

CHAPTER VII.

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 in 1933 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 from 1945-46 onward 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 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, but was transferred to the Department of Trade in January, 1956.

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 X.—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 XXX., 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 XXX., 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 tabulations made by the several State Statisticians from returns supplied to them annually by manufacturers in accordance with 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, farriers, photography studios, florists and seedsmen, or 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 the 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 saw-mills 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 Bulletin *Secondary Industries*, 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 (10 groups).
Ship and Boat Building and Repairing, Marine Engineering.
Cutlery and Small Hand Tools.
Agricultural Machines and Implements.
Non-Ferrous Metals—
Rolling and Extrusion.
Founding, 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 Casings.
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 (not Wire).
Furnishing Drapery, etc.

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

Picture Frames.
Blinds.

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

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

CLASS XIII.—RUBBER.

Rubber Goods and Tyres Made.
Tyre Retreading and Repairing.

CLASS XIV.—MUSICAL INSTRUMENTS.

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

CLASS XV.—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 XVI.—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.	Factories.	Employment.(a)	Salaries and Wages Paid.(b)	Value of—				
				Materials and Fuel Used.	Output.	Production. (c)	Land and Buildings.	Plant and Machinery.
	No.	'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1901	11,143	198	(d)	(d)	(d)	(d)	(d)	(d)
1911	14,455	312	27,528	81,763	133,022	51,259	32,701	31,516
1920-21 ..	17,113	367	62,932	213,559	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
1940-41 ..	27,300	650	137,919	386,881	644,795	257,914	144,094	161,356
1949-50 ..	41,596	917	385,797	983,924	1,645,456	661,532	259,549	285,602
1950-51 ..	43,147	969	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	483,431	580,715
1954-55 ..	51,056	1,031	781,640	2,069,080	3,434,589	1,365,509	555,996	698,292

(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.

§ 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 1949-50 to 1954-55:—

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
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
1954-55	20,837	15,861	5,284	3,750	3,727	1,597	51,056

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during 1938-39 and 1950-51 to 1954-55 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 237.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous Mine and Quarry Products	564	1,235	1,316	1,276	1,280	1,303
II. Bricks, Pottery, Glass, etc.	471	583	601	623	639	662
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	666	1,020	1,049	1,090	1,099	1,124
IV. Industrial Metals, Machines, Conveyances	7,255	13,106	14,513	15,672	16,868	17,842
V. Precious Metals, Jewellery, Plate	290	629	662	681	720	746
VI. Textiles and Textile Goods (not Dress)	611	1,190	1,246	1,270	1,336	1,356
VII. Skins and Leather (not Clothing or Footwear)	533	761	785	778	783	810
VIII. Clothing (except Knitted)	4,314	6,684	6,989	7,036	7,260	7,370
IX. Food, Drink and Tobacco	5,202	6,865	7,033	7,248	7,379	7,433
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	2,822	5,165	5,546	5,790	5,769	5,845
XI. Furniture of Wood, Bedding, etc.	1,149	1,936	2,052	2,157	2,180	2,200
XII. Paper, Stationery, Printing, Book-binding, etc.	1,816	2,010	2,084	2,121	2,179	2,224
XIII. Rubber	299	411	430	446	465	495
XIV. Musical Instruments	34	66	68	69	75	79
XV. Miscellaneous Products	413	1,032	1,039	1,035	1,095	1,119
<i>Total, Classes I. to XV.</i>	<i>26,439</i>	<i>42,693</i>	<i>45,413</i>	<i>47,292</i>	<i>49,127</i>	<i>50,608</i>
XVI. Heat, Light and Power	502	454	431	448	449	448
Grand Total	26,941	43,147	45,844	47,740	49,576	51,056

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 1954-55; in the latter year the number of factories in Australia reached the record total of 51,056 or nearly 90 per cent. more than in 1938-39.

(ii) *States, 1954-55.* The following table shows the number of factories in each State classified according to the nature of the industry:—

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1954-55.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	434	438	93	164	119	55	1,303
II. Bricks, Pottery, Glass, etc. ..	328	150	54	61	51	18	662
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	554	343	68	76	59	24	1,124
IV. Industrial Metals, Machines, Conveyances ..	7,384	5,365	1,827	1,439	1,381	446	17,842
V. Precious Metals, Jewellery, Plate ..	334	245	40	54	67	6	746
VI. Textiles and Textile Goods (not Dress) ..	482	741	30	47	43	13	1,356
VII. Skins and Leather (not Clothing or Footwear) ..	368	303	57	41	33	8	810
VIII. Clothing (except Knitted) ..	3,396	2,586	534	372	410	72	7,370
IX. Food, Drink and Tobacco ..	2,700	2,053	1,045	723	604	308	7,433
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	2,280	1,428	837	326	487	487	5,845
XI. Furniture of Wood, Bedding, etc. ..	780	697	309	159	171	84	2,200
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	937	809	190	139	116	33	2,224
XIII. Rubber ..	183	143	68	52	31	18	495
XIV. Musical Instruments ..	35	27	5	6	6	..	79
XV. Miscellaneous Products ..	518	438	52	46	51	14	1,119
Total Classes I. to XV. ..	20,713	15,766	5,209	3,705	3,629	1,586	50,608
XVI. Heat, Light and Power ..	124	95	75	45	98	11	448
Grand Total ..	20,837	15,861	5,284	3,750	3,727	1,597	51,056

§ 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 shown in the table below.

2. *States, 1954-55.*—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, 1954-55.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land	S. Aust.	W. Aust.	Tasmania.	Aust.
NUMBER OF FACTORIES.							
Under 4	8,170	5,672	1,785	1,235	1,715	665	19,242
4	1,770	1,250	496	371	173	154	4,214
5 to 10	5,017	3,826	1,491	973	917	420	12,644
11 to 20	2,714	2,206	671	540	431	173	6,735
21 to 50	1,865	1,717	497	368	314	115	4,876
51 to 100	670	600	169	138	110	40	1,727
101 to 200	347	322	91	63	41	14	878
201 to 300	92	107	48	22	17	4	290
301 to 400	59	50	13	15	2	5	144
401 to 500	22	34	8	6	3	1	74
501 to 750	47	44	4	7	3	2	107
751 to 1,000	25	14	7	4	..	1	51
Over 1,000	39	19	4	8	1	3	74
Total	20,837	15,861	5,284	3,750	3,727	1,597	51,056

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, 1954-55.

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	15,560	11,070	3,713	2,590	3,593	1,353	37,879
4	7,080	5 000	1,984	1,484	692	616	16,856
5 to 10	34,938	26,885	10,370	6,820	6,143	2,884	88,040
11 to 20	39,906	32,151	9,889	7,801	6,119	2,592	98,458
21 to 50	58,753	53,410	15,174	11,866	9,956	3,624	152,783
51 to 100	46,917	41,620	11,808	9,646	7,664	2,819	120,474
101 to 200	48,296	44,825	13,123	8,736	5,525	1,943	122,448
201 to 300	22,133	25,807	11,671	5,380	4,191	977	70,159
301 to 400	20,860	17,166	4,486	5,146	665	1,678	50,001
401 to 500	9,828	15,129	3,591	2,678	1,214	425	32,865
501 to 750	28,440	26,575	2,387	4,073	1,930	1,328	64,733
751 to 1,000	21,675	12,156	6,006	3,603	..	939	44,379
Over 1,000	68,740	36,474	6,763	20,139	2,745	4,861	139,722
Total	423,126	348,268	100,965	89,962	50,437	26,039	1,038,797
Average per Factory ..	20.31	21.96	19.11	23.99	13.53	16.30	20.35

3. Australia, 1938-39 and 1949-50 to 1954-55.—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 establishment .. ..	..	5.89	..	42.60	..	287.55	..	21.25
1949-50—								
Number	33,673	207,600	6,442	266,027	1,481	455,187	41,596	928,814
Average per establishment .. ..	..	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 establishment .. ..	..	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 establishment .. ..	..	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 establishment .. ..	..	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 establishment .. ..	..	5.69	..	41.52	..	320.73	..	20.11
1954-55—								
Number	42,835	241,233	6,603	273,257	1,618	524,307	51,056	1,038,797
Average per establishment .. ..	..	5.63	..	41.38	..	324.00	..	20.35

§ 4. Power Equipment in Factories.

1. **General.**—Since 1936-37, statistics of power equipment in factories relate to the "rated horse-power" of engines ordinarily in use and 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, 431 factories are shown in 1954-55 as using no power other than manual, the distribution of these factories among the various industries being as follows:—Fibrous Plaster and Products, 23; Galvanized Ironworking, Tinsmithing, 18; Tailoring and Ready-made Clothing, 112; Dressmaking, 14; Millinery, 7; Bakeries, 38; Cabinet and Furniture Making, 7; all other industries, 212.

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 1954-55:—

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1954-55.

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 ..	20,732	20	20,752	1,696,646	302,043
Victoria ..	15,752	47	15,799	1,165,011	164,280
Queensland ..	5,071	154	5,225	443,365	59,398
South Australia ..	3,639	69	3,708	311,534	41,237
Western Australia ..	3,518	115	3,633	204,848	32,138
Tasmania ..	1,562	26	1,588	210,606	32,538
Australia ..	50,274	431	50,705	4,032,010	631,634

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.

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, 1954-55.

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. ..	87,630	93,745	476	41,512	34,621	202	1,438,460	68,589	1,696,646
Victoria ..	23,983	49,397	2,084	24,849	17,985	1,241	1,045,472	46,739	1,165,011
Queensland ..	92,795	38,340	3,061	12,021	16,516	..	280,632	80,695	443,365
S. Australia ..	7,910	10,056	286	5,587	11,466	10	276,219	24,124	311,534
W. Australia ..	11,010	10,613	1,499	10,712	12,068	..	158,946	6,470	204,848
Tasmania ..	1,864	11	1	9,273	809	242	198,406	8	210,606
Australia ..	225,192	202,162	7,407	103,954	93,465	1,695	3,398,135	226,625	4,032,010

(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 1949-50 to 1954-55.

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
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
1954-55 ..	225,192	202,162	7,407	103,954	93,465	1,695	3,398,135	226,625	4,032,010

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1954-55.* 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(b), 1954-55.

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	80,446	45,001	16,154	18,996	11,562	13,970	186,129
II. Bricks, Pottery, Glass, etc. ..	46,682	31,163	7,778	8,308	10,265	1,865	106,061
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	104,010	108,301	8,867	16,471	34,619	3,767	276,035
IV. Industrial Metals, Machines, Conveyances	828,050	343,524	92,004	140,734	48,913	46,801	1,500,026
V. Precious Metals, Jewellery, Plate	4,629	6,216	360	1,115	623	48	12,991
VI. Textile and Textile Goods (not Dress)	54,041	92,349	5,766	7,755	2,490	5,512	167,913
VII. Skins and Leather (not Cloth- ing or Footwear)	18,954	20,501	5,617	5,315	2,557	504	53,448
VIII. Clothing (except Knitted) ..	23,254	28,895	4,662	3,079	2,257	895	63,042
IX. Food, Drink and Tobacco ..	201,546	185,322	185,453	51,698	36,642	18,474	679,135
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	171,819	119,200	89,474	30,647	43,243	37,261	491,644
XI. Furniture of Wood, Bedding, etc.	17,907	17,874	7,982	6,424	4,283	1,765	56,235
XII. Paper, Stationery, Printing, Bookbinding, etc.	56,450	88,982	8,574	14,003	4,992	78,897	251,898
XIII. Rubber	46,774	46,926	7,816	3,002	632	324	105,474
XIV. Musical Instruments	2,424	514	45	13	7	..	3,003
XV. Miscellaneous Products	20,874	21,405	538	1,840	518	412	45,587
<i>Total, Classes I. to XV. ..</i>	<i>1,677,860</i>	<i>1,156,173</i>	<i>441,090</i>	<i>309,400</i>	<i>203,603</i>	<i>210,495</i>	<i>3,998,621</i>
XVI. Gas Works	18,786	8,838	2,275	2,134	1,245	111	33,389
Grand Total	1,696,646	1,165,011	443,365	311,534	204,848	210,606	4,032,010

(a) Excludes Central Electric Stations. (b) Excludes motors driven by electricity generated in factories not classified as 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 1954–55 are given in the following table:—

CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1954-55.

Particulars.	Capacity of Engines and Generators.						Total.
	Steam.		Internal Combustion.			Water.	
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		
Engines installed .. Rated H.P.	7,226	4,255,372	14,524	11,383	347,235	793,738	5,429,478
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	5,085	3,126,212	10,188	8,092	231,756	572,505	3,953,838
Effective capacity	4,725	2,874,229	8,188	6,007	212,526	566,375	3,672,050
Horse-power equivalent—							
Total installed .. H.P.	6,816	4,190,625	13,657	10,847	310,664	767,432	5,300,041
Effective capacity	6,333	3,852,846	10,976	8,052	284,887	759,214	4,922,308

NOTE.—The number of establishments classified as Central Electric Stations in 1954–55 was 351.

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1954–55 are given in the next table.

CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Central Electric Stations No.	85	62	59	42	94	9	351
Engines installed .. Rated H.P.	2,231,954	1,319,327	576,500	(a)	323,119	(a)	5,429,478
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	1,635,751	944,028	428,720	(a)	232,407	(a)	3,953,838
Effective capacity	1,502,150	921,954	328,479	(a)	220,616	(a)	3,672,050
Horse-power equivalent—							
Total installed .. H.P.	2,192,692	1,265,450	574,691	(a)	311,537	(a)	5,300,041
Effective capacity	2,013,602	1,235,860	440,320	(a)	295,731	(a)	4,922,308

(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 215), 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) enginedrivers 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 207), 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 years 1938-39 and 1949-50 to 1954-55 in the following table :—

FACTORIES : EMPLOYMENT, AUSTRALIA.

Year.	Males.			Females.			Persons.		
	Number Employed.	Increase on Preceding Year.		Number Employed.	Increase on Preceding Year.		Number Employed.	Increase on Preceding Year.	
		Number	Per Cent.		Number	Per Cent.		Number	Per Cent.
1938-39 ..	412,591	3,989	0.98	152,515	1,957	1.30	565,106	5,946	1.06
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
1954-55 ..	788,691	30,183	3.98	242,391	11,357	4.92	1,031,082	41,540	4.20

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 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
1949-50 ..	382,385	303,476	88,963	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
1954-55 ..	419,810	346,648	100,293	89,565	49,314	25,452	1,031,082

PERCENTAGE OF AUSTRALIAN TOTAL.

1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00
1949-50 ..	41.68	33.07	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
1954-55 ..	40.71	33.62	9.73	8.69	4.78	2.47	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
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
1954-55 ..	1,213	1,393	757	1,109	746	813	1,134

2. Rates of Increase, 1938-39 and 1949-50 to 1954-55—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
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
1954-55 ..	4.28	4.64	2.22	4.75	3.91	3.51	4.20

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 1950-51 to 1954-55 :—

FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous Mine and Quarry Products	10,343	18,436	19,365	18,752	18,748	20,560
II. Bricks, Pottery, Glass, etc.	15,709	20,449	20,912	19,571	21,708	22,549
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	19,816	36,323	38,248	36,139	37,988	41,324
IV. Industrial Metals, Machines, Conveyances	177,677	373,798	389,252	376,398	397,713	422,124
V. Precious Metals, Jewellery, Plate	3,726	6,344	5,953	5,398	5,970	6,029
VI. Textiles and Textile Goods (not Dress)	46,082	68,280	63,548	60,087	69,482	69,046
VII. Skins and Leather (not Clothing or Footwear)	10,767	15,801	14,324	14,126	14,676	14,502
VIII. Clothing (except Knitted)	86,092	122,464	116,705	105,681	112,520	112,802
IX. Food, Drink and Tobacco	83,846	124,350	122,734	120,668	123,073	125,934
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	30,739	56,300	59,664	56,984	58,932	61,153
XI. Furniture of Wood, Bedding, etc. ..	15,287	22,818	22,156	20,353	20,975	21,342
XII. Paper, Stationery, Printing, Book-binding, etc.	39,913	55,328	56,455	53,219	56,119	59,777
XIII. Rubber	7,502	13,526	14,021	12,288	14,962	16,325
XIV. Musical Instruments	451	1,614	1,581	1,267	1,575	1,623
XV. Miscellaneous Products	7,727	19,401	18,176	17,240	19,565	19,962
<i>Total, Classes I. to XV.</i>	<i>555,577</i>	<i>955,232</i>	<i>963,094</i>	<i>918,171</i>	<i>974,006</i>	<i>1,015,052</i>
XVI. Heat, Light and Power	9,429	13,686	14,423	15,090	15,536	16,030
Grand Total	565,106	968,918	977,517	933,261	989,542	1,031,082

(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, 1954-55.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	8,312	6,088	1,780	1,716	1,944	720	20,560
II. Bricks, Pottery, Glass, etc. ..	11,462	5,752	1,279	2,076	1,643	337	22,549
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	18,434	15,418	1,675	3,068	2,315	414	41,324
IV. Industrial Metals, Machines, Conveyances ..	187,492	125,289	33,840	48,307	18,726	8,470	422,124
V. Precious Metals, Jewellery, Plate ..	2,265	2,785	314	388	257	20	6,029
VI. Textiles and Textile Goods (not Dress) ..	23,876	37,455	2,075	2,304	886	2,450	69,046
VII. Skins and Leather (not Clothing or Footwear) ..	5,656	5,460	1,322	1,316	668	80	14,502
VIII. Clothing (except Knitted) ..	45,458	47,571	8,823	5,865	4,144	941	112,802
IX. Food, Drink and Tobacco ..	38,940	39,496	26,309	10,615	6,496	4,078	125,934
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	20,537	15,259	10,676	4,577	6,634	3,470	61,153
XI. Furniture of Wood, Bedding, etc. ..	8,085	6,168	3,119	1,997	1,461	512	21,342
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	25,040	20,061	5,104	3,787	2,355	3,430	59,777
XIII. Rubber ..	7,235	6,122	1,607	1,002	210	149	16,325
XIV. Musical Instruments ..	1,235	286	41	34	27	..	1,623
XV. Miscellaneous Products ..	8,863	9,081	594	839	403	182	19,962
<i>Total, Classes I. to XV.</i>	<i>412,890</i>	<i>342,291</i>	<i>98,558</i>	<i>87,891</i>	<i>48,169</i>	<i>25,253</i>	<i>1,015,052</i>
XVI. Heat, Light and Power ..	6,920	4,357	1,735	1,674	1,145	199	16,030
Grand Total ..	419,810	346,648	100,293	89,565	49,314	25,452	1,031,082

4. *Persons Employed According to Occupational Grouping.*—(i) *General.* In the following table, the average number of persons employed in each State during 1954-55 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 para. 1 of this section (*see p. 211*).

FACTORIES : PERSONS EMPLOYED—OCCUPATIONAL GROUPING, 1954-55.

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 ..	15,801	47,429	5,791	17,353	331,039	2,397	419,810
Victoria ..	14,053	36,262	4,590	14,862	274,741	2,140	346,648
Queensland ..	4,646	9,375	895	3,583	81,158	636	100,293
South Australia ..	2,718	10,292	1,303	3,907	70,926	419	89,565
Western Australia ..	2,634	3,922	373	1,958	40,323	104	49,314
Tasmania ..	994	2,448	408	1,124	20,370	108	25,452
<i>Total Males</i>	<i>36,397</i>	<i>67,912</i>	<i>12,333</i>	<i>39,686</i>	<i>627,674</i>	<i>4,689</i>	<i>788,691</i>
<i>Total Females</i>	<i>4,449</i>	<i>41,816</i>	<i>1,027</i>	<i>3,101</i>	<i>190,883</i>	<i>1,115</i>	<i>242,391</i>
Total Persons	40,846	109,728	13,360	42,787	818,557	5,804	1,031,082

(a) Includes salaried managers and working directors.

(b) Includes persons working regularly at home.

(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, 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 1950-51 to 1954-55.*—(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 the year 1938-39 and on the last pay-day of the month in the later years.

FACTORIES ; MONTHLY EMPLOYMENT, AUSTRALIA.
(EXCLUDING WORKING PROPRIETORS.)

Month.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
MALES.						
July	387,693	682,797	710,373	688,670	704,109	739,450
August	389,979	685,454	711,656	682,882	707,438	741,435
September	391,576	685,873	712,284	680,026	710,246	743,638
October	393,977	687,498	714,424	679,901	715,338	746,139
November	395,192	692,615	716,300	680,398	719,230	750,285
December	394,438	690,565	708,848	678,174	716,202	747,230
January	385,742	692,678	710,357	680,298	722,277	750,823
February	392,056	694,602	709,453	689,012	727,754	755,456
March	395,146	696,262	707,701	694,516	732,000	757,956
April	391,005	700,154	702,571	697,202	731,923	760,139
May	393,609	702,628	696,475	698,711	734,340	761,555
June	390,973	704,515	694,871	701,500	738,002	763,488
FEMALES.						
July	147,282	229,987	243,646	201,464	212,322	231,222
August	149,294	232,090	244,629	200,393	214,644	232,603
September	151,159	233,914	244,712	199,910	218,078	234,818
October	152,473	236,282	245,285	201,107	222,255	236,930
November	152,806	238,740	242,831	201,346	224,672	238,146
December	151,165	237,141	237,174	199,707	224,100	236,804
January	141,853	236,018	231,186	201,596	228,838	236,664
February	151,883	242,902	229,047	209,939	232,678	242,008
March	154,854	243,181	225,487	213,470	236,354	242,573
April	152,614	243,011	216,845	211,725	234,175	239,460
May	150,693	243,768	212,036	211,392	232,333	238,450
June	148,601	244,268	207,163	211,551	232,009	238,529
PERSONS.						
July	534,975	912,784	954,019	890,143	916,431	970,672
August	539,273	917,544	956,285	883,275	922,082	974,038
September	542,735	919,787	956,996	879,936	928,324	978,456
October	546,450	923,780	959,709	881,008	937,593	983,069
November	547,998	931,355	959,131	881,744	943,902	988,431
December	545,603	927,706	946,022	877,881	940,302	984,034
January	527,595	928,696	941,543	881,894	951,115	987,487
February	543,939	937,504	938,500	898,951	960,432	997,464
March	550,000	939,443	933,188	907,986	968,354	1,000,529
April	543,619	943,165	919,416	908,927	966,098	999,599
May	544,302	946,396	908,511	910,103	966,673	1,000,005
June	539,574	948,783	902,034	913,051	970,011	1,002,017

(ii) *States.* Particulars of the numbers employed in each State on the last pay-day of each month in 1954-55 are shown in the following table :—

FACTORIES : MONTHLY EMPLOYMENT, 1954-55.

(EXCLUDING WORKING PROPRIETORS.)

Month.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
July	297,053	234,074	80,072	69,985	38,740	19,526	739,450
August	297,765	234,785	80,341	70,242	38,779	19,523	741,435
September	298,876	236,036	80,045	70,190	38,897	19,594	743,638
October	299,911	237,243	79,681	70,443	39,145	19,716	746,139
November	302,114	238,754	79,617	70,718	39,292	19,790	750,285
December	301,570	238,653	76,564	70,909	39,358	20,176	747,230
January	303,575	240,777	74,571	71,501	40,019	20,380	750,823
February	305,038	241,061	77,044	71,483	40,494	20,336	755,456
March	305,267	242,141	77,432	71,841	40,887	20,388	757,956
April	305,424	242,537	78,446	72,219	41,036	20,477	760,139
May	306,266	242,461	79,660	72,012	40,924	20,232	761,555
June	306,707	242,907	81,256	71,870	40,652	20,096	763,488
FEMALES.							
July	97,881	90,384	16,911	14,941	6,809	4,296	231,222
August	98,618	91,222	16,940	14,944	6,846	4,033	232,603
September	99,952	91,964	16,790	15,106	6,946	4,060	234,818
October	101,276	92,997	16,408	15,246	6,993	4,010	236,930
November	101,973	93,511	16,324	15,285	7,032	4,021	238,146
December	100,618	93,076	16,321	15,717	6,850	4,222	236,800
January	99,393	93,687	16,359	15,840	6,879	4,506	236,660
February	101,668	95,372	17,483	16,200	6,943	4,342	242,008
March	101,801	96,266	16,936	16,118	7,015	4,437	242,573
April	101,008	94,256	16,708	15,725	6,993	4,770	239,460
May	101,230	93,239	16,734	15,541	6,910	4,796	238,450
June	101,376	93,560	16,659	15,524	6,642	4,768	238,529
PERSONS.							
July	394,934	324,458	96,983	84,926	45,549	23,822	970,672
August	396,383	326,007	97,281	85,186	45,625	23,556	974,038
September	398,828	328,000	96,835	85,296	45,843	23,654	978,456
October	401,187	330,240	96,089	85,689	46,138	23,726	983,069
November	404,087	332,265	95,941	86,003	46,324	23,811	988,431
December	402,188	331,729	92,885	86,626	46,208	24,398	984,034
January	402,968	334,464	90,930	87,341	46,898	24,886	987,487
February	406,706	336,433	94,527	87,683	47,437	24,678	997,464
March	407,068	338,407	94,368	87,959	47,902	24,825	1,000,529
April	406,432	336,793	95,154	87,944	48,029	25,247	999,599
May	407,496	335,700	96,394	87,553	47,834	25,028	1,000,005
June	408,083	336,467	97,915	87,394	47,294	24,864	1,002,017

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 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, 1954 and 1955 are given below :—

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1954 AND 1955.

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1954.			June, 1955.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years ..	9,294	7,228	16,522	9,093	6,605	15,698
16 years ..	12,874	8,945	21,819	13,137	8,547	21,684
17 " ..	14,947	9,899	24,846	14,694	9,902	24,596
18 " ..	14,591	9,702	24,293	15,341	9,994	25,335
19 " ..	12,971	8,719	21,690	13,772	8,600	22,372
20 " ..	12,426	7,807	20,233	12,838	7,710	20,548
21 " and over ..	660,899	179,709	840,608	684,613	187,171	871,784
Total ..	738,002	232,009	970,011	763,488	238,529	1,002,017

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 1950 to 1955 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
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	89.55	738,002	100
1955 ..	9,093	1.19	69,782	9.14	684,613	89.67	763,488	100
FEMALES.								
1939 ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	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
1955 ..	6,605	2.77	44,753	18.76	187,171	78.47	238,529	100
PERSONS.								
1939 ..	31,606	5.86	132,691	24.59	375,267	69.55	539,564	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
1955 ..	15,698	1.57	114,535	11.43	871,784	87.00	1,002,017	100

§ 6. Sex Distribution in Factories.

1. 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 1950-51 to 1954-55 :—

FACTORIES : MALES AND FEMALES EMPLOYED.

State.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
MALES.						
New South Wales ..	167,172	301,307	304,808	291,704	305,040	316,673
Victoria ..	136,218	224,919	233,699	228,724	240,698	251,675
Queensland ..	43,941	77,182	77,673	77,627	81,425	83,290
South Australia ..	35,406	66,840	68,045	67,114	70,657	73,714
Western Australia ..	18,704	36,349	37,812	38,614	40,439	42,294
Tasmania ..	11,150	19,454	19,934	19,621	20,249	21,045
Australia ..	412,591	726,051	741,971	723,404	758,508	788,691
FEMALES.						
New South Wales ..	61,609	105,658	101,186	88,509	97,555	103,137
Victoria ..	65,613	91,873	90,444	82,035	90,579	94,973
Queensland ..	10,169	17,397	16,676	15,496	16,694	17,003
South Australia ..	7,965	16,154	15,862	13,369	14,846	15,851
Western Australia ..	4,507	7,412	7,285	6,574	7,020	7,020
Tasmania ..	2,652	4,373	4,093	3,874	4,340	4,407
Australia ..	152,515	242,867	235,546	209,857	231,034	242,391

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 1950-51 to 1954-55 :—

FACTORIES : ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
MALES.						
New South Wales ..	1.69	6.07	1.16	-4.30	4.57	3.81
Victoria ..	0.04	4.03	3.90	-2.13	5.24	4.56
Queensland ..	3.79	5.80	0.64	-0.06	4.89	2.29
South Australia ..	-2.39	5.87	1.80	-1.37	5.28	4.33
Western Australia ..	-0.30	7.83	4.02	2.12	4.73	4.59
Tasmania ..	4.40	0.79	2.47	-1.57	3.20	3.02
Australia ..	0.98	5.32	2.19	-2.50	4.85	3.98
FEMALES.						
New South Wales ..	1.88	7.45	-4.23	-12.44	10.22	5.72
Victoria ..	-0.03	5.26	-1.56	-9.30	10.42	4.85
Queensland ..	3.96	8.63	-4.14	-7.08	7.73	1.85
South Australia ..	1.98	5.56	-1.81	-15.72	11.05	6.77
Western Australia ..	3.06	5.55	-1.71	-9.76	6.78	..
Tasmania ..	6.51	4.02	-6.40	-5.35	12.03	1.54
Australia ..	1.30	6.45	-3.01	-10.91	10.09	4.92

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 1949–50 to 1954–55 :—

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
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
1954–55	307	265	490	465	602	478	325

(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 1954–55 there were 325 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 1954–55, these industries accounted for 79.18 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 135 females to every 100 males and in Class VIII., Clothing, with 236 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1954–55 :—

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1954–55.

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
IV. Industrial Metals, etc. ..	166,746	111,897	31,954	43,480	17,928	8,092	380,097
VI. Textiles and Textile Goods (not Dress) ..	9,670	16,529	710	1,140	442	941	29,432
VIII. Clothing (except Knitted) ..	12,815	14,725	2,596	1,839	1,263	359	33,597
IX. Food, Drink and Tobacco ..	27,422	29,099	22,432	7,899	5,081	2,921	94,854
All Other Classes ..	100,020	79,425	25,598	19,356	17,580	8,732	250,711
Total	316,673	251,675	83,290	73,714	42,294	21,045	788,691
FEMALES.							
IV. Industrial Metals, etc. ..	20,746	13,392	1,886	4,827	798	378	42,027
VI. Textiles and Textile Goods (not Dress) ..	14,206	20,926	1,365	1,164	444	1,509	39,614
VIII. Clothing (except Knitted) ..	32,643	32,846	6,227	4,026	2,881	582	79,205
IX. Food, Drink and Tobacco ..	11,518	10,397	3,877	2,716	1,415	1,157	31,080
All Other Classes ..	24,024	17,412	3,648	3,118	1,482	781	50,465
Total	103,137	94,973	17,003	15,851	7,020	4,407	242,391

(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.

FEMALES EMPLOYED IN CLOTHING INDUSTRIES, 1954-55.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Fe-males.	Femini- nity. (a)	Males.	Fe-males.	Femini- nity. (a)	Males.	Fe-males.	Femini- nity. (a)
Tailoring and Ready-made Clothing	3,057	14,305	468	3,110	7,657	246	1,239	4,016	324
Waterproof and Oilskin Clothing	114	623	546	116	272	234	14	82	586
Dressmaking, Hemstitching Millinery	229	2,148	938	1,368	7,946	581	155	2,940	1,897
Shirts, Collars and Under-clothing	241	1,393	578	221	854	386	42	477	1,136
Foundation Garments ..	402	3,872	963	718	5,619	783	165	1,969	1,193
Handkerchiefs, Ties and Scarves	123	1,372	1,115	202	1,381	684	21	186	886
Hats and Caps	169	1,030	609	75	390	520	15	144	960
Gloves	633	701	111	265	218	82	28	115	411
Boots and Shoes	107	362	338	48	238	496	33	159	482
Boot and Shoe Repairing ..	3,524	3,689	105	5,698	5,724	100	2,007	1,625	81
Boot and Shoe Accessories ..	1,464	76	5	687	39	6	676	39	6
Umbrellas and Walking Sticks	227	80	35	377	226	60	36	5	14
Dyeworks and Cleaning (in- cluding Renovating and Repairing)	49	104	212	19	50	263	16	38	238
Other	2,420	2,454	101	1,715	1,859	108	1,610	1,921	119
	56	434	775	106	373	352	..	..	..
Total	12,815	32,643	255	14,725	32,846	223	6,057	13,716	226

(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, 1954 and 1955.**—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 15,698 in June, 1955, 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 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.			1954.			1955.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	5,759	7,084	12,843	2,671	2,257	4,928	2,579	1,982	4,561
Victoria	6,167	5,005	11,172	3,093	2,527	5,620	2,908	2,381	5,289
Queensland	1,790	1,334	3,124	1,768	1,198	2,966	1,754	1,124	2,878
South Australia ..	1,296	1,053	2,349	819	750	1,569	855	723	1,578
Western Australia ..	705	521	1,226	835	430	1,265	876	319	1,195
Tasmania	392	500	892	108	66	174	121	76	197
Australia	16,109	15,497	31,606	9,294	7,228	16,522	9,093	6,605	15,698

(a) Under sixteen years of age.

3. **Industries Employing Child Labour.**—The distribution of children employed in factories in June, 1955 and the proportion of children employed to total employees are given in the following table according to the class of industry :—

FACTORIES : CHILDREN(a) EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1955.

Class of Industry.	Children Employed.		Total Employees. (b)		Proportion (per cent.) of Children Employed to Total Employees. (b)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Conveyances ..	4,167	801	374,786	43,364	1.11	1.85
Textiles and Textile Goods (not Dress)	417	1,206	27,937	38,311	1.49	3.15
Clothing (except Knitted)	502	2,610	27,900	76,536	1.80	3.41
Food, Drink and Tobacco	1,050	696	89,232	29,242	1.18	2.38
Sawmills, Joinery, Boxes, etc. ..	802	96	54,296	2,825	1.48	3.40
Furniture of Wood, Bedding, etc. ..	472	54	16,285	3,567	2.90	1.51
Paper, Stationery, Printing, Bookbinding	701	557	43,047	16,203	1.63	3.44
All other Industries	982	585	130,005	28,481	0.76	2.05
Total	9,093	6,605	763,488	238,529	1.19	2.77

(a) Under sixteen years of age.

(b) 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 their output for 1954–55 was £3,434,589,000, of which £1,940,698,000 was the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £128,382,000 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of output, namely, £1,365,509,000, 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 1954–55 was £781,640,000. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £76,503,000 or 10.85 per cent. on that for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1954–55.* 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, 1954-55.
(£'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	7,436	4,910	1,291	1,421	1,512	565	17,135
II. Bricks, Pottery, Glass, etc. . .	9,588	4,556	926	1,732	1,322	281	18,405
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease . . .	16,063	13,283	1,239	2,579	2,044	391	35,599
IV. Industrial Metals, Machines, Conveyances . . .	157,520	103,847	22,956	40,896	13,587	6,485	345,291
V. Precious Metals, Jewellery Plate . . .	1,532	2,019	176	266	155	10	4,158
VI. Textiles and Textile Goods (not Dress) . . .	15,893	24,872	1,091	1,516	542	1,493	45,407
VII. Skins and Leather (not Clothing or Footwear) . . .	4,252	4,068	879	1,036	469	61	10,765
VIII. Clothing (except Knitted) . .	24,888	27,840	4,137	3,076	1,935	498	62,374
IX. Food, Drink and Tobacco . . .	28,138	29,754	20,633	7,328	4,524	2,836	93,213
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving . . .	14,787	10,827	6,851	3,336	4,548	2,459	42,808
XI. Furniture of Wood, Bedding, etc. . .	5,649	4,082	1,740	1,331	850	295	13,947
XII. Paper, Stationery, Printing, Bookbinding, etc. . .	19,833	16,321	3,407	2,903	1,743	3,061	47,268
XIII. Rubber . . .	6,609	5,429	1,110	838	155	117	14,258
XIV. Musical Instruments . . .	984	210	22	22	17		1,255
XV. Miscellaneous Products . . .	6,629	6,537	360	557	224	110	14,417
<i>Total, Classes I. to XV.</i>	<i>319,801</i>	<i>258,555</i>	<i>66,818</i>	<i>68,837</i>	<i>33,627</i>	<i>18,662</i>	<i>766,300</i>
XVI. Heat, Light and Power . . .	6,814	4,195	1,482	1,536	1,111	202	15,340
Grand Total . . .	326,615	262,750	68,300	70,373	34,738	18,864	781,640

(ii) *Totals and Averages, 1938-39 and 1949-50 to 1954-55.*—The following table 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
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	491,718
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
1954-55	326,615	262,750	68,300	70,373	34,738	18,864	781,640
AVERAGE PER EMPLOYEE (£).							
1938-39	201.77	185.64	210.78	195.57	207.90	188.31	196.31
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	649.94	724.52	664.59	707.89	710.21
1953-54	758.65	743.29	678.35	761.27	703.26	734.60	742.62
1954-55	804.43	790.00	714.83	810.32	744.17	771.27	789.35

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, a large number of hands is employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1954-55 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 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 1954-55 reached a record level of over £789.

(iii) *Total and Average Earnings of Males and Females, 1938-39 and 1949-50 to 1954-55.* 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	33,272	29,006	9,920	7,488	4,129	2,234	91,049
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	14,249	538,760
1953-54	245,749	190,573	56,608	56,299	28,684	15,320	593,233
1954-55	274,467	213,377	61,125	62,942	31,748	16,736	660,395
AVERAGE PER MALE EMPLOYEE (£).							
1938-39	239.24	224.47	238.59	220.95	235.49	212.09	231.84
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	782.98
1953-54	844.05	833.71	733.34	824.49	754.20	791.86	820.98
1954-55	906.61	891.40	773.47	883.13	797.80	833.05	877.84
FEMALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39	6,334	7,021	967	681	445	246	15,694
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	38,898	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
1954-55	52,148	49,373	7,175	7,431	2,990	2,128	121,245
AVERAGE PER FEMALE EMPLOYEE (£).							
1938-39	103.66	108.25	96.00	86.44	99.58	93.19	103.92
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
1954-55	514.94	529.63	431.68	477.12	434.21	487.12	509.56

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1954-55 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, 1954-55.

Class of Industry.	Managers, Clerical Staff, Chemists, Draftsmen, etc.		All Other Employees.	
	Males.	Females.	Males.	Females.
	£'000.	£'000.	£'000.	£'000.
I. Treatment of Non-metalliferous Mine and Quarry Products	1,936	301	14,795	103
II. Bricks, Pottery, Glass, etc.	1,454	371	15,968	612
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	7,184	1,571	23,163	3,681
IV. Industrial Metals, Machines, Conveyances	44,961	9,507	278,388	12,435
V. Precious Metals, Jewellery, Plate	439	157	3,161	401
VI. Textiles and Textile Goods (not Dress)	3,779	1,605	21,615	18,408
VII. Skins and Leather (not Clothing or Footwear)	1,135	226	7,979	1,425
VIII. Clothing (except Knitted)	3,783	2,014	19,810	36,767
IX. Food, Drink and Tobacco	11,160	3,060	66,877	12,116
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	4,003	840	37,547	418
XI. Furniture of Wood, Bedding, etc.	1,259	377	11,047	1,264
XII. Paper, Stationery, Printing, Bookbinding, etc.	5,840	1,943	33,454	6,031
XIII. Rubber	1,864	411	10,564	1,419
XIV. Musical Instruments	138	61	913	143
XV. Miscellaneous Products	1,884	611	9,023	2,899
<i>Total, Classes I. to XV.</i>	<i>90,819</i>	<i>23,055</i>	<i>554,304</i>	<i>98,122</i>
XVI. Heat, Light and Power	1,380	55	13,892	13
<i>Grand Total.</i>	<i>92,199</i>	<i>23,110</i>	<i>568,196</i>	<i>98,135</i>
Average paid per employee	1,148.97	539.41	845.47	503.00

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1954–55.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1954–55 it amounted to a new high level of £128,382,000, an increase of £7,924,000 as compared with the previous year and over 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), 1954–55.
(£'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 ..	2,184	1,551	566	768	747	253	6,069
II. Bricks, Pottery, Glass, etc. ..	3,176	1,903	359	556	583	153	6,730
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	3,590	2,771	207	749	931	112	8,360
IV. Industrial Metals, Machines, Conveyances ..	22,794	4,829	1,616	4,835	764	803	35,641
V. Precious Metals, Jewellery Plate ..	113	108	11	27	12	1	272
VI. Textiles and Textile Goods (not Dress) ..	1,401	1,789	55	154	44	125	3,568
VII. Skins and Leather (not Clothing or Footwear) ..	402	403	62	116	54	3	1,040
VIII. Clothing (except Knitted) ..	836	729	148	123	82	33	1,951
IX. Food, Drink and Tobacco ..	5,706	4,834	2,658	1,214	929	363	15,704
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	1,353	564	357	142	316	228	2,960
XI. Furniture of Wood, Bedding, etc. ..	153	84	39	36	24	6	342
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,128	1,388	119	234	75	1,019	3,963
XIII. Rubber ..	924	834	127	92	18	16	2,011
XIV. Musical Instruments ..	60	13	1	(b)	(b)	..	74
XV. Miscellaneous Products ..	406	372	17	51	9	3	858
<i>Total, Classes I. to XV.</i>	<i>44,226</i>	<i>22,172</i>	<i>6,342</i>	<i>9,097</i>	<i>4,588</i>	<i>3,118</i>	<i>89,543</i>
XVI. Heat, Light and Power ..	16,699	9,595	5,278	3,800	3,458	9	38,839
Grand Total ..	60,925	31,767	11,620	12,897	8,046	3,127	128,382

(a) Includes value of lubricants and water.

(b) Less than £500.

(ii) *Values of Items, 1954–55.* 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), 1954–55.
(£'000.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Coal, Black ..	21,302	3,674	6,430	(b) 4,597	3,225	1,036	40,264
" Brown ..	..	6,301	..	..	..	..	6,301
Brown Coal Briquettes ..	..	2,285	..	..	..	..	2,285
Coke ..	11,354	918	470	2,644	144	227	15,757
Wood ..	441	730	419	389	429	168	2,576
Fuel Oil ..	4,414	6,575	1,126	1,449	1,640	375	15,579
Tar (Fuel) ..	780	318	3	93	12	20	1,226
Electricity ..	16,570	7,982	2,296	2,814	1,710	1,045	32,417
Gas ..	2,593	804	148	236	71	36	3,888
Other (Charcoal, etc.) ..	707	415	101	209	445	95	1,972
Water ..	1,749	1,051	277	222	174	55	3,528
Lubricating Oils ..	1,015	714	350	244	196	70	2,589
Total ..	60,925	31,767	11,620	12,897	8,046	3,127	128,382

(a) Includes value of lubricants and water.

(b) Includes £1,183,000, the value of 453,000 tons of Leigh Creek coal.

(iii) *Quantities of Fuel Used, 1954-55.* The following table shows the quantities of fuel used in factories in each State during the year:—

FACTORIES: QUANTITIES OF FUEL USED, 1954-55.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black	'000 tons	5,370	536	1,511	(a)991	603	234	9,245
" Brown	"	"	7,829	"	"	"	"	7,829
Brown Coal Briquettes..	"	"	514	"	"	"	"	514
Coke	"	2,016	97	45	302	18	15	2,493
Wood	"	214	436	282	161	345	89	1,527
Fuel Oil	'000 gals.	64,634	105,235	14,139	22,283	23,978	4,876	235,145
Tar (Fuel)	"	33,153	6,287	97	2,241	387	478	42,643

(a) Includes 453,000 tons of Leigh Creek coal.

(iv) *Total Value, 1938-39 and 1949-50 to 1954-55.* 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
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
1954-55	60,925	31,767	11,620	12,897	8,046	3,127	128,382

(a) Includes value of lubricants and water.

4. *Value of Materials Used.—(i) In Classes of Industry, 1954-55.* 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 1954-55 reached £1,940,698,000, 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, 1954-55.
(£'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	22,843	9,829	2,819	3,211	2,929	1,022	42,653
II. Bricks, Pottery, Glass, etc. ..	8,195	4,376	606	1,683	821	218	15,899
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	70,990	63,291	6,150	9,978	14,246	1,235	165,890
IV. Industrial Metals, Machines, Conveyances	331,143	160,792	40,383	86,791	17,367	14,507	650,983
V. Precious Metals, Jewellery Plate	1,555	2,717	84	197	77	3	4,633
VI. Textiles and Textile Goods (not Dress)	40,395	58,862	4,324	3,683	2,679	4,681	114,624
VII. Skins and Leather (not Clothing or Footwear)	12,665	12,399	2,662	7,324	1,285	217	36,552
VIII. Clothing (except Knitted) ..	41,124	45,980	5,901	3,175	2,294	369	98,843
IX. Food, Drink and Tobacco ..	150,486	157,859	132,604	32,694	26,009	13,904	513,556
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	35,611	23,243	13,811	9,088	7,212	4,901	93,866
XI. Furniture of Wood, Bedding, etc.	11,184	8,047	3,462	2,661	1,774	433	27,561
XII. Paper, Stationery, Printing, Bookbinding, etc.	39,692	35,155	5,475	4,761	2,540	5,406	93,029
XIII. Rubber	17,000	14,499	3,066	1,411	223	162	36,361
XIV. Musical Instruments	1,706	261	8	6	2	"	1,983
XV. Miscellaneous Products	10,256	13,066	484	852	185	65	24,908
<i>Total, Classes I. to XV.</i>	<i>794,845</i>	<i>610,376</i>	<i>221,839</i>	<i>167,515</i>	<i>79,643</i>	<i>47,123</i>	<i>1,921,341</i>
XVI. Heat, Light and Power	7,772	6,290	2,497	1,621	940	237	19,357
Grand Total	802,617	616,666	224,336	169,136	80,583	47,360	1,940,698

(ii) *Total Amount, 1938-39 and 1949-50 to 1954-55.* 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
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	476,489	187,572	133,818	63,943	38,029	1,527,805
1953-54	721,311	548,111	211,451	152,590	72,468	42,042	1,747,973
1954-55	802,617	616,666	224,336	169,136	80,583	47,360	1,940,698

5. *Value of Output.*—(i) *In Classes of Industry, 1954-55.* The value of the output of factories in the various classes in each State in 1954-55 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, 1954-55.
(£'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	38,202	20,682	5,846	6,863	6,333	2,300	80,226
II. Bricks, Pottery, Glass, etc.	27,280	13,401	2,584	5,150	3,688	832	52,935
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	124,547	99,129	9,805	16,764	19,796	2,335	272,376
IV. Industrial Metals, Machines, Conveyances	599,636	322,848	78,590	151,469	39,388	27,662	1,219,593
V. Precious Metals, Jewellery Plate	4,270	5,994	392	701	384	21	11,762
VI. Textiles and Textile Goods (not Dress)	68,470	104,575	6,354	6,187	3,750	7,250	196,586
VII. Skins and Leather (not Clothing or Footwear)	19,611	19,390	4,151	8,928	2,136	293	54,509
VIII. Clothing (except Knitted)	82,312	89,933	12,771	7,680	5,423	1,092	199,211
IX. Food, Drink and Tobacco	220,625	219,943	173,096	46,547	36,285	19,303	715,799
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	63,029	42,750	25,926	14,538	14,886	9,934	171,063
XI. Furniture of Wood, Bedding, etc.	20,832	15,237	6,399	4,832	3,287	913	51,560
XII. Paper, Stationery, Printing, Bookbinding, etc.	77,863	67,830	11,546	10,228	5,876	14,189	187,532
XIII. Rubber	26,530	25,282	5,492	2,867	544	382	61,097
XIV. Musical Instruments	3,439	578	44	36	25	..	4,122
XV. Miscellaneous Products	22,398	25,319	1,046	1,833	525	230	51,351
<i>Total, Classes I. to XV.</i>	<i>1,399,044</i>	<i>1,072,891</i>	<i>344,042</i>	<i>284,683</i>	<i>142,326</i>	<i>86,736</i>	<i>3,329,722</i>
XVI. Heat, Light and Power	47,625	27,765	11,975	8,378	7,259	1,865	104,867
Grand Total	1,446,669	1,100,656	356,017	293,061	149,585	88,601	3,434,589

(ii) *Total, 1938-39 and 1949-50 to 1954-55.* 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
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
1954-55	1,446,669	1,100,656	356,017	293,061	149,585	88,601	3,434,589

6. *Value of Production.*—(i) *In Classes of Industry, 1954-55.* 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 amount of depreciation, particulars of which are shown in § 9, para, 4, was recorded as £56,484,000 for 1954-55. 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 1954-55 to £1,366 million to which Class IV., Industrial Metals, etc., with £533 million made the greatest contribution. The total value of production in 1954-55 showed an increase of £139 million (11.28 per cent.) over the figure for 1953-54 and £1,162 million over the value of production recorded in 1938-39.

The following table shows the value of production in 1954-55 in each State for the various classes of industry.

FACTORIES: VALUE OF PRODUCTION, 1954-55.
(*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	13,175	9,302	2,461	2,884	2,657	1,025	31,504
II. Bricks, Pottery, Glass, etc. .. .	15,909	7,122	1,619	2,911	2,284	461	30,306
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .	49,967	33,067	3,448	6,037	4,619	988	98,126
IV. Industrial Metals, Machines, Conveyances .. .	245,699	157,227	36,591	59,843	21,257	12,352	532,969
V. Precious Metals, Jewellery, Plate .. .	2,602	3,169	297	477	295	17	6,857
VI. Textiles and Textile Goods (not Dress) .. .	26,674	43,924	1,975	2,350	1,027	2,444	78,394
VII. Skins and Leather (not Clothing or Footwear) .. .	6,544	6,588	1,427	1,488	797	73	16,917
VIII. Clothing (except Knitted) .. .	40,352	43,224	6,722	4,382	3,047	690	98,417
IX. Food, Drink and Tobacco .. .	64,433	57,250	37,834	12,639	9,347	5,036	186,539
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .	26,065	18,943	11,758	5,308	7,358	4,805	74,237
XI. Furniture of Wood, Bedding, etc. .. .	9,495	7,106	2,898	2,195	1,489	474	23,657
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .	37,043	31,287	5,952	5,233	3,261	7,764	90,540
XIII. Rubber .. .	8,606	9,949	2,299	1,364	303	204	22,725
XIV. Musical Instruments .. .	1,673	304	35	30	23	..	2,065
XV. Miscellaneous Products .. .	11,736	11,881	545	930	331	162	25,585
<i>Total, Classes I. to XV.</i> .. .	<i>559,973</i>	<i>440,343</i>	<i>115,861</i>	<i>108,071</i>	<i>58,095</i>	<i>36,495</i>	<i>1,318,838</i>
XVI. Heat, Light and Power .. .	23,154	11,880	4,200	2,957	2,861	1,619	46,671
Grand Total .. .	583,127	452,223	120,061	111,028	60,956	38,114	1,365,509

(ii) *Total and Averages, 1938-39 and 1949-50 to 1954-55.* 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 £150.22 per head in 1954-55. For value per person employed, the increase was not quite so pronounced (from £360 per head in 1938-39 to £1,324 in 1954-55) owing to the considerable increase in the number of persons employed in 1954-55 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
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	1,032,862
1953-54	520,043	408,314	110,255	100,221	55,147	33,065	1,227,045
1954-55	583,127	452,223	120,061	111,028	60,956	38,114	1,365,509
PER PERSON EMPLOYED. (£.)							
1938-39	395	327	357	315	378	391	360
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	1,240	1,048
1952-53	1,204	1,152	1,055	1,108	1,089	1,298	1,160
1953-54	1,292	1,233	1,124	1,172	1,162	1,345	1,240
1954-55	1,389	1,305	1,197	1,240	1,236	1,497	1,324
PER HEAD OF POPULATION. (£.)							
1938-39	33.00	35.25	19.14	22.98	18.80	22.72	29.34
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	99.79	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
1954-55	168.56	181.75	90.59	137.50	93.93	121.78	150.22

7. Value of Output and Cost of Production.—As the total value of the output for Australia for 1954-55 was recorded as £3,434,589,000, there remained, after payment of £1,940,698,000 for the value of the materials used, £781,640,000 for salaries and wages and £128,382,000 for power, fuel and light, a balance of £583,869,000 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 1954-55:—

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1954-55.

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	802,617	60,925	326,615	256,512	1,446,669
Victoria	616,666	31,767	262,750	189,473	1,100,656
Queensland	224,336	11,620	68,300	51,761	356,017
South Australia	169,136	12,897	70,373	40,655	293,061
Western Australia	80,583	8,046	34,738	26,218	149,585
Tasmania	47,360	3,127	18,864	19,250	88,601
Australia	1,940,698	128,382	781,640	583,869	3,434,589

(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 1954-55:—

**FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1954-55.
(£'000.)**

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
Land and buildings	221,519	186,324	46,187	42,133	30,230	29,603	555,996
Plant and machinery	258,596	226,347	76,367	52,145	54,958	29,879	698,292
Total ..	480,115	412,671	122,554	94,278	85,188	59,482	1,254,288

(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 1950-51 to 1954-55.

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

Class of Industry.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,779	6,281	6,905	7,431	8,091	9,103
II. Bricks, Pottery, Glass, etc. ..	2,953	5,883	6,761	7,723	8,535	9,849
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	7,377	20,920	25,262	30,996	36,931	44,658
IV. Industrial Metals, Machines, Conveyances ..	34,841	97,021	117,513	137,724	159,325	184,934
V. Precious Metals, Jewellery, Plate ..	633	1,688	2,037	2,311	2,523	2,888
VI. Textiles and Textile Goods (not Dress) ..	6,000	18,004	20,845	22,482	25,443	29,651
VII. Skins and Leather (not Clothing or Footwear) ..	2,096	4,764	5,382	5,734	6,072	6,452
VIII. Clothing (except Knitted) ..	10,624	22,128	24,768	26,359	28,584	31,163
IX. Food, Drink and Tobacco ..	33,273	60,217	68,916	78,278	86,625	94,070
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	4,107	11,680	14,505	16,361	18,297	21,225
XI. Furniture of Wood, Bedding, etc. ..	2,533	5,776	6,812	7,256	8,069	8,981
XII. Paper, Stationery, Printing, Book-binding, etc. ..	10,639	20,207	24,691	27,284	30,444	34,156
XIII. Rubber ..	1,676	3,792	4,620	5,530	6,668	7,430
XIV. Musical Instruments ..	105	387	380	398	468	528
XV. Miscellaneous Products ..	1,433	5,035	6,266	6,705	7,570	8,299
<i>Total, Classes I. to XV.</i> ..	121,069	283,783	335,663	382,572	433,645	493,387
XVI. Heat, Light and Power ..	9,851	19,002	23,827	31,874	49,786	62,609
Grand Total ..	130,920	302,785	359,490	414,446	483,431	555,996

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1954-55.* The following table gives particulars of the various classes of industry in each State.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), 1954-55.
(£'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 ..	3,868	2,696	737	613	595	594	9,103
II. Bricks, Pottery, Glass, etc. ..	4,751	2,295	685	810	1,129	179	9,849
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	19,138	16,973	1,123	2,415	4,127	882	44,658
IV. Industrial Metals, Machines, Conveyances ..	83,262	60,417	11,958	16,465	8,445	4,387	184,934
V. Precious Metals, Jewellery Plate ..	1,032	1,384	108	202	146	16	2,888
VI. Textiles and Textile Goods (not Dress) ..	10,365	16,845	653	815	471	502	29,651
VII. Skins and Leather (not Clothing or Footwear) ..	2,546	2,643	312	583	193	175	6,452
VIII. Clothing (except Knitted) ..	13,765	11,779	2,219	1,607	1,410	383	31,163
IX. Food, Drink and Tobacco ..	31,073	29,951	15,337	7,808	6,308	3,593	94,070
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	8,719	5,546	2,030	1,950	1,918	1,062	21,225
XI. Furniture of Wood, Bedding, etc. ..	3,441	2,954	1,011	682	695	198	8,981
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	13,399	12,822	2,084	1,676	1,015	3,160	34,156
XIII. Rubber ..	3,055	2,857	774	377	254	113	7,430
XIV. Musical Instruments ..	357	134	5	11	21	..	528
XV. Miscellaneous Products ..	3,603	3,993	178	283	176	66	8,299
<i>Total, Classes I. to XV.</i> ..	202,374	173,289	39,214	36,297	26,903	15,310	493,387
XVI. Heat, Light and Power ..	19,145	13,035	6,973	5,836	3,327	14,233	62,609
Grand Total ..	221,519	186,324	46,187	42,133	30,230	29,603	555,996

(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 1949-50 to 1954-55 :—

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
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
1954-55 ..	221,519	186,324	46,187	42,133	30,230	29,603	555,996

(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 £556.0 million in 1954-55.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39 and 1950-51 to 1954-55.* 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.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
I. Treatment of Non-metalliferous						
Mine and Quarry Products ..	7,028	9,239	11,911	16,155	17,829	20,625
II. Bricks, Pottery, Glass, etc. ..	3,145	6,057	7,461	8,811	9,741	11,000
III. Chemicals, Dyes, Explosives,						
Paints, Oils, Grease ..	6,754	26,247	30,559	39,024	53,528	97,508
IV. Industrial Metals, Machines,						
Conveyances ..	33,038	90,801	112,940	131,857	148,178	168,651
V. Precious Metals, Jewellery, Plate ..	197	808	955	1,012	1,002	1,094
VI. Textiles and Textile Goods (not						
Dress) ..	6,657	21,218	23,973	25,030	27,567	29,658
VII. Skins and Leather (not Clothing						
or Footwear) ..	973	2,994	3,642	3,894	4,034	4,153
VIII. Clothing (except Knitted) ..	2,557	9,294	10,403	11,181	12,363	13,452
IX. Food, Drink and Tobacco ..	32,101	56,489	66,712	77,512	90,624	101,700
X. Sawmills, Joinery, Boxes, etc.,						
Wood Turning and Carving ..	3,908	12,614	15,869	17,851	19,002	21,827
XI. Furniture of Wood, Bedding, etc.	728	2,035	2,483	2,692	2,870	3,186
XII. Paper, Stationery, Printing, Book-						
binding, etc. ..	9,188	25,301	33,613	38,129	41,866	46,129
XIII. Rubber ..	1,368	3,456	4,171	4,875	5,677	6,843
XIV. Musical Instruments ..	12	227	302	305	458	444
XV. Miscellaneous Products ..	758	4,008	4,674	5,075	5,968	6,614
<i>Total, Classes I. to XV. ..</i>	<i>108,412</i>	<i>270,788</i>	<i>329,668</i>	<i>383,403</i>	<i>440,707</i>	<i>532,884</i>
XVI. Heat, Light and Power ..	35,250	65,827	80,476	110,131	140,008	165,408
Grand Total ..	143,662	336,615	410,144	493,534	580,715	698,292

(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 1954-55 of £117.6 million over 1953-54 extended over all industrial classes. The greatest increase occurred in Class III., Chemicals, Dyes, Explosives, Paints, Oils, Grease.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1938–39 and 1949–50 to 1954–55. During 1954–55 increases occurred in all States, Victoria showing the largest increase, £45.3 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
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	147,365	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
1954–55	258,596	226,347	76,367	52,145	54,958	29,879	698,292

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

(iii) *Value according to Class of Industry, 1954–55.* The following table shows the value of plant and machinery used in factories in each State during 1954–55 according to class of industry.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), 1954-55.
(£'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	10,762	3,533	2,295	2,850	799	386	20,625
II. Bricks, Pottery, Glass, etc.	5,344	2,483	1,019	722	1,220	212	11,000
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	26,330	37,325	1,290	3,394	26,753	2,416	97,508
IV. Industrial Metals, Machines, Conveyances	90,535	44,967	8,478	16,499	5,274	2,898	168,651
V. Precious Metals, Jewellery, Plate	426	510	33	72	45	8	1,094
VI. Textiles and Textile Goods (not Dress)	10,151	17,079	936	472	353	667	29,658
VII. Skins and Leather (not Clothing or Footwear)	1,646	1,474	363	441	187	42	4,153
VIII. Clothing (except Knitted)	5,149	5,705	1,075	781	547	195	13,452
IX. Food, Drink and Tobacco	29,087	27,270	30,715	6,892	4,914	2,822	101,700
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	7,634	4,786	3,267	1,572	2,000	2,568	21,827
XI. Furniture of Wood, Bedding, etc.	1,119	1,010	411	315	255	76	3,186
XII. Paper, Stationery, Printing, Bookbinding, etc.	12,909	18,977	2,366	2,165	1,332	8,380	46,129
XIII. Rubber	2,669	3,040	550	360	146	78	6,843
XIV. Musical Instruments	356	81	3	1	3	..	444
XV. Miscellaneous Products	2,628	3,492	98	309	64	23	6,614
<i>Total, Classes I. to XV.</i>	<i>206,745</i>	<i>171,732</i>	<i>52,899</i>	<i>36,845</i>	<i>43,892</i>	<i>20,771</i>	<i>532,884</i>
XVI. Heat, Light and Power	51,851	54,615	23,468	15,300	11,066	9,108	165,408
Grand Total	258,596	226,347	76,367	52,145	54,958	29,879	698,292

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

4. *Depreciation of Land and Buildings and Plant and Machinery, 1954-55.*—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, 1954-55.

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,300	363	220	297	129	25	2,334
II. Bricks, Pottery, Glass, etc. ..	591	287	144	69	131	29	1,251
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	2,657	2,499	188	391	1,575	432	7,742
IV. Industrial Metals, Machines, Conveyances ..	7,731	4,852	838	1,778	490	445	16,134
V. Precious Metals, Jewellery, Plate ..	29	50	2	5	2	..	88
VI. Textiles and Textile Goods (not Dress) ..	1,040	1,992	55	83	55	90	3,315
VII. Skins and Leather (not Clothing or Footwear) ..	108	117	24	37	17	2	305
VIII. Clothing (except Knitted) ..	464	420	81	50	45	20	1,080
IX. Food, Drink and Tobacco ..	2,613	2,994	2,407	596	448	234	9,292
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	699	533	284	173	194	162	2,045
XI. Furniture of Wood, Bedding, etc. ..	93	62	37	23	21	6	242
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,221	1,751	221	159	124	670	4,146
XIII. Rubber ..	624	548	148	60	16	10	1,406
XIV. Musical Instruments ..	42	7	..	..	..	..	49
XV. Miscellaneous Products ..	298	453	10	25	5	3	794
<i>Total, Classes I. to XV.</i>	<i>19,510</i>	<i>16,928</i>	<i>4,659</i>	<i>3,746</i>	<i>3,252</i>	<i>2,128</i>	<i>50,223</i>
XVI. Heat, Light and Power ..	3,725	190	1,019	476	636	215	6,261
Grand Total ..	23,235	17,118	5,678	4,222	3,888	2,343	56,484

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1938-39 and 1949-50 to 1954-55.—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
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
1954-55 ..	555,996	698,292	58,311	170,762	6,568	49,916

(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 Bulletin *Secondary Industries*.

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1953 to 1955. A more complete list, together with values, where available, is published in the Bulletin *Secondary Industries*.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES : AUSTRALIA.

Article.	Unit of Quantity.	1952-53.	1953-54.	1954-55.
Acid—				
Nitric	Ton	8,693	11,501	11,777
Sulphuric	"	627,283	731,897	835,245
Aerated and Carbonated Waters	'000 gals.	53,221	56,624	59,648
Asbestos Cement Building Sheets	'000 sq. yds.	24,252	26,074	28,077
Bacon and Ham	Ton	34,254	33,651	35,188
Bags, Leather, Fibre, etc.—				
Handbags—				
Leather	No.	918,485	957,810	935,001
Plastic	"	512,158	470,379	575,085
Other	"	148,891	134,873	125,298
School Bags	"	136,186	137,316	104,993
Suitcases(a)	"	958,099	1,165,399	1,258,306
Trunks	"	2,161	2,902	1,348
All other	"	249,110	253,590	335,575
Baking Powder	lb.	775,982	771,227	701,395
Bath Heaters—				
Electric	No.	17,510	19,045	17,886
Gas	"	23,367	27,360	27,626
Solid Fuel	"	41,087	42,325	41,191
Bathing Suits	Doz.	135,743	156,509	222,473
Baths, C.I.P.E.	No.	64,720	89,387	117,414
Batteries, Wet Cell type	"	1,145,715	1,398,985	1,501,788
Beer (excluding Waste Beer)	'000 gals.	192,344	208,557	221,679
Biscuits	'000 lb.	148,278	150,475	150,816
Blankets	Pair	469,713	601,163	766,199
Boots, Shoes and Slippers (not Rubber)—				
Boots and Shoes	'000 pairs	16,492	18,582	17,901
Sandals	"	1,478	1,895	1,980
Slippers	"	6,982	8,632	7,324
Bran (Wheaten)	Ton (2,000 lb.)	304,394	274,307	272,455
Brassieres	Doz.	329,745	416,889	404,893
Bricks, Clay	'000	667,055	801,998	838,579
Brooms	Gross	18,747	18,539	19,715
Brushes (b)	"	71,014	82,257	86,531
Butter	Ton	156,117	156,117	188,010
Candles	Cwt.	14,256	8,611	10,369
Cardigans, Sweaters, etc.	Doz.	700,566	996,701	1,029,250
Cement, Portland	Ton.	1,439,096	1,700,127	1,919,802
Cheese	"	46,592	49,043	45,178
Cigarettes	'000 lb.	13,879	18,303	22,859
Cleansing and Scouring Powders—				
Soap based	Cwt.	94,447	99,187	91,038
Other	"			43,823
Cloth—				
Cotton	'000 sq. yds.	25,716	33,618	34,424
Woolen and Worsted (c)	"	29,400	35,027	31,067
Coke—				
Metallurgical	Ton	1,858,428	2,010,404	2,046,790
Other	"	1,071,106	943,344	1,099,859
Confectionery—				
Chocolate	'000 lb.	58,961	62,599	56,902
Other	"	76,644	76,872	81,506
Coppers—				
Electric	No.	24,673	29,935	28,381
Gas	"	25,039	28,047	27,400
Inserts (all types)	"	79,407	85,300	86,487
Cordials and Syrups	'000 gals.	5,628	3,967	4,537
Corsets and Corselets	Doz.	122,262	155,408	141,265
Cosmetic Creams and Lotions—				
Face Creams	Cwt.	4,923	5,412	5,110
Hand Creams and Lotions	"	3,124	4,800	6,175
Other Skin Creams and Lotions	"	6,958	9,102	8,221
Custard Powder	'000 lb.	5,745	6,155	5,535
Cycles, Assembled	No.	75,414	85,063	91,307

(a) Includes Kitbags. (b) Excludes Tooth, and Industrial Metal and Bristle. (c) Includes Mixtures.

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

Article.	Unit of Quantity.	1952-53.	1953-54.	1954-55.
Dynamos—				
Alternators	No.	200	293	264
Generators	"	8,194	9,331	8,473
Electricity	Mill. kWh	12,045	13,707	15,172
Enamels, Natural and Synthetic	'000 gals.	2,108	2,698	3,642
Engines—				
Diesel, other than Marine	No.	4,919	3,787	2,668
Petrol—				
Marine	"	1,232	1,357	1,380
Other (a)	"	16,527	23,680	45,608
Essences, Flavouring—				
Domestic	Gal.	92,592	96,359	111,086
Industrial	"	198,092	245,812	278,348
Face Powder	Cwt.	2,898	3,396	4,336
Fans, Electric	No.	39,292	42,283	63,265
Fats, Edible—				
Dripping	Cwt.	426,010	357,802	367,517
Other	"	237,902	264,267	291,989
Fibrous Plaster Sheets	'000 sq. yds.	15,418	16,185	17,784
Fish, Tinned (including Fish Loaf)	'000 lb.	7,705	6,605	6,646
Floorboards—				
Australian Timber	'000 super. ft.	87,009	110,536	115,640
Imported Timber	"	3,943	3,845	4,474
Flour, Self-raising	Cwt.	1,105,835	1,116,278	1,102,480
Flour, Wheaten (b)	Ton (2,000 lb.)	1,726,300	1,609,058	1,553,019
Fruit Juices—Natural	'000 gals.	2,075	3,161	2,874
Gas	Mill, cubic ft.	40,722	42,100	43,465
Gloves—				
Dress—				
Leather	Doz. pairs	25,254	12,113	6,454
Other	"	90,397	112,892	58,749
Work, all types	"	158,733	214,596	269,408
Golf Clubs	Doz.	8,961	15,563	14,861
Handkerchiefs—				
Men's	"	979,959	1,234,162	1,438,896
Women's	"	882,164	1,538,067	1,375,669
Hats and Caps	"	510,402	530,521	510,382
Hose, Rubber—Garden	'000 lin. ft.	7,419	5,420	5,071
Other	"	5,994	7,111	9,716
Plastic—Garden	"	15,507	29,887	24,893
Ice	Ton	960,034	877,803	766,557
Ice Cream	'000 gals.	13,425	13,678	14,796
Iron and Steel—				
Pig Iron	'000 tons	1,692	1,827	1,869
Steel Ingots	"	1,801	2,117	2,209
Blooms and Billets	"	1,688	1,921	1,953
Irons, Electric (Hand, Domestic)	No.	179,842	229,910	278,777
Jams	'000 lb.	77,521	85,687	81,699
Jelly Crystals	"	9,553	11,028	11,799
Kalsomine	"	3,787	3,396	3,089
Lacquer, Clear and Colours	Gal.	1,012,782	1,306,661	1,476,489
Lard	Cwt.	41,266	40,973	40,472
Lawn Mower—				
Electric	No.	12,849	21,922	25,418
Petrol	"	5,614	9,849	29,423
Hand	"	54,186	85,867	106,005
Leather—				
Dressed from Hides	'000 sq. ft.	46,541	50,733	48,796
Dressed from Skins	"	22,561	26,811	26,376
Harness, Skirt, etc.	'000 lb.	1,607	1,546	1,433
Sole and Belting	"	38,298	38,675	35,001
Upholstery	'000 sq. ft.	10,343	13,097	12,032
Lime—Agricultural	Ton	99,883	108,746	111,170
Hydrated	"	36,877	44,047	48,644
Quick	"	119,731	123,774	128,639
Linseed Oil—extracted from Local Crushing	'000 gals.	1,475	338	438
from treatment of Unrefined	"	1,911	3,946	5,539
Lubricating Oil	"	11,290	14,241	16,084

(a) Excludes Motor Car, Motor Cycle, Tractor and Aero Engines. Baking and Sharps.

(b) Includes Wheatmeal for

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

Article.	Unit of Quantity.	1952-53.	1953-54.	1954-55.
Malt, Barley	'000 bus.	6,620	7,078	7,517
Margarine—				
Table	'000 lb.	15,856	21,866	21,972
Other	"	49,337	49,939	49,171
Mattresses—Wire	No.	238,527	262,930	315,741
Inner Spring	"	329,604	418,811	476,395
Soft Filled, etc.	"	349,426	367,116	380,465
Meat, Tinned	'000 lb.	209,376	161,113	165,394
Milk—				
Concentrated (Whole)	"	32,465	43,599	22,560
Condensed	"	124,063	94,944	86,225
Powdered (Whole) (a)	"	72,654	68,643	59,269
Mops, Floor	Gross	9,658	11,964	13,914
Motor Bodies made	No.	90,767	114,878	127,709
Motor Spirit (including Benzol)	'000 gals.	106,793	182,319	412,955
Motors, Electric	No.	601,659	972,887	1,182,981
Nails	Ton	18,392	22,008	24,214
Neckties	Doz.	522,590	588,730	491,455
Newsprint	Ton	34,010	60,406	73,608
Oatmeal (including Rolled Oats)	Cwt.	381,237	400,095	322,985
Paint—Oil	'000 gals.	4,300	5,180	6,098
Water	'000 lb.	24,846	31,930	28,955
Peanut Butter and Paste	"	3,419	4,313	4,627
Perambulators	No.	131,699	153,048	155,433
Pickles	'000 pints	7,388	6,896	6,765
Pigments—Colours ground in oil.. .. .	Cwt.	18,028	19,047	17,592
Zinc Oxide	"	87,260	172,807	184,853
White Lead	"	68,284	337,794	389,185
Other, including Dry Colours	"	204,684		
Plywood, $\frac{1}{2}$ inch basis	'000 sq. ft.	115,728	161,581	186,604
Pollard	Ton (2,000 lb.)	369,243	335,890	315,028
Preserves—				
Fruit Preserved (b)	'000 lb.	228,379	338,562	319,235
Vegetables Preserved	"	66,306	40,265	51,116
Pyjamas—				
Men's and Boys' (Suits only)	Doz.	180,147	273,423	339,556
Women's and Girls' (inc. Nightdresses)	"	289,104	322,010	343,464
Racquet Frames (all types)	"	17,391	22,224	18,361
Refrigerators—Commercial	No.	1,127	1,442	1,656
Domestic	"	182,134	274,487	280,577
Rice (Cleaned)	Cwt.	718,556	904,207	916,702
Ropes and Cables (excluding Wire)	"	105,519	115,182	125,727
Sauce	'000 pints	25,977	25,770	28,526
Sausage Casings	Cwt.	65,352	61,205	72,377
Semolina	"	109,253	108,382	103,553
Shirts (Men's and Boys')	Doz.	881,447	1,240,069	1,410,573
Sink Heaters	No.	20,565	24,907	23,799
Soap—				
Household	Cwt.	593,201	568,754	534,939
Flakes and Chips (c)	"	76,601	77,406	79,952
Industrial (including Wool Scouring Soap)	"	84,173	99,983	117,174
Sand	"	28,982	22,045	24,312
Toilet and Hand	"	272,630	300,248	329,748
Shaving, (including Sticks and Creams)	"	7,095	7,076	7,218
Soft	"	14,512	18,954	25,522
Liquid	"	124,098	144,215	175,503
Shampoo	"	7,561	8,547	5,775
Soap Extracts and Powders	"	885,158	890,241	994,889
Socks and Stockings—				
Men's	Doz. pairs	1,574,846	1,894,936	1,664,072
Women's	"	2,337,332	2,793,050	3,016,671
Children's	"	422,406	570,167	531,816
Soup (Tinned)	'000 pints	22,621	25,509	27,616
Spades and Shovels	Doz.	21,821	25,322	32,058
Starch—Edible	Cwt.	312,188	334,298	357,557
Indible	"	70,385	90,339	92,004
Steel, Structural, Fabricated	Ton	130,029	135,057	166,779
Stoves, Ovens and Ranges—				
Domestic Cooking—				
Electric (d)	No.	63,385	81,508	85,589
Gas	"	35,731	43,040	58,758
Solid Fuel	"	47,033	50,376	49,758
Sugar—Raw (94 net titre)	Ton	948,886	1,254,387	1,327,546
Refined	"	440,326	449,015	481,639
Sulphate of Ammonia	"	70,174	70,811	78,434
Superphosphate	"	1,581,001	1,771,196	1,960,605

(a) Includes Malted Milk and Infants' and Invalids' Foods. (b) Includes Canned Apple, all types. (c) Includes industrial flakes and chips. (d) Includes Stovettes, Cookers, etc.

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

Article.	Unit of Quantiv.	1952-53.	1953-54.	1954-55.
Talcum Powder	Cwt.	24,637	30,183	30,454
Tallow—				
Edible	"	317,722	388,222	507,477
Inedible	"	1,120,308	1,101,114	1,126,770
Tiles, Roofing—				
Cement	'000	46,934	44,651	53,720
Terracotta	"	57,977	63,782	63,934
Timber—				
From Native Logs—				
Hardwood	'000 super. ft.	1,115,423	1,157,124	1,184,992
Softwood	"	224,374	242,974	264,296
From Imported Logs—				
Hardwood	"	13,588	20,627	28,748
Softwood	"	117,815	156,909	156,037
Toasters, Electric (Domestic)	No.	22,334	23,400	21,466
Tobacco	'000 lb.	1,863,640	622,314	1,237,714
Tomato Juice	Gal.	626,672	659,987	666,403
Towels	Doz.	3,250	2,949	3,099
Transformers and Converters—				
Above 20 k.v.a.	No.	207,084	309,901	386,517
Below 20 k.v.a.	"	86,465	107,629	116,059
Twine (all types)	Cwt.	1,288,352	2,214,041	2,737,172
Tyres, Pneumatic—				
Motor Car and Motor Cycle	No.	329,848	509,663	587,739
Truck and Omnibus	"	75,834	165,868	190,365
All Other (excl. Bicycle)	"	338,548	430,422	478,144
Umbrellas	'000 doz.	3,243	4,239	4,328
Underwear				
Vacuum Cleaners (Domestic)	No.	38,398	57,275	59,968
Varnishes	'000 gals.	2,930	3,135	3,188
Washing Machines, Household, Electric	No.	91,384	146,259	166,312
Weatherboards—				
Australian Timber	'000 super. ft.	20,944	24,880	23,529
Imported Timber	"	3,003	3,271	3,264
Wheatmeal(a)	Ton (2,000 lb.)	88,101	137,732	128,863
Wheelbarrows (Metal)	No.	62,364	78,874	84,631
Wireless—				
Cabinets—				
Wood	No.	55,044	85,061	86,210
Other	"	190,098	304,452	310,684
Receiving Sets	"	298,955	437,513	453,020
Wool Scoured—				
For Sale	'000 lb.	37,348	40,536	40,994
For use in own works	"	29,218	38,246	37,610
On Commission	"	57,479	57,785	57,643
Wool Tops	"	26,467	32,755	30,886
Yarn(b)				
Cotton	"	27,611	38,101	41,493
Woollen	"	15,468	19,868	19,790
Worsted	"	20,141	26,076	22,897
Zinc Oxide (<i>See</i> Pigments)				

(a) Excludes Wheatmeal for Baking included with Flour.
of the fibre mentioned.

(b) Including mixtures predominantly

§ 11. Individual Industries.

1. General.—Particulars in pages 206-233, §§ 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 203.

Details of some of the principal articles produced in factories in Australia during the years 1952-53 to 1954-55 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 1954-55 and for a series of years in the following table.

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

AUSTRALIA, 1954-55.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories	14	15	451	480
Number of persons employed	2,925	2,661	4,858	10,444
Salaries and wages paid £	2,653,339	2,255,703	3,794,960	8,704,002
Value of power, fuel, etc., used £	4,058,476	230,419	156,380	4,445,275
Value of materials used £	5,711,625	5,284,529	8,421,748	19,417,902
Value of production £	6,323,394	3,822,882	6,862,386	17,008,662
Total value of output £	16,093,495	9,337,830	15,440,514	40,871,839
Value of land and buildings £	1,918,009	980,476	1,827,672	4,726,157
Value of plant and machinery £	9,601,988	1,317,423	2,288,407	13,207,818
Horse-power of engines ordinarily in use h.p.	72,330	10,311	13,229	95,870

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	132	526	559	504	479	480
Number of persons employed	3,932	9,192	9,851	9,352	9,304	10,444
Salaries and wages paid £'000	897	4,860	6,469	6,942	7,435	8,704
Value of power, fuel, etc., used £'000	562	1,794	2,418	3,436	3,950	4,445
Value of materials used £'000	1,542	9,025	12,698	14,303	16,013	19,418
Value of production £'000	2,385	8,635	11,169	12,197	14,198	17,009
Total value of output £'000	4,489	19,454	26,285	29,936	34,161	40,872
Value of land and buildings £'000	1,350	3,250	3,466	3,890	4,206	4,726
Value of plant and machinery £'000	2,516	4,691	6,455	10,018	10,796	13,208
Horse-power of engines ordinarily in use h.p.	39,617	75,584	81,691	91,880	89,260	95,870

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 1954-55 with comparative figures for 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).
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	133	76	16	9	13	1	248
Number of persons employed ..	5,519	6,155	292	760	(a)	(a)	13,032
Salaries and wages paid .. £	5,330,399	5,318,300	226,046	715,056	(a)	(a)	11,832,853
Value of power, fuel, etc., used .. £	1,662,885	705,714	51,081	535,783	(a)	(a)	3,043,157
Value of materials used .. £	16,935,337	10,300,588	347,289	1,011,154	(a)	(a)	29,003,829
Value of production .. £	12,328,794	9,760,031	487,831	2,065,659	(a)	(a)	25,095,500
Total value of output .. £	30,927,016	20,766,333	886,201	3,612,596	(a)	(a)	57,142,486
Value of land and buildings .. £	7,493,046	5,622,634	124,967	703,321	(a)	(a)	14,189,703
Value of plant and machinery .. £	15,058,949	8,209,674	168,624	1,661,529	(a)	(a)	25,606,607
Horse-power of engines ordinarily in use h.p.	41,958	44,078	1,774	4,404	(a)	(a)	95,188

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	165	207	219	229	234	248
Number of persons employed ..	10,228	10,615	11,504	11,253	11,765	13,032
Salaries and wages paid .. £'000	3,450	6,243	8,539	8,928	9,907	11,833
Value of power, fuel, etc., used .. £'000	618	1,546	2,110	2,210	2,757	3,043
Value of materials used .. £'000	6,007	16,857	21,097	19,538	25,158	29,004
Value of production .. £'000	6,627	13,373	17,180	16,879	20,643	25,095
Total value of output .. £'000	13,252	31,776	40,387	38,627	48,558	57,142
Value of land and buildings .. £'000	11,697	7,770	8,828	11,923	13,389	14,190
Value of plant and machinery .. £'000	10,964	11,043	12,507	19,612	23,573	25,607
Horse-power of engines ordinarily in use h.p.	69,399	74,613	76,890	85,254	90,807	95,188

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

PHARMACEUTICAL AND TOILET PREPARATIONS.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	122	64	5	13	3	3	210
Number of persons employed ..	3,164	2,359	113	491	(a)	(a)	6,233
Salaries and wages paid .. £	2,084,279	1,755,315	55,008	301,920	(a)	(a)	4,255,152
Value of power, fuel, etc., used .. £	79,359	113,215	1,172	25,701	(a)	(a)	222,536
Value of materials used .. £	6,540,051	4,775,725	217,760	1,076,493	(a)	(a)	12,729,164
Value of production .. £	9,485,541	4,035,017	186,907	481,426	(a)	(a)	14,380,127
Total value of output .. £	16,104,951	8,923,957	405,839	1,583,620	(a)	(a)	27,331,827
Value of land and buildings .. £	2,546,994	2,972,838	34,243	316,393	(a)	(a)	6,022,348
Value of plant and machinery .. £	918,515	1,025,863	15,715	139,129	(a)	(a)	2,128,696
Horse-power of engines ordinarily in use h.p.	4,200	7,697	82	1,401	(a)	(a)	13,592

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	215	201	208	206	208	210
Number of persons employed ..	5,514	5,538	6,149	5,363	6,012	6,233
Salaries and wages paid .. £'000	1,699	2,423	3,433	3,468	3,898	4,255
Value of power, fuel, etc., used .. £'000	57	91	150	197	238	223
Value of materials used .. £'000	5,402	8,291	9,877	9,784	12,017	12,729
Value of production .. £'000	4,790	8,985	10,314	10,188	12,969	14,380
Total value of output .. £'000	10,249	17,367	20,341	20,169	25,224	27,332
Value of land and buildings .. £'000	1,534	1,963	3,332	3,931	4,755	6,022
Value of plant and machinery .. £'000	598	823	1,286	1,569	1,793	2,129
Horse-power of engines ordinarily in use h.p.	6,324	8,357	10,618	12,238	12,777	13,592

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

4. White Lead, Paints and Varnish.—The following table shows particulars of this industry for each State during 1954-55 and for Australia for a series of years.

WHITE LEAD, PAINTS AND VARNISH.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	78	56	17	14	8	2	175
Number of persons employed ..	2,970	1,409	309	533	(a)	(a)	5,322
Salaries and wages paid .. £	2,687,591	1,213,563	228,010	430,327	(a)	(a)	4,636,159
Value of power, fuel, etc., used .. £	260,726	73,816	15,079	21,975	(a)	(a)	375,874
Value of materials used .. £	11,214,144	5,912,701	1,579,801	2,353,764	(a)	(a)	21,553,319
Value of production £	6,298,349	3,312,759	981,304	1,145,518	(a)	(a)	11,980,220
Total value of output £	17,773,219	9,299,276	2,576,184	3,521,257	(a)	(a)	33,909,413
Value of land and buildings .. £	2,339,575	1,646,366	242,735	640,569	(a)	(a)	5,089,428
Value of plant and machinery .. £	1,180,025	1,160,386	157,765	343,790	(a)	(a)	2,891,781
Horse-power of engines ordinarily in use h.p.	13,236	7,407	1,311	1,602	(a)	(a)	24,178

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	102	154	158	175	174	175
Number of persons employed ..	2,271	4,985	5,141	4,622	4,934	5,322
Salaries and wages paid .. £'000	535	2,784	3,378	3,346	3,757	4,636
Value of power, fuel, etc., used .. £'000	45	229	303	258	337	376
Value of materials used £'000	2,275	14,157	16,623	14,657	18,603	21,553
Value of production £'000	1,585	7,010	8,112	8,583	9,891	11,980
Total value of output £'000	3,905	21,396	25,038	23,498	28,831	33,909
Value of land and buildings .. £'000	761	2,831	3,213	3,669	4,066	5,089
Value of plant and machinery .. £'000	324	1,548	1,842	2,113	2,230	2,892
Horse-power of engines ordinarily in use h.p.	7,696	19,875	21,412	22,769	22,719	24,178

(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 1954-55 and for Australia for a series of years :—

SOAP AND CANDLES.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	43	29	8	5	3	3	91
Number of persons employed ..	1,768	716	268	132	(a)	(a)	2,962
Salaries and wages paid .. £	1,631,295	614,093	185,605	107,567	(a)	(a)	2,588,603
Value of power, fuel, etc., used .. £	182,031	200,980	18,367	11,783	(a)	(a)	419,959
Value of materials used £	6,634,817	4,135,203	589,095	309,929	(a)	(a)	11,940,793
Value of production £	4,743,001	2,018,355	431,418	132,457	(a)	(a)	7,424,909
Total value of output £	11,559,849	6,354,538	1,038,880	454,169	(a)	(a)	19,785,661
Value of land and buildings .. £	543,099	828,627	111,715	76,507	(a)	(a)	1,619,011
Value of plant and machinery .. £	1,009,216	1,415,504	137,051	58,222	(a)	(a)	2,652,554
Horse-power of engines ordinarily in use h.p.	4,521	2,507	866	537	(a)	(a)	8,676

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

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	65	93	88	89	89	91
Number of persons employed ..	2,620	3,502	3,440	3,028	3,058	2,962
Salaries and wages paid .. £'000	501	1,974	2,555	2,460	2,544	2,589
Value of power, fuel, etc., used .. £'000	76	353	453	475	427	420
Value of materials used £'000	1,568	6,330	8,384	8,846	10,214	11,941
Value of production £'000	1,886	4,609	4,638	6,324	6,732	7,425
Total value of output £'000	3,530	11,292	13,475	15,645	17,373	19,786
Value of land and buildings .. £'000	666	1,200	1,301	1,487	1,565	1,619
Value of plant and machinery .. £'000	577	1,341	1,693	1,985	2,244	2,653
Horse-power of engines ordinarily in use h.p.	5,267	7,447	8,769	8,606	8,795	8,676
Materials used—						
Tallow cwt.	535,511	1,123,895	1,134,935	1,024,772	1,120,828	1,151,146
Alkali for Soap (a) .. cwt.	194,869	343,378	403,241	386,176	377,451	421,401
Coconut oil—refined and unrefined .. cwt.	138,954	91,404	113,203	95,825	86,576	93,498
Articles produced—						
Soap (b) cwt.	978,113	1,365,669	1,304,987	1,208,853	1,247,228	1,300,143
Soap Extracts and Powders	191,232	754,758	929,310	885,158	890,241	994,889
Candles made	28,649	12,871	16,931	14,256	8,611	10,369

(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 1955-56 were Soap, 1,298,000 cwt. ; Soap Extracts and Powders, 889,000 cwt.

6. **Chemical Fertilizers.**—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1954–55 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XXII.—Agricultural Production.

CHEMICAL FERTILIZERS.
1954–55.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	15	9	8	7	6	8	53
Number of persons employed ..	1,043	1,387	(a)	868	1,004	(a)	4,735
Salaries and wages paid .. £	978,339	1,355,529	(a)	789,653	874,866	(a)	4,372,273
Value of power, fuel, etc., used .. £	406,286	194,929	(a)	83,499	141,461	(a)	852,150
Value of materials used .. £	3,755,794	6,616,382	(a)	3,706,932	4,882,795	(a)	21,519,074
Value of production .. £	1,957,834	2,868,270	(a)	1,278,472	1,944,004	(a)	8,794,215
Total value of output .. £	6,119,914	9,679,581	(a)	5,068,903	6,968,260	(a)	31,165,439
Value of land and buildings .. £	2,466,348	769,774	(a)	501,896	1,817,357	(a)	6,512,111
Value of plant and machinery .. £	2,708,966	1,157,073	(a)	995,801	2,253,581	(a)	9,269,940
Horse-power of engines ordinarily in use .. h.p.	15,362	13,683	(a)	6,814	7,533	(a)	47,595

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54	1954–55.
Number of factories ..	36	49	49	51	51	53
Number of persons employed ..	2,540	4,012	4,325	4,483	4,531	4,735
Salaries and wages paid .. £'000	601	2,540	3,361	3,759	3,988	4,372
Value of power, fuel, etc., used .. £'000	114	440	589	786	842	852
Value of materials used .. £'000	3,231	14,014	20,297	21,100	20,521	21,519
Value of production .. £'000	1,600	4,312	5,998	7,255	8,109	8,794
Total value of output .. £'000	4,945	18,766	26,884	29,141	29,472	31,165
Value of land and buildings .. £'000	1,449	3,900	4,244	4,794	6,067	6,512
Value of plant and machinery .. £'000	2,353	5,418	5,804	6,218	8,067	9,270
Horse-power of engines ordinarily in use .. h.p.	18,165	36,274	38,220	39,850	41,644	47,595

(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 1954–55 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.
1954–55.

Items.	N.S.W.	Victoria.	Qld.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	18	11	..	3	1	..	33
Number of persons employed ..	16,102	1,421	..	(a)	(a)	..	17,842
Salaries and wages paid .. £	16,588,476	1,334,971	..	(a)	(a)	..	18,237,786
Value of power, fuel, etc., used .. £	13,635,091	293,813	..	(a)	(a)	..	15,669,815
Value of materials used .. £	93,356,959	1,147,385	..	(a)	(a)	..	94,928,434
Value of production .. £	31,600,732	1,759,507	..	(a)	(a)	..	34,381,181
Total value of output .. £	138,592,782	3,200,705	..	(a)	(a)	..	144,979,430
Value of land and buildings .. £	5,989,980	579,085	..	(a)	(a)	..	6,614,927
Value of plant and machinery .. £	25,429,949	736,643	..	(a)	(a)	..	26,394,485
Horse-power of engines ordinarily in use .. h.p.	327,354	9,180	..	(a)	(a)	..	339,135

AUSTRALIA.

Items.	1945–46.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	27	30	30	32	33	33
Number of persons employed ..	10,413	13,419	14,192	16,188	16,688	17,842
Salaries and wages paid .. £'000	4,164	9,245	11,904	14,455	15,609	18,238
Value of power, fuel, etc., used .. £'000	2,777	7,896	11,186	14,085	15,430	15,670
Value of materials used .. £'000	19,134	40,580	53,342	76,983	88,802	94,928
Value of production .. £'000	7,393	16,594	20,311	27,336	27,995	34,381
Total value of output .. £'000	29,304	65,070	84,839	118,404	132,227	144,979
Value of land and buildings .. £'000	2,197	3,259	4,064	5,278	6,508	6,615
Value of plant and machinery .. £'000	5,669	9,191	14,992	20,753	24,279	26,394
Horse-power of engines ordinarily in use .. h.p.	198,317	216,617	218,857	248,440	287,618	339,135

(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 XXVII.—Mineral Industry.

(iii) *Foundries (Ferrous)*. Particulars covering those industries classified as founding of iron and steel are shown for each State for 1954-55 and for Australia in selected years in the following table :—

FOUNDRIES—FERROUS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	90	216	22	24	16	..	368
Number of persons employed ..	2,830	2,693	627	541	408	..	7,099
Salaries and wages paid .. £	2,486,051	2,330,830	474,998	492,609	331,568	..	6,116,056
Value of power, fuel, etc., used .. £	302,073	264,684	39,977	99,227	90,158	..	796,119
Value of materials used .. £	1,930,099	1,820,062	483,680	377,716	269,722	..	4,881,279
Value of Production .. £	3,372,203	3,505,676	782,380	825,466	497,060	..	8,982,785
Total value of output .. £	5,604,375	5,590,422	1,306,037	1,302,409	856,940	..	14,660,183
Value of land and buildings .. £	943,107	998,868	357,620	197,126	126,512	..	2,623,233
Value of plant and machinery .. £	925,939	727,248	329,432	234,249	125,279	..	2,342,147
Horse-power of engines ordinarily in use .. h.p.	10,088	8,424	2,669	2,840	2,430	..	26,451

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	312	358	365	373	357	368
Number of persons employed ..	5,344	7,198	7,243	6,584	6,611	7,099
Salaries and wages paid .. £'000	1,612	4,134	5,252	4,989	5,129	6,116
Value of power, fuel, etc., used ..	161	475	633	642	702	796
Value of materials used .. £'000	1,210	3,262	4,331	4,026	4,057	4,881
Value of production .. £'000	2,341	6,024	7,622	7,337	7,469	8,983
Total value of output .. £'000	3,712	9,761	12,586	12,005	12,228	14,660
Value of land and buildings .. £'000	988	1,570	1,736	2,144	2,299	2,623
Value of plant and machinery .. £'000	619	1,357	1,574	1,923	2,123	2,342
Horse-power of engines ordinarily in use h.p.	13,381	23,976	25,107	24,467	25,415	26,451

(iv) *Plant, Equipment and Machinery (including Machine Tools)*. The next table shows particulars for this group for each State during 1954-55 and for Australia in selected years.

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	999	612	122	153	91	3	1,980
Number of persons employed ..	24,849	21,907	6,009	8,824	2,841	158	64,588
Salaries and wages paid .. £	21,530,556	18,886,946	4,343,646	7,450,964	2,210,155	138,945	54,561,212
Value of power, fuel, etc., used .. £	909,665	763,583	193,889	409,862	99,273	1,791	2,378,063
Value of materials used .. £	32,426,784	28,152,229	5,188,549	11,702,059	2,839,054	153,401	80,462,076
Value of production .. £	34,238,407	31,205,243	6,365,523	11,620,605	3,455,883	154,344	87,040,005
Total value of output .. £	67,574,856	60,121,055	11,747,961	23,732,526	6,394,210	309,536	169,880,144
Value of land and buildings .. £	12,246,287	10,426,064	1,346,032	2,860,621	1,649,266	158,293	28,686,563
Value of plant and machinery .. £	9,401,386	9,058,072	1,322,478	2,368,460	1,281,480	115,737	23,547,613
Horse-power of engines ordinarily in use .. h.p.	80,207	69,685	16,509	24,645	10,078	502	201,626

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	1,038	1,555	1,684	1,787	1,911	1,980
Number of persons employed ..	46,123	60,990	64,066	60,140	60,840	64,588
Salaries and wages paid .. £'000	14,259	35,215	45,434	45,414	47,620	54,561
Value of power, fuel, etc., used .. £'000	605	1,434	1,937	2,095	2,219	2,378
Value of materials used .. £'000	16,455	53,040	68,943	63,134	68,288	80,462
Value of production .. £'000	21,044	55,934	71,810	70,790	75,997	87,040
Total value of output .. £'000	38,104	110,408	142,690	136,019	146,504	169,880
Value of land and buildings .. £'000	7,227	15,904	19,383	22,332	25,259	28,687
Value of plant and machinery .. £'000	7,046	14,968	17,870	19,784	21,335	23,548
Horse-power of engines ordinarily in use h.p.	101,810	205,736	196,664	197,031	198,300	201,626

(v) *Other Engineering*. Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1954-55 and for Australia in selected years in the following table.

OTHER ENGINEERING.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	735	822	148	175	151	97	2,128
Number of persons employed ..	5,970	9,416	1,550	3,060	889	1,655	22,540
Salaries and wages paid .. £	4,545,090	7,600,383	980,280	2,481,401	574,258	1,309,847	17,491,259
Value of power, fuel, etc., used .. £	167,653	246,037	30,502	83,380	30,138	41,943	599,653
Value of materials used .. £	5,023,404	9,605,912	1,017,711	13,103,048	680,449	1,403,316	20,833,840
Value of production .. £	7,516,721	12,453,824	1,533,938	3,577,338	1,007,810	1,935,128	28,024,759
Total value of output .. £	12,707,778	22,305,773	2,582,151	6,763,766	1,718,397	3,380,387	49,458,252
Value of land and buildings .. £	3,044,019	4,769,125	547,138	1,666,838	495,113	767,125	11,289,558
Value of plant and machinery .. £	2,108,093	3,684,613	475,749	1,047,491	274,757	479,324	8,070,027
Horse-power of engines ordinarily in use .. h.p.	15,719	29,507	3,994	8,616	3,009	5,561	66,406

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	963	1,627	1,853	1,975	2,041	2,128
Number of persons employed ..	13,112	18,487	20,398	20,005	20,981	22,540
Salaries and wages paid .. £'000	3,634	9,495	13,124	13,804	15,100	17,491
Value of power, fuel, etc., used .. £'000	162	291	413	460	530	599
Value of materials used .. £'000	3,599	9,855	14,268	14,041	16,427	20,834
Value of production .. £'000	5,432	15,323	20,681	21,551	23,755	28,025
Total value of output .. £'000	9,193	25,469	35,362	36,052	40,712	49,458
Value of land and buildings .. £'000	2,369	5,089	7,021	8,285	9,900	11,289
Value of plant and machinery .. £'000	2,091	4,098	5,434	6,366	7,044	8,070
Horse-power of engines ordinarily in use .. h.p.	26,095	47,396	56,397	59,024	62,774	66,406

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 1954-55 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.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories ..	28	22	6	3	1	2	62
Number of persons employed ..	1,505	290	484	(b)	(b)	(b)	6,782
Salaries and wages paid .. £	1,420,481	264,770	501,587	(b)	(b)	(b)	6,432,085
Value of power, fuel, etc., used .. £	557,954	41,780	767,539	(b)	(b)	(b)	3,252,480
Value of materials used .. £	13,345,691	2,623,926	13,436,545	(b)	(b)	(b)	62,859,377
Value of production .. £	2,247,303	668,154	1,869,061	(b)	(b)	(b)	14,147,934
Total value of output .. £	16,150,948	3,333,860	16,073,145	(b)	(b)	(b)	80,259,791
Value of land and buildings .. £	643,229	206,027	945,691	(b)	(b)	(b)	3,044,047
Value of plant and machinery .. £	1,010,981	130,173	1,271,170	(b)	(b)	(b)	6,018,510
Horse-power of engines ordinarily in use .. h.p.	9,189	580	15,004	(b)	(b)	(b)	66,280

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53. (c)	1953-54. (c)	1954-55. (c)
Number of factories ..	42	65	67	59	59	62
Number of persons employed ..	5,532	7,664	7,812	6,958	6,592	6,782
Salaries and wages paid .. £'000	1,613	5,268	6,515	6,085	6,069	6,432
Value of power, fuel, etc., used .. £'000	598	3,223	3,130	2,803	3,063	3,253
Value of materials used .. £'000	16,844	59,735	71,097	44,481	53,711	62,859
Value of production .. £'000	3,892	20,435	27,496	14,163	12,648	14,148
Total value of output .. £'000	21,334	82,493	101,723	61,447	69,422	80,260
Value of land and buildings .. £'000	1,177	2,017	2,075	2,669	2,743	3,044
Value of plant and machinery .. £'000	3,526	4,723	4,936	4,371	5,390	6,019
Horse-power of engines ordinarily in use .. h.p.	54,450	88,410	81,567	70,424	65,067	66,280

(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 text above table.

9. Electrical Machinery, Cables and Apparatus.—The following table shows particulars of this industry for each State during 1954-55 and for Australia for a series of years.

ELECTRICAL MACHINERY, CABLES AND APPARATUS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	515	344	61	66	64	14	1,064
Number of persons employed ..	28,424	9,686	1,433	1,479	810	175	42,007
Salaries and wages paid ..	£ 23,199,586	7,486,743	986,875	1,044,715	552,742	132,378	33,403,039
Value of power, fuel, etc., used ..	£ 1,279,305	288,200	26,530	31,699	18,748	6,217	1,650,699
Value of materials used ..	£ 49,984,012	15,983,970	1,850,115	1,193,011	716,614	234,585	69,962,307
Value of production ..	£ 39,217,143	11,231,304	1,475,804	1,479,514	946,705	286,460	54,636,930
Total value of output ..	£ 90,480,460	27,503,474	3,352,449	2,704,224	1,682,067	527,262	126,249,936
Value of land and buildings ..	£ 11,332,042	4,181,513	405,007	474,554	402,035	89,546	16,884,697
Value of plant and machinery ..	£ 8,283,920	2,732,568	437,565	238,155	118,372	104,320	11,914,900
Horse-power of engines ordinarily in use .. h.p.	55,440	17,697	4,574	1,849	1,237	261	81,058

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	360	867	928	965	1,028	1,064
Number of persons employed ..	10,666	35,494	36,772	31,949	38,377	42,007
Salaries and wages paid ..	£'000 2,031	18,816	24,277	22,903	28,699	33,403
Value of power, fuel, etc., used ..	£'000 105	637	976	991	1,391	1,651
Value of materials used ..	£'000 3,195	31,680	40,704	36,668	58,237	69,962
Value of production ..	£'000 3,655	30,867	38,244	38,633	49,032	54,637
Total value of output ..	£'000 6,955	63,184	79,924	76,292	108,660	126,250
Value of land and buildings ..	£'000 1,627	8,224	9,631	11,270	13,829	16,885
Value of plant and machinery ..	£'000 897	5,719	6,957	8,168	9,709	11,915
Horse-power of engines ordinarily in use h.p.	12,043	55,854	62,814	66,512	74,088	81,058

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 (fourteen in 1954-55) controlled by non-public bodies are not included in the figures below :—*

TRAMCARS AND RAILWAY ROLLING STOCK.(a)
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	42	22	13	14	25	7	123
Number of persons employed ..	15,877	7,281	6,527	4,434	3,570	910	38,599
Salaries and wages paid ..	£ 12,955,365	6,093,613	4,534,554	3,846,329	2,688,604	658,068	30,776,533
Value of power, fuel, etc., used ..	£ 426,284	210,171	123,591	159,064	84,047	22,306	1,025,463
Value of materials used ..	£ 6,868,387	4,658,666	2,613,953	2,845,189	1,491,215	340,180	18,817,590
Value of production ..	£ 15,251,237	7,839,017	5,374,180	4,979,109	3,199,468	862,284	37,505,295
Total value of output ..	£ 22,545,908	12,707,854	8,111,724	7,983,362	4,774,730	1,224,770	57,348,348
Value of land and buildings ..	£ 5,627,763	1,829,148	740,239	1,307,222	374,579	644,877	10,523,828
Value of plant and machinery ..	£ 8,231,201	987,443	992,248	1,616,508	974,038	322,406	13,123,844
Horse-power of engines ordinarily in use .. h.p.	43,322	20,521	16,728	17,948	10,415	3,250	112,184

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	117	126	126	123	124	123
Number of persons employed ..	27,310	38,253	38,499	39,073	39,262	38,599
Salaries and wages paid ..	£'000 6,721	20,914	26,281	28,002	28,425	30,777
Value of power, fuel, etc., used ..	£'000 226	617	812	907	994	1,025
Value of materials used ..	£'000 4,976	12,165	15,151	16,706	17,093	18,818
Value of production ..	£'000 8,021	25,738	31,375	33,875	34,354	37,505
Total value of output ..	£'000 13,223	38,520	47,338	51,488	52,441	57,348
Value of land and buildings ..	£'000 6,737	7,983	8,786	9,279	9,730	10,524
Value of plant and machinery ..	£'000 5,390	8,277	9,218	10,701	12,166	13,124
Horse-power of engines ordinarily in use .. h.p.	53,671	93,567	97,585	98,251	108,478	112,184

(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 1954-55 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.
 1954-55.

Items.	Construction and Assembly.	Repairs.	Motor Bodies. (a)	Motor Accessories.	Total.
Number of factories	69	7,531	1,183	210	8,993
Number of persons employed	16,778	49,955	23,352	8,258	98,343
Salaries and wages paid	£ 15,279,280	31,575,125	19,453,676	6,765,336	73,073,417
Value of power, fuel, etc., used	£ 674,797	982,496	693,505	447,444	2,798,242
Value of materials used	£ 25,755,967	32,520,620	41,881,111	7,960,969	108,118,667
Value of production	£ 25,143,683	48,875,345	27,929,115	10,593,213	112,541,356
Total value of output	£ 51,574,447	82,378,461	70,503,731	19,001,626	223,458,265
Value of land and buildings	£ 8,582,774	33,964,699	9,010,630	3,893,358	55,451,461
Value of plant and machinery	£ 5,152,187	9,901,800	6,103,233	4,915,561	26,072,781
Horse-power of engines ordinarily in use h.p.	34,187	53,511	44,011	28,292	160,001

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

In the next table similar details are shown on a State basis for 1954-55 and for Australia for selected years for these branches combined.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.
 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	3,723	2,344	1,127	719	808	272	8,993
Number of persons employed	31,731	32,449	9,585	16,290	6,341	1,947	98,343
Salaries and wages paid	£ 22,379,831	25,521,360	5,688,476	13,864,523	4,374,072	1,245,155	73,073,417
Value of power, fuel, etc., used	£ 910,987	974,921	185,418	522,745	174,777	29,394	2,798,242
Value of materials used	£ 27,691,262	39,458,760	6,022,943	27,427,257	6,220,809	1,297,636	108,118,667
Value of production	£ 36,742,766	36,788,347	11,030,922	18,875,270	7,189,175	1,914,876	112,541,356
Total value of output	£ 65,345,015	77,222,028	17,239,283	46,825,272	13,584,761	3,241,906	223,458,265
Value of land and buildings	£ 21,927,549	18,423,295	4,347,381	5,522,221	3,728,209	1,502,806	55,451,461
Value of plant and machinery	£ 8,723,835	9,172,226	1,566,483	4,906,624	1,345,947	357,666	26,072,781
Horse-power of engines ordinarily in use	h.p. 47,615	56,445	11,022	31,476	11,516	1,927	160,001

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	3,592	5,730	6,587	7,422	8,302	8,993
Number of persons employed	39,706	75,580	82,123	82,609	89,913	98,343
Salaries and wages paid	£'000 10,582	38,789	51,799	54,666	62,454	73,073
Value of power, fuel, etc., used	£'000 395	1,215	1,610	1,987	2,477	2,798
Value of materials used	£'000 12,143	48,542	70,967	74,405	94,173	108,119
Value of production	£'000 15,818	60,592	78,808	86,305	101,054	112,541
Total value of output	£'000 28,356	110,349	151,385	162,697	197,704	223,458
Value of land and buildings	£'000 9,878	23,361	30,799	38,718	45,835	55,451
Value of plant and machinery	£'000 3,758	11,495	14,982	20,129	23,397	26,073
Horse-power of engines ordinarily in use h.p.	56,117	109,707	126,228	139,253	146,930	160,001

The table below shows the production and imports of motor bodies for 1938-39 and 1950-51 to 1955-56 :-

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

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	1955-56.
Motor Bodies(a)--- Made	No. 79,436	92,718	98,470	90,822	114,745	127,709	133,680
Value	£'000 6,421	18,465	22,663	22,536	27,969	31,620	(c)
Assembled from imported Panels	No. (d)	33,212	29,205	21,566	43,077	59,863	95,186
Imported(e)	No. 532	92,791	101,628	7,568	26,874	37,924	(f)19,041
Value	£'000 64	14,275	16,657	1,441	5,956	6,456	(g) 387

(a) Excludes sidecars. (b) Preliminary—subject to revision. (c) Not yet available. (d) Not available. (e) Includes bodies on complete vehicles imported. (f) Includes 16,097 bodies on complete vehicles imported for which value is not available. (g) Bodies not forming part of a complete vehicle.

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 1954-55 and for Australia for a series of years.

AGRICULTURAL MACHINES AND IMPLEMENTS.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	124	80	41	35	28	..	308
Number of persons employed ..	2,178	6,487	1,503	1,638	376	..	12,182
Salaries and wages paid .. £	1,772,036	5,798,133	1,012,602	1,332,110	291,313	..	10,206,194
Value of power, fuel, etc., used .. £	88,344	445,757	82,678	97,249	10,895	..	694,923
Value of materials used .. £	1,808,644	8,878,699	962,545	1,698,774	223,949	..	13,572,611
Value of production .. £	2,789,114	8,165,875	1,460,329	1,745,715	393,804	..	14,557,837
Total value of output .. £	4,686,102	17,490,331	2,475,552	3,541,738	631,648	..	28,825,371
Value of land and buildings .. £	1,357,819	2,136,976	567,492	625,783	349,455	..	5,037,525
Value of plant and machinery .. £	784,595	2,556,701	376,528	455,408	108,759	..	4,281,991
Horse-power of engines ordinarily in use .. h.p.	7,096	19,844	5,134	6,873	911	..	39,858

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	161	225	257	270	293	308
Number of persons employed ..	6,563	11,651	12,481	11,608	11,930	12,182
Salaries and wages paid .. £'000	1,373	6,894	9,044	8,838	9,473	10,206
Value of power, fuel, etc., used .. £'000	82	433	555	600	637	695
Value of materials used .. £'000	1,485	9,952	13,521	11,103	12,988	13,572
Value of production .. £'000	1,836	9,854	13,051	12,787	13,924	14,558
Total value of output .. £'000	3,403	20,239	27,127	24,490	27,549	28,825
Value of land and buildings .. £'000	997	2,814	3,320	3,701	3,918	5,038
Value of plant and machinery .. £'000	911	2,877	3,365	3,526	3,627	4,282
Horse-power of engines ordinarily in use .. h.p.	13,346	33,464	34,598	37,372	39,843	39,858

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, 1956 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.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	72	139	141	149	162	175
Number of persons employed ..	4,828	10,628	8,733	6,912	8,125	8,550
Salaries and wages paid .. £'000	754	5,140	5,361	4,707	5,751	6,398
Value of power, fuel, etc., used .. £'000	23	147	184	179	199	205
Value of materials used .. £'000	1,356	9,229	8,487	7,661	9,782	10,076
Value of production .. £'000	1,123	7,219	7,023	6,042	7,454	8,624
Total value of output .. £'000	2,502	16,595	15,694	13,882	17,435	18,905
Value of land and buildings .. £'000	558	1,339	1,586	1,713	2,011	2,300
Value of plant and machinery .. £'000	305	946	980	969	1,132	1,242
Horse-power of engines ordinarily in use .. h.p.	2,710	13,565	12,055	10,596	9,274	8,930
Domestic receiving sets made ^(a) .. No.	163,821	459,436	358,379	298,955	437,513	453,020

(a) Including radiograms and car radios.

NOTE.—There were 455,168 domestic wireless receiving sets and 2,636 television receiving sets made in 1955-56.

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 2.5 million lb. in the five years ended 1954–55. 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 1954–55 amounted to 3,597,000 lb. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XXII.—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 (in 1954–55) 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 1950–51 to 1954–55.

COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories	33	91	94	93	96	96
Number of persons employed	3,589	9,233	8,840	7,673	9,470	9,582
Salaries and wages paid £'000	493	4,473	5,297	5,090	6,602	6,845
Value of power, fuel, etc., used	50	441	554	551	690	706
Value of materials used £'000	1,357	16,873	20,803	14,747	18,083	18,505
Value of production £'000	979	7,534	9,272	8,126	10,809	11,343
Total value of output £'000	2,386	24,848	30,629	23,424	29,582	30,554
Value of land and buildings £'000	704	3,215	3,695	3,951	4,104	5,078
Value of plant and machinery £'000	736	4,020	4,214	4,370	4,411	4,355
Horse-power of engines ordinarily in use h.p.	9,128	31,468	32,285	36,517	33,201	34,356

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.

1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	48	88	4	3	3	5	151
Number of persons employed	6,696	11,322	872	582	(a)	(a)	21,844
Salaries and wages paid £	4,339,321	7,373,330	438,367	353,297	(a)	(a)	13,945,474
Value of power, fuel, etc., used £	444,346	651,693	33,444	36,503	(a)	(a)	1,288,440
Value of materials used £	12,203,660	19,138,662	1,618,077	890,323	(a)	(a)	38,937,599
Value of production £	6,861,096	11,522,164	601,304	570,611	(a)	(a)	21,897,501
Total value of output £	19,509,102	31,312,519	2,252,825	1,497,437	(a)	(a)	62,123,540
Value of land and buildings £	2,485,715	4,171,552	188,628	37,574	(a)	(a)	7,368,623
Value of plant and machinery £	2,924,192	6,080,917	373,244	100,081	(a)	(a)	10,052,716
Horse-power of engines ordinarily in use h.p.	18,342	37,289	3,002	2,146	(a)	(a)	66,817

WOOL CARDING, SPINNING AND WEAVING—*continued.*

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
	(b)					
Number of factories	90	176	181	171	164	151
Number of persons employed	19,608	24,333	21,244	19,729	22,619	21,844
Salaries and wages paid £'000	2,888	11,349	11,543	12,028	14,382	13,945
Value of power, fuel, etc., used £'000	393	952	1,057	1,175	1,329	1,288
Value of materials used £'000	7,331	53,872	44,064	34,655	45,033	38,938
Value of production £'000	4,791	18,610	16,272	19,226	23,237	21,898
Total value of output £'000	12,515	73,434	61,393	55,056	69,599	62,124
Value of land and buildings £'000	2,380	5,369	6,161	6,242	6,894	7,369
Value of plant and machinery £'000	3,370	6,898	7,881	8,183	9,086	10,053
Horse-power of engines ordinarily in use h.p.	42,944	69,070	69,232	67,911	68,715	66,817
Articles produced—						
Woollen and worsted cloth (c)(d)'000 sq. yds.	31,768	38,454	29,790	29,400	35,027	31,067
Blankets and rugs (c) '000	1,279	2,068	1,382	1,035	1,340	1,673

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

16. Hosiery and Other Knitted Goods.—Details for each State for 1954-55 and for Australia for a series of years are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	203	427	7	11	10	3	661
Number of persons employed	7,758	15,851	608	114	204	79	24,614
Salaries and wages paid £	4,861,414	9,736,036	330,793	50,630	99,920	37,805	15,116,598
Value of power, fuel, etc., used £	224,975	412,962	9,971	2,812	3,356	2,201	656,277
Value of materials used £	9,866,936	19,485,472	1,588,471	83,402	243,062	50,065	31,317,408
Value of production £	8,996,431	17,485,174	747,535	83,673	163,473	58,506	27,534,792
Total value of output £	19,088,342	37,383,608	2,345,977	169,887	409,891	110,772	59,508,477
Value of land and buildings £	2,490,485	5,825,061	172,899	37,567	78,962	37,632	8,642,606
Value of plant and machinery £	2,107,156	5,493,936	232,666	25,691	43,997	13,145	7,916,591
Horse-power of engines ordinarily in use h.p.	6,419	13,491	515	191	198	70	20,884

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	313	510	548	587	645	661
Number of persons employed	18,159	22,268	21,342	20,694	23,937	24,614
Salaries and wages paid £'000	2,332	9,605	11,179	11,641	14,277	15,117
Value of power, fuel, etc., used £'000	133	386	480	588	684	656
Value of materials used £'000	4,284	22,834	24,517	23,939	30,372	31,317
Value of production £'000	3,809	16,257	18,028	21,164	26,155	27,535
Total value of output £'000	8,226	39,477	43,025	45,691	57,211	59,508
Value of land and buildings £'000	1,962	4,755	5,602	6,329	7,253	8,643
Value of plant and machinery £'000	1,931	4,905	5,894	6,038	7,201	7,917
Horse-power of engines ordinarily in use h.p.	8,884	16,925	19,677	17,997	18,478	20,884

The following quantities of yarn were used in these establishments during 1954-55 :—Worsted, 8,497,565 lb.; woollen, 101,524 lb.; wool or worsted and cotton, 249,812 lb.; wool or worsted and rayon, 1,088,392 lb.; cotton, 8,197,738 lb.; mercerised cotton, 759,368 lb.; cotton and rayon, 22,512 lb.; rayon, spun, 1,252,580 lb.; rayon filament, 4,353,592 lb.; silk, 49,889 lb.; nylon, spun, 601,670 lb.; nylon filament, 1,685,135 lb.; other, 496,286 lb. Production of garments and stockings is shown in § 10 (*see p. 234*).

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.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	69	42	13	10	5	1	140
Number of persons employed ..	1,950	2,377	625	223	(a)	(a)	5,393
Salaries and wages paid .. £	1,756,878	1,972,290	443,001	183,236	(a)	(a)	4,518,319
Value of power, fuel, etc., used £	188,304	156,236	34,473	17,504	(a)	(a)	408,494
Value of materials used .. £	4,311,882	3,965,727	1,472,535	485,265	(a)	(a)	10,674,538
Value of production .. £	2,471,116	3,091,621	666,919	278,483	(a)	(a)	6,742,529
Total value of output .. £	6,971,302	7,213,584	2,173,927	781,252	(a)	(a)	17,825,561
Value of land and buildings .. £	945,853	1,032,879	103,788	88,884	(a)	(a)	2,218,566
Value of plant and machinery .. £	881,224	823,121	217,940	148,343	(a)	(a)	2,128,409
Horse-power of engines ordinarily in use .. h.p.	13,012	12,490	3,481	1,655	(a)	(a)	31,708

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

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	132	143	143	141	142	140
Number of persons employed ..	4,375	5,362	5,274	5,240	5,445	5,393
Salaries and wages paid .. £'000	920	3,200	3,889	4,163	4,464	4,518
Value of power, fuel, etc., used .. £'000	88	275	352	382	417	408
Value of materials used .. £'000	2,983	8,221	8,796	9,488	10,477	10,675
Value of production .. £'000	1,522	4,950	5,912	5,983	6,672	6,743
Total value of output .. £'000	4,593	13,446	15,060	15,853	17,566	17,826
Value of land and buildings .. £'000	814	1,638	1,857	1,983	2,055	2,219
Value of plant and machinery .. £'000	524	1,425	1,703	1,832	1,990	2,128
Horse-power of engines ordinarily in use h.p.	12,345	27,684	28,980	30,314	31,182	31,708

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1954-55 are shown in the following table :—

TANNERIES : MATERIALS USED AND PRODUCTION, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Materials used—							
Hides (cattle) .. No.	970,890	1,158,139	395,337	137,217	(a)	(a)	2,799,906
Skins—							
Calf	757,417	481,413	205,510	(a)	(a)	..	1,448,154
Goat	521,866	(a)	(a)	..	..	..	544,081
Sheep, including Pelts ..	2,195,760	428,136	(a)	(a)	..	..	63,488,635
Marsupial	22,955	20,697	(a)	(a)	..	..	53,462
Bark used—							
Wattle tons	3,180	5,455	967	514	(a)	(a)	(b) 10,191
Mallet and Other ..	(a)	1,036	(a)	..	283	..	1,475
Tanning extract used ..	2,767	2,683	2,177	(a)	898	(a)	8,749
Articles produced—							
Leather made—							
So'e and Belting .. lb.	10,248,181	14,112,695	6,495,921	1,026,923	(a)	(a)	35,001,029
Harness sq. ft.	537,376	415,993	443,146	(a)	(a)	..	1,432,517
Upholstery sq. ft.	(a)	6,511,047	(a)	(a)	(a)	..	12,032,346
Dressed and Upper from Hides—							
Sold by Measurement—							
Patent sq. ft.	(a)	(a)	..	..	..	..	2,723,551
All Other	15,109,898	17,979,326	7,330,713	3,738,268	(a)	(a)	46,072,798
Sold by Weight (all kinds) lb.	52,070	(a)	(a)	..	4,266	..	208,332
Dressed from skins—							
Calf sq. ft.	4,886,223	3,742,677	1,545,611	(a)	33,324	(a)	10,227,131
Goat	2,285,742	(a)	(a)	..	..	..	2,366,932
Sheep	8,163,458	1,062,517	(a)	(a)	..	..	61,274,689
Marsupial	96,897	122,653	(a)	(a)	..	..	294,323

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

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

18. Tailoring and Ready-made Clothing.—Statistics showing the distribution of this industry between States in 1954-55 and for Australia for a series of years are shown in the following table :—

TAILORING AND READY-MADE CLOTHING.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	946	654	137	105	127	16	1,985
Number of persons employed ..	17,362	10,767	2,426	1,661	944	224	33,384
Salaries and wages paid	£ 9,219,031	£ 6,333,315	£ 1,080,617	£ 803,463	£ 416,736	£ 115,033	£ 17,968,195
Value of power, fuel, etc., used ..	£ 207,804	£ 126,657	£ 22,366	£ 19,728	£ 11,600	£ 2,043	£ 390,198
Value of materials used	£ 17,507,025	£ 12,861,441	£ 2,054,315	£ 1,016,698	£ 671,622	£ 125,940	£ 24,327,041
Total value of production	£ 14,497,969	£ 9,723,896	£ 1,877,293	£ 1,114,003	£ 663,782	£ 153,876	£ 28,030,819
Total value of output	£ 32,212,798	£ 22,711,994	£ 3,953,974	£ 2,150,429	£ 1,347,004	£ 281,859	£ 62,658,058
Value of land and buildings	£ 4,760,166	£ 2,609,921	£ 590,349	£ 541,230	£ 351,699	£ 63,313	£ 8,916,678
Value of plant and machinery ..	£ 1,375,134	£ 999,003	£ 126,969	£ 111,581	£ 42,259	£ 7,868	£ 2,662,814
Horse-power of engines ordinarily in use	4,725	3,302	541	407	181	42	9,198

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	1,177	1,890	1,998	1,961	1,963	1,985
Number of persons employed	26,499	38,535	36,226	32,209	33,264	33,384
Salaries and wages paid	£ 3,168	£ 14,206	£ 16,132	£ 15,681	£ 17,215	£ 17,968
Value of power, fuel, etc., used ..	£ 72	£ 249	£ 329	£ 363	£ 380	£ 390
Value of materials used	£ 4,947	£ 27,539	£ 30,078	£ 28,767	£ 33,598	£ 34,237
Value of production	£ 4,812	£ 21,349	£ 23,719	£ 23,581	£ 26,076	£ 28,031
Total value of output	£ 9,831	£ 49,137	£ 54,126	£ 52,711	£ 60,054	£ 62,658
Value of land and buildings	£ 3,176	£ 6,538	£ 7,398	£ 7,573	£ 8,251	£ 8,917
Value of plant and machinery	£ 356	£ 2,030	£ 2,431	£ 2,469	£ 2,523	£ 2,663
Horse-power of engines ordinarily in use h.p.	2,607	10,137	11,093	10,693	9,339	9,198

19. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1938-39 and 1950-51 to 1954-55 are shown in the following table :—

DRESSMAKING AND MILLINERY : AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	869	1,328	1,423	1,405	1,433	1,411
Number of persons employed	16,398	22,557	20,912	18,913	19,197	18,014
Salaries and wages paid	£ 1,653	£ 7,568	£ 8,412	£ 8,490	£ 9,230	£ 8,975
Value of power, fuel, etc., used ..	£ 33	£ 130	£ 149	£ 170	£ 187	£ 176
Value of materials used	£ 2,610	£ 11,567	£ 12,123	£ 11,746	£ 13,634	£ 13,109
Value of production	£ 2,592	£ 11,868	£ 12,700	£ 13,193	£ 14,392	£ 14,501
Total value of output	£ 5,235	£ 23,565	£ 24,972	£ 25,109	£ 28,213	£ 27,786
Value of land and buildings	£ 2,052	£ 4,068	£ 4,588	£ 4,726	£ 5,033	£ 5,256
Value of plant and machinery	£ 189	£ 903	£ 1,032	£ 1,065	£ 1,108	£ 1,123
Horse-power of engines ordinarily in use h.p.	1,732	4,671	4,899	4,790	4,858	4,740

20. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1954-55 and for Australia for a series of years :—

SHIRTS, COLLARS AND UNDERCLOTHING.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	154	173	20	25	18	2	392
Number of persons employed	4,274	6,337	998	(a)	617	(a)	12,745
Salaries and wages paid	£ 2,276,601	£ 3,481,097	£ 446,994	(a)	£ 263,357	(a)	£ 6,701,897
Value of power, fuel, etc., used ..	£ 38,752	£ 51,712	£ 7,347	(a)	£ 4,555	(a)	£ 106,150
Value of materials used	£ 5,992,906	£ 7,656,525	£ 693,186	(a)	£ 422,865	(a)	£ 15,019,445
Value of production	£ 3,730,516	£ 5,790,252	£ 707,778	(a)	£ 365,043	(a)	£ 10,926,992
Total value of output	£ 9,762,174	£ 13,498,489	£ 1,408,311	(a)	£ 792,463	(a)	£ 26,052,587
Value of land and buildings	£ 985,949	£ 1,358,474	£ 166,330	(a)	£ 119,463	(a)	£ 2,719,111
Value of plant and machinery ..	£ 371,511	£ 543,349	£ 56,951	(a)	£ 51,707	(a)	£ 1,053,186
Horse-power of engines ordinarily in use	1,533	2,236	344	(a)	190	(a)	4,468

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

SHIRTS, COLLARS AND UNDERCLOTHING—continued.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	283	410	419	379	379	392
Number of persons employed	11,081	12,870	12,640	9,657	11,156	12,745
Salaries and wages paid	£'000 1,143	4,452	5,361	4,397	5,684	6,702
Value of power, fuel, etc., used	£'000 23	72	82	76	92	106
Value of materials used	£'000 2,651	10,730	12,333	9,670	12,077	15,020
Value of production	£'000 1,761	7,503	8,715	7,524	9,377	10,927
Total value of output	£'000 4,435	18,305	21,130	17,270	21,546	26,053
Value of land and buildings	£'000 946	2,155	2,091	2,151	2,417	2,719
Value of plant and machinery	£'000 231	845	885	846	905	1,053
Horse-power of engines ordinarily in use h.p.	1,874	6,017	5,189	4,779	4,320	4,468

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, except in Tasmania, where it has been necessary to include details of boot and shoe repairing, in order to avoid disclosure of 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 262.

BOOTS AND SHOES.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories	191	239	31	23	11	21	516
Number of persons employed	7,213	11,422	1,546	1,339	634	169	22,323
Salaries and wages paid	£ 4,666,567	7,326,002	876,290	879,878	395,058	97,546	14,241,341
Value of power, fuel, etc., used	£ 83,335	108,569	11,542	14,030	7,914	1,339	226,729
Value of materials used	£ 6,331,025	11,689,797	1,313,233	1,066,321	481,114	138,272	21,019,762
Value of production	£ 6,517,682	10,147,236	1,130,551	1,167,483	540,841	136,740	19,640,533
Total value of output	£ 12,932,042	21,945,602	2,455,326	2,247,834	1,029,869	276,351	40,887,024
Value of land and buildings	£ 1,278,450	1,767,475	221,596	283,692	149,267	32,110	3,732,590
Value of plant and machinery	£ 822,825	1,832,364	299,293	273,199	132,424	19,878	3,379,983
Horse-power of engines ordinarily in use	h.p. 4,947	9,567	1,389	870	589	126	17,488

AUSTRALIA.

Items.	1945-46.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	383	521	540	509	520	516
Number of persons employed	18,264	23,783	22,775	20,920	22,953	22,323
Salaries and wages paid	£'000 4,408	10,215	12,405	12,430	14,215	14,241
Value of power, fuel, etc., used	£'000 75	141	172	197	225	227
Value of materials used	£'000 7,520	15,390	18,058	17,668	20,508	21,020
Value of production	£'000 6,472	14,611	17,162	17,162	19,444	19,640
Total value of output	£'000 14,067	30,142	35,392	35,027	40,177	40,887
Value of land and buildings	£'000 1,518	2,822	3,310	3,227	3,491	3,733
Value of plant and machinery	£'000 1,222	2,265	2,402	2,653	3,152	3,380
Horse-power of engines ordinarily in use h.p.	9,678	17,200	18,573	18,214	16,679	17,488

(a) Includes details of boot and shoe repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers are in factories producing and repairing boots and shoes in each State are shown for 1954-55 in the following table. Particulars relating to the output of rubber boots and shoes are not included :—

BOOT AND SHOE FACTORIES : OUTPUT, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Quantity—							
Boots, shoes and sandals pairs	7,007,979	9,432,946	1,336,395	(a)	556,275	(a)	19,880,642
Slippers	2,097,577	4,290,782	440,816	(a)	398,590	(a)	7,323,810
Value—							
Boots, shoes and sandals	£ 11,866,422	17,976,281	2,049,965	(a)	762,603	(a)	35,019,580
Slippers	£ 1,392,636	2,387,926	215,539	(a)	281,736	(a)	4,326,028

(a) Not available for publication; figures are included in the 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 1954–55 and for Australia for a series of years :—

FLOUR-MILLING.
1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	52	35	11	23	20	10	151
Number of persons employed ..	1,629	1,254	(a)	428	507	(a)	4,528
Salaries and wages paid .. £	1,474,629	1,077,712	(a)	342,860	416,199	(a)	3,850,861
Value of power, fuel, etc., used £	360,873	166,399	(a)	85,984	110,402	(a)	805,016
Value of materials used .. £	20,803,480	15,559,789	(a)	4,987,134	6,250,307	(a)	54,435,552
Value of production .. £	3,217,556	1,800,634	(a)	601,462	705,717	(a)	7,311,394
Total value of output .. £	24,381,909	17,526,822	(a)	5,674,580	7,066,426	(a)	62,551,962
Value of land and buildings .. £	1,773,894	1,182,064	(a)	257,337	755,517	(a)	4,533,187
Value of plant and machinery .. £	2,127,787	1,245,359	(a)	468,149	602,791	(a)	5,060,266
Horse-power of engines ordinarily in use .. h.p.	17,502	14,787	(a)	3,930	5,060	(a)	46,566

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

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	172	165	162	158	157	151
Number of persons employed ..	3,783	4,842	4,681	4,892	4,602	4,528
Salaries and wages paid .. £'000	896	2,933	3,466	3,884	3,847	3,851
Value of power, fuel, etc., used .. £'000	231	545	730	866	847	805
Value of materials used .. £'000	10,573	34,350	45,576	51,373	53,946	54,436
Value of production .. £'000	2,091	5,636	7,313	8,296	8,134	7,311
Total value of output .. £'000	12,895	40,531	53,619	60,535	62,927	62,552
Value of land and buildings .. £'000	2,091	3,177	3,606	3,912	4,260	4,533
Value of plant and machinery .. £'000	1,814	3,408	4,106	4,531	4,921	5,060
Horse-power of engines ordinarily in use h.p.	27,795	38,413	41,824	44,781	52,545	46,566

(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 1950–51 to 1955–56 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
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	227,269	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) ..	586,549	455,906	157,904	143,840	178,851	29,969	1,553,019
1955–56(a)(b)(c)	548,880	451,540	168,138	151,632	186,028	27,660	1,533,878

(a) Includes wheatmeal for baking. (b) Includes also sharps. (c) Preliminary, subject to revision.

In addition, 587,000 tons (2,000 lb. per ton) of bran and pollard were made in 1954–55 and 586,000 tons in 1955–56. The total quantity of wheat ground in flour mills was 70,571,805 bushels in 1954–55 and 70,871,195 bushels in 1955–1956.

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).

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	1,525	1,058	479	284	293	161	3,800
Number of persons employed ..	7,347	5,411	2,229	1,562	1,036	1,540	19,125
Salaries and wages paid £	4,179,355	3,002,065	1,066,069	857,195	514,905	1,028,253	10,647,843
Value of power, fuel, etc., used £	783,623	534,787	208,969	148,139	100,560	125,555	1,901,633
Value of materials used ..	12,685,780	9,520,782	3,819,490	2,896,413	1,970,341	5,005,654	35,898,960
Value of production ..	£ 9,064,798	£ 6,909,807	£ 2,620,392	£ 1,923,718	£ 1,235,151	£ 1,828,532	£ 23,582,398
Total value of output ..	£ 22,534,201	£ 16,965,376	£ 6,648,851	£ 4,968,270	£ 3,306,552	£ 6,959,741	£ 61,382,991
Value of land and buildings ..	£ 5,731,132	£ 4,224,463	£ 1,246,454	£ 1,138,732	£ 780,604	£ 1,231,078	£ 14,352,463
Value of plant and machinery ..	£ 3,043,729	£ 2,691,131	£ 735,934	£ 706,766	£ 468,604	£ 726,655	£ 8,372,819
Horse-power of engines ordinarily in use .. h.p.	8,703	6,968	2,750	2,799	1,663	4,932	27,815

(a) Includes confectionery.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.	
Number of factories ..	..	1,958	3,167	3,347	3,534	3,687	3,800
Number of persons employed ..	..	11,715	17,929	18,332	18,405	18,758	19,125
Salaries and wages paid ..	£'000	1,993	6,942	8,571	9,368	9,954	10,648
Value of power, fuel, etc., used ..	£'000	306	1,116	1,486	1,694	1,805	1,902
Value of materials used ..	£'000	6,651	20,786	26,451	29,672	32,829	35,899
Value of production ..	£'000	4,509	14,873	18,624	21,788	23,107	23,582
Total value of output ..	£'000	11,466	36,795	46,561	53,154	57,741	61,383
Value of land and buildings ..	£'000	4,960	9,199	10,789	12,145	13,617	14,352
Value of plant and machinery ..	£'000	1,478	4,078	5,082	6,073	7,158	8,373
Horse-power of engines ordinarily in use h.p.	..	10,855	20,483	22,248	23,792	26,462	27,815

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 XXII.—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 XXII.—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 1950-51 to 1954-55 :—

SUGAR-MILLS.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
NEW SOUTH WALES.						
Number of factories ..	3	3	3	3	3	3
Number of persons employed..	212	282	176	138	156	187
Cane crushed .. tons	337,038	359,849	321,388	125,714	263,249	222,313
Raw sugar produced (94 net titre) tons	45,106	41,258	41,060	14,272	34,004	26,301
QUEENSLAND.						
Number of factories ..	33	32	31	31	31	31
Number of persons employed ..	4,419	6,394	5,612	6,495	7,358	7,272
Cane crushed .. tons	5,432,193	6,691,704	5,005,172	6,841,536	8,751,063	9,864,304
Raw sugar produced (94 net titre) tons	775,064	879,844	704,341	934,614	1,220,383	1,301,245
Molasses—						
Sold to distilleries .. '000 gals	8,276	15,234	12,557	15,774	23,323	23,167
Used as fodder .. " "	4,237	5,582	5,900	5,887	5,486	5,753
Used as manure .. " "	3,293	5,555	5,484	7,499	11,466	10,501
Run to waste .. " "	499	50	37	76	168	233
Burnt as fuel .. " "	3,749	2,371	1,005	934	183	1,079
Sold or used for other purposes .. '000 gals	232	581	324	426	516	473
Total molasses disposed of .. '000 gals	20,286	29,373	25,307	30,596	41,142	41,206

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 1954-55, 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 502,261 tons for a yield of 481,639 tons of refined sugar.

26. *Confectionery.*—The figures for 1954-55 for each State and for Australia for a series of years are shown hereunder :—

CONFECTIONERY.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories ..	94	96	21	20	7	(a)	238
Number of persons employed..	2,850	3,252	321	325	321	(a)	7,069
Salaries and wages paid .. £	1,919,792	2,099,571	136,530	192,718	167,548	(a)	4,516,159
Value of power, fuel, etc., used .. £	230,007	167,375	13,955	18,804	17,282	(a)	447,423
Value of materials used .. £	7,250,135	6,300,986	517,538	389,414	458,521	(a)	14,916,594
Value of production .. £	4,365,626	3,184,659	224,543	231,132	313,657	(a)	8,319,617
Total value of output .. £	11,845,768	9,653,020	756,036	639,350	789,460	(a)	23,683,634
Value of land and buildings .. £	1,344,994	1,159,699	175,035	211,107	73,589	(a)	2,964,424
Value of plant and machinery .. £	1,481,867	1,574,463	114,950	122,279	74,755	(a)	3,368,314
Horse-power of engines ordinarily in use .. h.p.	12,200	12,554	788	1,355	477	(a)	27,374

AUSTRALIA.(b)

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	..	148	250	256	249	238
Number of persons employed ..	..	7,256	7,801	7,361	6,873	7,069
Salaries and wages paid ..	.. £'000	1,041	3,431	4,006	4,084	4,382
Value of power, fuel, etc., used ..	.. £'000	107	299	371	436	444
Value of materials used ..	.. £'000	3,102	10,370	11,997	12,554	13,857
Value of production ..	.. £'000	2,418	6,810	7,801	7,910	8,307
Total value of output ..	.. £'000	5,627	17,479	20,169	20,900	22,608
Value of land and buildings ..	.. £'000	1,423	2,319	2,428	2,510	2,650
Value of plant and machinery ..	.. £'000	1,364	2,421	2,704	2,872	3,039
Horse-power of engines ordinarily in use .. h.p.	..	16,154	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 1954–55 and for Australia for a series of years :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR.
1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	51	62	16	21	12	22	184
Number of persons employed ..	2,622	4,498	1,756	1,040	126	1,019	11,061
Salaries and wages paid .. £	1,941,134	3,389,643	1,273,620	607,724	76,216	656,541	7,944,878
Value of power, fuel, etc., used .. £	203,567	321,872	72,666	44,694	5,322	50,777	698,898
Value of materials used .. £	7,065,052	14,081,902	5,260,266	1,456,883	219,569	1,624,882	23,708,554
Value of production £	3,929,245	7,368,565	2,047,506	900,898	133,641	932,023	15,311,878
Total value of output £	11,197,864	21,772,339	7,380,438	2,402,475	358,532	2,607,682	45,719,330
Value of land and buildings .. £	1,556,772	2,663,715	711,940	464,816	134,758	660,579	6,192,580
Value of plant and machinery .. £	1,351,370	2,421,336	521,775	436,726	37,975	726,998	5,496,180
Horse-power of engines ordinarily in use .. h.p.	8,960	15,225	2,774	2,071	283	3,348	32,661

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories	123	200	201	204	197	184
Number of persons employed ..	6,476	13,124	13,152	10,845	11,101	11,061
Salaries and wages paid .. £'000	1,149	6,298	7,793	9,391	7,870	7,945
Value of power, fuel, etc., used .. £'000	97	521	672	636	660	699
Value of materials used £'000	4,800	21,234	28,286	27,228	28,875	29,708
Value of production £'000	2,334	10,685	13,623	12,562	14,992	15,312
Total value of output £'000	7,231	32,440	42,581	40,526	44,527	45,719
Value of land and buildings .. £'000	1,382	4,082	5,031	6,025	6,137	6,193
Value of plant and machinery .. £'000	721	3,720	4,425	5,095	5,404	5,496
Horse-power of engines ordinarily in use h.p.	7,873	26,718	29,792	30,241	31,721	32,661

(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 81.7 million lb. in 1954–55. Preliminary figures for 1955–56 show production as being 82.1 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 1955–56 show production as being 300.4 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 1954–55 amounted to 51.1 million lb. Preliminary figures for 1955–56 show production as being 78.1 million lb.

The following table shows the total quantity and value of jams, pickles, sauces and other items manufactured in each State in 1954–55 :—

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : OUTPUT.
1954–55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Jams '000 lb.	22,377	(a)43,274	10,916	4,534	598	(b)	81,699
Fruit, preserved	46,867	169,111	73,387	15,948	(c)	(c)	319,235
Fruit Pulp(d) cwt.	34,974	29,285	11,670	13,197	6,634	98,309	194,069
Fruit Juices, natural '000 gals.	220	55	2,092	287	(c)	(c)	2,874
Vegetables, preserved '000 lb.	22,967	19,401	(c)	(c)	(c)	(c)	51,116
Tomato Pulp(d) cwt.	44,287	197,197	(c)	17,389	18,831	(c)	278,087
Tomato Paste, Puree, etc. '000 pints	(c)	1,509	..	(c)	(c)	..	1,982
Pickles	3,055	1,877	125	1,520	188	..	6,765
Sauces	11,307	12,743	1,635	1,942	655	244	28,526
Soup (canned)	4,210	23,255	..	115	36	..	27,616

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

28. Bacon-curing.—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1954–55 and for Australia for a series of years :—

BACON-CURING.
1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	32	16	9	13	4	10	84
Number of persons employed ..	662	674	1,128	390	254	93	3,201
Salaries and wages paid .. £	543,155	548,912	829,771	334,519	189,145	71,130	2,516,632
Value of power, fuel, etc., used .. £	82,968	66,528	78,251	54,376	33,350	6,748	322,221
Value of materials used .. £	4,376,125	3,744,733	5,790,183	2,011,690	1,835,133	559,675	18,317,539
Value of production .. £	1,634,731	1,283,732	1,644,556	577,718	430,063	144,395	5,715,195
Total value of output .. £	6,093,824	5,094,993	7,512,990	2,643,784	2,298,546	710,818	24,354,955
Value of land and buildings .. £	550,383	326,716	550,793	300,039	101,687	126,173	1,955,791
Value of plant and machinery .. £	234,130	205,658	356,714	230,701	43,251	29,699	1,100,153
Horse-power of engines ordinarily in use .. h.p.	2,173	2,793	3,560	1,856	929	480	11,791

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	76	84	83	85	85	84
Number of persons employed ..	2,047	2,961	2,838	2,994	2,975	3,201
Salaries and wages paid .. £'000	480	1,577	1,895	2,225	2,270	2,517
Value of power, fuel, etc., used .. £'000	77	204	251	292	298	322
Value of materials used .. £'000	3,768	14,076	16,269	18,836	19,448	18,318
Value of production .. £'000	865	2,930	3,907	4,026	4,410	5,715
Total value of output .. £'000	4,710	17,210	20,427	23,154	24,156	24,355
Value of land and buildings .. £'000	750	1,270	1,356	1,635	1,737	1,956
Value of plant and machinery .. £'000	357	610	724	917	955	1,100
Horse-power of engines ordinarily in use .. h.p.	9,389	10,472	10,700	11,636	11,685	11,791

(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 1954–55 are shown in the following table :—

BACON-CURING FACTORIES : PIGS CURED AND PRODUCTION, 1954–55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Figs killed for bacon and ham—							
For curing on own account	208,710	159,110	223,982	71,387	} 89,801	30,760	{ 782,590
For curing on commission	15,418	4,763	3,212	1,158			
Pork and green bacon used for—							
Curing on own account							
'000 lb.	2,306	3,308	(a)	483	828	(a)	6,979
Curing on commission							
'000 lb.	4,834	..	(a)	..	(a)	..	4,970
Sugar used .. ton	42	48	171	27	27	16	331
Finished bacon and ham made (b)—							
On own account '000 lb.	18,017	15,979	21,395	6,867	7,414	2,095	71,767
On commission ..	5,963	445	419	117	14	95	7,053
Green bacon and ham ..	1,357	1,565	2,272	664	765	174	6,797
Lard produced .. cwt.	4,057	7,536	20,409	4,572	3,127	771	40,472

(a) Not available for publication ; figures are included in the 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 XXIV.—Farmyard, Dairy and Bee Products.

29. 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 1954–55 and for Australia for a series of years.

BUTTER, CHEESE AND CONDENSED AND DRIED MILK.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	77	134	89	41	17	21	379
Number of persons employed ..	2,322	5,219	1,626	788	286	326	10,567
Salaries and wages paid .. £	1,874,685	4,563,116	1,183,146	587,727	212,371	258,473	8,679,518
Value of power, fuel, etc., used .. £	619,571	1,331,858	238,289	111,835	70,109	51,307	2,422,969
Value of materials used .. £	17,693,901	46,548,628	23,978,000	5,474,053	3,286,275	3,725,761	100,706,618
Value of production .. £	3,191,554	8,037,560	2,125,279	859,534	543,480	636,372	15,393,779
Total value of output .. £	21,505,026	55,918,046	26,341,568	6,445,422	3,899,864	4,413,440	118,523,366
Value of land and buildings .. £	2,711,921	4,869,822	1,493,223	491,427	201,096	269,337	10,036,826
Value of plant and machinery .. £	3,596,582	5,787,405	2,120,704	477,838	336,187	234,433	12,553,149
Horse-power of engines ordinarily in use .. h.p.	29,193	35,505	22,164	6,041	3,477	2,062	98,442

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	523	409	399	384	380	379
Number of persons employed ..	6,851	10,707	10,473	10,641	10,580	10,567
Salaries and wages paid .. £'000	1,570	6,020	7,186	8,098	8,416	8,680
Value of power, fuel, etc., used .. £'000	390	1,504	1,837	2,339	2,396	2,423
Value of materials used .. £'000	29,162	61,581	68,038	97,291	94,020	100,706
Value of production .. £'000	3,543	10,790	12,535	14,350	15,914	15,394
Total value of output .. £'000	33,095	73,875	82,410	113,980	112,330	118,523
Value of land and buildings .. £'000	2,880	5,400	6,585	7,571	9,365	10,037
Value of plant and machinery .. £'000	3,067	7,014	8,569	10,250	12,083	12,553
Horse-power of engines ordinarily in use .. b.p.	45,059	74,199	77,439	84,428	94,863	98,442

(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 1954-55. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED MILK, ETC., FACTORIES : PRODUCTION, 1954-55.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MATERIALS USED.							
Whole Milk used in manufacture of—							
Butter '000 gal.	173,857	370,671	211,639	35,506	32,233	38,737	862,643
Cheese	5,761	44,203	17,451	28,163	(a)	(a)	98,520
Condensed, Dried and other Milk Products '000 gal.	11,574	58,406	(a)	(a)	2,581	(a)	76,387
Sugar ton	(a)	12,576	..	..	(a)	(a)	14,458
PRODUCTION.							
Butter ton	38,688	79,418	45,915	8,510	7,145	8,334	188,010
Cheese (Green Weight)	2,508	20,290 (b)	7,921	13,101	(a)	(a)	45,178
Condensed Milk (Sweetened and Unsweetened)	(a)	35,113	..	..	(a)	..	38,493
Concentrated—							
Whole Milk	(a)	4,593	(a)	..	(a)	(a)	10,071
Skim Milk	(a)	(a)	(a)	..	..	..	5,313
Powdered Full Cream Milk—							
Spray	(a)	10,813	(a)	(a)	(a)	(a)	14,230
Roller	(a)	290	(a)	..	..	..	1,309
Infants' and Invalids' Foods (including Malted Milk and Milk Sugar)	(a)	(a)	..	..	..	(a)	10,920
Powdered Skim Milk—							
Spray	6,643	10,200	(a)	(a)	(a)	(a)	17,031
Roller	2,815	4,389	(a)	(a)	(a)	(a)	7,587
Buttermilk and Whey Powder	622	2,771	1,250	(a)	(a)	..	5,086
Caseln	(a)	(a)	(a)	..	..	..	6,870
Ice Cream Mix—							
Powder	(a)	(a)	..	(a)	(a)	..	619
Liquid	(a)	(a)	..	..	..	..	2,081
Processed Cheese	(a)	(a)	(a)	..	..	..	13,742

(a) Not available for publication : figures are included in the total for Australia. (b) Includes 101 tons of cheese valued at £21,916 made in establishments not classified as factories.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXIV.—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 XXIII.—Pastoral Production. In recent years, there has been considerable expansion in the canning of meat and fish.

MEAT AND FISH PRESERVING.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	14	16	26	21	33	4	114
Number of persons employed ..	766	1,024	6,242	296	1,043	61	9,432
Salaries and wages paid .. £	559,541	902,035	5,753,817	181,644	884,488	45,207	8,326,732
Value of power, fuel, etc., used .. £	89,422	161,376	718,830	21,208	113,877	5,472	1,110,185
Value of materials used .. £	2,983,382	6,268,783	33,280,460	1,182,510	2,847,701	79,389	46,642,225
Value of production .. £	1,059,602	1,163,769	8,073,495	341,862	1,472,939	70,143	12,181,810
Total value of output .. £	4,132,406	7,593,928	42,072,785	1,545,580	4,434,517	155,004	59,934,220
Value of land and buildings .. £	279,141	826,835	2,507,250	142,023	1,593,367	54,778	5,403,394
Value of plant and machinery .. £	358,439	642,671	1,486,612	167,127	726,686	26,997	3,408,532
Horse-power of engines ordinarily in use .. h.p.	2,015	3,349	21,903	1,137	6,855	341	35,600

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	32	86	87	98	106
Number of persons employed	4,093	7,940	7,386	8,771	9,113
Salaries and wages paid .. £'000	..	1,180	4,752	5,222	6,820	7,395
Value of power, fuel, etc., used .. £'000	..	134	633	742	972	1,015
Value of materials used .. £'000	..	6,351	30,578	33,828	47,637	46,671
Value of production .. £'000	..	1,601	6,528	8,751	12,126	11,374
Total value of output .. £'000	..	8,086	37,739	43,321	60,735	59,060
Value of land and buildings .. £'000	..	1,966	3,223	3,990	4,562	4,500
Value of plant and machinery .. £'000	..	1,325	2,297	2,623	2,786	2,826
Horse-power of engines ordinarily in use .. h.p.	..	13,385	30,081	34,510	33,328	31,810
						35,600

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 XXIII.—Pastoral Production.

31. **Breweries.**—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1954-55 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.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	9	7	6	3	3	2	30
Number of persons employed ..	1,851	2,701	807	(a)	569	(a)	6,791
Salaries and wages paid .. £	1,853,008	2,422,450	630,382	(a)	490,815	(a)	6,272,241
Value of power, fuel, etc., used .. £	513,286	362,406	163,091	(a)	165,025	(a)	1,369,484
Value of materials used .. £	6,928,482	7,405,133	1,844,828	(a)	2,033,943	(a)	20,809,776
Value of production .. £	6,034,782	3,284,012	1,933,493	(a)	1,570,967	(a)	14,854,906
Total value of output (b) .. £	13,476,550	11,051,551	3,941,412	(a)	3,769,935	(a)	37,034,166
Value of land and buildings .. £	2,508,491	2,411,041	1,664,994	(a)	677,146	(a)	8,306,902
Value of plant and machinery .. £	3,403,150	2,716,834	1,536,157	(a)	1,138,558	(a)	10,295,467
Horse-power of engines ordinarily in use .. h.p.	16,714	10,937	6,390	(a)	3,915	(a)	42,359

BREWERIES—continued.

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	34	29	31	32	31	30
Number of persons employed ..	3,698	5,517	5,914	5,904	6,193	6,791
Salaries and wages paid .. £'000	1,215	3,666	4,564	5,030	5,325	6,272
Value of power, fuel, etc., used .. £'000	251	849	1,145	1,388	1,366	1,369
Value of materials used .. £'000	3,407	9,081	11,739	16,452	19,975	20,810
Value of production .. £'000	5,372	8,458	10,298	11,458	13,048	14,855
Total value of output(b) .. £'000	9,030	18,388	23,182	29,298	34,389	37,034
Value of land and buildings .. £'000	2,801	5,162	5,715	6,480	7,256	8,307
Value of plant and machinery .. £'000	2,737	4,489	4,832	5,870	7,681	10,295
Horse-power of engines ordinarily in use h.p.	23,231	28,765	30,181	32,754	38,803	42,359

(a) Not available for publication ; figures are included in the 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 1955-56 amounted to over 230 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 24.74 gallons by 1955-56.

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 1954-55 :—

BREWERIES : MATERIALS USED AND PRODUCTION, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MATERIALS USED.							
Malt bus.	2,500,068	2,194,738	730,774	(a)	637,606	(a)	6,853,223
Hops lb.	2,074,805	1,237,201	487,397	(a)	439,199	(a)	4,813,361
Sugar ton	21,045	13,030	4,311	(a)	2,112	(a)	45,241

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

Quantity .. '000 gals.	88,081	68,093	22,151	(a)	17,411	(a)	221,679
Value (b) .. £'000	13,333	10,934	3,917	(a)	3,536	(a)	36,497

(a) Not available for publication ; figures are included in the 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 1954-55 and for Australia for a series of years.

WINERIES AND DISTILLERIES.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	30	31	5	74	18	..	158
Number of persons employed ..	291	322	180	1,176	53	..	2,022
Salaries and wages paid .. £	236,695	234,092	146,217	861,358	27,633	..	1,505,995
Value of power, fuel, etc., used .. £	114,094	76,458	74,837	119,367	2,254	..	387,010
Value of materials used .. £	863,898	622,680	337,641	2,950,631	110,392	..	4,885,242
Value of production .. £	607,632	517,514	297,862	1,341,532	80,724	..	2,845,264
Total value of output .. £	1,585,624	1,216,652	710,340	4,411,530	193,370	..	8,117,516
Value of land and buildings .. £	511,959	340,520	123,465	1,283,249	52,624	..	2,311,817
Value of plant and machinery .. £	473,206	377,461	345,943	931,037	41,969	..	2,169,616
Horse-power of engines ordinarily in use h.p.	1,451	2,528	591	6,183	301	..	11,054

WINERIES AND DISTILLERIES—*continued.*

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	135	153	158	167	164	158
Number of persons employed	1,133	2,158	2,277	2,021	1,981	2,022
Salaries and wages paid £'000	246	1,122	1,416	1,431	1,475	1,506
Value of power, fuel, etc., used £'000	58	294	383	333	365	387
Value of materials used £'000	1,421	4,810	7,076	5,464	5,721	4,885
Value of production £'000	811	2,637	3,118	3,198	3,254	2,846
Total value of output £'000	2,290	7,741	10,577	8,995	9,340	8,118
Value of land and buildings £'000	1,002	1,795	1,920	2,104	2,284	2,312
Value of plant and machinery £'000	916	1,556	1,774	1,913	2,108	2,170
Horse-power of engines ordinarily in use h.p.	4,396	9,189	11,038	10,995	11,275	11,054

33. Tobacco, Cigars and Cigarettes.—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1954-55 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.

1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	13	13	6	..	2	34
Number of persons employed	2,332	2,166	(a)	..	(a)	4,707
Salaries and wages paid £	1,792,713	1,589,254	(a)	..	(a)	3,516,469
Value of power, fuel, etc., used £	108,000	43,477	(a)	..	(a)	158,300
Value of materials used £	16,482,816	11,803,745	(a)	..	(a)	28,825,086
Value of production £	3,995,028	5,577,057	(a)	..	(a)	9,744,759
Total value of output £	20,585,844	17,424,279	(a)	..	(a)	38,728,145
Value of land and buildings £	342,658	931,915	(a)	..	(a)	1,504,207
Value of plant and machinery £	746,410	1,233,047	(a)	..	(a)	2,189,594
Horse-power of engines ordinarily in use h.p.	5,099	2,862	(a)	..	(a)	8,466

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories	30	37	36	37	36	34
Number of persons employed	5,544	5,044	4,971	4,704	4,757	4,707
Salaries and wages paid £'000	1,096	2,380	2,932	3,204	3,417	3,516
Value of power, fuel, etc., used £'000	34	90	126	144	151	158
Value of materials used £'000	7,081	16,599	19,419	22,416	26,835	28,825
Value of production £'000	2,685	4,897	5,206	7,078	8,341	9,745
Total value of output £'000	9,800	21,586	24,751	29,638	35,327	38,728
Value of land and buildings £'000	1,042	1,485	1,598	1,741	1,822	1,504
Value of plant and machinery £'000	943	1,171	1,284	1,458	1,917	2,190
Horse-power of engines ordinarily in use h.p.	4,610	6,056	5,862	6,028	6,919	8,466
Leaf used—						
Australian (stemmed) '000 lb.	4,489	3,775	3,664	4,222	4,866	4,482
Imported (stemmed) '000 lb.	16,011	24,558	26,131	28,410	33,076	36,053
Tobacco made '000 lb.	16,305	20,967	21,615	22,334	23,400	21,466
Cigars made '000 lb.	238	179	175	129	143	151
Cigarettes made '000 lb.	6,731	10,679	11,749	13,879	18,303	22,859

(a) Not available for publication; figures are included in the 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 materials. 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 1954-55 usage was 4.5 million lb. For further information see Chapter XXII.—Agricultural Production.

Imports of tobacco during 1954-55 comprised—manufactured tobacco, 273,342 lb.; cigars, 45,964 lb.; cigarettes, 2,858,614 lb.; unmanufactured tobacco, 43,577,571 lb.

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

SAWMILLS AND PLYWOOD MILLS.

1954-55.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,081	639	619	89	258	347	3,033
Number of persons employed ..	10,965	7,712	8,615	2,218	4,698	2,423	36,631
Salaries and wages paid .. £	7,635,686	5,674,204	5,572,612	1,688,578	3,239,019	1,719,676	25,529,775
Value of power, fuel, etc., used £	593,518	418,710	309,899	82,205	276,970	123,280	1,804,582
Value of materials used .. £	21,936,906	13,355,736	10,999,986	5,885,627	5,316,027	3,578,987	61,073,269
Value of production .. £	13,921,296	10,387,796	9,560,107	2,813,482	5,301,581	3,334,409	45,318,671
Total value of output .. £	36,451,720	24,162,242	20,869,992	8,781,314	10,894,578	7,036,676	108,196,522
Value of land and buildings .. £	3,831,078	2,258,151	1,480,151	1,034,423	1,156,090	561,412	10,321,305
Value of plant and machinery .. £	4,348,976	3,214,401	2,829,962	1,009,159	1,553,074	1,940,836	14,896,408
Horse-power of engines ordinarily in use .. h.p.	114,773	82,888	78,166	19,505	34,363	30,091	359,786

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	1,639	2,917	3,113	3,245	3,117	3,033
Number of persons employed ..	19,056	32,937	35,646	34,541	35,448	36,631
Salaries and wages paid .. £'000	3,626	14,985	20,084	21,367	23,536	25,530
Value of power, fuel, etc., used .. £'000	225	1,031	1,399	1,547	1,639	1,805
Value of materials used .. £'000	8,441	34,868	49,131	46,585	53,908	61,073
Value of production .. £'000	5,762	26,718	35,935	35,663	39,799	45,319
Total value of output .. £'000	14,428	62,617	86,465	83,795	95,346	108,197
Value of land and buildings .. £'000	2,029	5,763	7,108	8,043	8,775	10,321
Value of plant and machinery .. £'000	2,777	8,866	10,864	11,906	12,504	14,896
Horse-power of engines ordinarily in use .. h.p.	89,843	275,699	310,387	332,736	336,951	359,786

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 1955-56 had risen to 1,454 million super. feet. Further reference is made to the sawmilling industry in Chapter XXV.—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 1954-55 :—

CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	536	537	246	120	151	68	1,658
Number of persons employed ..	5,291	4,461	2,403	1,505	1,170	441	15,271
Salaries and wages paid .. £	3,809,312	2,993,842	1,328,789	1,014,030	669,971	251,420	10,067,364
Value of power, fuel, etc., used .. £	110,654	66,729	30,223	26,727	18,421	4,843	257,597
Value of materials used .. £	6,427,197	4,670,779	2,273,062	1,700,298	1,163,014	304,227	16,538,577
Value of production .. £	5,938,896	4,890,408	2,059,437	1,507,665	1,102,802	388,604	15,887,812
Total value of output .. £	12,476,747	9,627,916	4,362,722	3,234,690	2,284,237	697,674	32,683,986
Value of land and buildings .. £	2,317,889	1,999,356	706,121	475,516	540,096	165,166	6,204,144
Value of plant and machinery .. £	708,750	703,571	305,180	241,417	179,774	57,224	2,195,916
Horse-power of engines ordinarily in use .. h.p.	14,966	14,598	6,600	5,226	3,493	1,530	46,413

36. *Printing Works.*—Printing and bookbinding rank high in importance among the industries of Australia, and in 1954-55 afforded employment for 37,246 employees, and paid £29,270,000 in salaries and wages, while the value of output amounted to £97,215,000. The first table below gives particulars of establishments engaged in general printing in each

State for 1954-55. 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, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	511	500	104	78	71	21	1,285
Number of persons employed..	9,542	8,356	2,218	1,587	1,302	566	23,571
Salaries and wages paid .. £	7,468,766	6,470,272	1,391,170	1,082,440	844,124	415,354	17,672,126
Value of power, fuel, etc., used £	255,029	156,658	37,060	29,419	25,769	7,476	511,411
Value of materials used ..	11,105,763	8,800,605	1,401,677	1,252,452	977,244	412,442	23,950,183
Value of production ..	12,533,850	10,540,571	2,134,105	1,666,694	1,525,721	566,776	28,967,717
Total value of output ..	23,894,642	19,497,834	3,572,842	2,948,565	2,528,734	986,694	53,429,311
Value of land and buildings ..	3,984,806	4,119,696	740,971	529,278	532,787	212,530	10,120,068
Value of plant and machinery ..	4,737,779	4,668,720	694,011	815,378	605,139	247,996	11,769,023
Horse-power of engines ordinarily in use .. h.p.	14,792	12,893	2,195	1,986	1,831	810	34,507

NEWSPAPERS AND PERIODICALS, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	179	114	57	34	23	6	413
Number of persons employed..	5,943	3,395	2,086	1,181	677	393	13,675
Salaries and wages paid .. £	4,995,214	3,027,916	1,523,332	1,054,516	629,339	367,821	11,598,138
Value of power, fuel, etc., used £	257,253	101,745	62,680	31,391	34,318	5,324	492,711
Value of materials used ..	9,897,422	6,722,750	2,487,744	1,871,774	1,123,747	287,385	22,390,822
Value of production ..	9,264,271	5,172,957	2,743,678	1,900,089	1,307,046	514,002	20,902,043
Total value of output ..	19,418,946	11,997,452	5,294,102	3,803,254	2,465,111	806,711	43,785,576
Value of land and buildings ..	3,843,581	1,278,123	912,858	708,279	317,070	216,813	7,276,724
Value of plant and machinery ..	3,742,353	2,910,241	1,208,398	613,604	615,583	123,334	9,213,513
Horse-power of engines ordinarily in use .. h.p.	15,264	10,316	4,863	3,182	2,265	720	36,610

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. It remained at about this level until 1949-50 but has since increased steadily to a total of 173,000 tons in 1954-55.

The number of factories operating in 1954-55 comprised three in New South Wales nine in Victoria, one in Queensland and South Australia, two in 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.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	7	14	16	17	18	20
Number of persons employed ..	1,961	6,336	7,237	6,441	7,179	7,611
Salaries and wages paid .. £'000	467	4,231	5,852	5,338	6,130	7,095
Value of power, fuel, etc., used .. £'000	201	1,181	1,610	1,649	2,048	2,560
Value of materials used .. £'000	1,096	7,487	14,558	12,637	15,198	17,474
Value of production .. £'000	1,005	9,165	12,623	11,085	15,451	18,294
Total value of output .. £'000	2,302	17,833	28,791	25,371	32,697	38,328
Value of land and buildings .. £'000	850	4,871	6,820	7,324	8,106	8,255
Value of plant and machinery .. £'000	1,713	9,814	12,961	15,263	16,810	18,050
Horse-power of engines ordinarily in use h.p.	31,548	103,098	112,469	127,558	141,373	157,948

38. **Rubber Goods.**—The following table shows particulars of this industry for each State during 1954-55 but excludes establishments engaged primarily in the retreading and repairing of tyres.

RUBBER GOODS, 1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S.Aust.	W.Aust.	Tas.	Australia.
Number of factories ..	35	51	10	9	2	1	108
Number of persons employed ..	6,325	5,505	1,109	675	(a)	(a)	13,645
Salaries and wages paid ..	£ 5,958,563	£ 4,978,046	£ 818,129	£ 586,047	(a)	(a)	£ 1,236,900
Value of power, fuel, etc., used ..	£ 841,393	£ 767,230	£ 87,911	£ 59,855	(a)	(a)	£ 1,759,080
Value of material used ..	£ 15,853,186	£ 13,442,081	£ 2,538,694	£ 870,448	(a)	(a)	£ 32,732,755
Value of production ..	£ 7,173,268	£ 9,051,091	£ 1,771,403	£ 956,202	(a)	(a)	£ 18,982,613
Total value of output ..	£ 23,867,847	£ 23,260,402	£ 4,398,008	£ 1,886,505	(a)	(a)	£ 53,474,448
Value of land and buildings ..	£ 2,165,316	£ 2,297,461	£ 430,694	£ 113,772	(a)	(a)	£ 5,057,461
Value of plant and machinery ..	£ 2,151,249	£ 2,650,321	£ 286,973	£ 179,104	(a)	(a)	£ 5,284,787
Horse-power of engines ordinarily in use ..	h.p. 44,274	45,196	6,839	2,361	(a)	(a)	98,836

(a) Not available for publication ; figures are included in the 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 VIII.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1954-55 and for Australia for a series of years are shown below :—

ELECTRIC LIGHT AND POWER WORKS.
1954-55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	85	62	59	42	94	9	351
Number of persons employed ..	5,362	2,891	1,350	(a)	945	(a)	11,927
Salaries and wages paid ..	£ 5,253,008	£ 2,790,735	£ 1,177,535	(a)	£ 923,264	(a)	£ 11,456,947
Value of power, fuel, etc., used ..	£ 14,686,504	£ 9,461,575	£ 5,250,414	(a)	£ 3,352,850	(a)	£ 36,547,670
Value of materials used ..	£ 1,579,083	£ 456,557	£ 1,549,706	(a)	£ 306,437	(a)	£ 4,170,627
Value of production ..	£ 18,397,404	£ 9,128,122	£ 3,402,346	(a)	£ 2,602,970	(a)	£ 37,567,647
Total value of output ..	£ 34,662,991	£ 19,046,254	£ 10,202,466	(a)	£ 6,262,257	(a)	£ 78,285,944
Value of land and buildings ..	£ 17,791,097	£ 12,410,583	£ 6,689,324	(a)	£ 3,186,519	(a)	£ 60,120,947
Value of plant and machinery ..	£ 45,991,307	£ 47,397,231	£ 21,735,033	(a)	£ 9,512,914	(a)	£ 146,273,460
Generators installed—Kilowatt capacity ..	kw. 1,635,751	944,028	428,720	(a)	232,407	(a)	3,953,838

AUSTRALIA.

Items.	1938-39.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of factories ..	395	354	331	349	351	351
Number of persons employed ..	6,508	9,815	10,381	10,891	11,395	11,927
Salaries and wages paid ..	£'000 1,977	£ 6,541	£ 8,178	£ 9,675	£ 10,308	£ 11,457
Value of power, fuel, etc., used ..	£'000 3,239	£ 21,259	£ 28,724	£ 32,205	£ 35,083	£ 36,548
Value of materials used ..	£'000 530	£ 2,712	£ 3,481	£ 3,296	£ 4,800	£ 4,170
Value of production ..	£'000 8,714	£ 14,790	£ 18,065	£ 24,582	£ 30,098	£ 37,568
Total value of output ..	£'000 12,483	£ 38,761	£ 50,270	£ 60,083	£ 69,981	£ 78,286
Value of land and buildings ..	£'000 8,388	£ 16,932	£ 21,641	£ 29,531	£ 47,369	£ 60,120
Value of plant and machinery ..	£'000 27,751	£ 53,441	£ 66,630	£ 94,169	£ 122,773	£ 146,273

(a) Not available for publication ; figures are included in the 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 211.

(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 ..	1,948.5	1,222.5	387.3	256.3	307.0	566.7	4,688.3
1949-50 ..	3,758.1	2,706.1	971.6	593.8	417.5	1,061.6	9,508.7
1950-51 ..	4,251.4	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	3,192.9	1,349.1	822.3	568.7	1,243.5	12,044.8
1953-54 ..	5,450.1	3,692.7	1,510.7	955.2	626.9	1,471.4	13,707.0
1954-55 ..	5,951.2	4,152.3	1,657.6	1,119.2	702.3	1,589.0	15,171.6
1955-56(a) ..	6,494.9	4,646.8	1,801.2	1,238.7	757.4	1,843.1	16,782.1

(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 1954–55 and for Australia for a series of years :—

GAS-WORKS.

1954–55.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	39	33	16	3	4	2	97
Number of persons employed ..	1,558	1,466	385	(a)	200	(a)	4,103
Salaries and wages paid .. £	1,560,460	1,403,991	304,664	(a)	187,667	(a)	3,882,441
Value of power, fuel, etc., used .. £	2,012,291	134,490	26,481	(a)	104,906	(a)	2,290,820
Value of materials used .. £	6,192,620	5,832,471	948,709	(a)	633,383	(a)	15,186,621
Value of production .. £	4,757,248	2,751,786	797,482	(a)	258,462	(a)	9,103,508
Total value of output .. £	12,962,159	8,718,747	1,772,672	(a)	996,751	(a)	26,580,949
Value of land and buildings .. £	1,354,114	624,968	284,046	(a)	139,951	(a)	2,488,304
Value of plant and machinery .. £	5,859,924	7,217,835	1,732,534	(a)	1,553,038	(a)	19,134,481
Horse-power of engines ordinarily in use .. h.p.	18,786	8,838	2,275	(a)	1,245	(a)	33,389

AUSTRALIA.

Items.	1938–39.	1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
Number of factories ..	107	100	100	99	98	97
Number of persons employed ..	2,931	3,871	4,042	4,199	4,141	4,103
Salaries and wages paid .. £'000	785	2,401	3,207	3,553	3,767	3,882
Value of power, fuel, light, etc., used .. £'000	251	1,179	1,777	2,080	2,244	2,291
Value of materials used .. £'000	1,872	9,450	13,401	15,576	15,249	15,187
Value of production .. £'000	2,694	4,426	7,165	8,473	8,121	9,103
Total value of output .. £'000	4,817	15,055	22,343	26,129	25,614	26,581
Value of land and buildings .. £'000	1,463	2,071	2,186	2,342	2,416	2,488
Value of plant and machinery .. £'000	7,498	12,386	13,846	15,962	17,235	19,134
Horse-power of engines ordinarily in use .. h.p.	17,905	28,205	28,427	29,514	30,055	33,389

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

(ii) *Coal Used and Production.* The following table shows details for 1954–55 :—

GAS-WORKS : COAL USED AND PRODUCTION, 1954-55.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal used '000 tons	984	696	157	(a)	55	(a)	2,063
Gas produced million cubic ft.	21,360	14,290	2,956	(a)	1,448	(a)	43,465
Gas sold .. "	18,476	12,244	2,614	(a)	1,261	(a)	37,555
Coke produced (b) .. tons	520,646	354,737	108,452	(a)	17,778	(a)	1,099,859

(a) Not available for publication ; figures are included in the total for Australia. (b) In addition, 2,046,790 tons of metallurgical coke were made in Coke Works in 1954–55.

Since 1938–39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached nearly 45 thousand million cubic feet in 1955–56.