Metals, Machines and Conveyances. In the table below a summary is given of the principal statistics for 1953-54 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.

1953-54.

Items.	Construc- tion and Assembly.	Repairs.	Motor Bodies. (a)	Motor Access- ories.	Total.
Number of factories	68	6,972	1,072	190	8,302
Number of persons employed	15,335	46,889	21,183	6,506	89,913
Salaries and wages paid	£ 12,965,369	28,057,953	16,472,657	4,958,511	62,454,490
Value of power, fuel, etc., used	£ 710,078	872,920	370,254	323,760	2,477,012
Value of materials used	£ 23,656,241	29,751,926	35,220,047	5,544,485	94,172,699
Value of production	£ 25,580,773	43,348,858	24,189,742	7,935,190	101,054,563
Total value of output	£ 49,947,092	73,973,704	59,080,043	13,803,435	197,704,274
Value of land and buildings	£ 6,517,146	28,947,533	7,122,786	3,247,598	45,835,063
Value of plant and machinery	£ 4,808,962	8,837,293	5,576,518	4,174,036	23,396,809
Horse-power of engines ordinarily in use h.p.	31,098	48,078	43,658	24,096	146,930

(a) Includes motor body repairing, panel beating, duco spraying, etc.

In the next table similar details are shown on a State basis for 1953-54 and for Australia for selected years for these branches combined.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories	3,414	2,172	1,085	640	725	266	8,302
Number of persons employed	28,152	30,409	9,170	14,119	6,092	1,971	89,913
Salaries and wages paid	£ 18,578,675	22,337,852	5,126,558	11,201,919	4,016,223	1,193,263	62,454,490
Value of power, fuel, etc., used	£ 749,636	926,473	175,382	428,031	171,255	26,235	2,477,012
Value of materials used	£ 23,145,264	36,764,591	5,551,844	20,975,283	6,562,079	1,172,738	94,172,699
Value of production	£ 30,604,129	36,432,335	9,728,920	16,386,601	6,134,782	1,767,796	101,054,563
Total value of output	£ 54,499,029	74,123,309	15,456,146	37,789,915	12,869,016	2,966,760	197,704,274
Value of land and buildings	£ 18,457,426	14,463,802	3,850,974	4,582,889	3,176,664	1,303,308	45,835,063
Value of plant and machinery	£ 7,787,442	8,251,416	1,417,806	4,392,643	1,205,875	341,627	23,396,809
Horse-power of engines ordi- narily in use h.p.	43,842	51,147	10,589	28,778	10,153	2,421	146,930

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories	3,592	5,330	5,730	6,587	7,422	8,302
Number of persons employed	39,706	67,874	75,580	82,123	82,609	89,913
Salaries and wages paid	£'000 10,582	28,685	38,789	51,799	54,666	62,454
Value of power, fuel, etc., used	£'000 395	895	1,215	1,610	1,987	2,477
Value of materials used	£'000 12,143	32,427	48,542	70,967	74,405	94,173
Value of production	£'000 15,818	45,091	60,592	78,808	86,305	101,054
Total value of output	£'000 28,356	78,413	110,349	151,385	162,697	197,704
Value of land and buildings	£'000 9,878	18,801	23,301	30,799	38,718	45,835
Value of plant and machinery	£'000 3,758	9,464	11,495	14,982	20,129	23,397
Horse-power of engines ordi- narily in use h.p.	56,117	95,755	109,707	126,228	139,253	146,930

The table below shows the output of motor bodies and the imports of motor bodies and motor chassis for 1938-39 and 1949-50 to 1954-55 :—

PRODUCTION AND IMPORTS OF MOTOR BODIES(a) AND IMPORTS OF MOTOR CHASSIS : AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55. (b)
Motor Bodies(a)—							
Made	No. 79,436	67,196	92,718	98,470	90,822	114,745	127,476
Value	£'000 6,421	14,095	18,465	22,663	22,536	27,699	(c)
Assembled from imported Panels	(d)	29,810	33,212	29,205	21,566	43,077	59,863
Imported	No. 532	115,484	92,791	101,628	7,568	26,874	37,924
Value	£'000 64	17,994	14,275	16,657	1,441	5,956	8,593
Motor Chassis—							
Imported	No. 76,094	187,363	185,751	172,419	59,724	137,331	164,756
Value	£'000 7,315	41,965	46,920	49,864	21,650	36,461	33,209

(a) Excludes sidescars.

(b) Preliminary—subject to revision.

(c) Not yet available.

(d) Not available.

12. Agricultural Machines and Implements.—Owing to the extensive agricultural activities conducted in Australia and the demand for modern mechanized farm equipment, the manufacture of agricultural implements constitutes an important branch of

Australian industry. The articles manufactured include a wide range of implements for tillage, seeding, and planting and the harvesting of crops. Other farm machinery made includes windmills, chaff-cutters and machinery used in the dairying industry.

The following table shows details of establishments classified as agricultural implement works in each State for 1953-54 and for Australia for a series of years.

AGRICULTURAL MACHINES AND IMPLEMENTS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	119	76	36	34	28	..	293
Number of persons employed ..	2,032	6,285	1,511	1,698	404	..	11,930
Salaries and wages paid .. £	1,589,876	5,331,607	980,531	1,283,741	287,220	..	9,472,975
Value of power, fuel, etc., used £	81,350	402,557	50,001	89,379	10,124	..	636,411
Value of materials used .. £	1,581,059	8,599,849	1,078,416	1,533,103	195,930	..	12,988,357
Value of production .. £	2,366,876	7,689,112	1,453,570	1,990,403	424,302	..	13,924,263
Total value of output .. £	4,032,285	16,691,518	2,581,987	3,612,885	630,356	..	27,549,031
Value of land and buildings .. £	1,217,286	1,456,006	402,702	522,749	317,917	..	3,917,560
Value of plant and machinery .. £	715,364	1,995,436	365,667	449,840	101,030	..	3,627,337
Horse-power of engines ordinarily in use .. h.p.	7,858	19,729	4,954	6,405	897	..	39,843

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	161	208	225	257	270	293
Number of persons employed ..	6,563	10,454	11,651	12,481	11,608	11,930
Salaries and wages paid .. £'000	1,373	5,012	6,894	9,044	8,838	9,473
Value of power, fuel, etc., used .. £'000	82	292	433	555	600	637
Value of materials used .. £'000	1,485	6,910	9,952	13,521	11,103	12,988
Value of production .. £'000	1,836	6,983	9,854	13,051	12,787	13,924
Total value of output .. £'000	3,403	14,185	20,239	27,127	24,490	27,549
Value of land and buildings .. £'000	997	2,201	2,814	3,320	3,701	3,918
Value of plant and machinery .. £'000	911	2,215	2,877	3,365	3,526	3,627
Horse-power of engines ordinarily in use .. h.p.	13,346	28,139	33,464	34,598	37,372	39,843

13. **Wireless and Amplifying Apparatus.**—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31 a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined mainly to New South Wales and Victoria, but is becoming increasingly important in South Australia. The number of broadcast listeners' licences increased from a third of a million in 1930-31 to over two million at 30th June, 1955, and this increase reflects the advancement of the industry during that period. During the war years considerable expansion took place in the industry to meet the requirements of the fighting services and apart from a slight drop in output in 1945-46, this expansion has continued.

WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	72	129	139	141	149	162
Number of persons employed ..	4,828	9,283	10,628	8,733	6,912	8,125
Salaries and wages paid .. £'000	754	3,745	5,140	5,361	4,707	5,751
Value of power, fuel, etc., used .. £'000	23	101	147	184	179	109
Value of materials used .. £'000	1,356	6,409	9,229	8,487	7,661	9,782
Value of production .. £'000	1,123	5,252	7,219	7,023	6,042	7,454
Total value of output .. £'000	2,502	11,762	16,595	15,694	13,882	17,435
Value of land and buildings .. £'000	558	1,205	1,339	1,586	1,713	2,011
Value of plant and machinery .. £'000	305	770	946	980	669	1,132
Horse-power of engines ordinarily in use .. h.p.	2,710	10,357	13,565	12,055	10,596	9,274
Domestic receiving sets made(a) No.	163,821	343,323	459,436	358,379	298,955	437,513

(a) Including radiograms and car radios.

NOTE.—There were 444,286 domestic receiving sets made in 1954-55.

14. Cotton.—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The average annual quantity of unginned cotton produced during the five years ended 1938–39 was 18 million lb. and slightly over 2 million lb. in the five years ended 1953–54. Arising out of the development in the local manufacture of cotton materials and the further expansion following the outbreak of war in 1939, plans were completed for an extension of the area devoted to the cultivation of this crop. The downward trend which commenced with the war in the Pacific persisted until recent years but production has recently risen and in 1953–54 amounted to 5,132,000 lb. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XXI.—Agricultural Production.

(ii) *Ginning.* The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly (1953–54) from India, Pakistan, Brazil, Egypt, Peru and the United States of America.

(iii) *Spinning and Weaving.* The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been established and Australia is now producing an extensive range of cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre cord and tyre cord fabric. The number of establishments engaged in cotton spinning and weaving in Australia and other particulars of the industry are shown in the following table for the years 1938–39, and 1949–50 to 1953–54.

COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938–39.	1949–50.	1950–51.	1951–52	1952–53.	1953–54.
Number of factories ..	33	93	91	94	93	96
Number of persons employed ..	3,589	8,377	9,233	8,840	7,673	9,470
Salaries and wages paid .. £'000	493	3,306	4,473	5,297	5,090	6,602
Value of power, fuel, etc., used .. £'000	50	308	441	554	551	690
Value of materials used .. £'000	1,357	9,889	16,873	20,803	14,747	18,083
Value of production .. £'000	979	5,991	7,531	9,272	8,126	10,809
Total value of output .. £'000	2,386	16,188	24,848	30,629	23,421	29,582
Value of land and buildings .. £'000	704	2,844	3,215	3,695	3,951	4,104
Value of plant and machinery .. £'000	736	4,118	4,020	4,214	4,370	4,411
Horse-power of engines ordinarily in use h.p.	9,128	29,118	31,468	32,285	36,517	33,201

15. Wool Carding, Spinning and Weaving.—The importance of this industry is emphasised by the fact that Australia is the world's chief source of wool and the development of the woollen industry since its establishment at an early period in Australian history is of singular interest. The production consists chiefly of woollen cloth and tweed, worsted cloth, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability.

WOOL CARDING, SPINNING AND WEAVING.

1953–54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	56	93	4	3	3	5	164
Number of persons employed ..	7,133	11,655	870	613	(a)	(a)	22,619
Salaries and wages paid .. £	4,523,982	7,621,760	433,136	361,245	(a)	(a)	14,381,744
Value of power, fuel, etc., used .. £	470,036	672,030	32,053	33,051	(a)	(a)	1,328,975
Value of materials used .. £	14,040,263	22,551,965	1,604,716	975,921	(a)	(a)	45,033,084
Value of production .. £	7,474,671	12,068,647	570,071	581,111	(a)	(a)	13,236,805
Total value of output .. £	21,984,970	35,292,642	2,206,840	1,590,086	(a)	(a)	69,598,864
Value of land and buildings .. £	2,512,330	3,698,311	177,345	34,250	(a)	(a)	6,893,778
Value of plant and machinery .. £	2,970,625	5,169,298	356,788	89,452	(a)	(a)	9,086,059
Horse-power of engines ordinarily in use h.p.	18,550	39,324	2,799	2,046	(a)	(a)	68,715

WOOL CARDING, SPINNING AND WEAVING—*continued.*

AUSTRALIA.

Items.	1938-39. (b)	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	90	168	176	181	171	164
Number of persons employed ..	19,608	24,354	24,333	21,244	19,729	22,610
Salaries and wages paid .. £'000	2,888	9,404	11,349	11,543	12,028	14,382
Value of power, fuel, etc., used £'000	393	831	952	1,057	1,175	1,329
Value of materials used .. £'000	7,331	32,741	53,872	44,064	34,655	45,033
Value of production .. £'000	4,791	16,426	18,610	16,272	19,226	23,237
Total value of output .. £'000	12,515	49,998	73,434	61,393	55,056	69,599
Value of land and buildings £'000	2,380	4,347	5,369	6,161	6,242	6,891
Value of plant and machinery £'000	3,370	5,235	6,898	7,881	8,183	9,086
Horse-power of engines ordinarily in use .. h.p.	42,944	63,669	69,070	69,232	67,911	68,715
Articles produced—						
Woolen and worsted cloth (c)						
(d) '000 sq. yds.	31,768	38,028	38,454	29,790	29,400	34,794
Blankets and rugs (c) .. '000	1,279	1,914	2,068	1,382	1,035	1,340

(a) Not available for publication; figures are included in total for Australia. (b) Includes Woollscouring Works in Victoria and Tasmania and Woollscouring Works and Fellmongeries in South Australia. (c) Includes production in other industries. (d) Includes mixtures.

Preliminary details of production in 1954-55 were: Woollen and worsted cloth, 28,400,000 square yards; blankets and rugs, 1,683,000.

16. Hosiery and Other Knitted Goods.—Details for each State for 1953-54 and for Australia for a series of years are shown in the following table:—

HOSIERY AND OTHER KNITTED GOODS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	194	420	7	11	10	3	645
Number of persons employed ..	7,567	15,390	593	119	184	84	23,937
Salaries and wages paid .. £	4,627,712	9,159,653	310,937	49,054	88,456	41,273	14,277,085
Value of power, fuel, etc., used £	221,907	444,278	9,081	2,507	3,906	2,098	683,777
Value of materials used .. £	10,060,976	18,462,401	1,446,158	99,622	237,408	65,491	30,372,056
Value of production .. £	8,095,567	17,081,053	686,266	74,162	166,961	51,404	26,155,413
Total value of output .. £	18,378,450	35,987,732	2,141,505	176,291	408,275	118,993	57,211,246
Value of land and buildings .. £	2,378,104	4,598,502	152,266	31,207	68,459	24,849	7,253,387
Value of plant and machinery .. £	1,894,359	5,049,642	184,316	20,916	37,852	13,807	7,200,892
Horse-power of engines ordinarily in use .. h.p.	6,085	11,566	456	98	203	70	18,478

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	313	496	510	548	587	645
Number of persons employed ..	18,159	21,577	22,268	21,342	20,694	23,937
Salaries and wages paid .. £'000	2,332	7,382	9,605	11,179	11,041	14,277
Value of power, fuel, etc., used £'000	133	315	386	480	588	684
Value of materials used .. £'000	4,284	16,637	22,834	24,517	23,939	30,372
Value of production .. £'000	3,809	12,399	16,257	18,028	21,164	26,155
Total value of output .. £'000	8,226	29,351	39,477	43,025	45,691	57,211
Value of land and buildings .. £'000	1,962	3,877	4,755	5,602	6,329	7,253
Value of plant and machinery .. £'000	1,931	3,815	4,905	5,894	6,038	7,201
Horse-power of engines ordinarily in use .. h.p.	8,884	14,625	16,925	19,677	17,997	18,478

The following quantities of yarn were used in these establishments during 1953-54:—Worsted, 8,206,507 lb.; woollen, 104,384 lb.; wool or worsted and cotton, 378,216 lb.; Wool or worsted and nylon, 48,946 lb.; wool or worsted and rayon, 1,241,941 lb.; cotton, 9,257,773 lb.; mercerised cotton, 818,283 lb.; cotton and rayon, 56,848 lb.; rayon, spun 1,787,680 lb.; rayon filament, 6,195,312 lb.; silk, 31,255 lb.; nylon, spun, 295,291 lb.; nylon filament, 1,162,619 lb.; other, 309,219 lb. Production of garments and stockings is shown in § 10.

17. **Tanning, Currying and Leather Dressing.**—(i) *Details of Industry.* In Class VII. the most important industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

TANNING, CURRYING AND LEATHER DRESSING.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	69	41	13	10	5	1	142
Number of persons employed ..	1,989	2,385	617	223	(a)	(a)	5,445
Salaries and wages paid .. £	1,732,081	1,939,965	443,106	170,048	(a)	(a)	4,464,373
Value of power, fuel, etc., used .. £	186,326	166,169	34,244	17,185	(a)	(a)	417,556
Value of materials used .. £	4,258,693	3,963,734	1,350,053	463,970	(a)	(a)	10,476,745
Value of production .. £	2,432,782	3,043,728	645,340	295,318	(a)	(a)	6,671,673
Total value of output .. £	6,877,801	7,173,631	2,029,637	776,473	(a)	(a)	17,565,974
Value of land and buildings .. £	770,018	1,052,556	103,279	86,974	(a)	(a)	2,054,745
Value of plant and machinery .. £	804,287	783,430	206,923	142,800	(a)	(a)	1,990,371
Horse-power of engines ordinarily in use .. h.p.	12,684	12,505	3,348	1,623	(a)	(a)	31,182

.. Not available for publication; figures are included in the total for Australia.

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	132	145	143	143	141	142
Number of persons employed ..	4,375	5,473	5,362	5,274	5,240	5,145
Salaries and wages paid .. £'000	920	2,755	3,200	3,889	4,163	4,464
Value of power, fuel, etc., used .. £'000	88	243	275	352	382	417
Value of materials used .. £'000	2,983	6,846	8,221	8,796	9,488	11,477
Value of production .. £'000	1,522	4,330	4,950	5,912	5,983	6,672
Total value of output .. £'000	4,593	11,419	13,446	15,066	15,853	17,566
Value of land and buildings .. £'000	814	1,355	1,638	1,857	1,983	2,055
Value of plant and machinery .. £'000	524	1,171	1,425	1,703	1,832	1,990
Horse-power of engines ordinarily in use .. h.p.	12,345	25,792	27,684	28,980	30,314	31,182

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1953-54 are shown in the following table:—

TANNERIES: MATERIALS USED AND PRODUCTION, 1953-54.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Materials used—							
Hides (cattle) .. No.	984,672	1,147,414	396,350	147,521	(a)	(a)	2,835,047
Skins—							
Calf ..	849,483	545,049	22,727	(a)	(a)	..	1,629,458
Goat ..	(a)	(a)	(a)	(a)	(a)	(a)	440,490
Sheep, including Pelts ..	2,079,330	401,242	(a)	(a)(b)	(a)	(a)	h3,473,130
Marsupial ..	46,412	25,480	(a)	(a)	(a)	(a)	108,396
Bark used—							
Wattle .. tons	3,899	5,286	938	(a)	(a)	(a)	h) 10,941
Mallet and Other ..	(a)	1,402	(a)	(a)	238	(a)	b) 1,901
Tanning extract used ..	3,111	2,745	2,033	(a)	952	(a)	9,067
Articles produced—							
Leather made—							
Sole and Belting .. lb.	11,133,054	16,103,750	6,865,316	1,346,139	(a)	(a)	38,674,598
Harness ..	539,761	495,554	569,580	(a)	(a)	(a)	1,546,447
Upholstery .. sq. ft.	(a)	7,185,187	(a)	(a)	(a)	(a)	13,096,682
Dressed and Upper from Hides—							
Sold by Measure-ment—							
Patent .. sq. ft.	(a)	(a)	(a)	(a)	(a)	(a)	3,186,136
All Other ..	16,137,405	17,814,727	7,186,855	3,876,321	(a)	(a)	47,146,512
Sold by Weight (all kinds) .. lb.	(a)	204,544	(a)	..	5,027	(a)	296,940
Dressed from skins—							
Calf .. sq. ft.	5,318,958	3,671,277	1,637,658	(a)	71,987	(a)	10,744,052
Goat ..	1,975,193	78,769	(a)	(a)	(a)	(a)	2,054,262
Sheep ..	7,597,611	1,613,348	(a)	(a)(b)	(a)	(a)	h13,366,093
Marsupial ..	270,427	134,777	(a)	(a)	(a)	(a)	480,012

(a) Not available for publication; figures are included in the total for Australia.

(b) Includes an amount produced or used in other works.

18. Tailoring and Ready-made Clothing.—Statistics showing the distribution of this industry between States in 1953-54 and for Australia for a series of years are shown in the following table :—

TAILORING AND READY-MADE CLOTHING.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	914	648	141	111	131	18	1,963
Number of persons employed ..	17,086	10,593	2,572	1,720	1,041	252	33,264
Salaries and wages paid .. £	8,742,284	5,954,120	1,116,719	822,995	455,189	123,108	17,214,505
Value of power, fuel, etc., used .. £	197,044	126,587	23,124	20,755	10,542	2,075	380,127
Value of materials used .. £	16,974,210	12,523,828	2,175,943	1,110,792	702,383	111,294	33,598,450
Value of production .. £	13,080,085	9,248,825	1,767,990	1,145,986	673,172	159,485	26,075,543
Total value of output .. £	30,251,339	21,899,240	3,967,057	2,277,533	1,386,097	272,854	60,054,120
Value of land and buildings .. £	4,446,971	2,315,555	570,143	535,399	312,855	60,680	8,250,603
Value of plant and machinery .. £	1,324,796	907,433	126,860	109,405	45,336	9,562	2,523,392
Horse-power of engines ordinarily in use .. h.p.	5,247	2,914	487	464	182	45	9,339

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	1,177	1,902	1,890	1,995	1,961	1,963
Number of persons employed ..	26,409	37,250	38,535	36,226	32,200	33,264
Salaries and wages paid .. £'000	3,168	11,246	14,206	16,132	15,681	17,215
Value of power, fuel, etc., used .. £'000	72	204	249	320	363	380
Value of materials used .. £'000	4,947	20,187	27,539	30,078	28,767	33,598
Value of production .. £'000	4,812	17,085	21,349	23,719	23,581	26,076
Total value of output .. £'000	9,831	37,476	49,137	54,126	52,711	60,054
Value of land and buildings .. £'000	3,176	5,872	6,538	7,308	7,573	8,251
Value of plant and machinery .. £'000	356	1,666	2,030	2,431	2,469	2,523
Horse-power of engines ordinarily in use .. h.p.	2,607	8,805	10,137	11,093	10,693	9,339

19. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1938-39 and 1949-50 to 1953-54 are shown in the following table :—

DRESSMAKING AND MILLINERY : AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	869	1,313	1,328	1,423	1,405	1,433
Number of persons employed ..	16,398	22,384	22,557	20,912	18,913	19,197
Salaries and wages paid .. £'000	1,653	6,244	7,568	8,412	8,490	9,230
Value of power, fuel, etc., used .. £'000	33	112	130	149	170	187
Value of materials used .. £'000	2,610	8,996	11,567	12,123	11,746	13,634
Value of production .. £'000	2,592	9,812	11,868	12,700	13,193	14,392
Total value of output .. £'000	5,235	18,920	23,565	24,972	25,109	28,213
Value of land and buildings .. £'000	2,052	3,626	4,068	4,588	4,726	5,033
Value of plant and machinery .. £'000	189	713	903	1,032	1,065	1,108
Horse-power of engines ordinarily in use .. h.p.	1,732	4,361	4,671	4,890	4,790	4,858

20. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1953-54 and for Australia for a series of years :—

SHIRTS, COLLARS AND UNDERCLOTHING.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	148	163	21	25	19	3	379
Number of persons employed ..	3,745	5,275	988	441	676	34	11,156
Salaries and wages paid .. £	1,928,656	2,820,270	445,145	197,580	279,039	13,151	5,683,841
Value of power, fuel, etc., used .. £	34,623	41,481	6,736	3,426	5,204	65	91,535
Value of materials used .. £	4,909,291	5,999,686	413,104	263,621	400,145	1,245	12,077,095
Value of production .. £	3,008,203	5,098,227	600,920	282,544	372,306	15,231	9,377,518
Total value of output .. £	7,952,117	11,139,394	1,050,760	549,591	837,745	16,541	21,546,148
Value of land and buildings .. £	804,960	1,287,626	152,780	62,145	94,875	14,520	2,416,906
Value of plant and machinery .. £	310,008	457,966	56,285	22,754	52,010	5,940	904,963
Horse-power of engines ordinarily in use .. h.p.	1,560	2,201	101	162	181	16	4,320

SHIRTS, COLLARS AND UNDERCLOTHING—continued.

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	283	397	410	419	379	379
Number of persons employed ..	11,081	12,545	12,870	12,640	9,657	11,156
Salaries and wages paid .. £'000	1,143	3,515	4,432	5,361	4,397	5,684
Value of power, fuel, etc., used .. £'000	23	60	72	82	76	92
Value of materials used ..	2,651	8,915	10,730	12,333	9,670	12,677
Value of production .. £'000	1,761	5,978	7,503	8,715	7,524	9,377
Total value of output ..	4,435	14,953	18,305	21,130	17,270	21,546
Value of land and buildings .. £'000	946	1,833	2,155	2,091	2,151	2,417
Value of plant and machinery .. £'000	231	693	845	885	846	905
Horse-power of engines ordinarily in use .. h.p.	1,874	3,795	6,017	5,189	4,779	4,320

21. Boots and Shoes.—(i) *Details of Industry.* The boot and shoe factories hold an important place both in regard to employment afforded and extent of output. The following tables refer to boot and shoe factories as distinct from those devoted to repairing. It has been necessary to include details of boot and shoe repairing in Tasmania, in order to conceal confidential information for that State. Factories engaged in the manufacture of rubber boots and shoes are excluded, being classified under Rubber Goods, *see* para. 38, page 386.

BOOTS AND SHOES.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	191	239	3	23	11	22	520
Number of persons employed ..	7,544	11,402	1,68	1,379	767	180	22,953
Salaries and wages paid .. £	4,735,496	7,114,644	916,857	875,123	444,048	99,093	14,215,261
Value of power, fuel, etc., used .. £	89,347	99,865	12,517	13,223	8,548	1,304	224,804
Value of materials used .. £	6,319,973	11,059,291	1,364,717	1,034,336	596,840	133,099	20,508,256
Value of production ..	6,577,505	9,866,437	1,146,772	1,123,613	597,791	132,351	19,444,472
Total value of output .. £	12,986,825	21,025,593	2,524,000	2,171,172	1,203,179	260,754	40,177,532
Value of land and buildings .. £	1,274,502	1,604,864	216,838	219,885	138,068	36,715	3,490,872
Value of plant and machinery .. £	771,651	1,711,239	247,919	262,260	134,291	24,342	3,151,702
Horse-power of engines ordinarily in use .. h.p.	4,933	9,150	885	981	595	135	16,679

AUSTRALIA.

Items.	1945-46.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	383	570	521	540	509	520
Number of persons employed ..	18,264	23,180	23,783	22,775	20,920	22,953
Salaries and wages paid .. £'000	4,408	8,410	10,212	12,415	12,430	14,215
Value of power, fuel, etc., used .. £'000	75	123	141	172	197	225
Value of materials used ..	7,520	12,353	15,390	18,058	17,668	20,508
Value of production ..	6,472	11,802	14,611	17,162	17,162	19,444
Total value of output ..	14,067	24,368	30,142	35,392	35,027	40,177
Value of land and buildings .. £'000	1,518	2,328	2,822	3,310	3,227	3,491
Value of plant and machinery .. £'000	1,222	1,877	2,265	2,402	2,653	3,152
Horse-power of engines ordinarily in use .. h.p.	9,678	15,644	17,200	18,573	18,214	16,679

(a) Includes details of boot and shoe repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made in factories producing and repairing boots and shoes in each State are shown for 1953-54 in the following table. Particulars relating to the output of rubber boots and shoes are not included:—

BOOT AND SHOE FACTORIES: OUTPUT, 1953-54.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Quantity—							
Boots, shoes and sandals pairs ..	6,744,102	9,631,948	1,382,097	1,430,492	650,207	109,777	19,948,623
Slippers ..	2,902,004	4,240,842	723,571	(a)	624,313	(u)	8,557,746
Value—							
Boots, shoes and sandals .. £	11,095,206	17,318,983	1,995,782	2,111,440	865,640	187,298	33,574,349
Slippers ..	1,595,750	2,865,768	310,321	(a)	341,850	(u)	5,149,335

(a) Not available for publication; figures are included in total for Australia.

22. Flour-milling.—(i) *Details of Industry.* The following table shows the position of the grain-milling industry in each State for the year 1953-54 and for Australia for a series of years :—

FLOUR-MILLING.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	53	37	II	26	20	10	157
Number of persons employed ..	1,723	1,240	(a)	460	543	(a)	4,602
Salaries and wages paid ..	£ 1,492,078	1,057,925	(a)	378,421	439,385	(a)	3,847,152
Value of power, fuel, etc., used ..	£ 374,114	177,421	(a)	94,845	125,181	(a)	847,310
Value of materials used ..	£ 20,666,320	14,947,772	(a)	5,611,561	6,752,569	(a)	53,945,882
Value of production ..	£ 3,313,455	2,405,804	(a)	700,225	834,845	(a)	8,133,863
Total value of output ..	£ 24,353,889	17,530,997	(a)	6,406,631	7,712,595	(a)	62,927,064
Value of land and buildings ..	£ 1,578,721	1,164,232	(a)	264,098	697,789	(a)	4,259,932
Value of plant and machinery ..	£ 2,041,200	1,226,794	(a)	471,395	602,736	(a)	4,921,168
Horse-power of engines ordinarily in use .. h.p.	17,443	14,007	(a)	4,392	5,260	(a)	52,545

(a) Not available for publication ; figures are included in total for Australia.

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52	1952-53.	1953-54.
Number of factories ..	172	161	165	162	158	157
Number of persons employed ..	3,783	4,541	4,842	4,681	4,892	4,602
Salaries and wages paid .. £'000	896	2,349	2,933	3,466	3,884	3,847
Value of power, fuel, etc., used .. £'000	231	444	545	730	866	847
Value of materials used ..	10,573	27,837	34,350	45,576	51,373	53,946
Value of production ..	£'000 2,001	4,277	5,636	7,313	8,296	8,134
Total value of output ..	£'000 12,895	32,558	40,531	53,619	60,535	62,927
Value of land and buildings .. £'000	2,091	2,557	3,177	3,606	3,912	4,260
Value of plant and machinery .. £'000	1,814	2,593	3,408	4,106	4,531	4,921
Horse-power of engines ordinarily in use .. h.p.	27,795	36,081	38,413	41,824	44,781	52,545

(ii) *Production of Flour and By-products.* The production of flour by the mills in each State (including other than flour mills) for the years 1938-39 and 1948-49 to 1954-55 was as follows :—

FLOUR-MILLING : PRODUCTION OF FLOUR.

(Tons of 2,000 lb.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1948-49 (a)	667,645	479,288	110,843	211,787	183,143	26,484	1,679,190
1949-50 (a)	597,491	447,784	112,995	162,259	161,251	27,243	1,509,023
1950-51 (a)	694,036	448,881	116,503	189,962	218,841	27,336	1,695,559
1951-52 (a)	578,686	559,224	124,703	206,856	223,936	27,745	1,721,150
1952-53 (a)(b)	543,693	592,465	132,839	201,685	227,260	28,349	1,726,300
1953-54 (a)(b)	603,575	473,842	138,524	164,907	197,654	30,556	1,609,058
1954-55 (a)(b)(c)	570,895	452,536	156,668	141,517	189,603	29,247	1,538,466

(a) Includes wheatmeal for baking.

(b) Includes also sharps.

(c) Preliminary, subject to revision.

In addition, 610,000 tons of bran and pollard were made in 1953-54 and 566,000 tons in 1954-55. The total quantity of wheat ground in flour mills was 72,354,671 bushels in 1953-54 and 70,287,909 bushels in 1954-55.

23. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on is given in the table below. It should be noted, however, that the details refer only to establishments coming within the definition of a factory as explained at the beginning of this section. For that reason the tables do not give complete details of the industry, as a large number of bakehouses not coming within the definition are excluded. This is true of all other industries covered by the statistics of manufacturing production, but, in view of the omission of such a large number of establishments in this instance, special mention is deemed necessary.

BAKERIES (INCLUDING CAKES AND PASTRY).

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia
Number of factories ..	1,470	1,078	473	223	286	157	3,687
Number of persons employed ..	7,343	5,327	2,312	1,292	980	1,504	18,756
Salaries and wages paid £	3,876,974	2,852,675	1,048,068	741,355	467,892	967,318	9,954,282
Value of power, fuel, etc., used £	739,336	515,345	194,999	132,082	93,699	129,729	1,805,190
Value of materials used £	11,632,528	8,933,182	3,632,306	2,500,270	1,760,184	4,369,961	32,828,431
Value of production ..	£ 8,915,016	6,742,142	2,522,858	1,574,455	1,142,735	2,209,726	32,106,932
Total value of output ..	£ 21,286,880	16,190,669	6,350,163	4,206,807	2,996,618	6,709,416	57,740,553
Value of land and buildings £	5,694,495	3,913,899	1,162,078	944,122	657,996	1,241,498	13,617,088
Value of plant and machinery £	2,631,019	2,276,859	651,065	583,263	393,110	622,737	7,158,053
Horse-power of engines ordinarily in use .. h.p.	8,667	6,396	2,619	2,396	1,566	1,818	26,462

(a) Includes confectionery.

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	1,958	3,064	3,167	3,347	3,534	3,687
Number of persons employed ..	11,715	17,925	17,929	18,332	18,405	18,758
Salaries and wages paid £'000	1,993	5,891	6,942	8,571	9,368	9,954
Value of power, fuel, etc., used £'000	306	917	1,116	1,486	1,694	1,805
Value of materials used ..	£'000 6,651	18,406	20,786	26,451	29,672	32,829
Value of production ..	£'000 4,509	12,987	14,893	18,624	21,788	23,107
Total value of output ..	£'000 11,466	32,310	36,795	46,561	53,151	57,741
Value of land and buildings £'000	4,960	8,817	9,199	10,789	12,145	13,617
Value of plant and machinery £'000	1,478	3,635	4,078	5,082	6,073	7,158
Horse-power of engines ordinarily in use .. h.p.	10,855	19,160	20,483	22,248	23,792	26,462

24. **Sugar-mills.**—(i) *General.* Sugar-cane is grown in New South Wales and Queensland and particulars of area, yield, etc., are given in extended detail in Chapter XXI.—Agricultural Production.

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. Particulars of cane crushed and sugar produced embodied in the following table refer to the quantities treated during the years ended 30th June, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced may differ slightly from those given in Chapter XXI.—Agricultural Production, which relate to harvest years.

(ii) *Details for States.* The following table shows details of the operations of sugar mills in New South Wales and Queensland for the years 1938-39 and 1940-50 to 1953-54 :—

SUGAR-MILLS.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
NEW SOUTH WALES.						
Number of factories ..	3	3	3	3	3	3
Number of persons employed ..	212	227	282	176	138	156
Cane crushed .. tons	337,038	330,740	350,849	321,388	125,714	263,249
Raw sugar produced (94 net titre) .. tons	45,106	40,706	41,258	41,060	14,272	34,004
QUEENSLAND.						
Number of factories ..	33	32	32	31	31	31
Number of persons employed ..	4,419	5,898	6,394	5,612	6,495	7,358
Cane crushed .. tons	5,432,193	6,318,006	6,691,704	5,005,172	6,841,536	8,751,063
Raw sugar produced (94 net titre) .. tons	775,064	896,413	879,844	704,341	934,614	1,220,383
Molasses—						
Sold to distilleries .. '000 gals	8,276	17,596	15,234	12,557	15,774	23,323
Used as fodder .. " "	4,237	5,563	5,582	5,900	5,887	5,486
Used as manure .. " "	3,293	7,517	5,555	5,484	7,499	11,466
Run to waste .. " "	499	283	50	37	76	168
Burnt as fuel .. " "	3,749	1,490	2,371	1,005	934	183
Sold or used for other purposes .. '000 gals.	232	727	581	324	426	516
Total molasses disposed of .. '000 gals	20,286	33,176	29,373	25,307	30,596	41,142

25. *Sugar-refining.*—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1953-54 there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The quantity of raw sugar treated amounted to 465,848 tons for a yield of 449,015 tons of refined sugar.

26. *Confectionery.*—The figures for 1953-54 for each State and for Australia for a series of years are shown hereunder :—

CONFECTIONERY.

1953-54

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories ..	97	99	23	22	8	(a)	249
Number of persons employed ..	2,930	3,063	318	351	314	(a)	6,976
Salaries and wages paid .. £	1,939,654	1,960,725	128,653	184,837	168,169	(a)	4,382,038
Value of power, fuel, etc., used .. £	230,206	162,704	10,920	22,496	17,589	(a)	443,915
Value of materials used .. £	6,543,033	6,001,657	462,973	416,505	432,757	(a)	13,850,925
Value of production .. £	4,381,632	3,139,110	223,152	258,106	305,467	(a)	8,307,465
Total value of output .. £	11,154,869	9,303,471	697,015	697,107	755,813	(a)	22,608,305
Value of land and buildings .. £	1,180,350	985,339	181,360	219,927	82,947	(a)	2,649,923
Value of plant and machinery .. £	1,398,150	1,333,615	108,764	114,666	83,580	(a)	3,038,775
Horse-power of engines ordinarily in use .. h.p.	13,864	12,016	826	1,578	479	(a)	28,763

AUSTRALIA.(b)

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	148	267	250	250	256	249
Number of persons employed ..	7,256	8,064	7,801	7,361	6,873	6,976
Salaries and wages paid .. £'000	1,041	2,974	3,431	4,006	4,084	4,382
Value of power, fuel, etc., used .. £'000	107	263	299	371	436	444
Value of materials used .. £'000	3,102	9,571	10,370	11,997	12,554	13,857
Value of production .. £'000	2,418	6,641	6,810	7,801	7,910	8,307
Total value of output .. £'000	5,627	16,475	17,479	20,169	20,900	22,608
Value of land and buildings .. £'000	1,423	2,071	2,319	2,428	2,510	2,650
Value of plant and machinery .. £'000	1,364	2,087	2,421	2,704	2,872	3,039
Horse-power of engines ordinarily in use .. h.p.	16,154	23,463	26,473	26,887	26,002	28,763

(a) Not available for publication. Included with Bakeries.

(b) Excludes Tasmania.

27. Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar.—(i) *Details of Industry.* The following table shows particulars of factories included in this class for each State for 1953-54 and for Australia for a series of years :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	59	64	18	23	11	22	197
Number of persons employed ..	2,734	4,314	1,516	1,293	139	1,111	11,101
Salaries and wages paid .. £	1,990,566	3,242,993	1,033,319	819,126	78,278	701,013	7,870,295
Value of power, fuel, etc., used .. £	105,986	293,378	58,916	54,727	5,424	49,767	667,220
Value of materials used .. £	6,779,912	13,546,315	4,513,624	3,197,081	218,176	1,624,567	28,674,662
Value of production .. £	3,125,937	7,346,966	2,162,923	1,062,195	144,671	948,990	14,991,684
Total value of output .. £	1,101,835	2,388,659	6,735,493	3,309,003	368,265	2,623,317	14,526,572
Value of land and buildings .. £	1,743,106	2,540,871	684,603	448,162	103,582	616,653	6,136,665
Value of plant and machinery .. £	1,431,856	2,443,327	386,253	414,852	49,096	678,133	5,403,519
Horse-power of engines ordinarily in use .. h.p.	8,983	14,636	2,376	1,887	371	3,477	31,721

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	123	197	200	201	264	197
Number of persons employed ..	6,476	12,200	13,124	13,152	10,815	11,101
Salaries and wages paid .. £'000	1,149	4,901	6,298	7,793	9,391	7,870
Value of power, fuel, etc., used .. £'000	97	415	521	672	636	660
Value of materials used .. £'000	4,800	17,481	21,234	28,280	27,238	28,875
Value of production .. £'000	2,334	8,374	10,685	13,623	12,662	14,992
Total value of output .. £'000	7,231	26,270	32,449	42,581	40,526	44,527
Value of land and buildings .. £'000	1,382	3,490	4,082	5,031	6,025	6,137
Value of plant and machinery .. £'000	721	3,116	3,720	4,425	5,095	5,404
Horse-power of engines ordinarily in use .. h.p.	7,873	25,314	26,718	29,792	30,241	31,721

(ii) *Production.* During the 1939-45 War, production of jams increased greatly and an output of 171 million lb. was attained in 1943-44. Production afterwards decreased, but attained a new record of 198.5 million lb. in 1947-48. It dropped to 85.7 million lb. in 1953-54. Preliminary figures for 1954-55 show production as being 78.7 million lb.

The peak output of preserved fruit occurred in 1953-54 with 338.6 million lb. compared with the previous highest level of 256.1 million lb. attained in 1951-52. Preliminary figures for 1954-55 show production as being 313.9 million lb.

There has also been a marked development in the production of canned vegetables. In 1938-39 output totalled 10.3 million lb. but, as a result of the war-time demand by the armed services, production reached the record level of 119.1 million lb. in 1944-45. However, it has since declined and in 1953-54 amounted to 40.3 million lb. Preliminary figures for 1954-55 show production as being 46.9 million lb.

The following table shows the total quantity and value of jams, pickles, sauces and other items manufactured in each State in 1953-54 :—

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : OUTPUT. 1953-54.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Jams .. '000 lb.	23,800	(a) 14,395	9,896	6,863	733	(b)	85,687
Fruit, preserved ..	52,592	176,755	59,376	32,072	91	17,676	338,562
Fruit Pulp(d) .. cwt.	11,609	49,681	15,006	13,801	18,102	82,013	223,212
Fruit Juices, natural .. '000 gals.	214	71	2,552	171	73	80	3,161
Vegetables, preserved .. '000 lb.	19,603	14,784	(c)	(c)	(c)	(c)	40,265
Tomato Pulp(d) .. cwt.	24,522	148,131	(c)	15,202	11,486	(c)	199,547
Tomato Paste, Puree, etc. .. '000 pints	286	927	(c)	(c)	(c)	..	1,325
Pickles ..	2,951	2,161	152	1,420	212	..	6,856
Sauces ..	10,426	10,622	1,745	1,834	692	451	25,770
Soup (canned) ..	3,070	22,175	..	243	21	..	25,509

(a) Includes Tasmania. (b) Included with Victoria. (c) Not available for publication. Figures are included in total for Australia. (d) Including quantities made and used in the works producing.

28. Bacon-curing.—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1953-54 and for Australia for a series of years :—

BACON-CURING.

1953-54

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	32	16	9	13	4	11	85
Number of persons employed ..	608	623	1,053	380	215	96	2,975
Salaries and wages paid .. £	502,853	460,726	774,484	291,235	166,553	74,117	2,269,968
Value of power, fuel, etc., used £	81,371	59,106	70,052	51,503	29,708	5,912	297,652
Value of materials used .. £	4,524,168	3,667,237	6,507,900	2,071,384	2,035,665	642,158	19,448,512
Value of production .. £	1,081,675	1,183,095	1,439,066	379,066	172,283	154,802	4,409,987
Total value of output .. £	5,687,214	4,909,438	8,017,018	2,501,953	2,237,656	802,872	24,156,151
Value of land and buildings .. £	474,171	306,904	479,722	250,985	103,174	122,348	1,737,304
Value of plant and machinery .. £	211,759	170,324	317,081	193,431	32,845	29,178	954,618
Horse-power of engines ordinarily in use .. h.p.	2,194	2,753	3,696	1,832	762	448	11,685

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	76	86	84	83	85	85
Number of persons employed ..	2,047	2,907	2,961	2,838	2,994	2,975
Salaries and wages paid .. £'000	480	1,318	1,577	1,895	2,225	2,270
Value of power, fuel, etc., used .. £'000	77	170	204	251	292	298
Value of materials used .. £'000	3,768	12,518	14,076	16,269	18,356	19,448
Value of production .. £'000	865	2,283	2,930	3,907	4,026	4,410
Total value of output .. £'000	4,710	14,971	17,210	20,427	23,154	24,156
Value of land and buildings .. £'000	750	1,079	1,270	1,356	1,635	1,737
Value of plant and machinery .. £'000	357	537	610	724	917	955
Horse-power of engines ordinarily in use .. h.p.	9,389	10,093	10,472	10,700	11,636	11,685

(ii) *Quantity of Production.* The number of pigs cured and the quantity of bacon and ham and lard produced in factories in each State for 1953-54 are shown in the following table :—

BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1953-54.

Particulars.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
Pigs killed for bacon and ham—							
For curing on own account ..	208,204	131,272	224,595	61,438	77,219	27,010	729,122
For curing on commission ..	10,985	1,716	1,165	552			
Pork and green bacon used for—							
Curing on own account '000 lb.	1,711	2,276	(a)	(a)	835	(a)	5,547
Curing on commission ..	4,565	2	..	..	5	..	4,572
Sugar used .. ton	76	19	145	24	23	14	301
Finished bacon and ham made (b)—							
On own account .. '000 lb.	18,652	14,270	20,587	6,217	7,713	1,983	69,422
On commission ..	5,524	185	129	53	10	56	5,957
Green bacon and ham ..	1,127	1,328	2,545	462	736	246	6,444
Lard produced .. cwt.	4,732	6,657	19,566	3,647	5,471	900	40,973

(a) Not available for publication; figures are included in total for Australia. (b) Includes smoked bacon and ham, cooked ham (not smoked) made for retail sale, and canned bacon and ham.

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

20. Butter, Cheese and Condensed and Dried Milk.—(i) *Details of Industry.* The following table shows particulars of butter, cheese and condensed and dried milk factories in each State for 1953-54 and for Australia for a series of years.

BUTTER, CHEESE AND CONDENSED AND DRIED MILK.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	78	135	91	49	15	21	380
Number of persons employed ..	2,412	5,162	1,623	771	294	316	10,580
Salaries and wages paid .. £	1,913,753	4,333,802	1,143,410	563,866	222,966	238,569	8,416,368
Value of power, fuel, etc., used .. £	622,688	1,314,460	221,536	115,800	68,775	52,861	2,396,420
Value of materials used .. £	16,631,526	43,447,230	22,436,121	5,049,637	3,236,593	3,323,543	94,019,950
Value of production .. £	3,452,188	8,643,239	1,669,398	816,776	511,822	520,207	15,913,670
Total value of output .. £	20,706,401	53,299,929	24,627,655	5,982,163	3,817,190	3,806,701	112,330,040
Value of land and buildings .. £	2,880,959	4,217,221	1,405,248	453,282	146,772	259,478	9,364,960
Value of plant and machinery .. £	3,814,666	5,545,539	1,788,948	433,936	272,930	226,757	12,082,776
Horse-power of engines ordinarily in use .. h.p.	32,977	32,484	19,715	5,863	1,838	1,986	94,863

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52	1952-53.	1953-54.
Number of factories ..	523	428	409	399	384	380
Number of persons employed ..	6,851	10,469	10,707	10,473	10,641	10,580
Salaries and wages paid .. £'000	1,570	4,941	6,020	7,186	8,098	8,416
Value of power, fuel, etc., used .. £'000	390	1,340	1,504	1,837	2,339	2,396
Value of materials used .. £'000	29,162	60,762	61,581	68,038	97,291	94,020
Value of production .. £'000	3,543	8,099	10,790	12,535	14,350	15,914
Total value of output .. £'000	33,095	70,201	73,875	82,410	113,980	112,330
Value of land and buildings .. £'000	2,880	4,562	5,400	6,585	7,571	9,365
Value of plant and machinery .. £'000	3,067	5,547	7,014	8,569	10,250	12,083
Horse-power of engines ordinarily in use .. h.p.	45,059	69,800	74,199	77,439	84,428	91,863

(ii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced and the quantities of milk used in their production during 1953-54. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED MILK, ETC. FACTORIES: PRODUCTION, 1953-54.

Particulars.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
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MATERIALS USED.

Whole Milk used in manufacture of—							
Butter '000 gal	138,106	296,322	189,190	31,909	28,205	37,678	721,410
Cheese	7,333	54,925	15,162	24,915	(a)	(a)	105,719
Condensed, Dried and other Milk Products '000 gal	10,535	59,732	(a)	(a)	3,089	2,881	86,667
Sugar ton	1,212	13,229	(a)	(a)	(a)	(a)	16,508

PRODUCTION.

Butter ton	29,713	63,616	41,797	7,586	6,142	7,263	156,117
Cheese (Green Weight)	3,210	25,977	(b) 6,746	11,612	(a)	(a)	(b) 49,043
Condensed Milk (Sweetened and Unsweetened)	(a)	35,999	..	(a)	(a)	..	42,386
Concentrated—							
Whole Milk	(a)	5,268	(a)	..	(a)	(a)	19,161
Skim Milk .. ..	..	(a)	(a)	..	..	..	797
Powdered Full Cream Milk—							
Spray	(a)	11,221	(a)	(a)	(a)	(a)	15,616
Roller	(a)	1,687	(a)	(a)	(a)	(a)	3,289
Infants' and Invalids' Foods (including Malted Milk and Milk Sugar)	(a)	(a)	..	..	..	(a)	11,740
Powdered Skim Milk—							
Spray	3,235	5,996	(a)	(a)	(a)	(a)	9,339
Roller	1,866	7,748	(a)	(a)	(a)	(a)	10,465
Butter, Milk and Whey Powder	627	3,713	(a)	162	(a)	..	5,358
Casein	(a)	(a)	..	..	..	..	3,827
Ice Cream Mix—							
Powder	(a)	(a)	..	(a)	(a)	..	582
Liquid	(a)	(a)	..	..	..	..	2,998
Processed Cheese	(a)	(a)	(a)	..	..	..	14,337

(a) Not available for publication; figures are included in total for Australia.
 tons of cheese valued at £26,348 made in establishments not classified as factories.

(b) Includes 119

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

30. Meat and Fish Preserving.—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. The substitution of chilled for frozen meat exported is referred to in Chapter XXII.—Pastoral Production. In recent years there has been considerable expansion in the canning of meat and fish.

MEAT AND FISH PRESERVING.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	14	16	26	21	21	4	106
Number of persons employed ..	846	1,064	6,25	345	56	46	9,113
Salaries and wages paid .. £	585,581	844,824	5,217,04	203,116	510,467	33,848	7,391,881
Value of power, fuel, etc., used .. £	100,951	106,352	768,81	20,305	74,153	4,502	1,015,079
Value of materials used .. £	1,137,737	5,155,044	33,640,136	1,136,418	3,536,037	65,680	46,671,052
Value of production .. £	1,161,031	1,261,704	7,525,286	373,611	1,000,629	48,248	11,374,112
Total value of output .. £	1,160,311	6,526,100	41,874,231	1,530,338	4,610,819	118,430	59,060,243
Value of land and buildings .. £	303,316	629,918	2,494,431	169,176	761,052	51,971	4,500,464
Value of plant and machinery .. £	385,347	477,185	1,290,309	148,169	496,206	28,921	2,826,137
Horse-power of engines ordinarily in use .. h.p.	3,057	2,931	20,356	1,011	4,114	341	31,810

AUSTRALIA.

Items.	1938-39	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	3	86	86	87	98	106
Number of persons employed ..	4,09	8,552	7,940	7,356	8,771	9,113
Salaries and wages paid .. £'000	1,181	4,165	4,752	5,222	6,820	7,395
Value of power, fuel, etc., used .. £'000	134	550	633	742	972	1,015
Value of materials used .. £'000	6,351	23,640	30,578	33,821	47,637	46,671
Value of production .. £'000	1,601	7,200	6,528	8,751	12,126	11,374
Total value of output .. £'000	8,086	31,390	37,739	43,321	60,735	59,060
Value of land and buildings .. £'000	1,966	3,015	3,223	3,990	4,562	4,500
Value of plant and machinery .. £'000	1,325	1,970	2,297	2,623	2,786	2,826
Horse-power of engines ordinarily in use .. h.p.	13,385	28,668	30,081	34,510	33,328	31,810

Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XXII.—Pastoral Production.

31. Breweries.—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1953-54 and for Australia for a series of years. It should be noted, however, that the data shown are not strictly comparable throughout, owing to the inability or failure of some breweries to furnish a separate return for each branch of activity. Consequently the figures for some States include details of employment, wages, output, etc., not connected with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

BREWERIES.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	9	7	6	4	3	2	31
Number of persons employed ..	1,737	2,152	779	745	(a)	(a)	6,193
Salaries and wages paid .. £	1,674,080	1,730,707	593,579	634,531	(a)	(a)	5,325,416
Value of power, fuel, etc., used .. £	493,568	400,405	158,922	118,418	(a)	(a)	1,366,161
Value of materials used .. £	6,412,436	7,060,641	1,787,853	1,890,040	(a)	(a)	19,974,349
Value of production .. £	5,100,949	3,048,705	1,754,866	1,274,208	(a)	(a)	13,048,265
Total value of output (b) .. £	12,006,953	10,509,751	3,701,641	3,282,666	(a)	(a)	34,388,775
Value of land and buildings .. £	2,007,048	2,351,068	1,323,538	544,337	(a)	(a)	7,255,798
Value of plant and machinery .. £	2,615,833	1,318,513	1,219,121	1,236,742	(a)	(a)	7,681,217
Horse-power of engines ordinarily in use .. h.p.	15,467	0,306	6,128	3,506	(a)	(a)	38,803

BREWERIES—continued.

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	34	30	29	31	32	31
Number of persons employed ..	3,668	5,258	5,517	5,914	5,904	6,193
Salaries and wages paid .. £'000	1,215	2,896	3,666	4,564	5,030	5,325
Value of power, fuel, etc., used .. £'000	251	704	849	1,145	1,388	1,366
Value of materials used .. £'000	3,407	7,584	9,081	11,739	16,452	19,975
Value of production .. £'000	5,372	7,563	8,458	10,298	11,458	13,048
Total value of output(b) .. £'000	9,030	15,851	18,388	23,182	29,208	34,389
Value of land and buildings .. £'000	2,801	3,507	5,162	5,715	6,480	7,256
Value of plant and machinery .. £'000	2,737	3,623	4,489	4,832	5,870	7,681
Horse-power of engines ordinarily in use .. h.p.	23,231	26,512	28,765	30,181	32,754	38,803

(a) Not available for publication; figures are included in total for Australia.

(b) Excludes Excise Duty.

(ii) *Production, Consumption, Materials Used.* The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter increased each year to 109.2 million gallons in 1941-42. Under the Control of Liquor Order which operated between March, 1942 and March, 1946, the production of beer was restricted and consequently output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter production increased, and in 1954-55 amounted to over 220 million gallons.

The average annual consumption of ale, stout and beer prior to the economic depression of the early thirties exceeded 11 gallons per head of the population: it dropped to 7.32 gallons in 1931-32, increased to 13.76 gallons in 1941-42 and declined again to about 13 gallons during the period of control. The consumption per head had increased to 24.09 gallons by 1954-55.

The table below shows the quantities of materials used and the quantity and value of ale, stout and beer (excluding waste beer) brewed in each State during 1953-54:—

BREWERIES: MATERIALS USED AND PRODUCTION, 1953-54.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MATERIALS USED.							
Malt .. bus.	2,234,154	2,047,945	683,695	555,319	(a)	(a)	6,378,087
Hops .. lb.	2,094,935	1,332,912	460,248	438,046	(a)	(a)	4,874,837
Sugar .. ton	18,325	12,122	4,139	3,770	(a)	(a)	41,273

ALE, BEER AND STOUT BREWED (EXCLUDING WASTE BEER).

Quantity .. '000 gals.	79,943	63,633	21,323	19,387	(a)	(a)	208,557
Value(b) .. £'000	11,881	10,396	3,684	3,277	(a)	(a)	33,782

(a) Not available for publication; figures are included in total for Australia.

(b) Excludes Excise Duty.

32. *Wineries and Distilleries.*—The following table shows particulars of the operations of Wineries and Distilleries for each State during 1953-54 and for Australia for a series of years.

WINERIES AND DISTILLERIES.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	32	32	5	78	17	..	164
Number of persons employed ..	275	314	182	1,154	56	..	1,981
Salaries and wages paid .. £	229,529	235,316	121,149	860,918	28,271	..	1,475,183
Value of power, fuel, etc., used .. £	97,060	70,041	79,766	116,137	1,941	..	364,965
Value of materials used .. £	1,040,397	676,616	345,043	3,542,670	116,443	..	5,721,169
Value of production .. £	785,078	532,175	266,281	1,665,472	64,466	..	3,253,472
Total value of output .. £	1,922,535	1,278,832	691,110	5,264,279	182,850	..	9,330,606
Value of land and buildings .. £	566,000	251,931	181,579	1,234,545	48,709	..	2,283,664
Value of plant and machinery .. £	546,468	374,657	269,787	881,028	35,763	..	2,107,703
Horse-power of engines ordinarily in use .. h.p.	1,679	2,639	591	6,073	293	..	11,275

WINERIES AND DISTILLERIES—*continued.*

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	135	146	153	158	167	164
Number of persons employed ..	1,133	2,130	2,158	2,277	2,021	1,981
Salaries and wages paid .. £'000	246	976	1,122	1,416	1,431	1,475
Value of power, fuel, etc., used .. £'000	58	260	294	383	333	365
Value of materials used .. £'000	1,421	4,484	4,810	7,076	5,464	5,721
Value of production .. £'000	811	2,169	2,637	3,118	3,198	3,254
Total value of output .. £'000	2,290	6,913	7,741	10,577	8,995	9,340
Value of land and buildings .. £'000	1,002	1,300	1,795	1,920	2,104	2,284
Value of plant and machinery .. £'000	916	1,210	1,556	1,774	1,913	2,108
Horse-power of engines ordinarily in use .. h.p.	4,396	8,175	9,189	11,038	10,995	11,275

33. Tobacco, Cigars and Cigarettes.—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1953-54 are shown below for each State and for Australia for a series of years. There are no such factories in Tasmania.

TOBACCO, CIGARS AND CIGARETTES.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories ..	15	12	7	..	2	36
Number of persons employed ..	2,451	2,023	(a)	..	(a)	4,757
Salaries and wages paid .. £	1,804,984	1,437,632	(a)	..	(a)	3,416,708
Value of power, fuel, etc., used .. £	106,851	37,853	(a)	..	(a)	151,043
Value of materials used .. £	15,845,396	10,370,568	(a)	..	(a)	26,834,971
Value of production .. £	3,951,651	4,089,786	(a)	..	(a)	8,340,848
Total value of output .. £	19,903,898	14,498,207	(a)	..	(a)	35,326,862
Value of land and buildings .. £	742,802	841,731	(a)	..	(a)	1,821,606
Value of plant and machinery .. £	679,324	1,014,396	(a)	..	(a)	1,916,924
Horse-power of engines ordinarily in use .. h.p.	4,327	2,145	(a)	..	(a)	6,919

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	30	37	37	36	37	36
Number of persons employed ..	5,544	5,167	5,044	4,971	4,704	4,757
Salaries and wages paid .. £'000	1,096	1,992	2,380	2,932	3,204	3,417
Value of power, fuel, etc., used .. £'000	34	89	90	126	144	151
Value of materials used .. £'000	7,081	15,016	16,599	19,419	22,416	26,835
Value of production .. £'000	2,685	3,869	4,897	5,206	7,078	8,341
Total value of output .. £'000	9,800	18,974	21,586	24,751	29,638	35,327
Value of land and buildings .. £'000	1,042	1,276	1,485	1,598	1,741	1,822
Value of plant and machinery .. £'000	943	1,060	1,171	1,284	1,458	1,917
Horse-power of engines ordinarily in use .. h.p.	4,610	5,796	6,056	5,862	6,028	6,919
Leaf used—						
Australian (stemmed) .. '000 lb.	4,489	3,313	3,775	3,664	4,222	4,866
Imported (stemmed) .. '000 lb.	16,011	24,043	24,558	26,131	28,410	33,076
Tobacco made .. '000 lb.	16,305	20,168	20,967	21,615	22,334	23,400
Cigars made .. '000 lb.	238	169	179	175	129	173
Cigarettes made .. '000 lb.	6,731	10,341	10,670	11,740	13,879	18,303

(a) Not available for publication; figures are included in total for Australia.

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw material. Increased import duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31. During the 1939-45 War about 4.7 million lb. of Australian-grown leaf was used annually, but in subsequent years the figure fell, and the 1953-54 usage showed an increase to 4.9 million lb. In this connexion, see Chapter XXI.—Agricultural Production.

Imports of tobacco during 1953-54 comprised—manufactured tobacco, 200,925 lb.; cigars, 39,734 lb.; cigarettes, 6,210,425 lb.; unmanufactured tobacco, 37,253,690 lb.

34. Sawmills, etc.—The most important industry in Class X. is that of sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town, they have been combined in the following table, together with plywood and bark mills.

SAWMILLS, PLYWOOD AND BARK MILLS.

1953-54.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,145	645	658	92	253	345	3,130
Number of persons employed ..	10,821	7,360	8,603	2,116	4,395	2,194	35,489
Salaries and wages paid .. £	7,194,866	4,960,036	5,268,134	1,661,613	2,993,390	1,483,861	23,561,900
Value of power, fuel, etc., used £	546,968	392,214	282,594	71,548	250,813	95,796	1,639,933
Value of materials used .. £	19,759,994	11,478,692	10,574,679	4,754,713	4,535,738	2,947,286	54,051,152
Value of production .. £	12,834,126	8,604,979	8,671,845	2,355,069	5,020,889	2,375,434	39,862,336
Total value of output .. £	33,141,082	20,475,885	19,529,118	7,181,330	9,807,490	5,418,516	95,553,421
Value of land and buildings .. £	3,157,372	2,053,273	1,339,852	933,710	942,311	403,873	8,830,393
Value of plant and machinery .. £	3,875,667	2,915,836	2,652,710	821,431	1,394,757	855,470	12,515,871
Horse-power of engines ordinarily in use .. h.p.	112,320	75,022	74,740	18,028	31,309	26,139	337,558

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	1,660	2,781	2,937	3,133	3,264	3,138
Number of persons employed ..	19,104	31,493	32,978	35,685	34,589	35,489
Salaries and wages paid .. £'000	3,635	12,031	14,999	20,100	21,392	23,562
Value of power, fuel, etc., used .. £'000	226	804	1,032	1,400	1,548	1,640
Value of materials used .. £'000	8,523	27,020	34,965	49,217	46,710	54,051
Value of production .. £'000	5,789	20,727	26,747	35,965	35,710	39,862
Total value of output .. £'000	14,538	48,551	62,744	86,582	83,968	95,553
Value of land and buildings .. £'000	2,055	4,477	5,819	7,148	8,007	8,830
Value of plant and machinery .. £'000	2,786	7,077	8,881	10,876	11,918	12,516
Horse-power of engines ordinarily in use .. h.p.	90,315	243,927	276,232	310,861	333,297	337,558

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in 1938-39 and by 1954-55 had risen to 1,422 million super. feet. Further reference is made to the sawmilling industry in Chapter XXIV.—Forestry.

35. Cabinet and Furniture Making and Upholstery.—These industries constitute the principal manufactures in Class XI. The following table shows particulars for each State in 1953-54 :—

CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	525	549	227	121	153	67	1,642
Number of persons employed ..	5,253	4,447	2,382	1,560	1,179	431	15,252
Salaries and wages paid .. £	3,523,657	2,719,519	1,256,620	951,363	646,524	236,938	9,334,621
Value of power, fuel, etc., used .. £	103,468	60,736	27,100	27,060	18,391	4,498	241,253
Value of materials used .. £	5,689,089	3,977,256	2,048,036	1,653,797	1,103,039	243,227	14,714,441
Value of production .. £	5,574,618	4,338,569	1,927,158	1,418,474	1,068,521	365,677	14,693,017
Total value of output .. £	11,367,175	8,376,561	4,002,294	3,099,331	2,189,951	613,402	29,648,714
Value of land and buildings .. £	2,118,757	1,807,921	704,151	434,912	443,452	125,555	5,634,748
Value of plant and machinery .. £	618,376	622,383	280,581	223,108	177,078	48,784	1,970,310
Horse-power of engines ordinarily in use .. h.p.	14,936	14,489	6,371	5,437	3,505	1,478	46,216

36. Printing Works.—Printing and bookbinding rank high in importance among the industries of Australia, and in 1953-54 afforded employment for 35,390 employees, and paid £26,023,000 in salaries and wages, while the value of output amounted to £86,054,000. The first table below gives particulars of establishments engaged in general printing in each State for 1953-54. These establishments include those engaged in lithographic

printing, bookbinding, paper ruling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table to follow :—

GOVERNMENT AND GENERAL PRINTING WORKS, 1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	487	488	103	72	71	20	1,241
Number of persons employed ..	9,070	7,725	2,150	1,500	1,256	551	22,252
Salaries and wages paid .. £	6,594,988	5,452,015	1,282,749	973,697	755,65	375,349	15,434,440
Value of power, fuel, etc., used £	237,679	126,040	33,318	26,201	23,892	7,250	454,380
Value of materials used .. £	9,700,424	6,955,789	1,316,612	1,061,719	909,349	408,140	20,332,933
Value of production ..	11,050,952	8,576,365	1,970,019	1,544,850	1,419,109	543,302	25,104,597
Total value of output .. £	20,989,055	15,658,194	3,319,949	2,632,770	2,352,350	958,692	45,911,010
Value of land and buildings .. £	3,763,271	3,296,680	671,266	437,900	471,796	151,786	8,792,699
Value of plant and machinery .. £	4,105,649	3,617,350	629,011	743,070	561,033	231,822	9,887,935
Horse-power of engines ordinarily in use .. h.p.	15,104	11,434	2,197	1,907	1,784	741	33,167

NEWSPAPERS AND PERIODICALS, 1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	182	113	57	33	24	7	416
Number of persons employed ..	5,686	3,380	1,966	1,055	641	410	13,138
Salaries and wages paid .. £	4,543,558	2,829,469	1,416,333	917,773	531,434	349,815	10,588,382
Value of power, fuel, etc., used £	249,869	104,793	59,275	30,369	34,630	5,276	484,212
Value of materials used .. £	8,964,537	6,568,338	2,241,298	1,517,762	1,015,039	245,618	20,552,592
Value of production ..	8,473,456	4,842,317	2,536,692	1,672,641	1,168,972	412,555	19,106,633
Total value of output .. £	17,687,862	11,515,448	4,837,265	3,220,772	2,218,641	663,449	40,143,437
Value of land and buildings .. £	3,520,909	1,230,180	873,266	594,378	238,381	161,415	6,618,529
Value of plant and machinery .. £	3,470,613	2,916,887	1,145,485	497,829	683,360	110,875	8,825,049
Horse-power of engines ordinarily in use .. h.p.	16,705	9,985	4,492	2,796	1,980	575	36,533

37. **Paper Making.**—Although the paper manufacturing industry has been established in Australia for many years it was not until the manufacture of paper pulp from indigenous timber commenced in 1938-39 that any marked development occurred.

Plants producing pulp from eucalypt timber are operating in Victoria and Tasmania, whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in 1938-39 to 88,000 tons in 1946-47, and remained about this level until 1953-54, when production totalled 137,000 tons.

The number of factories operating in 1953-54 comprised two in New South Wales, nine in Victoria, one in Queensland, South Australia and Western Australia and four in Tasmania. In the latter State, newsprint, writing and printing papers are produced, and in the other States wrappings, other papers and boards. Particulars for this industry are shown in the following table.

PAPER MAKING, INCLUDING PULP MILLS : AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	7	14	14	16	17	18
Number of persons employed ..	1,961	6,160	6,336	7,237	6,441	7,179
Salaries and wages paid .. £'000	467	3,183	4,231	5,852	5,338	6,130
Value of power, fuel, etc., used .. £'000	201	998	1,181	1,610	1,649	2,048
Value of materials used .. £'000	1,096	6,154	7,487	14,558	12,637	15,198
Value of production .. £'000	1,005	6,581	9,165	12,623	11,085	15,451
Total value of output .. £'000	2,302	13,733	17,833	28,791	25,371	32,697
Value of land and buildings .. £'000	850	3,331	4,871	6,820	7,324	8,106
Value of plant and machinery .. £'000	1,713	5,754	9,814	12,961	15,263	16,810
Horse-power of engines ordinarily in use .. h.p.	31,548	95,999	103,098	112,469	127,558	141,373

38. **Rubber Goods.**—The following table shows particulars of this industry for each State during 1953-54 and excludes establishments engaged primarily in the retreading and repairing of tyres.

RUBBER GOODS, 1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	33	46	7	9	2	1	98
Number of persons employed	5,996	4,804	978	606	(a)	(a)	12,421
Salaries and wages paid	£ 5,198,534	4,147,602	678,831	510,410	(a)	(a)	10,549,573
Value of power, fuel, etc., used	£ 798,572	713,696	68,485	49,282	(a)	(a)	1,632,453
Value of materials used	£ 12,311,661	10,623,038	1,943,067	842,479	(a)	(a)	25,778,271
Value of production	£ 6,653,438	8,487,178	1,602,325	805,923	(a)	(a)	17,569,585
Total value of output	£ 19,783,671	19,823,912	3,613,377	1,697,684	(a)	(a)	44,980,309
Value of land and buildings	£ 1,999,025	2,123,371	249,740	97,615	(a)	(a)	4,515,654
Value of plant and machinery	£ 1,901,394	1,983,520	275,441	182,368	(a)	(a)	4,361,352
Horse-power of engines ordinarily in use	h.p. 44,356	40,058	5,886	2,257	(a)	(a)	93,621

(a) Not available for separate publication; figures included in total for Australia.

39. Electric Light and Power Works.—(i) *Details of Industry.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. For further information on this subject see Chapter X.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1953-54 and for Australia for a series of years are shown below:—

ELECTRIC LIGHT AND POWER WORKS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	84	67	54	44	93	9	351
Number of persons employed	5,140	2,690	1,289	(a)	961	(a)	11,395
Salaries and wages paid	£ 4,764,853	2,431,526	1,061,656	(a)	849,712	(a)	10,308,281
Value of power, fuel, etc., used	£ 11,471,667	8,902,076	5,001,814	(a)	3,079,371	(a)	35,082,984
Value of materials used	£ 2,030,358	404,570	900,494	(a)	275,339	(a)	4,800,123
Value of production	£ 13,996,253	6,862,091	3,154,215	(a)	2,308,621	(a)	30,098,090
Total value of output	£ 31,401,278	16,168,746	9,056,553	(a)	5,663,331	(a)	69,481,197
Value of land and buildings	£ 13,681,350	8,922,235	4,294,708	(a)	3,046,293	(a)	47,369,225
Value of plant and machinery	£ 42,714,300	34,925,189	16,667,426	(a)	8,595,465	(a)	122,773,375
Generators installed—Kilowatt capacity	K.W. 1,421,951	829,405	398,625	(a)	198,982	(a)	3,416,609

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories	395	358	354	331	349	351
Number of persons employed	6,508	9,433	9,815	10,381	10,891	11,395
Salaries and wages paid	£'000 1,977	5,368	6,541	8,178	9,675	10,308
Value of power, fuel, etc., used	£'000 3,239	15,491	21,259	28,724	32,205	35,083
Value of materials used	£'000 530	2,180	2,712	3,481	3,296	4,800
Value of production	£'000 8,714	12,885	14,790	18,065	24,582	30,098
Total value of output	£'000 12,483	30,556	38,761	50,276	60,083	69,981
Value of land and buildings	£'000 8,388	13,486	16,932	21,641	29,531	47,369
Value of plant and machinery	£'000 27,751	45,454	53,441	66,630	94,169	122,773

(a) Not available for separate publication; figures included in total for Australia.

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 333.

(ii) *Production.* The increase in the production of electric light and power in each of the States since 1938-39 is shown in the following table:—

ELECTRIC LIGHT AND POWER WORKS: ELECTRICITY PRODUCED.
(Million kWh)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia
1938-39	1,018.5	1,222.5	387.3	256.3	307.0	566.7	4,688.3
1948-49	3,217.0	2,504.0	890.3	566.6	398.6	976.4	9,052.9
1949-50	3,758.1	2,706.1	971.6	593.8	417.5	1,061.6	9,508.7
1950-51	4,251.1	2,875.9	1,115.4	713.0	469.9	1,077.7	10,503.3
1951-52	4,628.1	2,964.1	1,242.1	787.8	529.7	1,145.5	11,297.3
1952-53	4,868.3	3,074.0	1,349.1	822.3	568.7	1,213.5	12,944.8
1953-54	5,450.1	3,692.7	1,510.7	955.2	626.9	1,471.4	13,707.0
1951-55 (a)	5,017.5	4,150.5	1,658.7	1,157.0	738.5	1,595.3	15,298.4

(a) Preliminary—subject to revision.

40. Gas-works.—(i) *Details of Industry.* Gas-works are in operation in the majority of important towns in Australia. The following table shows particulars of gas-works in each State for the year 1953-54 and for Australia for a series of years :—

GAS-WORKS.

1953-54.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	39	34	16	3	4	2	98
Number of persons employed ..	1,533	1,461	434	(a)	201	(a)	4,141
Salaries and wages paid .. £	1,422,455	1,393,032	342,789	(a)	180,647	(a)	3,767,359
Value of power, fuel, etc., used .. £	1,979,861	129,185	26,883	(a)	98,986	(a)	2,244,073
Value of materials used .. £	6,025,510	5,991,089	1,003,178	(a)	678,560	(a)	15,248,733
Value of production .. £	4,884,807	1,652,034	835,836	(a)	225,622	(a)	8,120,811
Total value of output .. £	12,890,208	7,772,308	1,865,897	(a)	1,003,168	(a)	25,613,617
Value of land and buildings .. £	1,299,645	610,660	285,960	(a)	142,578	(a)	2,416,176
Value of plant and machinery .. £	5,486,579	6,255,590	1,605,318	(a)	1,464,799	(a)	17,234,856
Horse-power of engines ordinarily in use .. h.p.	15,342	9,740	2,134	(a)	1,202	(a)	30,055

AUSTRALIA.

Items.	1938-39.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number of factories ..	107	100	100	100	99	98
Number of persons employed ..	2,931	3,815	3,871	4,042	4,199	4,141
Salaries and wages paid .. £'000	785	2,027	2,401	3,207	3,553	3,767
Value of power, fuel, light, etc., used .. £'000	251	845	1,179	1,777	2,080	2,244
Value of materials used .. £'000	1,872	7,220	9,450	13,401	15,576	15,249
Value of production .. £'000	2,694	3,663	4,426	7,165	8,473	8,121
Total value of output .. £'000	4,817	11,728	15,055	22,343	26,129	25,614
Value of land and buildings .. £'000	1,463	1,930	2,071	2,186	2,342	2,416
Value of plant and machinery .. £'000	7,498	11,656	12,386	13,846	15,962	17,235
Horse-power of engines ordinarily in use .. h.p.	17,905	26,225	28,205	28,427	29,514	30,055

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Coal Used and Production.* The following table shows details for 1953-54 :—

GAS-WORKS : COAL USED AND PRODUCTION, 1953-54.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Coal used '000 tons	946	687	196	(a)	56	(a)	2,047
Gas produced million cubic ft.	20,802	13,715	2,902	(a)	1,443	(a)	42,100
Gas sold ..	17,820	11,763	2,551	(a)	1,240	(a)	36,178
Coke produced (b) .. tons	382,565	261,433	85,076	(a)	17,800	(a)	839,793

(a) Not available for publication ; figures are included in total for Australia.
2,010,404 tons of metallurgical coke were made in Coke Works in 1953-54.

(b) In addition,

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached 43 thousand million cubic feet in 1954-55: