

## CHAPTER VI.

### MANUFACTURING INDUSTRY.

NOTE.—Further detail on the subjects dealt with in this chapter is contained in the annual printed bulletin, *Secondary Industries*. Information is also published, as soon as the data can be prepared, in a series of 34 annual mimeograph bulletins, *Manufacturing Industries*, each relating to a particular industry or group of industries. Details of the industries covered are contained in § 2., Statistical Publications of Australia, of Chapter XXXI.—Statistical Organization and Sources of Information. Advance annual information is published in mimeograph form in *A Summary of Principal Statistics of Factories* and in *Principal Factory Products*. Current information on factory products is available in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, and the *Monthly Bulletin of Production Statistics*. A preliminary annual statement (*Factory Statistics*) and a monthly statement (*Production Statistics*) are also issued.

In addition to the above-mentioned publications there is also a series of 45 monthly *Production Summaries*, each relating to the production of a particular commodity or group of commodities (see reference above).

#### § 1. General.

1. **Introduction.**—A complete statistical account of the growth of the manufacturing industry in Australia cannot be given, as the necessary statistics were not collected by the several States on a definite and uniform basis prior to 1906. A standard classification of manufacturing industries was formulated at a conference of Australian statisticians in 1902 and adopted by all States in 1906, and 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 engaged primarily in the production of goods for local use, mainly 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 factor in the post-war growth of manufacturing industry in Australia was the creation in 1921 of the Tariff Board (see Chapter XIII.—Trade). Besides encouraging primary industries, the Tariff Board assisted, by means of protective tariffs, new manufacturing industries until they were soundly established, and local manufacturers who had been adversely affected by oversea competition.

This expansion was checked 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 primeage 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 their demands, as well as those arising locally because of interruption of oversea imports, 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 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. 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 XIII.—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.

**4. Scientific Research and Standardization.**—(i) *The Commonwealth Scientific and Industrial Research Organization.* The function of this Organization 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. For further information concerning the work of the Organization, see Chapter XV. of this Year Book.

(ii) *The Standards Association of Australia.* The Standards Association of Australia is the national standardizing organization of Australia, and issues Australian standard specifications for materials and codes of practice.

The Association was established in July, 1929, by the amalgamation of the Australian Commonwealth Engineering Standards Association and the Australian Commonwealth Association of Simplified Practice. It is an independent body in close touch with modern industrial requirements and has the full recognition and support of the Commonwealth and State Governments and industry. It was incorporated by Royal Charter in 1950.

The sole executive authority of the Association is vested in the Council, on which industry is fully represented, together with official representatives of the Commonwealth and State Governments and their technical departments, and of scientific, professional and commercial organizations. Voluntary assistance is rendered in the drafting of specifications and codes by several thousand individuals who are experts in their particular fields, and are organized into some hundreds of committees. These committees are grouped under broad industry headings including civil engineering and building construction, mechanical engineering, electrical engineering, chemicals, timber, transportation, aircraft materials, ferrous and non-ferrous metallurgy, plastics, textiles, mining, ceramics, medical and dental materials, household and domestic economy, agricultural and dairying, safety, packaging, and water supply and sewerage.

These committees are composed of nominated representatives of manufacturing, distributing and purchasing organizations, and of scientific and other expert authorities in the particular field of the project being dealt with. The operations of these committees are co-ordinated and supervised by committees broadly representative of the whole industry within which the respective projects are included.

The specifications of the Association provide a suitable standard of performance, quality, and dimension, and an equitable basis for tendering. They help to eliminate redundant qualities and sizes. They enable purchasers to obtain their requirements with greater assurance of satisfaction, with more rapid delivery and without the necessity of drafting individual specifications.

The underlying principles covering the preparation of the specifications and codes are that they shall be in accordance with the needs of industry; that the common interests of producer and consumer be maintained; that periodical revision should keep the work abreast with progress; and that standardization be arrived at by general consent without coercion.

Organizations, companies, firms and individuals interested in the work of the Association are eligible for subscription membership. Members are entitled to free copies of the publications of the Association and to the use of the library and its Special Information Service. Bibliographical research is undertaken for committees, members of the Association, and industry in general. Many hundreds of inquiries are answered each year.

The Association has international affiliations, and the standards of all British and foreign countries are filed in the library and are accessible to members. It is a member, representing Australia, of the International Organization for Standardization (ISO). The Association also administers the Australian National Committee of the International Electrotechnical Commission.

The Association is also the representative of the British Standards Institution, and all British standards may be purchased from headquarters and branch offices in the various States.

The headquarters of the Association are at Science House, Gloucester Street, Sydney, and branches of the Association are situated at Temple Court, 422 Collins Street, Melbourne; School of Arts Building, 166 Ann Street, Brisbane; 11 Bagot Street, North Adelaide; 10 Hooper Street, West Perth; c/o Engineering School, University of Tasmania, Sandy Bay; and Howard Smith Chambers, Watt Street, Newcastle.

(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.

(iv) *Industrial Design Council of Australia.* The Industrial Design Council of Australia was established in June, 1958, for the purpose of encouraging better design in Australian-made goods and fostering an appreciation of good design throughout the community. The decision to set up the Council arose from a realization on the part of representatives of industry and government, designers and educationists, that there was a pressing need in Australia for an independent and authoritative body to promote better design in the interests of trade development.

The Council has a membership fully representative of industry, commerce and government, together with designers and educationists. Initial finance has been raised by donations from industry and commerce, and a grant of £10,000 has been made by the Commonwealth Government for establishment purposes.

As part of its programme of assisting industry, the Council has conducted several lecture series in Sydney and Melbourne, dealing with various aspects of product design. Design counselling is available to manufacturing companies on request, and manufacturers seeking the services of designers are put in touch with qualified people.

Other projects include the setting-up of a Design Index, providing a photographic catalogue of well-designed Australian goods, for reference by manufacturers, retailers, architects, designers and the public; a Register of Designers, providing a comprehensive reference to Australian designers to assist those seeking their services; Displays and exhibitions of well-designed goods, both local and overseas; Design Training—the council is aware of the urgent need to raise the standard of training in industrial design and will co-operate with education authorities to this end; Information Services—it is intended to establish information offices in both Sydney and Melbourne, and later in other States, to provide information on all matters concerned with design.

The offices of the Council are in ICI House, 1 Nicholson Street, Melbourne, C.2.

5. *Definitions in Factory Statistics.*—The statistics relating to factories have been compiled from tabulations made by the Deputy Commonwealth Statisticians in the several States, from returns supplied to them annually by manufacturers in accordance with the statistical acts of the States and the Commonwealth. 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, 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 and 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 sawmills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

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

Statistics relating to factory activity in the Australian Capital Territory and Northern Territory are not included in the figures contained in this chapter.

**6. 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 respect of the placement and composition of sub-classes) in accordance with decisions of the 1945 Conference of Statisticians.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or to 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 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, Portland.  
Asbestos Cement Sheets and Mouldings.  
Other Cement Goods.  
Other.

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

Bricks and Tiles.  
Earthenware, China, Porcelain and Terracotta.  
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 (including Fireworks).  
White Lead, Paints and 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, Rolling of Iron and Steel.  
Foundries (Ferrous).  
Plant, Equipment and Machinery, etc.  
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 (Government and Other).  
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 Working (including Nails).  
Stoves, Ovens and Ranges.  
Gas Fittings and Meters.  
Lead Mills.  
Sewing Machines.

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

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, etc.).

#### 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.  
Textile Dyeing, Printing and Finishing  
Other.

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

Furriers and Fur-dressing.  
Woolscouring and Feltmongery.  
Tanning, Currying and Leather-dressing.  
Saddlery, Harness and Whips.  
Machine Belting (Leather or other).  
Bags, Trunks, etc.

#### CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready-made Clothing.  
Waterproof and Oilskin Clothing.  
Dressmaking, Hemstitching.  
Millinery.  
Shirts, Collars, Underclothing.  
Foundation Garments.  
Handkerchiefs, Ties and 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, etc.  
Other.

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

Flour-milling.  
Cereal Foods and Starch.  
Animal and Bird Foods.  
Chaffcutting and Corncrushing.  
Bakeries (including Cakes and Pastry).  
Biscuits.  
Sugar-mills.  
Sugar-refining.

**CLASS IX.—FOOD, DRINK AND TOBACCO—**  
*continued.*  
Confectionery (including Chocolate and Icing Sugar).  
Jam, Fruit and Vegetable Canning.  
Pickles, Sauces, Vinegar.  
Bacon Curing.  
Butter Factories.  
Cheese Factories.  
Condensed and Processed Milk Factories.  
Margarine.  
Meat and Fish Preserving.  
Condiments, Coffee, Spices.  
Ice and Refrigerating.  
Salt.  
Aerated Waters, Cordials, etc.  
Breweries.  
Distilleries.  
Wine-making.  
Cider and Perry.  
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 Mills (including Veneers).  
Bark Mills.  
Joinery.  
Cooperage.  
Boxes and Cases.  
Woodturning, Woodcarving, etc.  
Basketware and Wickerware (including Sea-grass and Bamboo Furniture).  
Perambulators (including Pushers and Strollers).  
Wall and Ceiling Boards (not Plaster or Cement).  
Other.

**CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.**  
Cabinet and Furniture Making (including Billiard Tables and Upholstery).  
Bedding and Mattresses (not Wire).  
Furnishing Drapery.

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

Picture Frames.  
Blinds.

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

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

**CLASS XIII.—RUBBER.**

Rubber Goods (including 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 Material, (including Developing and Printing).  
Toys, Games and Sports Requisites.  
Artificial Flowers.  
Other.

**CLASS XVI.—HEAT, LIGHT, AND POWER.**

Electric Light and Power.  
Gas Works.

7. 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.	Pro-duction. (c)	Land and Build-ings.	Plant and Ma-chinery.
	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
1940-41 ..	27,300	650	137,919	386,881	644,795	257,914	144,094	161,356
1950-51 ..	43,147	969	491,718	1,306,963	2,150,835	843,872	302,785	336,615
1955-56 ..	52,406	1,060	853,469	2,263,346	3,764,060	1,500,714	653,574	797,835
1956-57 ..	53,200	1,063	891,090	2,400,293	4,022,413	1,622,120	759,687	917,037
1957-58 ..	53,988	1,074	929,290	2,545,159	4,273,882	1,728,723	849,036	1,012,735
1958-59 ..	54,888	1,088	970,553	2,649,331	4,491,932	1,842,601	947,899	1,108,385
1959-60 ..	56,657	1,132	1,086,359	2,948,814	5,023,696	2,074,882	1,063,852	1,220,064

(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 added in process of manufacture (i.e., 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 1955–56 to 1959–60.

## FACTORIES: NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 .. ..	21,602	16,053	5,378	3,908	3,871	1,594	52,406
1956-57 .. ..	21,838	16,232	5,537	4,063	3,935	1,595	53,200
1957-58 .. ..	22,270	16,426	5,528	4,168	3,941	1,655	53,988
1958-59 .. ..	22,684	16,527	5,651	4,235	4,125	1,666	54,888
1959-60 .. ..	23,274	16,979	5,758	4,684	4,279	1,683	56,657

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during 1955–56 to 1959–60 classified to the industrial classes agreed upon by the Conference of Statisticians in 1930. Details of some of the principal industries included in the table will be found in § 11.

## FACTORIES: NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	1,337	1,331	1,328	1,344	1,374
II. Bricks, Pottery, Glass, etc. .. ..	666	672	660	663	682
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	1,139	1,162	1,184	1,218	1,248
IV. Industrial Metals, Machines, Conveyances .. ..	18,860	19,766	20,518	21,254	22,622
V. Precious Metals, Jewellery, Plate .. ..	782	824	808	818	823
VI. Textiles and Textile Goods (not Dress) .. ..	1,362	1,364	1,364	1,373	1,435
VII. Skins and Leather (not Clothing or Footwear) .. ..	789	785	761	729	727
VIII. Clothing (except Knitted) .. ..	7,390	7,312	7,266	7,195	7,267
IX. Food, Drink and Tobacco .. ..	7,468	7,315	7,455	7,580	7,449
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	5,895	5,872	5,764	5,676	5,771
XI. Furniture of Wood, Bedding, etc. .. ..	2,203	2,199	2,200	2,184	2,211
XII. Paper, Stationery, Printing, Bookbinding, etc. .. ..	2,303	2,367	2,413	2,518	2,619
XIII. Rubber .. ..	513	536	565	606	620
XIV. Musical Instruments .. ..	84	88	88	86	87
XV. Miscellaneous Products .. ..	1,188	1,185	1,207	1,251	1,330
<i>Total, Classes I. to XV.</i> .. ..	<i>51,979</i>	<i>52,778</i>	<i>53,581</i>	<i>54,495</i>	<i>56,265</i>
XVI. Heat, Light and Power .. ..	427	422	407	393	392
<b>Grand Total</b> .. ..	<b>52,406</b>	<b>53,200</b>	<b>53,988</b>	<b>54,888</b>	<b>56,657</b>

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 1959–60. In the latter year, the number of factories in Australia reached the record total of 56,657, or more than twice the number in 1938–39.

(ii) States, 1959-60. The following table shows the number of factories in each State classified according to the nature of the industry.

**FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1959-60.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	476	449	104	164	131	50	1,374
II. Bricks, Pottery, Glass, etc. .. .	312	176	56	71	48	19	682
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .	613	367	83	89	70	26	1,248
IV. Industrial Metals, Machines, Conveyances .. .	9,401	6,414	2,255	2,151	1,869	532	22,622
V. Precious Metals, Jewellery, Plate .. .	374	248	40	80	75	6	823
VI. Textiles and Textile Goods (not Dress) .. .	479	811	31	54	42	18	1,435
VII. Skins and Leather (not Clothing or Footwear) .. .	328	272	52	37	30	8	727
VIII. Clothing (except Knitted) .. .	3,381	2,416	531	440	399	100	7,267
IX. Food, Drink and Tobacco .. .	2,690	2,104	1,025	719	624	287	7,449
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .	2,237	1,404	828	350	470	482	5,771
XI. Furniture of Wood, Bedding, etc. .. .	826	664	283	198	175	65	2,211
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .	1,130	948	211	163	128	39	2,619
XIII. Rubber .. .	228	164	103	59	44	22	620
XIV. Musical Instruments .. .	36	25	7	11	8	..	87
XV. Miscellaneous Products .. .	664	446	72	61	72	15	1,330
Total Classes I. to XV. .. .	23,175	16,908	5,681	4,647	4,185	1,669	56,265
XVI. Heat, Light and Power .. .	99	71	77	37	94	14	392
Grand Total .. .	23,274	16,979	5,758	4,684	4,279	1,683	56,657

**§ 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).

2. States, 1959-60.—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, 1959-60.**

Size of Factory (Persons employed).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
NUMBER OF FACTORIES.							
Under 4 .. .. .	9,751	6,030	2,001	1,837	2,136	758	22,513
4 .. .. .	1,966	1,403	569	408	376	125	4,847
5 to 10 .. .. .	5,368	4,003	1,569	1,140	913	413	13,406
11 to 20 .. .. .	2,741	2,401	729	592	384	178	7,025
21 to 50 .. .. .	2,042	1,816	522	415	309	123	5,227
51 to 100 .. .. .	725	659	177	154	89	47	1,851
101 to 200 .. .. .	362	370	108	72	48	21	981
201 to 300 .. .. .	113	126	44	30	11	4	328
301 to 400 .. .. .	60	42	14	9	7	5	137
401 to 500 .. .. .	31	36	11	5	2	1	86
501 to 750 .. .. .	53	58	8	8	1	1	129
751 to 1,000 .. .. .	21	15	3	2	2	3	46
Over 1,000 .. .. .	41	20	3	12	1	4	81
Total .. .. .	23,274	16,979	5,758	4,684	4,279	1,683	56,657

CLASSIFICATION OF FACTORIES ACCORDING TO NUMBER EMPLOYED. 163

The relative importance of large and small factories is illustrated by the following classification of the average number of persons employed according to the size of factory in which they worked.

FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1959-60.

Size of Factory (Persons employed).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4 .. ..	18,017	12,005	4,149	3,600	3,980	1,512	43,263
4 .. ..	7,864	5,612	2,276	1,632	1,504	500	19,388
5 to 10 .. ..	37,308	27,991	10,818	7,772	6,239	2,887	93,015
11 to 20 .. ..	39,960	35,216	10,518	8,610	5,565	2,627	102,496
21 to 50 .. ..	63,723	57,905	16,294	13,128	9,623	3,802	164,475
51 to 100 .. ..	50,552	45,866	12,357	10,926	6,069	3,155	128,925
101 to 200 .. ..	50,592	51,711	15,530	9,679	6,657	2,935	137,104
201 to 300 .. ..	27,638	30,735	10,596	7,479	2,548	1,039	80,035
301 to 400 .. ..	20,764	14,604	4,699	3,296	2,298	1,729	47,390
401 to 500 .. ..	13,833	16,470	5,076	2,167	843	407	38,796
501 to 750 .. ..	32,092	35,212	4,881	4,944	502	587	78,218
751 to 1,000 .. ..	18,267	12,798	2,703	1,777	1,589	2,270	39,404
Over 1,000 .. ..	90,174	37,134	5,626	24,523	2,858	6,570	166,885
<b>Total .. ..</b>	<b>470,784</b>	<b>383,259</b>	<b>105,523</b>	<b>99,533</b>	<b>50,275</b>	<b>30,020</b>	<b>1,139,394</b>
<b>Average per Factory ..</b>	<b>20.23</b>	<b>22.57</b>	<b>18.33</b>	<b>21.25</b>	<b>11.75</b>	<b>17.84</b>	<b>20.11</b>

3. Australia, 1955-56 to 1959-60.—In the following table, factories in Australia are classified in broad groups for a series of years according to the number of persons employed.

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.
1955-56—								
Number .. ..	44,012	246,087	6,736	279,991	1,658	542,428	52,406	1,068,506
Average per establish- ment .. ..	..	5.59	..	41.57	..	327.16	..	20.39
1956-57—								
Number .. ..	44,790	249,069	6,730	279,974	1,680	541,872	53,200	1,070,915
Average per establish- ment .. ..	..	5.56	..	41.60	..	322.54	..	20.13
1957-58—								
Number .. ..	45,569	250,748	6,730	279,750	1,689	550,777	53,988	1,081,275
Average per establish- ment .. ..	..	5.50	..	41.57	..	326.10	..	20.03
1958-59—								
Number .. ..	46,345	253,375	6,825	282,735	1,718	560,553	54,888	1,096,663
Average per establish- ment .. ..	..	5.47	..	41.43	..	326.28	..	19.98
1959-60—								
Number .. ..	47,791	258,162	7,078	293,400	1,788	587,832	56,657	1,139,394
Average per establish- ment .. ..	..	5.40	..	41.45	..	328.77	..	20.11

## § 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 disjunction 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.

2. Rated Horse-power of Engines in Factories other than Central Electric Stations.—The following table shows the total number of factories and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1959-60.

**FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1959-60.**

State.	Factories.(a)	Rated Horse-power of Engines and Motors.	
		Ordinarily In Use.(b)	In Reserve or Idle (omitting obsolete).
New South Wales .. .. .	23,212	2,307,643	365,970
Victoria .. .. .	16,935	1,469,691	191,830
Queensland .. .. .	5,697	552,186	87,391
South Australia .. .. .	4,650	406,832	46,281
Western Australia .. .. .	4,188	261,660	41,811
Tasmania .. .. .	1,671	265,103	37,851
<b>Australia .. .. .</b>	<b>56,353</b>	<b>5,263,115</b>	<b>771,134</b>

(a) Includes Gas Works but excludes Central Electric Stations, details of which are shown on page 166.  
 (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, 1959-1960.**

State.	Steam.		Internal Combustion.			Water.	Motors driven by Electricity.(b)		Total. (c)
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		Purchased.	Own Generation. (d)	
N.S.W. ..	69,356	146,481	823	41,503	23,491	..	2,025,989	91,492	2,307,643
Victoria ..	27,100	94,060	1,756	42,654	..	890	1,303,231	78,546	1,469,691
Queensland ..	74,942	66,339	2,423	16,200	11,176	..	381,106	107,277	552,186
S. Australia ..	6,236	9,550	976	8,040	8,898	10	373,122	19,199	406,832
W. Australia ..	10,070	11,665	3,505	17,832	7,605	..	210,983	5,558	261,660
Tasmania ..	1,188	21	1	11,606	135	192	251,960	19	265,103
<b>Australia ..</b>	<b>188,892</b>	<b>328,116</b>	<b>9,484</b>	<b>137,835</b>	<b>51,305</b>	<b>1,092</b>	<b>4,546,391</b>	<b>302,091</b>	<b>5,263,115</b>

(a) Includes Gas Works but excludes Central Electric Stations, details of which are shown on page 166.  
 (b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.  
 (c) Excludes particulars in column (d).

(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 1955-56 to 1959-60.

**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.(b)		Total. (c)
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		Purchased.	Own Generation. (d)	
1955-56 ..	223,147	254,497	8,746	112,944	90,314	1,641	3,674,373	243,800	4,365,662
1956-57 ..	214,875	262,559	7,973	120,533	74,060	1,431	3,860,595	260,708	4,542,026
1957-58 ..	204,854	266,659	9,487	118,106	64,498	1,770	4,062,006	274,287	4,727,380
1958-59 ..	190,905	302,594	10,821	122,916	56,503	1,271	4,310,456	270,981	4,995,466
1959-60 ..	188,892	328,116	9,484	137,835	51,305	1,092	4,546,391	302,091	5,263,115

(a) Includes Gas Works but excludes Central Electric Stations, details of which are shown on page 166.  
 (b) Excludes motors driven by electricity generated in factories not classified as Central Electric Stations.  
 (c) Excludes particulars in column (d).

(iii) *In Classes of Industry, 1959-60.* 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), 1959-60.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-ferrous Metal Products ..	97,157	88,435	24,668	25,011	17,758	15,402	268,431
II. Bricks, Pottery, Glass, etc. ..	61,093	37,336	9,415	10,218	11,275	2,447	131,784
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	174,185	129,269	12,470	22,760	43,802	13,456	395,942
IV. Industrial Metals, Machines, Conveyances ..	1,271,530	480,931	112,676	193,897	73,456	64,362	2,196,852
V. Precious Metals, Jewellery, Plate ..	5,460	4,105	1,208	922	625	58	12,378
VI. Textiles and Textile Goods (not Dress) ..	54,621	104,543	7,397	7,932	3,020	8,721	186,234
VII. Skins and Leather (not Clothing or Footwear) ..	18,702	21,517	6,304	5,785	2,787	495	55,590
VIII. Clothing (except Knitted) ..	24,651	30,538	4,668	3,798	2,438	939	67,032
IX. Food, Drink and Tobacco ..	214,369	208,671	219,149	58,146	42,162	23,112	765,609
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	183,062	130,878	109,345	40,359	50,443	47,303	561,390
XI. Furniture of Wood, Bedding, etc. ..	18,810	14,999	7,849	7,376	4,286	1,510	54,830
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	74,650	106,250	22,615	15,861	6,076	86,222	311,674
XIII. Rubber ..	58,156	63,915	10,627	5,597	1,101	491	139,887
XIV. Musical Instruments ..	1,740	312	42	12	12	..	2,118
XV. Miscellaneous Products ..	31,475	31,275	829	2,205	1,063	459	67,306
<i>Total, Classes I. to XV. ..</i>	<i>2,289,661</i>	<i>1,452,974</i>	<i>549,262</i>	<i>399,879</i>	<i>260,304</i>	<i>264,977</i>	<i>5,217,057</i>
XVI. Gas Works ..	17,982	16,717	2,924	6,953	1,356	126	46,058
<b>Grand Total ..</b>	<b>2,307,643</b>	<b>1,469,691</b>	<b>552,186</b>	<b>406,832</b>	<b>261,660</b>	<b>265,103</b>	<b>5,263,115</b>

(a) Excludes Central Electric Stations, details of which are shown on page 166. (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 1959-60 are given in the following table.

**CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1959-60.**

Particulars.	Capacity of Engines and Generators.						
	Steam.		Internal Combustion.			Water.	Total.
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		
Engines installed .. Rated H.P.	3,766	5,828,177	6,530	40,307	289,290	1,967,690	8,135,760
Generators installed—							
Kilowatt capacity—							
Total installed .. kW	2,784	4,297,925	4,519	26,512	198,243	1,423,410	5,953,393
Effective capacity .. ..	2,724	4,033,358	2,916	23,784	180,450	1,384,501	5,627,733
Horse-power equivalent—							
Total installed .. H.P.	3,732	5,761,283	6,057	35,539	265,741	1,908,052	7,980,404
Effective capacity .. ..	3,651	5,406,636	3,909	31,882	241,890	1,855,896	7,543,864

NOTE.—There were 304 establishments classified as Central Electric Stations in 1959-60.

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1959-60 are given in the next table.

**CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1959-60.**

Particulars.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Central Electric Stations	No.	62	44	61	34	91	12	304
Engines installed ..	Rated H.P.	3,446,494	1,832,183	943,945	(a)	500,680	(a)	8,135,760
Generators installed—								
Kilowatt capacity—								
Total installed ..	kW	2,524,981	1,366,355	703,567	(a)	339,658	(a)	5,953,393
Effective capacity ..	..	2,402,397	1,320,441	564,232	(a)	333,998	(a)	5,627,733
Horse-power equivalent—								
Total installed ..	H.P.	3,384,687	1,831,571	943,117	(a)	455,305	(a)	7,980,404
Effective capacity ..	..	3,220,365	1,770,025	756,342	(a)	447,718	(a)	7,543,864

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

### § 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 "out-workers" (see para. 4 (ii), p. 170), are counted as factory employees, while those employed in selling and distributing, such as salesmen, travellers, collectors, carters employed solely on outward delivery of manufactured goods and retailing storemen, are excluded. Prior to 1945-46, the occupational grouping collected was (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) workers in factory, skilled and unskilled; (vi) carters and messengers; and (vii) persons working regularly at home for the establishment. This grouping did not record separate details for technical staff (e.g., chemists, draftsmen, etc.) and supervisory staff and, in 1945-46, the 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, p. 162), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia.* Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for the years 1955-56 to 1959-60 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.
1955-56 ..	811,847	23,156	2.94	248,651	6,260	2.58	1,060,498	29,416	2.85
1956-57 ..	813,551	1,704	0.21	249,847	1,196	0.48	1,063,398	2,900	0.27
1957-58 ..	822,515	8,964	1.10	251,292	1,445	0.58	1,073,807	10,409	0.98
1958-59 ..	834,940	12,425	1.51	253,316	2,024	0.81	1,088,256	14,449	1.35
1959-60 ..	862,185	27,245	3.26	269,492	16,176	6.39	1,131,677	43,421	3.99

(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 thousand of mean population in each State and Australia.

## FACTORIES: EMPLOYMENT.

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

1955-56 ..	433,081	355,185	102,473	92,589	50,108	27,062	1,060,498
1956-57 ..	436,369	355,204	103,426	91,981	48,748	27,670	1,063,398
1957-58 ..	445,802	357,143	101,844	92,472	48,462	28,084	1,073,807
1958-59 ..	449,518	362,979	104,753	94,165	48,417	28,424	1,088,256
1959-60 ..	467,139	381,514	104,693	99,018	49,651	29,662	1,131,677

## PERCENTAGE OF AUSTRALIAN TOTAL.

1955-56 ..	40.84	33.49	9.66	8.73	4.73	2.55	100
1956-57 ..	41.04	33.40	9.73	8.65	4.58	2.60	100
1957-58 ..	41.51	33.26	9.48	8.61	4.52	2.62	100
1958-59 ..	41.31	33.35	9.63	8.65	4.45	2.61	100
1959-60 ..	41.28	33.71	9.25	8.75	4.39	2.62	100

FACTORIES: EMPLOYMENT—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PER 1,000 OF POPULATION.							
1955-56 ..	123	139	75	111	75	85	115
1956-57 ..	122	135	74	107	72	85	112
1957-58 ..	122	133	72	104	70	85	110
1958-59 ..	121	132	72	104	69	84	110
1959-60 ..	123	135	71	106	69	86	112

2. Rates of Increase, 1955-56 to 1959-60.—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.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 ..	3.16	2.46	2.17	3.38	1.61	6.33	2.85
1956-57 ..	0.75	0.00	0.93	-0.66	-2.71	2.25	0.27
1957-58 ..	2.18	0.55	-1.53	0.53	-0.59	1.50	0.98
1958-59 ..	0.83	1.63	2.86	1.83	-0.09	1.21	1.35
1959-60 ..	3.92	5.11	-0.06	5.15	2.55	4.36	3.99

NOTE.—Minus sign (-) indicates decrease.

3. Persons Employed in Industrial Classes.—(i) *Australia.* The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1955-56 to 1959-60.

FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	20,893	20,318	20,883	21,093	21,778
II. Bricks, Pottery, Glass, etc. .. .. .	22,914	22,162	22,448	23,093	24,308
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	44,718	45,753	46,986	47,876	47,617
IV. Industrial Metals, Machines, Conveyances .. .. .	444,274	447,405	459,345	469,446	498,192
V. Precious Metals, Jewellery, Plate .. .. .	5,894	6,053	5,905	5,483	5,308
VI. Textiles and Textile Goods (not Dress) .. .. .	68,356	70,176	68,875	67,467	72,263
VII. Skins and Leather (not Clothing or Footwear) .. .. .	13,810	13,454	13,171	12,935	12,952
VIII. Clothing (except Knitted) .. .. .	110,820	109,266	106,947	106,098	106,830
IX. Food, Drink and Tobacco .. .. .	126,493	124,723	123,471	125,408	126,154
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	61,914	60,008	59,238	60,101	61,651
XI. Furniture of Wood, Bedding, etc. .. .. .	21,508	21,258	22,099	22,110	22,902
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	62,713	64,719	66,285	68,327	71,672
XIII. Rubber .. .. .	17,287	17,844	18,105	18,467	18,663
XIV. Musical Instruments .. .. .	1,739	1,902	1,101	1,025	936
XV. Miscellaneous Products .. .. .	20,967	21,746	22,332	22,286	23,851
<i>Total, Classes I. to XV.</i> .. .. .	<i>1,044,300</i>	<i>1,046,787</i>	<i>1,057,191</i>	<i>1,071,215</i>	<i>1,115,077</i>
XVI. Heat, Light and Power .. .. .	16,198	16,611	16,616	17,041	16,600
<b>Grand Total</b> .. .. .	<b>1,060,498</b>	<b>1,063,398</b>	<b>1,073,807</b>	<b>1,088,256</b>	<b>1,131,677</b>

(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, 1959-60.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products</b> ..	8,684	6,564	2,077	2,142	1,574	737	21,778
<b>II. Bricks, Pottery, Glass, etc.</b> ..	12,424	6,460	1,334	2,315	1,383	392	24,308
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease</b> ..	22,957	16,231	1,824	3,134	2,631	840	47,617
<b>IV. Industrial Metals, Machines, Conveyances</b> ..	223,498	150,843	37,804	55,802	20,494	9,751	498,192
<b>V. Precious Metals, Jewellery, Plate</b> ..	2,345	1,980	294	452	217	20	5,308
<b>VI. Textiles and Textile Goods (not Dress)</b> ..	22,272	41,073	2,274	2,510	968	3,166	72,263
<b>VII. Skins and Leather (not Clothing or Footwear)</b> ..	5,485	4,413	1,152	1,212	629	61	12,952
<b>VIII. Clothing (except Knitted)</b> ..	44,646	45,260	7,670	5,060	3,316	878	106,830
<b>IX. Food, Drink and Tobacco</b> ..	39,109	38,830	26,024	10,793	6,714	4,684	126,154
<b>X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving</b> ..	20,493	15,759	10,782	5,243	5,600	3,774	61,651
<b>XI. Furniture of Wood, Bedding, etc.</b> ..	9,362	6,531	2,908	2,253	1,378	470	22,902
<b>XII. Paper, Stationery, Printing, Bookbinding, etc.</b> ..	29,994	24,305	6,058	4,386	2,700	4,229	71,672
<b>XIII. Rubber</b> ..	7,885	7,282	1,796	1,288	270	142	18,663
<b>XIV. Musical Instruments</b> ..	588	233	48	33	34	..	936
<b>XV. Miscellaneous Products</b> ..	10,925	10,767	673	816	487	183	23,851
<b>Total Classes I. to XV.</b>	<b>460,667</b>	<b>376,531</b>	<b>102,718</b>	<b>97,439</b>	<b>48,395</b>	<b>29,327</b>	<b>1,115,077</b>
<b>XVI. Heat, Light and Power</b> ..	<b>6,472</b>	<b>4,983</b>	<b>1,975</b>	<b>1,579</b>	<b>1,256</b>	<b>335</b>	<b>16,600</b>
<b>Grand Total</b> ..	<b>467,139</b>	<b>381,514</b>	<b>104,693</b>	<b>99,018</b>	<b>49,651</b>	<b>29,662</b>	<b>1,131,677</b>

4. *Persons Employed According to Occupational Grouping.*—(i) *General.* In the following table, the average number of persons employed in each State during 1959-60 is classified according to 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. 166*).

**FACTORIES: PERSONS EMPLOYED—OCCUPATIONAL GROUPING, 1959-60.**

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 ..	15,493	59,025	7,526	20,727	362,121	2,247	467,139
Victoria ..	13,401	45,913	6,677	18,060	295,423	2,040	381,514
Queensland ..	4,963	10,973	1,229	4,396	82,717	415	104,693
South Australia ..	3,394	11,943	1,928	4,708	76,705	340	99,018
Western Australia ..	2,884	4,559	502	2,241	39,377	88	49,651
Tasmania ..	998	3,143	605	1,446	23,350	120	29,662
<b>Total Males</b> ..	<b>35,270</b>	<b>83,342</b>	<b>16,753</b>	<b>47,880</b>	<b>674,573</b>	<b>4,367</b>	<b>862,185</b>
<b>Total Females</b> ..	<b>5,863</b>	<b>52,214</b>	<b>1,714</b>	<b>3,698</b>	<b>205,120</b>	<b>883</b>	<b>269,492</b>
<b>Total Persons</b> ..	<b>41,133</b>	<b>135,556</b>	<b>18,467</b>	<b>51,578</b>	<b>879,693</b>	<b>5,250</b>	<b>1,131,677</b>

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

(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.

5. *Monthly Employment, 1955-56 to 1959-60.*—(i) *Australia.* The following table shows the number of persons (excluding working proprietors) employed in factories on the last pay-day of the month during the years specified.

**FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA.**  
(EXCLUDING WORKING PROPRIETORS.)

Month.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
<b>MALES.</b>					
July .. .. .	768,382	775,580	781,156	794,374	811,912
August .. .. .	770,312	774,506	780,630	794,537	814,297
September .. .. .	771,715	774,119	782,988	795,464	817,277
October .. .. .	774,071	774,455	785,289	796,964	820,178
November .. .. .	777,304	777,127	785,825	799,368	821,316
December .. .. .	772,509	772,479	781,054	792,351	817,217
January .. .. .	774,077	773,419	786,520	794,996	824,919
February .. .. .	778,552	779,646	790,835	800,208	831,022
March .. .. .	779,527	780,973	793,327	802,408	835,371
April .. .. .	780,418	777,262	791,617	804,259	835,236
May .. .. .	780,252	779,757	791,403	804,691	839,084
June .. .. .	777,968	780,156	791,098	805,641	840,832
<b>FEMALES.</b>					
July .. .. .	238,883	240,918	242,399	244,610	251,512
August .. .. .	240,857	241,429	243,489	245,349	253,864
September .. .. .	243,289	243,199	245,019	245,882	257,906
October .. .. .	244,840	245,130	246,360	246,199	260,105
November .. .. .	244,582	245,006	247,805	247,098	262,514
December .. .. .	242,366	242,175	244,653	244,235	259,753
January .. .. .	240,574	243,191	245,340	243,625	260,749
February .. .. .	247,841	248,336	250,891	249,847	267,234
March .. .. .	247,209	250,728	252,918	250,384	270,364
April .. .. .	244,588	245,873	247,439	249,209	267,916
May .. .. .	243,989	244,054	245,855	248,365	269,200
June .. .. .	242,548	242,966	244,052	248,915	270,402
<b>PERSONS.</b>					
July .. .. .	1,007,265	1,016,498	1,023,555	1,038,984	1,063,424
August .. .. .	1,011,169	1,015,935	1,024,119	1,039,886	1,068,161
September .. .. .	1,015,004	1,017,318	1,028,007	1,041,346	1,075,183
October .. .. .	1,018,911	1,019,585	1,031,649	1,043,163	1,080,283
November .. .. .	1,021,886	1,022,133	1,033,630	1,046,466	1,083,830
December .. .. .	1,014,875	1,014,654	1,025,707	1,036,586	1,076,970
January .. .. .	1,014,651	1,016,610	1,031,860	1,038,621	1,085,668
February .. .. .	1,026,393	1,027,982	1,041,726	1,050,055	1,098,256
March .. .. .	1,026,736	1,031,701	1,046,245	1,052,792	1,105,735
April .. .. .	1,025,006	1,023,135	1,039,056	1,053,468	1,103,152
May .. .. .	1,024,241	1,023,811	1,037,258	1,053,056	1,108,284
June .. .. .	1,020,516	1,023,122	1,035,150	1,054,556	1,111,234

(ii) *States.* Particulars of the numbers employed in each State on the last pay-day of each month in 1959-60 are shown in the following table.

## FACTORIES: MONTHLY EMPLOYMENT, 1959-60.

(EXCLUDING WORKING PROPRIETORS.)

Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
July .. ..	330,762	256,793	86,107	76,037	39,472	22,741	811,912
August .. ..	331,823	258,204	85,500	76,412	39,559	22,799	814,297
September .. ..	333,851	259,614	84,236	76,954	39,686	22,936	817,277
October .. ..	335,161	261,176	83,629	77,266	39,897	23,049	820,178
November .. ..	336,792	262,710	81,024	77,579	40,084	23,127	821,316
December .. ..	336,929	262,074	76,961	77,582	40,058	23,613	817,217
January .. ..	339,102	264,845	78,339	78,526	39,986	24,121	824,919
February .. ..	340,533	266,754	80,600	78,969	40,374	23,792	831,022
March .. ..	341,909	268,298	81,380	79,695	40,493	23,596	835,371
April .. ..	342,154	267,455	82,160	79,440	40,429	23,598	835,236
May .. ..	343,550	267,668	84,153	79,587	40,536	23,590	839,084
June .. ..	344,356	268,022	84,964	79,556	40,448	23,486	840,832
FEMALES.							
July .. ..	108,617	98,765	16,658	16,301	6,272	4,899	251,512
August .. ..	109,659	99,860	16,938	16,382	6,321	4,704	253,864
September .. ..	111,594	101,357	17,260	16,543	6,413	4,739	257,906
October .. ..	112,661	102,700	16,794	16,705	6,458	4,787	260,105
November .. ..	113,919	103,542	16,735	16,951	6,534	4,833	262,514
December .. ..	111,750	102,678	16,536	17,130	6,468	5,191	259,753
January .. ..	111,428	103,252	16,619	17,481	6,427	5,542	260,749
February .. ..	114,120	106,087	17,377	17,819	6,545	5,286	267,234
March .. ..	115,496	107,875	17,160	17,840	6,658	5,335	270,364
April .. ..	115,719	105,572	16,956	17,487	6,588	5,594	267,916
May .. ..	116,386	105,720	17,372	17,578	6,528	5,616	269,200
June .. ..	117,184	106,116	17,519	17,657	6,382	5,544	270,402
PERSONS.							
July .. ..	439,379	355,558	102,765	92,338	45,744	27,640	1,063,424
August .. ..	441,482	358,064	102,438	92,794	45,880	27,503	1,068,161
September .. ..	445,445	360,971	101,496	93,497	46,099	27,675	1,075,183
October .. ..	447,822	363,876	100,423	93,971	46,355	27,836	1,080,283
November .. ..	450,711	366,252	97,759	94,530	46,618	27,960	1,083,830
December .. ..	448,679	364,752	93,497	94,712	46,526	28,804	1,076,970
January .. ..	450,530	368,097	94,958	96,007	46,413	29,663	1,085,668
February .. ..	454,653	372,841	97,977	96,788	46,919	29,078	1,098,256
March .. ..	457,405	376,173	98,540	97,535	47,151	28,931	1,105,735
April .. ..	457,873	373,027	99,116	96,927	47,017	29,192	1,103,152
May .. ..	459,936	373,388	101,525	97,165	47,064	29,206	1,108,284
June .. ..	461,540	374,138	102,483	97,213	46,830	29,030	1,111,234

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, provides for 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, 1959 and 1960, are given below.

**FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1959 AND 1960.**

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1959.			June, 1960.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years ..	8,411	7,234	15,645	8,627	7,457	16,084
16 years .. ..	13,556	8,957	22,513	14,475	9,800	24,275
17 " .. ..	16,532	9,878	26,410	16,846	10,411	27,257
18 " .. ..	17,085	9,639	26,724	17,963	10,370	28,333
19 " .. ..	16,099	9,069	25,168	16,993	9,446	26,439
20 " .. ..	15,189	8,468	23,657	15,739	8,818	24,557
21 " and over ..	718,769	195,670	914,439	750,189	214,100	964,289
<b>Total .. ..</b>	<b>805,641</b>	<b>248,915</b>	<b>1,054,556</b>	<b>840,832</b>	<b>270,402</b>	<b>1,111,234</b>

The following table shows the age distribution in sexes for Australia in June in the years 1956 to 1960.

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

(EXCLUDING WORKING PROPRIETORS.)

In June.	Under 16 Years.	16 Years.	17 Years.	18 Years.	19 Years.	20 Years.	21 Years and Over.	Total.
<b>MALES.</b>								
1956 ..	9,061	13,025	14,985	15,348	14,884	13,635	697,030	777,968
1957 ..	9,158	13,310	15,289	16,104	15,219	14,162	696,914	780,156
1958 ..	8,710	13,817	16,347	16,802	16,337	15,315	703,770	791,098
1959 ..	8,411	13,556	16,532	17,085	16,099	15,189	718,769	805,641
1960 ..	8,627	14,475	16,846	17,963	16,993	15,739	750,189	840,832

**FEMALES.**

1956 ..	6,557	8,163	9,390	10,102	9,072	7,801	191,463	242,548
1957 ..	6,828	8,292	9,276	9,715	8,986	7,959	191,910	242,966
1958 ..	6,924	9,180	9,790	10,025	9,421	8,737	189,975	244,052
1959 ..	7,234	8,957	9,878	9,639	9,069	8,468	195,670	248,915
1960 ..	7,457	9,800	10,411	10,370	9,446	8,818	214,100	270,402

**PERSONS.**

1956 ..	15,618	21,188	24,375	25,450	23,956	21,436	888,493	1,020,516
1957 ..	15,986	21,602	24,565	25,819	24,205	22,121	888,824	1,023,122
1958 ..	15,634	22,997	26,137	26,827	25,758	24,052	893,745	1,035,150
1959 ..	15,645	22,513	26,410	26,724	25,168	23,657	914,439	1,054,556
1960 ..	16,084	24,275	27,257	28,333	26,439	24,557	964,289	1,111,234

## § 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 1955-56 to 1959-60.

## FACTORIES: MALES AND FEMALES EMPLOYED.

State.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
MALES.					
New South Wales .. ..	327,106	329,386	337,211	340,757	351,208
Victoria .. ..	258,006	258,119	259,404	263,847	275,315
Queensland .. ..	85,123	85,899	84,871	87,454	86,985
South Australia .. ..	76,144	75,543	75,909	77,427	81,312
Western Australia .. ..	43,340	42,122	42,039	41,951	42,957
Tasmania .. ..	22,128	22,482	23,081	23,504	24,408
<b>Australia .. ..</b>	<b>811,847</b>	<b>813,551</b>	<b>822,515</b>	<b>834,940</b>	<b>862,185</b>

FEMALES.					
New South Wales .. ..	105,975	106,983	108,591	108,761	115,931
Victoria .. ..	97,179	97,085	97,739	99,132	106,199
Queensland .. ..	17,350	17,527	16,973	17,299	17,708
South Australia .. ..	16,445	16,438	16,563	16,738	17,706
Western Australia .. ..	6,768	6,626	6,423	6,466	6,694
Tasmania .. ..	4,934	5,188	5,003	4,920	5,254
<b>Australia .. ..</b>	<b>248,651</b>	<b>249,847</b>	<b>251,292</b>	<b>253,316</b>	<b>269,492</b>

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 1955-56 to 1959-60.

## FACTORIES: ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
MALES.					
New South Wales .. ..	3.20	0.70	2.38	1.05	3.07
Victoria .. ..	2.52	0.04	0.50	1.71	4.35
Queensland .. ..	2.20	0.91	-1.20	3.04	-0.54
South Australia .. ..	3.30	-0.79	0.48	2.00	5.02
Western Australia .. ..	2.47	-2.81	-0.20	-0.21	2.40
Tasmania .. ..	5.15	1.60	2.66	1.83	3.85
<b>Australia .. ..</b>	<b>2.94</b>	<b>0.21</b>	<b>1.10</b>	<b>1.51</b>	<b>3.26</b>

FEMALES.					
New South Wales .. ..	2.75	0.95	1.50	0.16	6.59
Victoria .. ..	2.32	-0.10	0.88	1.43	7.13
Queensland .. ..	2.04	1.02	-3.16	1.92	2.36
South Australia .. ..	3.75	-0.04	0.76	1.06	5.78
Western Australia .. ..	-3.59	-2.10	-3.06	0.67	3.53
Tasmania .. ..	11.96	5.15	-3.57	-1.66	6.79
<b>Australia .. ..</b>	<b>2.58</b>	<b>0.48</b>	<b>0.58</b>	<b>0.81</b>	<b>6.39</b>

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 the proportion of males to females employed in each State. The following table shows particulars for the years 1955–56 to 1959–60.

**FACTORIES: MASCULINITY(a) OF PERSONS EMPLOYED.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955–56 .. ..	309	265	491	463	640	448	327
1956–57 .. ..	308	266	490	460	636	433	326
1957–58 .. ..	311	265	500	458	655	461	327
1958–59 .. ..	313	266	506	463	649	478	330
1959–60 .. ..	303	259	491	459	642	465	320

(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, 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. In 1959–60, there were 320 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 1959–60, these industries accounted for 78.51 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 138 females to every 100 males and in Class VIII., Clothing, with 245 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes in 1955–60.

**MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1959-60.**

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MALES.</b>							
IV. Industrial Metals, etc. ..	193,076	131,515	35,315	49,229	19,467	9,219	437,821
VI. Textiles and Textile Goods (not Dress) .. ..	9,194	17,104	838	1,238	543	1,433	30,350
VIII. Clothing (except Knitted) ..	12,148	13,504	2,120	1,733	1,107	382	30,994
IX. Food, Drink and Tobacco ..	26,952	27,587	21,830	7,821	5,311	3,186	92,687
All Other Classes .. ..	109,838	85,605	26,882	21,291	16,529	10,188	270,333
Total .. ..	351,208	275,315	86,985	81,312	42,957	24,408	862,185
<b>FEMALES.</b>							
IV. Industrial Metals, etc. ..	30,422	19,328	2,489	6,573	1,027	532	60,371
VI. Textiles and Textile Goods (not Dress) .. ..	13,078	23,969	1,436	1,272	425	1,733	41,913
VIII. Clothing (except Knitted) ..	32,498	31,756	5,550	3,327	2,209	496	75,836
IX. Food, Drink and Tobacco ..	12,157	11,243	4,194	2,972	1,403	1,498	33,467
All Other Classes .. ..	27,776	19,903	4,039	3,562	1,630	995	57,905
Total .. ..	115,931	106,199	17,708	17,706	6,694	5,254	269,492

(ii) *Females Employed in Clothing Manufacture.* The employment of females in the several industries of Class VIII., Clothing, the class in which 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.

## EMPLOYMENT IN CLOTHING INDUSTRIES, FEMININITY(a), 1959-60.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Fe- males.	Femi- ninity. (a)	Males.	Fe- males.	Femi- ninity. (a)	Males.	Fe- males.	Femi- ninity. (a)
Tailoring and Ready-made Clothing .. .. .	3,100	15,391	496	2,809	7,592	270	1,004	3,274	326
Waterproof and Oilskin Clothing .. .. .	122	579	475	174	449	258	6	12	200
Dressmaking, Hemstitching .. .. .	117	1,163	994	1,114	7,535	676	148	2,360	1,595
Millinery .. .. .	224	1,191	532	144	578	401	38	409	1,076
Shirts, Collars, Underclothing .. .. .	465	4,536	975	603	5,195	862	160	1,932	1,208
Foundation Garments .. .. .	117	1,451	1,240	253	1,595	630	25	148	592
Handkerchiefs, Ties and Scarves .. .. .	178	1,031	579	76	324	426	22	125	568
Hats and Caps .. .. .	468	547	117	147	164	112	25	105	420
Gloves .. .. .	122	403	330	49	189	386	43	132	307
Boots and Shoes (not Rubber) .. .. .	3,129	3,242	104	5,144	5,896	115	1,598	1,192	75
Boot and Shoe Repairing .. .. .	1,462	130	9	772	76	10	691	54	8
Boot and Shoe Accessories .. .. .	242	145	60	514	240	47	40	12	30
Umbrellas and Walking Sticks .. .. .	44	87	198	27	60	222	22	46	209
Dyeworks and Cleaning (including Renovating and Repairing) .. .. .	2,314	2,263	98	1,604	1,599	100	1,520	1,781	117
Other .. .. .	44	339	770	74	264	357	..	..	..
<b>Total .. .. .</b>	<b>12,148</b>	<b>32,498</b>	<b>268</b>	<b>13,504</b>	<b>31,756</b>	<b>235</b>	<b>5,342</b>	<b>11,582</b>	<b>217</b>

(a) Number of females per 100 males.

## § 7. Children Employed in Factories.

1. Number of Children Employed, 1958 to 1960.—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The decline in the number of children employed from the peak of 33,553 reached in June, 1940, to 16,084 in June, 1960, was probably caused largely by the raising of the school 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.	1958.			1959.			1960.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales .. .. .	2,575	1,929	4,504	2,453	2,175	4,628	2,625	2,219	4,844
Victoria .. .. .	2,805	2,608	5,413	2,595	2,535	5,130	2,573	2,664	5,237
Queensland .. .. .	1,588	1,151	2,739	1,571	1,226	2,797	1,592	1,271	2,863
South Australia .. .. .	873	796	1,669	860	829	1,689	883	883	1,766
Western Australia .. .. .	769	327	1,096	822	331	1,153	863	332	1,195
Tasmania .. .. .	100	113	213	110	138	248	91	88	179
<b>Australia .. .. .</b>	<b>8,710</b>	<b>6,924</b>	<b>15,634</b>	<b>8,411</b>	<b>7,234</b>	<b>15,645</b>	<b>8,627</b>	<b>7,457</b>	<b>16,084</b>

(a) Under sixteen years of age.

2. **Industries Employing Children.**—The distribution of children employed in factories in June, 1960, and the proportion of children employed to total employees are given in the following table according to the class of industry.

**FACTORIES: CHILDREN<sup>(a)</sup> EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1960.**

Class of Industry.	Children Employed. (a)		Total Employees. (b)		Proportion (per cent.) of Children Employed to Total Employees. (b)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Conveyances .. .. .	3,939	912	433,862	63,688	0.91	1.43
Textiles and Textile Goods (not Dress)	489	1,449	30,135	42,797	1.62	3.39
Clothing (except Knitted) .. .. .	490	2,938	26,018	74,430	1.88	3.94
Food, Drink and Tobacco .. .. .	982	795	87,402	31,400	1.12	2.53
Sawmills, Joinery, Boxes, etc. .. .	740	69	54,833	3,384	1.35	2.04
Furniture of Wood, Bedding, etc. ..	442	88	17,104	4,347	2.58	2.02
Paper, Stationery, Printing, Bookbinding, etc. .. .. .	682	645	52,216	18,877	1.31	3.42
All other Industries .. .. .	863	561	139,262	31,479	0.62	1.78
<b>Total .. .. .</b>	<b>8,627</b>	<b>7,457</b>	<b>840,832</b>	<b>270,402</b>	<b>1.03</b>	<b>2.76</b>

(a) Under sixteen years of age.

(b) Excludes working proprietors.

3. **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. Value of Production, Materials Used, Salaries and Wages.

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

1. **General.**—The gross value of factory output for 1959–60 was £5,023,696,000, of which £2,767,999,000 was the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £180,815,000 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the gross value of output, namely, £2,074,882,000, represents the net value of factory production, defined as “the value of consumable commodities produced during the year, deducting so far as possible the value of goods consumed in process of production.” Depreciation, however, is not deducted (*see* para. 6 of this section, p. 183). The gross value of factory output and the value of materials used each contain *inherent elements of duplication*, as the output of some factories becomes the materials used in other factories. They therefore have little statistical significance. The net value of factory production indicates the relative importance of manufacturing in the Australian economy in current money terms. The total amount of salaries and wages paid in factories in 1959–60 was £1,086,359,000, excluding amounts drawn by working proprietors.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1959–60.* 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, 1959-60.

(£'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 ..	9,873	7,332	2,022	2,219	1,418	736	23,600
II. Bricks, Pottery, Glass, etc. ..	13,240	6,746	1,265	2,487	1,266	416	25,420
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	25,201	18,366	1,729	3,205	2,767	1,031	52,299
IV. Industrial Metals, Machines, Conveyances ..	236,341	157,826	33,091	56,635	17,205	10,027	511,125
V. Precious Metals, Jewellery, Plate ..	2,022	1,840	208	364	151	15	4,600
VI. Textiles and Textile Goods (not Dress) ..	18,624	34,836	1,467	2,108	787	2,512	60,334
VII. Skins and Leather (not Clothing or Footwear) ..	5,104	3,944	1,033	1,192	572	62	11,907
VIII. Clothing (except Knitted) ..	30,086	32,556	4,272	3,225	1,791	541	72,471
IX. Food, Drink and Tobacco ..	35,497	36,064	24,118	9,344	5,627	4,140	114,790
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	18,643	14,486	8,585	4,565	4,568	3,247	54,094
XI. Furniture of Wood, Bedding, etc. ..	8,480	5,655	2,091	1,720	976	355	19,277
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	31,558	26,088	5,429	4,209	2,533	4,998	74,815
XIII. Rubber ..	8,474	8,075	1,482	1,445	215	137	19,828
XIV. Musical Instruments ..	570	217	32	21	22	..	862
XV. Miscellaneous Products ..	10,256	10,143	489	652	326	140	22,006
<i>Total, Classes I. to XV.</i> ..	453,969	364,174	87,313	93,391	40,224	28,357	1,067,428
XVI. Heat, Light and Power ..	7,175	6,007	2,054	1,847	1,419	429	18,931
<b>Grand Total ..</b>	<b>461,144</b>	<b>370,181</b>	<b>89,367</b>	<b>95,238</b>	<b>41,643</b>	<b>28,786</b>	<b>1,086,359</b>

(ii) *Totals and Averages, 1955-56 to 1959-60.* 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.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
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TOTAL AMOUNT PAID (£'000).

1955-56 .. ..	359,023	286,944	72,460	76,237	37,207	21,598	853,469
1956-57 .. ..	378,332	296,608	77,780	77,818	36,916	23,636	891,090
1957-58 .. ..	396,692	310,540	78,958	79,844	37,935	25,321	929,290
1958-59 .. ..	413,015	324,336	85,497	83,145	38,732	25,828	970,553
1959-60 .. ..	461,144	370,181	89,367	95,238	41,643	28,786	1,086,359

AVERAGE PER EMPLOYEE (£.)

1955-56 .. ..	860.91	841.16	740.93	848.43	785.23	828.65	837.35
1956-57 .. ..	900.06	869.21	789.63	872.87	801.95	886.68	871.98
1957-58 .. ..	923.40	904.81	814.86	891.80	829.22	936.70	900.46
1958-59 .. ..	952.82	928.60	856.33	911.89	847.81	942.94	927.13
1959-60 .. ..	1021.03	1005.62	896.09	995.96	890.43	1004.27	996.16

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 are employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1959-60 were paid in New South Wales, Victoria and Tasmania 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 1959-60 had reached a level of slightly over £996.

(iii) *Total and Average Earnings of Males and Females, 1955-56 to 1959-60.* Particulars for these years are given in the following table.

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

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
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**MALES.**

**TOTAL AMOUNT PAID (£'000).**

1955-56 .. ..	302,880	234,784	64,918	68,213	34,236	19,146	724,177
1956-57 .. ..	318,612	241,587	69,873	69,645	33,895	20,878	754,490
1957-58 .. ..	334,245	253,342	70,954	71,153	34,938	22,516	787,148
1958-59 .. ..	348,302	265,615	77,049	74,268	35,647	23,138	824,019
1959-60 .. ..	387,166	302,678	80,345	85,333	38,276	25,618	919,416

**AVERAGE PER MALE EMPLOYEE (£).**

1955-56 .. ..	967.45	955.00	802.89	925.47	839.62	904.78	933.92
1956-57 .. ..	1,010.17	981.79	857.48	953.42	856.63	970.11	970.91
1957-58 .. ..	1,034.19	1,023.48	881.32	970.33	884.66	1,018.45	1,001.28
1958-59 .. ..	1,065.21	1,052.69	926.77	992.28	905.12	1,026.66	1,031.05
1959-60 .. ..	1,145.65	1,145.80	971.95	1,088.21	950.85	1,091.42	1,111.86

**FEMALES.**

**TOTAL AMOUNT PAID (£'000).**

1955-56 .. ..	56,143	52,160	7,542	8,024	2,971	2,452	129,292
1956-57 .. ..	59,720	55,020	7,907	8,174	3,021	2,758	136,600
1957-58 .. ..	62,447	57,198	8,004	8,691	2,997	2,805	142,142
1958-59 .. ..	64,713	58,721	8,448	8,877	3,085	2,690	146,534
1959-60 .. ..	73,978	67,503	9,022	9,905	3,367	3,168	166,943

**AVERAGE PER FEMALE EMPLOYEE (£).**

1955-56 .. ..	540.06	547.42	445.22	496.84	449.61	500.06	530.23
1956-57 .. ..	569.11	578.14	464.68	507.53	467.32	537.11	557.95
1957-58 .. ..	586.89	597.81	487.69	536.42	479.14	569.66	578.10
1958-59 .. ..	607.71	605.66	505.75	543.49	489.60	554.24	591.74
1959-60 .. ..	650.82	649.38	528.65	575.58	516.95	610.25	633.25

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1959-60, 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, 1959-60.

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 .. .. .	3,213	547	19,719	121
II. Bricks, Pottery, Glass, etc. .. .. .	2,301	540	21,662	916
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	12,219	2,781	32,962	4,336
IV. Industrial Metals, Machines, Conveyances .. .. .	76,627	15,779	395,635	23,084
V. Precious Metals, Jewellery, Plate .. .. .	545	187	3,412	457
VI. Textiles and Textile Goods (not Dress) .. .. .	5,716	2,434	27,883	24,300
VII. Skins and Leather (not Clothing or Footwear) .. .. .	1,397	308	8,456	1,748
VIII. Clothing (except Knitted) .. .. .	5,151	2,791	22,080	42,449
IX. Food, Drink and Tobacco .. .. .	16,043	4,567	78,800	15,380
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	5,796	1,272	46,331	696
XI. Furniture of Wood, Bedding, etc. .. .. .	1,970	667	14,678	1,962
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	10,271	3,317	52,857	8,370
XIII. Rubber .. .. .	2,959	627	14,367	1,874
XIV. Musical Instruments .. .. .	107	23	642	91
XV. Miscellaneous Products .. .. .	3,350	1,110	13,445	4,100
<i>Total, Classes I. to XV.</i> .. .. .	<i>147,665</i>	<i>36,950</i>	<i>752,929</i>	<i>129,884</i>
XVI. Heat, Light and Power .. .. .	1,957	83	16,866	26
<b>Grand Total</b> .. .. .	<b>149,622</b>	<b>37,033</b>	<b>769,794</b>	<b>129,910</b>
Average paid per employee .. .. .	£ 1,494.80	£ 686.71	£ 1,059.13	£ 619.50

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1959-60.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is shown in the following table for each State and Australia for 1959-60.

 FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), 1959-60.  
 (£'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 .. .. .	4,753	2,710	858	990	478	341	10,130
II. Bricks, Pottery, Glass, etc. .. .. .	4,117	2,215	506	695	515	186	8,234
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	6,709	6,642	352	810	2,098	519	17,130
IV. Industrial Metals, Machines, Conveyances .. .. .	39,306	8,950	2,339	5,344	1,386	2,219	59,544
V. Precious Metals, Jewellery, Plate .. .. .	151	146	13	40	13	1	364
VI. Textiles and Textile Goods (not Dress) .. .. .	1,565	2,668	83	220	63	254	4,853
VII. Skins and Leather (not Clothing or Footwear) .. .. .	420	457	78	156	88	5	1,204
VIII. Clothing (except Knitted) .. .. .	954	937	178	120	86	42	2,317
IX. Food, Drink and Tobacco .. .. .	6,137	6,126	2,971	1,376	1,071	550	18,231
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	1,586	850	622	319	342	348	4,067
XI. Furniture of Wood, Bedding, etc. .. .. .	202	136	49	49	24	7	467
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	1,531	2,141	298	350	116	1,705	6,141
XIII. Rubber .. .. .	1,063	1,265	184	162	29	21	2,724
XIV. Musical Instruments .. .. .	39	9	1	1	(b)	..	50
XV. Miscellaneous Products .. .. .	669	913	15	41	18	5	1,661
<i>Total, Classes I. to XV.</i> .. .. .	<i>69,202</i>	<i>36,165</i>	<i>8,547</i>	<i>10,673</i>	<i>6,327</i>	<i>6,203</i>	<i>137,117</i>
XVI. Heat, Light and Power .. .. .	17,906	10,975	6,636	4,420	3,744	17	43,698
<b>Grand Total</b> .. .. .	<b>87,108</b>	<b>47,140</b>	<b>15,183</b>	<b>15,093</b>	<b>10,071</b>	<b>6,220</b>	<b>180,815</b>

(a) Includes value of lubricants and water.

(b) Less than £500.

(ii) *Values of Items, 1959-60.* 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), 1959-60.**

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black .. ..	20,311	2,678	8,256	(b) 4,352	2,568	1,363	39,528
"    Brown .. ..	..	7,805	..	..	..	..	7,805
Brown Coal Briquettes .. ..	..	2,356	..	..	..	..	2,356
Coke .. ..	13,777	635	396	2,335	222	347	17,712
Wood .. ..	434	608	363	387	381	213	2,386
Fuel Oil .. ..	10,342	12,428	1,377	2,500	3,592	846	31,085
Tar (Fuel) .. ..	1,583	179	19	95	29	16	1,921
Electricity .. ..	24,012	15,827	3,661	4,061	2,244	2,862	52,667
Gas .. ..	9,820	1,307	201	263	92	44	11,727
Other (Charcoal, etc.) .. ..	2,467	648	120	371	430	322	4,358
Water .. ..	2,962	1,725	420	455	271	117	5,950
Lubricating Oils .. ..	1,400	944	370	274	242	90	3,320
<b>Total .. ..</b>	<b>87,108</b>	<b>47,140</b>	<b>15,183</b>	<b>15,093</b>	<b>10,071</b>	<b>6,220</b>	<b>180,815</b>

(a) Includes value of lubricants and water.  
of Leigh Creek coal. (See p. 241)

(b) Includes £1,441,116, the value of 676,719 tons

(iii) *Quantities of Fuel Used, 1959-60.* The following table shows the quantities of fuel used in factories in each State during the year.

**FACTORIES: QUANTITIES OF FUEL USED, 1959-60.**

Particulars.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black .. ..	'000 tons	6,223	427	1,800	(a) 1,241	607	269	10,567
"    Brown .. ..	"	..	11,746	..	..	..	..	11,746
Brown Coal Briquettes .. ..	"	..	510	..	..	..	..	510
Coke .. ..	"	2,375	50	31	270	18	18	2,762
Wood .. ..	"	202	352	174	215	271	93	1,307
Fuel Oil .. ..	'000 gals.	190,590	241,433	16,274	47,451	70,738	12,014	578,500
Tar (Fuel) .. ..	"	30,996	3,412	418	2,331	854	274	38,285

(a) Includes 676,719 tons of Leigh Creek coal.

(iv) *Total Value, 1955-56 to 1959-60.* 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.
1955-56 .. ..	66,469	34,598	11,980	12,830	9,053	4,097	139,027
1956-57 .. ..	71,445	40,381	13,130	14,130	9,225	4,799	153,110
1957-58 .. ..	73,452	42,762	13,152	14,933	9,425	5,074	158,798
1958-59 .. ..	76,275	43,377	14,964	14,590	9,587	5,459	164,252
1959-60 .. ..	87,108	47,140	15,183	15,093	10,071	6,220	180,815

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1959-60.* 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 1959-60 reached £2,767,999,000, or 55.1 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, 1959-60.(a)**

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>I. Treatment of Non-metalliferous Mine and Quarry Products</b> ..	34,623	15,671	5,190	5,264	2,738	1,485	64,971
<b>II. Bricks, Pottery, Glass, etc.</b> ..	12,732	7,055	1,092	2,589	868	317	24,653
<b>III. Chemicals, Dyes, Explosives, Paints, Oils, Grease</b> ..	138,288	105,314	9,335	11,159	35,772	2,608	302,476
<b>IV. Industrial Metals, Machines, Conveyances</b> ..	553,615	249,955	57,097	107,629	27,427	20,239	1,015,962
<b>V. Precious Metals, Jewellery, Plate</b> ..	2,040	1,995	107	224	81	10	4,457
<b>VI. Textiles and Textile Goods (not Dress)</b> ..	44,261	83,004	5,040	4,233	4,274	6,082	146,894
<b>VII. Skins and Leather (not Clothing or Footwear)</b> ..	16,262	12,090	3,563	5,492	1,103	322	38,832
<b>VIII. Clothing (except Knitted)</b> ..	51,832	53,113	5,080	3,895	2,174	458	116,552
<b>IX. Food, Drink and Tobacco</b> ..	184,265	194,820	166,536	40,172	29,236	18,450	633,479
<b>X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving</b> ..	44,337	31,647	17,311	11,351	7,687	7,575	119,908
<b>XI. Furniture of Wood, Bedding, etc.</b> ..	18,080	11,632	4,580	3,312	2,216	608	40,428
<b>XII. Paper, Stationery, Printing, Bookbinding, etc.</b> ..	58,610	58,057	9,536	6,943	3,774	8,751	145,671
<b>XIII. Rubber</b> ..	20,665	22,128	3,891	2,005	419	208	49,316
<b>XIV. Musical Instruments</b> ..	890	199	24	8	16	..	1,137
<b>XV. Miscellaneous Products</b> ..	18,224	23,121	594	1,202	445	100	43,686
<i>Total, Classes I. to XV.</i>	<i>1,198,724</i>	<i>869,801</i>	<i>288,976</i>	<i>205,478</i>	<i>118,230</i>	<i>67,213</i>	<i>2,748,422</i>
<b>XVI. Heat, Light and Power</b> ..	7,531	6,172	2,412	2,158	908	396	19,577
<b>Grand Total</b> ..	<b>1,206,255</b>	<b>875,973</b>	<b>291,388</b>	<b>207,636</b>	<b>119,138</b>	<b>67,609</b>	<b>2,767,999</b>

(a) *See* para. 1 of this section, p. 176.

(ii) *Total Amount, 1955-56 to 1959-60.* The following table shows the value of materials used in factories for these years.

**FACTORIES: VALUE OF MATERIALS USED.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 ..	884,582	674,846	231,584	183,196	96,360	53,751	2,124,319
1956-57 ..	948,393	707,729	244,974	184,209	104,969	56,909	2,247,183
1957-58 ..	1,016,928	768,459	248,647	183,880	111,525	56,922	2,386,361
1958-59 ..	1,070,862	778,716	280,757	188,358	107,853	58,533	2,485,079
1959-60 ..	1,206,255	875,973	291,388	207,636	119,138	67,609	2,767,999

(a) *See* para. 1 of this section, p. 176.

5. *Value of Output.*—(i) *In Classes of Industry, 1959-60.* The value of the output of factories in the various classes in each State in 1959-60 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) 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 net value of factory production (*see* paras. 1 and 6 of this section).

## FACTORIES: VALUE OF OUTPUT, 1959-60.(a)

(£'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	62,037	34,056	10,554	11,311	6,420	3,150	127,528
II. Bricks, Pottery, Glass, etc. ..	39,524	21,149	4,077	7,721	3,798	1,137	77,406
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	233,463	170,424	15,071	20,926	52,359	5,629	497,872
IV. Industrial Metals, Machines, Conveyances ..	1,001,865	511,662	112,182	200,918	56,518	41,453	1,924,598
V. Precious Metals, Jewellery, Plate ..	5,780	5,268	471	883	395	36	12,833
VI. Textiles and Textile Goods (not Dress) ..	81,449	146,274	7,546	8,209	6,005	10,608	260,091
VII. Skins and Leather (not Clothing or Footwear) ..	24,835	18,972	5,292	7,267	2,164	446	58,976
VIII. Clothing (except Knitted) ..	103,162	106,650	12,198	9,081	5,260	1,365	237,716
IX. Food, Drink and Tobacco ..	284,590	282,558	215,079	59,469	42,554	27,528	911,778
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	80,587	57,492	33,094	19,647	16,379	14,465	221,664
XI. Furniture of Wood, Bedding, etc. ..	33,030	21,973	8,142	6,246	3,998	1,268	74,657
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	122,088	112,965	20,202	15,154	8,772	21,724	300,905
XIII. Rubber ..	33,187	38,010	6,841	4,713	894	533	84,178
XIV. Musical Instruments ..	2,402	533	75	47	56	..	3,113
XV. Miscellaneous Products ..	38,357	42,698	1,425	2,617	1,083	307	86,487
<i>Total, Classes I. to XV.</i>	<i>2,146,356</i>	<i>1,570,684</i>	<i>452,249</i>	<i>374,209</i>	<i>206,655</i>	<i>129,649</i>	<i>4,879,802</i>
XVI. Heat, Light and Power ..	63,453	38,930	16,714	11,493	8,928	4,376	143,894
<b>Grand Total ..</b>	<b>2,209,809</b>	<b>1,609,614</b>	<b>468,963</b>	<b>385,702</b>	<b>215,583</b>	<b>134,025</b>	<b>5,023,696</b>

(a) See para. 1 of this section, p. 176.

(ii) *Total, 1955-56 to 1959-60.* The following table shows the value of output in each State during these years.

## FACTORIES: VALUE OF OUTPUT.(a)

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 ..	1,595,137	1,201,392	371,644	316,962	175,146	103,779	3,764,060
1956-57 ..	1,726,637	1,276,141	396,504	325,105	187,636	110,390	4,022,413
1957-58 ..	1,848,242	1,377,697	405,757	332,098	196,262	113,826	4,273,882
1958-59 ..	1,952,452	1,431,041	451,186	342,758	196,202	118,293	4,491,932
1959-60 ..	2,209,809	1,609,614	468,963	385,702	215,583	134,025	5,023,696

(a) See para. 1 of this section p. 176.

6. *Value of Production.*—(i) *In Classes of Industry, 1959-60.* 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.”

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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". On account of the difficulty experienced in securing accurate figures for depreciation, however, it was subsequently decided that no deduction should be made on this account. All the deductions mentioned above, with the exception of depreciation, are included in the items "value of materials used" and "value of fuel used" as defined above. The net value of production as given in the following tables is obtained, therefore, by deducting only "value of materials used" and "value of fuel used" from the "value of output".

Only certain selected items of costs are recorded in the annual census of production. It must not, therefore, 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, as many miscellaneous expenses such as taxation, insurance, advertising and other overhead charges, as well as depreciation, also have to be taken into account.

The value of factory production, therefore, approximates "net value added" in the manufacturing process. In 1959-60, it amounted to £2,075 million, to which Class IV., Industrial Metals, etc., with £849 million made the greatest contribution.

The following table shows the value of production in 1959-60 in each State for the various classes of industry.

FACTORIES: VALUE OF PRODUCTION, 1959-60.(a)

(£'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 ..	22,661	15,675	4,506	5,057	3,204	1,324	52,427
II. Bricks, Pottery, Glass, etc. ..	22,675	11,879	2,479	4,437	2,415	634	44,519
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	88,466	58,468	5,384	8,957	14,489	2,502	178,266
IV. Industrial Metals, Machines, Conveyances ..	408,941	252,757	52,746	87,945	27,705	18,995	849,092
V. Precious Metals, Jewellery, Plate ..	3,589	3,127	351	619	301	25	8,012
VI. Textiles and Textile Goods (not Dress) ..	35,623	60,602	2,423	3,756	1,668	4,272	108,344
VII. Skins and Leather (not Clothing or Footwear) ..	8,153	6,425	1,651	1,619	973	119	18,940
VIII. Clothing (except Knitted) ..	50,376	52,600	6,940	5,066	3,000	865	118,847
IX. Food, Drink and Tobacco ..	94,188	81,612	45,572	17,921	12,247	8,528	260,068
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	34,664	24,995	15,161	7,977	8,350	6,542	97,689
XI. Furniture of Wood, Bedding, etc. ..	14,748	10,205	3,513	2,885	1,758	653	33,762
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	61,947	52,767	10,368	7,861	4,882	11,268	149,093
XIII. Rubber ..	11,459	14,617	2,766	2,546	446	304	32,138
XIV. Musical Instruments ..	1,473	325	50	38	40	..	1,926
XV. Miscellaneous Products ..	19,464	18,664	816	1,374	620	202	41,140
Total, Classes I. to XV.	878,430	664,718	154,726	158,058	82,098	56,233	1,994,263
XVI. Heat, Light and Power ..	38,016	21,783	7,666	4,915	4,276	3,963	80,619
Grand Total ..	916,446	686,501	162,392	162,973	86,374	60,196	2,074,882

(a) See para. I of this section, p. 176.

(ii) Total and Averages, 1955-56 to 1959-60. The value of production and the amount per person employed and per head of population are shown in the following table.

## FACTORIES: VALUE OF PRODUCTION.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
VALUE. (£'000.)							
1955-56 .. ..	644,086	491,948	128,080	120,936	69,733	45,931	1,500,714
1956-57 .. ..	706,799	528,031	138,400	126,766	73,442	48,682	1,622,120
1957-58 .. ..	757,862	566,476	143,958	133,285	75,312	51,830	1,728,723
1958-59 .. ..	805,315	608,948	155,465	139,810	78,762	54,301	1,842,601
1959-60 .. ..	916,446	686,501	162,392	162,973	86,374	60,196	2,074,882

## PER PERSON EMPLOYED. (£.)

1955-56 .. ..	1,487	1,385	1,250	1,306	1,392	1,697	1,415
1956-57 .. ..	1,620	1,487	1,343	1,378	1,507	1,759	1,525
1957-58 .. ..	1,700	1,586	1,414	1,441	1,554	1,846	1,610
1958-59 .. ..	1,792	1,678	1,484	1,485	1,627	1,910	1,693
1959-60 .. ..	1,962	1,799	1,551	1,646	1,740	2,029	1,833

## PER HEAD OF POPULATION. (£.)

1955-56 .. ..	182.72	192.46	94.12	144.92	104.56	144.30	162.04
1956-57 .. ..	196.93	201.11	99.28	147.16	107.85	149.94	171.18
1957-58 .. ..	207.02	210.81	101.21	150.43	108.59	156.09	178.55
1958-59 .. ..	215.96	221.44	107.18	153.92	111.58	160.36	186.45
1959-60 .. ..	241.40	243.47	109.86	174.56	120.41	174.93	205.65

(a) See para. 1 of this section, p. 176.

## § 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 1959-60.

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1959-60.  
(£'000.)

Value of—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Land and buildings	440,548	353,735	76,352	77,632	43,573	72,012	1,063,852
Plant and machinery	506,638	377,092	120,211	98,240	64,225	53,658	1,220,064
Total ..	947,186	730,827	196,563	175,872	107,798	125,670	2,283,916

(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. Consequently, the totals shown in the table 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 1955–56 to 1959–60.

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

Class of Industry.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	11,228	12,686	13,714	15,175	22,325
II. Bricks, Pottery, Glass, etc. ..	11,301	14,498	14,986	16,580	19,616
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	61,863	67,719	70,090	76,645	80,477
IV. Industrial Metals, Machines, Conveyances ..	218,667	252,837	300,343	336,282	387,934
V. Precious Metals, Jewellery, Plate ..	3,233	3,525	3,777	3,845	3,955
VI. Textiles and Textile Goods (not Dress)	31,931	37,010	40,199	46,671	48,379
VII. Skins and Leather (not Clothing or Footwear) ..	6,288	7,074	7,221	7,702	9,166
VIII. Clothing (except Knitted) ..	33,920	37,203	39,855	43,203	47,762
IX. Food, Drink and Tobacco ..	108,335	118,413	129,073	138,625	149,341
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	23,141	25,347	28,464	30,656	34,903
XI. Furniture of Wood, Bedding, etc. ..	9,915	11,223	12,992	14,677	16,251
XII. Paper, Stationery, Printing, Book-binding, etc. ..	40,256	44,912	52,854	61,059	68,997
XIII. Rubber ..	8,581	9,563	11,688	12,821	13,439
XIV. Musical Instruments ..	621	987	636	730	930
XV. Miscellaneous Products ..	9,946	11,491	12,922	14,688	18,345
<i>Total, Classes I. to XV.</i> ..	<i>579,226</i>	<i>654,488</i>	<i>738,814</i>	<i>819,359</i>	<i>921,820</i>
XVI. Heat, Light and Power ..	74,348	105,199	110,222	128,540	142,032
<b>Grand Total ..</b>	<b>653,574</b>	<b>759,687</b>	<b>849,036</b>	<b>947,899</b>	<b>1,063,852</b>

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1959–60.* The following table gives particulars of the various classes of industry in each State.

**FACTORIES: VALUE OF LAND AND BUILDINGS(a), 1959-60.**  
(£'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 ..	6,494	9,744	1,460	2,148	1,781	698	22,325
II. Bricks, Pottery, Glass, etc. ..	10,551	5,018	1,072	1,368	1,307	300	19,616
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	41,295	28,094	1,577	3,576	4,752	1,183	80,477
IV. Industrial Metals, Machines, Conveyances ..	182,147	126,411	22,030	33,219	13,741	10,386	387,934
V. Precious Metals, Jewellery, Plate ..	1,711	1,551	121	358	189	25	3,955
VI. Textiles and Textile Goods (not Dress)	15,053	28,657	907	1,732	620	1,410	48,379
VII. Skins and Leather (not Clothing or Footwear) ..	3,950	3,821	358	669	333	35	9,166
VIII. Clothing (except Knitted) ..	19,914	20,391	2,613	2,356	1,704	784	47,762
IX. Food, Drink and Tobacco ..	47,067	52,057	23,891	11,669	8,627	6,030	149,341
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	13,073	10,482	3,286	4,150	2,185	1,727	34,903
XI. Furniture of Wood, Bedding, etc. ..	6,595	5,306	1,608	1,546	851	345	16,251
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	28,700	23,801	4,535	3,999	1,937	6,025	68,997
XIII. Rubber ..	4,870	5,171	1,620	1,092	433	253	13,439
XIV. Musical Instruments ..	513	283	28	73	33	..	930
XV. Miscellaneous Products ..	8,075	8,733	403	587	392	155	18,345
<i>Total, Classes I. to XV.</i> ..	<i>390,008</i>	<i>329,520</i>	<i>65,509</i>	<i>68,542</i>	<i>38,885</i>	<i>29,356</i>	<i>921,820</i>
XVI. Heat, Light and Power ..	50,540	24,215	10,843	9,090	4,688	42,656	142,032
<b>Grand Total ..</b>	<b>440,548</b>	<b>353,735</b>	<b>76,352</b>	<b>77,632</b>	<b>43,573</b>	<b>72,012</b>	<b>1,063,852</b>

(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 1955-56 to 1959-60.

**FACTORIES: VALUE OF LAND AND BUILDINGS.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 .. ..	260,268	212,913	52,602	48,353	32,859	46,579	653,574
1956-57 .. ..	303,981	249,716	58,654	55,343	35,520	56,473	757,687
1957-58 .. ..	350,169	277,557	63,927	61,084	36,846	59,453	849,036
1958-59 .. ..	400,273	309,833	68,995	66,278	40,690	61,830	947,899
1959-60 .. ..	440,548	353,735	76,352	77,632	43,573	72,012	1,063,852

(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, an increase 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 it stood at £1,063.9 million in 1959-60.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1955-56 to 1959-60.* 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.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	23,512	27,351	30,623	35,099	49,658
II. Bricks, Pottery, Glass, etc. .. ..	12,319	13,138	13,443	14,564	16,286
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	125,016	127,732	137,520	153,820	157,731
IV. Industrial Metals, Machines, Conveyances .. ..	202,286	251,161	289,969	319,665	358,039
V. Precious Metals, Jewellery, Plate .. ..	1,219	1,374	1,388	1,348	1,541
VI. Textiles and Textile Goods (not Dress)	31,155	32,570	36,040	41,380	42,775
VII. Skins and Leather (not Clothing or Footwear) .. ..	4,225	4,332	4,240	4,348	4,216
VIII. Clothing (except Knitted) .. ..	14,340	15,699	15,621	16,407	17,244
IX. Food, Drink and Tobacco .. ..	115,904	124,406	131,708	138,940	147,262
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	23,626	25,045	27,043	29,121	30,841
XI. Furniture of Wood, Bedding, etc. .. ..	3,388	3,632	3,802	4,130	4,369
XII. Paper, Stationery, Printing, Book-binding, etc. .. ..	51,405	53,755	59,509	63,757	74,776
XIII. Rubber .. ..	8,971	8,626	10,234	10,333	12,240
XIV. Musical Instruments .. ..	509	682	429	426	386
XV. Miscellaneous Products .. ..	7,459	8,515	10,417	11,077	13,455
<i>Total, Classes I. to XV.</i> .. ..	<i>625,334</i>	<i>698,018</i>	<i>771,986</i>	<i>844,415</i>	<i>930,819</i>
XVI. Heat, Light and Power .. ..	172,501	219,019	240,749	263,970	289,245
<b>Grand Total</b> .. ..	<b>797,835</b>	<b>917,037</b>	<b>1,012,735</b>	<b>1,108,385</b>	<b>1,220,064</b>

(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 1959-60 of £111.7 million over 1958-59 extended over practically all industrial classes.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1955-56 to 1959-60. During 1959-60, increases occurred in all States, except Western Australia which declined by 2.8 per cent. South Australia showed the greatest relative increase with 15.9 per cent.

**FACTORIES: VALUE OF PLANT AND MACHINERY.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 .. ..	298,913	252,590	85,777	63,596	56,534	40,425	797,835
1956-57 .. ..	363,310	283,868	89,904	71,847	63,272	44,836	917,037
1957-58 .. ..	415,838	302,263	104,598	79,336	63,840	46,860	1,012,735
1958-59 .. ..	459,678	337,107	112,528	84,749	66,097	48,226	1,108,385
1959-60 .. ..	506,638	377,092	120,211	98,240	64,225	53,658	1,220,064

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

(iii) *Value according to Class of Industry, 1959-60.* The following table shows the value of plant and machinery used in factories in each State during 1959-60 according to class of industry.

**FACTORIES: VALUE OF PLANT AND MACHINERY(a), 1959-60.**

(£'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 .. ..	21,107	16,976	4,070	4,450	2,067	988	49,658
II. Bricks, Pottery, Glass, etc. .. ..	8,904	3,888	1,191	1,063	985	255	16,286
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	69,092	54,094	2,900	7,949	21,464	2,232	157,731
IV. Industrial Metals, Machines, Conveyances .. ..	199,697	89,797	15,232	32,871	9,196	11,246	358,039
V. Precious Metals, Jewellery, Plate .. ..	821	490	42	134	47	7	1,541
VI. Textiles and Textile Goods (not Dress) .. ..	13,706	23,278	1,084	2,021	423	2,263	42,775
VII. Skins and Leather (not Clothing or Footwear) .. ..	1,706	1,477	381	435	203	14	4,216
VIII. Clothing (except Knitted) .. ..	6,207	7,840	1,172	1,025	636	364	17,244
IX. Food, Drink and Tobacco .. ..	40,552	43,938	40,796	10,257	6,462	5,257	147,262
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	10,000	7,000	5,067	3,631	2,412	2,731	30,841
XI. Furniture of Wood, Bedding, etc. .. ..	1,774	1,276	496	476	270	77	4,369
XII. Paper, Stationery, Printing, Bookbinding, etc. .. ..	26,759	25,145	6,810	4,033	1,832	10,197	74,776
XIII. Rubber .. ..	3,820	6,598	866	586	244	126	12,240
XIV. Musical Instruments .. ..	299	73	4	7	3	..	386
XV. Miscellaneous Products .. ..	5,725	6,973	202	362	152	41	13,455
<i>Total, Classes I. to XV.</i>	<i>410,169</i>	<i>288,843</i>	<i>80,313</i>	<i>69,300</i>	<i>46,396</i>	<i>35,798</i>	<i>930,819</i>
XVI. Heat, Light and Power .. ..	96,469	88,249	39,898	28,940	17,829	17,860	289,245
<b>Grand Total .. ..</b>	<b>506,638</b>	<b>377,092</b>	<b>120,211</b>	<b>98,240</b>	<b>64,225</b>	<b>53,658</b>	<b>1,220,064</b>

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

4. *Depreciation of Land and Buildings and Plant and Machinery, 1959-60.*—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, 1959-60.**

(£'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 ..	2,041	1,300	390	501	227	91	4,550
II. Bricks, Pottery, Glass, etc. ..	1,170	570	149	147	125	28	2,189
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	7,153	6,500	308	754	2,556	618	17,889
IV. Industrial Metals, Machines, Conveyances ..	19,734	9,764	1,542	4,038	985	1,061	37,124
V. Precious Metals, Jewellery, Plate ..	60	42	4	11	4	1	122
VI. Textiles and Textile Goods (not Dress) ..	1,559	3,111	160	326	71	331	5,558
VII. Skins and Leather (not Clothing or Footwear) ..	154	157	36	53	29	1	430
VIII. Clothing (except Knitted) ..	691	703	109	78	64	51	1,696
IX. Food, Drink and Tobacco ..	4,372	5,208	4,027	1,132	770	531	16,040
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	1,074	724	585	359	276	339	3,357
XI. Furniture of Wood, Bedding, etc. ..	205	129	66	54	28	7	489
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	2,635	3,475	827	417	232	982	8,568
XIII. Rubber ..	923	1,015	167	160	42	23	2,330
XIV. Musical Instruments ..	44	7	..	1	..	..	52
XV. Miscellaneous Products ..	822	990	21	43	18	5	1,899
<i>Total, Classes I. to XV.</i>	<i>42,637</i>	<i>33,695</i>	<i>8,391</i>	<i>8,074</i>	<i>5,427</i>	<i>4,069</i>	<i>102,293</i>
XVI. Heat, Light and Power ..	10,421	3,796	2,432	1,009	1,173	665	19,496
<b>Grand Total ..</b>	<b>53,058</b>	<b>37,491</b>	<b>10,823</b>	<b>9,083</b>	<b>6,600</b>	<b>4,734</b>	<b>121,789</b>

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1955-56 to 1959-60.—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.(a)		Depreciation allowed during year.	
	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.
1955-56.. ..	653,574	797,835	82,808	156,535	8,209	60,508
1956-57.. ..	759,687	917,037	87,441	195,670	9,514	71,119
1957-58.. ..	849,036	1,012,735	75,762	176,903	10,899	85,818
1958-59.. ..	947,899	1,108,385	94,823	197,566	13,000	96,752
1959-60.. ..	1,063,852	1,220,064	101,971	231,162	13,303	108,486

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

§ 10. Principal Factory Products.

The factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau and in the bulletin *Secondary Industries* (see NOTE at beginning of this chapter).

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1959 to 1961. A more complete list, together with values, where available, is published in the *Secondary Industries* bulletin.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA.

Article.	Unit of Quantity.	1958-59.	1959-60.	1960-61.(a)
Acid—				
Nitric .. .. .	Ton	15,331	16,807	16,986
Sulphuric .. .. .	"	986,193	1,071,128	1,122,193
Aerated and Carbonated Waters .. .. .	'000 gals.	69,285	75,834	76,493
Asbestos Cement Building Sheets .. .. .	'000 sq. yds.	26,846	30,707	28,388
Bacon and Ham (cured weight) .. .. .	'000 lb.	74,815	71,572	(b)
Bags, Leather, Fibre, etc.—				
Handbags—				
Leather .. .. .	No.	792,973	792,854	(b)
Plastic .. .. .	"	1,401,958	1,750,264	(b)
Other .. .. .	"	94,964	102,612	(b)
School Bags .. .. .	"	128,633	135,332	(b)
Suitcases (c) .. .. .	"	1,322,930	1,410,563	(b)
All other (d) .. .. .	"	1,068,481	1,839,705	(b)
Baking Powder .. .. .	lb.	585,156	819,937	(b)
Bath Heaters—				
Electric .. .. .	No.	12,533	12,313	13,923
Gas .. .. .	"	23,190	21,301	17,190
Solid Fuel .. .. .	"	30,185	28,625	23,713
Bathing Suits .. .. .	Doz.	155,882	194,114	220,408
Baths, C.I.P.E. .. .. .	No.	87,954	91,591	84,189
Batteries, Wet Cell Type—				
Auto (S.L.I.) 6 Volts .. .. .	No.	648,246	694,062	623,966
" 12 Volts .. .. .	"	664,172	823,832	842,165
Radio, Homelighter, Fencer .. .. .	No. of 2 Volt Cells	233,560	216,405	209,310
Traction .. .. .	"	31,068	36,094	35,990
Other .. .. .	(e)	39,519	39,519	22,458
Beer (excluding Waste Beer) .. .. .	'000 gals.	223,597	231,675	(f) 241,758
Biscuits .. .. .	'000 lb.	172,540	177,579	180,691
Blankets .. .. .	'000	1,705	1,934	1,899
Boots and Shoes (see Footwear).				
Bran (Wheaten) .. .. .	Ton (2,000 lb.)	228,461	248,137	255,109
Brassieres .. .. .	Doz.	494,541	521,146	512,328
Bricks, Clay .. .. .	'000	940,198	1,030,444	1,061,134
Brooms .. .. .	Gross	21,227	20,503	(b)
Brushes (g) .. .. .	"	106,777	105,948	(b)
Butter .. .. .	Ton	190,923	195,007	179,424
Candles .. .. .	Cwt.	8,588	9,472	9,116
Cardigans, Sweaters, etc. .. .. .	Doz.	1,175,782	1,436,549	1,239,509
Cement, Portland .. .. .	Ton	2,481,036	2,631,599	2,859,680
Cheese (green weight) .. .. .	"	43,430	44,758	46,590
Cigarettes .. .. .	'000 lb.	35,255	39,391	40,806
Cleansing and Scouring Powders—				
Soap based (including Sand Soap) .. .. .	Cwt.	64,982	65,927	61,285
Other .. .. .	"	136,241	136,054	144,625
Cloth (h)—				
Cotton (excludes Towelling) .. .. .	'000 sq. yds.	42,285	43,125	44,572
Woolfen and Worsted .. .. .	"	27,265	30,235	26,552
Coke—				
Metallurgical .. .. .	Ton	2,210,621	2,376,097	2,761,668
Other .. .. .	"	815,464	758,668	(b)
Confectionery—				
Chocolate .. .. .	'000 lb.	66,305	73,275	78,548
Other .. .. .	"	92,457	95,536	94,856
Coppers—				
Electric .. .. .	No.	20,717	19,461	15,327
Gas .. .. .	"	21,834	20,110	15,447
Inserts (all types) .. .. .	"	43,393	37,343	(b)
Cordials and Syrups .. .. .	'000 gals.	4,556	4,962	5,274
Corsets and Corselets .. .. .	Doz.	174,619	200,165	215,381

(a) Subject to revision. (b) Not yet available. (c) Includes kitbags and trunks.  
 (d) Excludes canvas waterbags. (e) Not available for publication. (f) As reported by Department of Customs and Excise; includes waste. (g) Excludes tooth and industrial metal and bristle brushes. (h) Includes mixtures.

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

Article.	Unit of Quantity.	1958-59.	1959-60.	1960-61.(a)
Custard Powder .. .. .	'000 lb.	5,472	5,577	(b)
Cycles, Assembled .. .. .	No.	69,608	69,835	64,608
Dynamos—				
Alternators .. .. .	No.	330	611	(b)
Generators .. .. .	"	4,663	4,841	(b)
Electricity .. .. .	Mill. kWh	21,199	23,199	25,072
Engines—				
Diesel, other than Marine .. .. .	No.	1,670	3,216	3,079
Petrol—				
Marine .. .. .	"	4,419	5,174	9,053
Other (c) .. .. .	"	290,229	291,909	183,695
Essences, Flavouring—				
Culinary .. .. .	Gal.	120,686	111,173	(b)
Industrial .. .. .	"	347,452	379,774	(b)
Face Powder .. .. .	Cwt.	2,112	2,973	(b)
Fans, Electric (including Industrial) .. .. .	No.	(d)	(d)	266,565
Fats, Edible—				
Dripping .. .. .	Cwt.	517,313	(e)	(b)
Other .. .. .	"	529,919	555,595	(b)
Fibrous Plaster Sheets .. .. .	'000 sq. yds.	18,341	18,598	16,982
Fish, Canned (including Fish Loaf) .. .. .	'000 lb.	7,782	8,118	8,212
Floorboards—				
Australian Timber .. .. .	'000 super. ft.	139,163	150,208	(b)
Imported Timber .. .. .	"	2,691	2,094	(b)
Flour, Self-raising .. .. .	Cwt.	1,031,463	983,622	(b)
Flour, Wheaten (f) .. .. .	Ton (2,000 lb.)	1,367,244	1,507,213	1,571,033
Footwear (Not Rubber)—				
Boots, Shoes and Sandals .. .. .	'000 pairs	24,062	25,629	24,035
Slippers .. .. .	"	8,535	9,751	10,300
Fruit Juices, Natural .. .. .	'000 gals.	5,073	5,041	(b)
Gas (Town) .. .. .	Mill. cubic ft.	48,567	49,593	50,648
Gloves—				
Dress—				
Leather .. .. .	Doz. pairs.	1,692	930	328
Other .. .. .	"	52,816	58,304	42,761
Work, all types .. .. .	"	310,007	358,952	380,480
Golf Clubs .. .. .	Doz.	14,832	16,007	26,830
Handkerchiefs—				
Men's .. .. .	"	1,363,165	1,276,622	(b)
Women's .. .. .	"	1,634,059	1,617,728	(b)
Hats and Caps (excluding Berets) (g) .. .. .	"	522,086	513,701	(b)
Hose, Rubber, Garden .. .. .	'000 lin. ft.	2,514	2,494	(b)
Other .. .. .	"	10,680	11,706	(b)
Plastic, Garden .. .. .	"	23,854	33,743	(b)
Ice .. .. .	Ton	381,691	326,098	(b)
Ice Cream .. .. .	'000 gals.	16,095	16,524	17,806
Infants' and Invalid's Foods (h) .. .. .	Ton	14,134	15,985	16,464
Iron and Steel—				
Pig Iron .. .. .	'000 tons.	2,294	2,655	3,011
Steel Ingots .. .. .	"	3,204	3,520	3,737
Blooms and Billets .. .. .	"	2,814	3,022	3,214
Irons, Electric (Hand, Domestic) .. .. .	No.	305,899	334,247	285,889
Jams .. .. .	'000 lb.	78,234	84,702	81,311
Jelly Crystals .. .. .	"	12,756	12,551	(b)
Lacquer, Clear and Colours .. .. .	Gal.	1,597,532	1,794,192	1,333,576
Lard .. .. .	Cwt.	39,122	43,137	(b)
Lawn Mowers—				
Electric .. .. .	No.	1,038	(i)	(i)
Petrol .. .. .	"	248,967	246,721	198,801
Hand .. .. .	"	22,015	11,642	8,684
Leather—				
Dressed from Hides, Sold by Measurement .. .. .	'000 sq. ft.	64,008	59,597	(b)
Sold by Weight .. .. .	'000 lb.	218	199	(b)
Dressed from Skins .. .. .	'000 sq. ft.	20,166	20,348	(b)
Harness, Skirt, Belting, etc. .. .. .	'000 lb.	1,979	1,121	(b)
Sole .. .. .	"	26,601	22,432	(b)
Upholstery .. .. .	'000 sq. ft.	960	1,276	(b)
Lime, Crushed .. .. .	Ton	134,398	149,137	(b)
Hydrated .. .. .	"	55,419	56,846	(b)
Quick .. .. .	"	106,980	98,262	(b)

(a) Subject to revision. (b) Not yet available. (c) Excludes motor car, motor cycle, tractor and aero engines. (d) Not available. (e) Now included with Tallow—Edible. (f) Includes wheatmeal for baking and sharps. (g) Includes hoods and capelines. (h) Includes malted milk and milk sugar (lactose). (i) Not available for publication.

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

Article.	Unit of Quantity.	1958-59.	1959-60.	1960-61.(a)
Linseed Oil, extracted from Local Crushing	'000 gals.	859	1,235	(b)
from treatment of Unrefined	"	2,471	2,317	(b)
Lubricating Oil .. .. .	"	18,429	19,275	(b)
Malt, Barley .. .. .	'000 bus.	8,108	8,435	9,121
Margarine—				
Table .. .. .	'000 lb.	36,000	35,810	35,911
Other .. .. .	"	53,034	58,784	61,668
Mattresses, Wire .. .. .	No.	350,900	389,208	407,114
Inner Spring .. .. .	"	581,002	619,165	589,950
Soft Filled, etc. .. .. .	"	290,615	294,224	284,109
Meat, Canned .. .. .	'000 lb.	165,648	156,594	111,363
Milk—Condensed, Concentrated and				
Evaporated—				
Full Cream—Sweetened .. .. .	'000 lb.	70,843	75,862	66,558
Unsweetened .. .. .	"	66,856	72,715	72,554
Skim and/or Buttermilk .. .. .	"	11,072	9,992	9,636
Milk Powder—				
Full Cream .. .. .	Ton	19,183	19,591	19,331
Skim .. .. .	"	34,128	41,204	37,129
Buttermilk and Whey .. .. .	"	6,024	7,215	7,617
Mops, Floor .. .. .	Gross	12,580	15,426	(b)
Motor Bodies Made .. .. .	No.	169,486	204,007	213,828
Assembled .. .. .	"	77,827	99,013	85,389
Motor Spirit (including Benzol) .. .. .	'000 gals.	959,662	1,079,380	(b)
Motors, Electric .. .. .	No.	1,314,089	1,643,617	1,849,849
Nails .. .. .	Ton	23,815	25,858	(b)
Neckties .. .. .	Doz.	468,738	497,457	(b)
Newsprint .. .. .	Ton	83,071	88,510	88,039
Oatmeal (including Rolled Oats) .. .. .	Cwt.	289,026	313,441	310,381
Paint—				
Ready-mixed—Liquid and Enamels .. .. .	'000 gals.	11,415	12,028	11,681
Other than Water, in paste form (Heavy-bodied Whites, etc.) .. .. .	'000 lb.	4,177	3,957	3,331
Water—				
Emulsion Type .. .. .	'000 gals.	2,032	2,549	2,471
Powder (including Kalsomine) .. .. .	'000 lb.	3,295	2,793	2,740
Peanut Butter and Paste .. .. .	"	5,461	6,406	(b)
Perambulators .. .. .	No.	149,923	153,332	144,720
Pickles .. .. .	'000 pints	5,247	8,310	(b)
Pigments, Tinting Colours ground in oil .. .. .	Gal.	30,188	37,842	(b)
Zinc Oxide .. .. .	Cwt.	128,714	115,242	(b)
Other, including Dry Colours .. .. .	"	895,589	1,116,166	(b)
Plywood, ½ inch basis .. .. .	'000 sq. ft.	236,204	242,099	(b)
Pollard .. .. .	Ton (2,000 lb.)	291,500	317,690	328,602
Preserves—				
Fruit Preserved(c) .. .. .	'000 lb.	312,563	344,294	310,476
Vegetables Preserved .. .. .	"	73,349	83,159	90,008
Pyjamas—				
Men's and Boys' (Suits only) .. .. .	Doz.	365,118	340,754	341,805
Women's and Girls' (inc. Nightdresses) .. .. .	"	492,293	541,804	535,739
Racquet Frames (all types) .. .. .	"	16,063	17,463	12,670
Refrigerators, Domestic .. .. .	No.	219,790	237,150	217,283
Rice (Cleaned) .. .. .	Cwt.	1,437,217	1,583,301	(b)
Ropes and Cables (excluding Wire) .. .. .	"	133,352	145,658	141,014
Rugs .. .. .	'000	133	179	182
Sauce .. .. .	'000 pints	30,695	34,281	(b)
Semolina .. .. .	Ton (2,000 lb.)	7,353	8,492	11,181
Shirts (Men's and Boys') .. .. .	Doz.	1,614,502	1,836,098	1,827,798
Sink Heaters .. .. .	No.	19,821	17,094	15,856
Soap and Detergents—				
Soap, Personal Toilet .. .. .	Cwt.	397,756	375,806	403,619
Household .. .. .	"	695,445	734,644	717,022
Industrial (incl. Wool Scouring)(d) .. .. .	"	155,408	153,960	124,142
Extracts and Powders, Household .. .. .	"	710,463	731,054	593,708
Industrial .. .. .	"	90,636	95,095	91,716
Detergents, Personal Toilet .. .. .	"	10,743	12,108	13,810
Household .. .. .	"	164,214	220,082	252,881
Industrial .. .. .	"	47,017	36,057	34,208
Extracts and Powders—				
Household .. .. .	"	273,977	338,580	425,165
Industrial .. .. .	"	50,898	64,523	73,727

(a) Subject to revision.

(b) Not yet available.

(c) Includes canned apple, all types.

(d) Includes industrial flakes and chips.

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

Article.	Unit of Quantity.	1958-59.	1959-60.	1960-61.(a)
<b>Socks and Stockings—</b>				
Men's and Youths' .. .. .	'000 doz. pairs	1,311	1,557	1,365
Women's and Maids' .. .. .	"	2,458	2,550	2,606
Infants' and Babywear (including Anklets)	"	1,068	1,188	1,046
<b>Soup, Canned .. .. .</b>	'000 pints	31,480	41,138	(b)
Dry-Mix .. .. .	'000 lb.	4,329	5,363	(b)
Spades and Shovels .. .. .	Doz.	39,787	36,156	(b)
Starch, Edible .. .. .	Cwt.	407,245	500,084	489,417
Inedible .. .. .	"	165,939	209,242	(b)
Steel, Structural, Fabricated	Ton	256,904	325,129	(b)
<b>Stoves, Ovens and Ranges—</b>				
Domestic Cooking—				
Electric(c) .. .. .	No.	100,224	116,594	104,960
Gas .. .. .	"	67,919	98,745	92,098
Solid Fuel .. .. .	"	39,453	36,855	31,354
<b>Sugar, Raw (94 net titre)</b>	Ton	1,412,286	1,287,546	1,382,611
Refined .. .. .	"	518,921	540,087	526,266
Sulphate of Ammonia .. .. .	"	117,489	104,861	100,030
Superphosphate .. .. .	"	2,124,087	2,379,975	2,530,884
Talcum Powder .. .. .	Cwt.	37,593	47,097	(b)
<b>Tallow—</b>				
Edible (including Dripping)	"	1,020,061	1,040,059	(b)
Inedible .. .. .	"	2,256,272	2,349,131	(b)
Television Sets .. .. .	No.	316,412	438,458	311,815
<b>Tiles, Roofing—</b>				
Cement .. .. .	'000	52,260	56,896	53,343
Terracotta .. .. .	"	59,232	56,873	55,349
<b>Timber—</b>				
From Native Logs—				
Hardwood .. .. .	'000 super. ft.	1,158,799	1,208,595	} 1,396,917
Softwood .. .. .	"	301,175	312,451	
From Imported Logs—				
Hardwood .. .. .	"	} 36,037	43,380	38,328
Softwood .. .. .	"			
Toasters, Electric (Domestic)	No.	188,033	211,152	235,920
Tobacco .. .. .	'000 lb.	17,087	15,262	14,612
Tomato Juice .. .. .	Gal.	1,468,223	1,298,088	2,114,477
Towels .. .. .	Doz.	759,161	862,814	695,341
<b>Transformers, Chokes and Ballasts—</b>				
For distribution of Power and Light, etc.	No.	72,541	65,363	(b)
For Fluorescent Lights and Neon Signs ..	"	1,458,976	1,732,313	(b)
For Radio Receivers, Record Players, etc.	"	240,610	334,818	(b)
For Television Receivers .. .. .	"	298,742	325,097	(b)
For Welders .. .. .	"	6,030	7,589	(b)
For other purposes .. .. .	"	30,525	97,218	(b)
Twine (all types) .. .. .	Cwt.	186,771	156,963	215,525
<b>Tyres, Pneumatic—</b>				
Motor Car and Motor Cycle .. .. .	No.	3,205,931	3,453,485	3,649,576
Truck and Omnibus .. .. .	"	567,286	569,165	469,551
Aero and Tractor .. .. .	"	166,946	204,953	201,287
<b>Umbrellas .. .. .</b>				
Underwear (Men's, Women's, Children's) ..	'000 doz.	510,580	605,857	(b)
		4,914	5,170	5,361
<b>Vacuum Cleaners (Domestic) .. .. .</b>	No.	86,287	95,766	92,238
<b>Washing Machines, Household, Electric ..</b>	No.	180,188	201,873	195,460
<b>Weatherboards—</b>				
Australian Timber .. .. .	'000 super. ft.	26,279	27,581	(b)
Imported Timber .. .. .	"	2,649	2,981	(b)
Wheatmeal(d) .. .. .	Ton (2,000 lb.)	82,908	83,943	92,904
Wheelbarrows (Metal) .. .. .	No.	77,378	93,316	(b)
Wireless and Television Cabinets .. .. .	No.	546,461	652,958	539,887
Wireless Receiving Sets (incl. Radiograms)	"	378,316	402,588	451,167
<b>Wool Scoured—</b>				
For sale .. .. .	'000 lb.	40,285	40,703	} 156,019
For use in own works .. .. .	"	47,463	53,290	
On commission .. .. .	"	69,808	80,928	
Wool Tops .. .. .	"	40,991	48,021	40,811
<b>Yarn(e)—</b>				
Cotton .. .. .	"	42,523	46,411	43,875
Woollen .. .. .	"	21,593	26,673	25,247
Worsted .. .. .	"	18,894	23,885	23,063
<b>Zinc Oxide (see Pigments)</b>				

(a) Subject to revision.

(b) Not yet available.

(d) Excludes wheatmeal for baking included with flour.  
the fibre mentioned.(c) Includes stoves, cookers, etc.  
(e) Includes mixtures predominantly of

## § 11. Individual Industries.

1. General.—Particulars on pages 161–88, §§ 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 publication, 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 the value added to raw materials by the process of manufacture. It is calculated by deducting “Value of materials used” and “Value of fuel used”, as defined above, from the “Value of output”.

*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, para. 5 of this chapter, page 158.

Details of some of the principal articles produced in factories in Australia during the years 1958–59 to 1960–61 are shown in the table on 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 1959–60 and for a series of years in the following table.

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

AUSTRALIA, 1959–60.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories .. .. .	14	15	494	523
Number of persons employed .. .. .	3,168	2,727	6,159	12,054
Salaries and wages paid .. .. . £'000	3,541	3,193	6,697	13,431
Value of power, fuel, etc., used .. .. . £'000	4,853	391	372	5,616
Value of materials used .. .. . £'000	7,039	6,645	19,710	33,394
Value of production .. .. . £'000	10,815	5,941	14,029	30,785
Total value of output .. .. . £'000	22,707	12,977	34,111	69,795
Value of land and buildings .. .. . £'000	3,591	2,566	4,457	10,614
Value of plant and machinery .. .. . £'000	14,604	2,837	6,833	24,274
Horse-power of engines ordinarily in use h.p.	94,220	15,919	22,571	132,710

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS—*continued.*

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	489	479	481	499	523
Number of persons employed .. ..	11,167	10,688	10,994	11,392	12,054
Salaries and wages paid .. ..	£'000 10,044	10,312	10,864	11,648	13,431
Value of power, fuel, etc., used .. ..	£'000 4,792	5,119	5,124	5,265	5,616
Value of materials used .. ..	£'000 21,999	23,226	25,579	28,739	33,394
Value of production .. ..	£'000 19,460	21,228	23,121	26,179	30,785
Total value of output .. ..	£'000 46,251	49,573	53,824	60,183	69,795
Value of land and buildings .. ..	£'000 6,128	6,994	7,407	8,308	10,614
Value of plant and machinery .. ..	£'000 15,542	18,454	19,823	21,754	24,274
Horse-power of engines ordinarily in use .. ..	h.p. 108,715	105,805	106,905	125,082	132,710

3. **Industrial and Heavy Chemicals.**—The following tables show particulars of the Industrial and Heavy Chemical industry for each State during 1959-60 and for Australia for a series of years. 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).

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	140	93	24	15	13	2	287
Number of persons employed .. ..	7,469	5,392	384	942	(a)	(a)	14,423
Salaries and wages paid .. ..	£'000 9,092	6,417	359	1,020	(a)	(a)	17,146
Value of power, fuel, etc., used .. ..	£'000 2,896	1,207	88	573	(a)	(a)	4,874
Value of materials used .. ..	£'000 28,359	14,738	1,113	1,279	(a)	(a)	46,212
Value of production .. ..	£'000 23,738	14,895	943	3,242	(a)	(a)	43,497
Total value of output .. ..	£'000 54,993	30,840	2,144	5,094	(a)	(a)	94,583
Value of land and buildings .. ..	£'000 11,848	10,485	485	1,504	(a)	(a)	24,657
Value of plant and machinery .. ..	£'000 22,403	12,909	1,070	4,044	(a)	(a)	41,326
Horse-power of engines ordinarily in use .. ..	h.p. 65,432	39,580	2,857	6,077	(a)	(a)	117,311

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

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	258	270	281	302	287
Number of persons employed .. ..	14,107	14,509	15,085	15,813	14,423
Salaries and wages paid .. ..	£'000 13,574	14,684	15,875	17,240	17,146
Value of power, fuel, etc., used .. ..	£'000 3,462	3,845	4,208	4,616	4,874
Value of materials used .. ..	£'000 33,506	38,335	43,497	46,605	46,212
Value of production .. ..	£'000 29,895	34,513	35,930	42,512	43,497
Total value of output .. ..	£'000 66,863	76,693	83,635	93,733	94,583
Value of land and buildings .. ..	£'000 15,987	17,831	21,055	22,948	24,657
Value of plant and machinery .. ..	£'000 27,125	29,190	36,157	38,137	41,326
Horse-power of engines ordinarily in use .. ..	h.p. 101,527	107,787	121,393	130,928	117,311

4. **Pharmaceutical and Toilet Preparations.**—The following tables show particulars of the Pharmaceutical and Toilet Preparations industry for each State during 1959–60 and for Australia for a series of years.

**PHARMACEUTICAL AND TOILET PREPARATIONS.**  
1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	133	58	7	13	4	1	216
Number of persons employed .. ..	4,052	3,026	113	532	(a)	(a)	7,791
Salaries and wages paid .. £'000	3,473	3,058	76	426	(a)	(a)	7,074
Value of power, fuel, etc., used .. ..	£'000 160	606	2	38	(a)	(a)	810
Value of materials used .. ..	£'000 13,817	7,912	166	1,316	(a)	(a)	23,311
Value of production .. ..	£'000 20,029	7,722	181	947	(a)	(a)	28,985
Total value of output .. ..	£'000 34,006	16,240	349	2,301	(a)	(a)	53,106
Value of land and buildings .. ..	£'000 6,476	4,557	50	329	(a)	(a)	11,528
Value of plant and machinery .. ..	£'000 2,129	2,999	50	145	(a)	(a)	5,347
Horse-power of engines ordinarily in use .. .. h.p.	6,407	9,863	66	1,612	(a)	(a)	18,084

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

**AUSTRALIA.**

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	206	206	212	210	216
Number of persons employed .. ..	6,400	6,446	6,834	6,976	7,791
Salaries and wages paid .. .. £'000	4,635	5,020	5,531	5,886	7,074
Value of power, fuel, etc., used .. ..	£'000 259	312	386	754	810
Value of materials used .. ..	£'000 13,565	15,292	18,226	19,575	23,311
Value of production .. ..	£'000 15,279	17,312	21,856	23,130	28,985
Total value of output .. ..	£'000 29,103	32,916	40,468	43,459	53,106
Value of land and buildings .. ..	£'000 6,830	7,828	9,677	10,750	11,528
Value of plant and machinery .. ..	£'000 2,686	2,746	3,262	4,519	5,347
Horse-power of engines ordinarily in use .. .. h.p.	14,301	16,666	14,962	16,702	18,084

5. **White Lead, Paints and Varnish.**—The following table shows particulars of this industry for each State during 1959–60 and for Australia for a series of years.

**WHITE LEAD, PAINTS AND VARNISH.**  
1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	83	49	16	15	14	4	181
Number of persons employed .. ..	2,946	1,568	313	482	(a)	(a)	5,475
Salaries and wages paid .. .. £'000	3,208	1,616	259	478	(a)	(a)	5,710
Value of power, fuel, etc., used .. ..	£'000 269	94	19	27	(a)	(a)	416
Value of materials used .. ..	£'000 14,785	7,506	1,800	1,961	(a)	(a)	26,892
Value of production .. ..	£'000 8,595	3,513	1,291	1,573	(a)	(a)	15,446
Total value of output .. ..	£'000 23,649	11,113	3,110	3,561	(a)	(a)	42,754
Value of land and buildings .. ..	£'000 3,108	2,531	304	619	(a)	(a)	6,942
Value of plant and machinery .. ..	£'000 1,874	1,718	134	367	(a)	(a)	4,219
Horse-power of engines ordinarily in use .. .. h.p.	13,857	7,630	1,435	1,929	(a)	(a)	25,879

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

**AUSTRALIA.**

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	178	186	184	188	181
Number of persons employed .. ..	5,804	5,815	5,749	5,532	5,475
Salaries and wages paid .. .. £'000	5,300	5,508	5,608	5,448	5,710
Value of power, fuel, etc., used .. ..	£'000 384	400	445	419	416
Value of materials used .. ..	£'000 23,504	23,916	24,619	25,448	26,892
Value of production .. ..	£'000 12,874	13,567	13,853	13,184	15,446
Total value of output .. ..	£'000 36,762	37,883	38,917	39,051	42,754
Value of land and buildings .. ..	£'000 5,563	6,680	6,397	6,327	6,942
Value of plant and machinery .. ..	£'000 3,261	3,408	3,986	3,696	4,219
Horse-power of engines ordinarily in use .. .. h.p.	25,050	26,969	25,443	25,093	25,879

6. Soap and Candle Factories.—The following table shows particulars of factories in the Soap and Candle industry in each State for 1959–60 and for Australia for a series of years.

## SOAP AND CANDLES.

1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	66	32	9	6	4	3	120
Number of persons employed .. ..	1,962	868	239	50	(a)	(a)	3,210
Salaries and wages paid .. .. £'000	1,961	938	207	39	(a)	(a)	3,220
Value of power, fuel, etc., used .. £'000	168	185	21	5	(a)	(a)	383
Value of materials used .. .. £'000	8,233	6,390	701	141	(a)	(a)	15,835
Value of production .. .. £'000	8,853	4,565	481	67	(a)	(a)	14,131
Total value of output .. .. £'000	17,254	11,140	1,203	213	(a)	(a)	30,349
Value of land and buildings .. £'000	1,373	997	158	36	(a)	(a)	2,652
Value of plant and machinery .. £'000	1,928	833	182	36	(a)	(a)	3,054
Horse-power of engines ordinarily in use .. .. h.p.	7,103	4,843	1,085	311	(a)	(a)	13,689

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

## AUSTRALIA.

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	92	87	90	89	(a) 120
Number of persons employed .. ..	3,167	2,932	2,983	2,929	3,210
Salaries and wages paid .. .. £'000	2,858	2,704	2,830	2,822	3,220
Value of power, fuel, etc., used .. £'000	406	393	441	387	383
Value of materials used .. .. £'000	12,057	12,437	14,446	15,253	15,835
Value of production .. .. £'000	8,147	9,150	10,525	11,941	14,131
Total value of output .. .. £'000	20,610	21,980	25,412	27,581	30,349
Value of land and buildings .. .. £'000	1,743	1,784	1,871	2,039	2,652
Value of plant and machinery .. £'000	3,001	3,150	2,973	3,118	3,054
Horse-power of engines ordinarily in use .. .. h.p.	10,711	10,922	11,296	12,632	13,689
Materials used—					
Tallow .. .. cwt.	1,162,578	1,152,865	1,219,538	1,161,856	1,031,906
Alkali for Soap(b) .. ..	390,757	366,796	386,712	384,680	403,950
Coconut oil—refined and unrefined ..	83,346	80,395	94,952	92,719	96,470
Articles produced—					
Soap (excluding Sand Soap) .. ..	1,269,648	1,231,890	1,311,796	1,248,609	1,264,410
Cleansers and Scourers (including Sand Soap) .. .. cwt.	105,046	78,186	72,586	64,466	65,927
Soap Extracts and Powders .. ..	910,443	866,961	875,959	801,099	826,149
Candles made .. ..	10,011	10,354	7,444	8,588	9,472

(a) The increase in the number of factories is due mainly to the reclassification of a number of factories in New South Wales. (b) Includes Soda Ash.

7. Chemical Fertilizers.—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1959–60 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.

1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	14	5	8	9	6	7	49
Number of persons employed .. ..	836	1,443	(a)	826	927	(a)	4,763
Salaries and wages paid .. .. £'000	999	1,707	(a)	886	948	(a)	5,369
Value of power, fuel, etc., used .. £'000	256	215	(a)	77	169	(a)	994
Value of materials used .. .. £'000	3,817	8,033	(a)	4,605	5,993	(a)	26,348
Value of production .. .. £'000	2,220	3,639	(a)	1,744	2,482	(a)	11,520
Total value of output .. .. £'000	6,293	11,887	(a)	6,426	8,644	(a)	38,862
Value of land and buildings .. £'000	3,143	777	(a)	758	1,847	(a)	7,508
Value of plant and machinery .. £'000	2,972	1,418	(a)	2,851	1,803	(a)	10,257
Horse-power of engines ordinarily in use .. .. h.p.	14,614	13,151	(a)	10,155	9,334	(a)	58,519

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

## CHEMICAL FERTILIZERS—continued.

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	54	52	49	48	49
Number of persons employed .. ..	4,911	5,074	5,050	4,959	4,763
Salaries and wages paid .. .. £'000	4,809	5,069	5,309	5,207	5,369
Value of power, fuel, etc., used .. .. £'000	939	1,160	950	995	994
Value of materials used .. ..	24,098	25,479	28,862	25,756	26,348
Value of production .. ..	£'000 10,267	10,158	12,175	11,440	11,520
Total value of output .. ..	£'000 35,304	36,797	41,987	38,191	38,862
Value of land and buildings .. ..	£'000 7,033	7,341	7,583	7,633	7,508
Value of plant and machinery .. ..	£'000 11,645	11,404	10,835	10,808	10,257
Horse-power of engines ordinarily in use .. .. h.p.	58,044	59,457	58,212	57,587	58,519

8. Iron and Steel Works and Engineering.—(i) *General.* The first group included under this heading (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. Detailed statistics for the four groups mentioned are shown in the following tables.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table, particulars are shown for each State for 1959-60 and for Australia for a series of years for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

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

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of factories .. ..	17	11	..	5	2	..	35
Number of persons employed .. ..	29,683	1,315	..	(a)	(a)	..	31,825
Salaries and wages paid .. .. £'000	36,288	1,610	..	(a)	(a)	..	38,793
Value of power, fuel, etc., used .. .. £'000	27,851	341	..	(a)	(a)	..	30,202
Value of materials used .. ..	£'000 156,219	2,333	..	(a)	(a)	..	162,677
Value of production .. ..	£'000 79,711	2,478	..	(a)	(a)	..	86,256
Total value of output .. ..	£'000 263,781	5,152	..	(a)	(a)	..	279,135
Value of land and buildings .. ..	£'000 13,469	476	..	(a)	(a)	..	14,417
Value of plant and machinery .. ..	£'000 91,154	758	..	(a)	(a)	..	95,110
Horse-power of engines ordinarily in use .. .. h.p.	661,068	11,925	..	(a)	(a)	..	690,291

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	28	34	35	34	35
Number of persons employed .. ..	20,805	26,078	28,526	29,982	31,825
Salaries and wages paid .. .. £'000	22,037	28,636	31,469	34,220	38,793
Value of power, fuel, etc., used .. ..	£'000 17,864	20,538	22,150	23,539	30,202
Value of materials used .. ..	£'000 101,416	136,483	137,674	153,563	162,677
Value of production .. ..	£'000 44,269	66,385	70,379	78,154	86,256
Total value of output .. ..	£'000 163,549	223,406	230,203	255,256	279,135
Value of land and buildings .. ..	£'000 6,457	9,054	9,953	11,400	14,417
Value of plant and machinery .. ..	£'000 29,154	61,608	71,048	82,451	95,110
Horse-power of engines ordinarily in use h.p.	363,751	448,541	536,530	633,180	690,291

(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 on page 190 and 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 1959-60 and for Australia for a series of years in the following table.

## FOUNDRIES—FERROUS.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	80	165	24	26	17	..	312
Number of persons employed .. ..	2,876	2,951	1,002	565	459	..	7,853
Salaries and wages paid .. .. £'000	3,198	3,337	962	584	423	..	8,504
Value of power, fuel, etc., used .. .. £'000	373	472	78	87	111	..	1,121
Value of materials used .. .. £'000	2,555	3,370	965	615	400	..	7,905
Value of production .. .. £'000	4,285	5,005	1,510	911	614	..	12,325
Total value of output .. .. £'000	7,213	8,847	2,553	1,613	1,125	..	21,351
Value of land and buildings .. .. £'000	1,550	2,344	437	238	297	..	4,866
Value of plant and machinery .. .. £'000	1,096	1,802	416	235	242	..	3,791
Horse-power of engines ordinarily in use .. .. h.p.	10,726	12,153	3,596	2,835	3,145	..	32,455

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	373	368	373	346	312
Number of persons employed .. ..	7,434	7,633	7,801	7,376	7,853
Salaries and wages paid .. .. £'000	6,706	7,060	7,548	7,293	8,504
Value of power, fuel, etc., used .. .. £'000	918	975	997	955	1,121
Value of materials used .. .. £'000	5,396	6,221	6,664	6,687	7,905
Value of production .. .. £'000	9,652	10,235	11,237	10,615	12,325
Total value of output .. .. £'000	15,966	17,431	18,898	18,257	21,351
Value of land and buildings .. .. £'000	3,564	3,899	4,244	3,912	4,866
Value of plant and machinery .. .. £'000	3,234	3,545	3,615	2,963	3,791
Horse-power of engines ordinarily in use .. .. h.p.	30,738	32,835	33,042	31,612	32,455

(iv) *Plant, Equipment and Machinery (including Machine Tools)*. The next table shows particulars for this group for each State during 1959-60 and for Australia for a series of years.

## PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	1,195	758	193	223	137	12	2,518
Number of persons employed .. ..	29,376	27,645	6,213	9,469	3,104	289	76,096
Salaries and wages paid .. .. £'000	33,025	30,597	5,652	9,450	2,872	289	81,885
Value of power, fuel, etc., used .. .. £'000	1,246	1,342	262	580	136	8	3,574
Value of materials used .. .. £'000	62,967	51,530	8,798	16,243	4,515	352	144,405
Value of production .. .. £'000	57,379	51,908	8,884	15,587	4,212	432	138,402
Total value of output .. .. £'000	121,592	104,780	17,944	32,410	8,863	792	286,381
Value of land and buildings .. .. £'000	23,575	22,265	2,850	4,645	2,369	412	56,116
Value of plant and machinery .. .. £'000	14,990	16,003	2,478	4,032	1,629	275	39,407
Horse-power of engines ordinarily in use .. .. h.p.	101,890	97,473	20,713	33,616	13,099	706	267,497

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	2,062	2,212	2,240	2,345	2,518
Number of persons employed .. ..	68,699	69,476	69,540	70,905	76,096
Salaries and wages paid .. .. £'000	61,872	65,272	67,000	70,371	81,885
Value of power, fuel, etc., used .. .. £'000	2,570	2,775	2,964	3,161	3,574
Value of materials used .. .. £'000	93,510	99,172	114,716	122,408	144,405
Value of production .. .. £'000	98,574	106,922	110,365	115,472	138,402
Total value of output .. .. £'000	194,654	208,869	228,045	241,041	286,381
Value of land and buildings .. .. £'000	34,019	39,692	45,592	49,927	56,116
Value of plant and machinery .. .. £'000	26,261	29,112	32,805	36,400	39,407
Horse-power of engines ordinarily in use .. .. h.p.	217,880	222,937	236,230	250,580	267,497

(v) *Other Engineering.* Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1959-60 and for Australia for a series of years in the following table.

## OTHER ENGINEERING.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	827	902	151	190	155	93	2,318
Number of persons employed ..	7,492	10,370	1,534	3,662	881	1,841	25,780
Salaries and wages paid .. £'000	7,765	10,711	1,318	3,607	688	1,769	25,858
Value of power, fuel, etc., used £'000	311	467	40	100	37	63	1,018
Value of materials used .. £'000	8,927	13,355	1,349	4,211	940	2,328	31,110
Value of production .. £'000	12,440	18,086	2,045	5,824	1,181	2,688	42,264
Total value of output .. £'000	21,678	31,908	3,434	10,135	2,158	5,079	74,392
Value of land and buildings £'000	6,008	8,014	761	2,421	619	1,410	19,233
Value of plant and machinery £'000	3,941	6,359	557	1,942	298	685	13,782
Horse-power of engines ordinarily in use .. .. h.p.	25,927	34,279	4,690	14,288	3,921	6,269	89,374

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	2,220	2,166	2,223	2,220	2,318
Number of persons employed ..	24,445	23,148	23,370	23,467	25,780
Salaries and wages paid .. £'000	20,477	20,037	20,768	21,682	25,858
Value of power, fuel, etc., used .. £'000	698	674	699	806	1,018
Value of materials used .. £'000	24,534	22,320	23,780	26,059	31,110
Value of production .. £'000	32,949	31,568	34,274	34,829	42,264
Total value of output .. £'000	58,181	54,562	58,753	61,694	74,392
Value of land and buildings .. £'000	13,205	13,801	15,485	16,655	19,233
Value of plant and machinery .. £'000	9,363	9,440	10,746	12,201	13,782
Horse-power of engines ordinarily in use h.p.	78,246	72,254	76,500	76,109	89,374

9. *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 1959-60 and for Australia for a series of years.

## EXTRACTING AND REFINING OF NON-FERROUS METALS: ALLOYS.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	33	24	5	2	4	3	71
Number of persons employed ..	1,370	300	907	(b)	13	(b)	7,438
Salaries and wages paid .. £'000	1,788	351	1,104	(b)	12	(b)	9,535
Value of power, fuel, etc., used £'000	563	54	1,151	(b)	4	(b)	4,833
Value of materials used .. £'000	15,191	3,317	16,992	(b)	50	(b)	64,376
Value of production .. £'000	3,269	862	2,775	(b)	37	(b)	20,502
Total value of output .. £'000	19,023	4,233	20,918	(b)	91	(b)	89,711
Value of land and buildings £'000	1,094	436	2,938	(b)	11	(b)	10,105
Value of plant and machinery £'000	2,694	223	4,013	(b)	22	(b)	21,495
Horse-power of engines ordinarily in use .. .. h.p.	8,931	1,034	16,923	(b)	264	(b)	86,776

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	56	58	63	68	71
Number of persons employed ..	7,029	7,212	7,254	7,269	7,438
Salaries and wages paid .. £'000	7,434	8,720	8,667	8,880	9,535
Value of power, fuel, etc., used .. £'000	3,753	4,282	4,413	4,724	4,833
Value of materials used .. £'000	70,000	68,426	58,120	61,060	64,376
Value of production .. £'000	17,787	19,773	18,138	18,129	20,502
Total value of output .. £'000	91,540	92,481	80,671	83,913	89,711
Value of land and buildings .. £'000	6,155	6,566	6,907	7,326	10,105
Value of plant and machinery .. £'000	13,367	14,485	15,262	15,764	21,495
Horse-power of engines ordinarily in use h.p.	79,696	76,212	76,070	76,680	86,776

(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.

10. Electrical Machinery, Cables and Apparatus.—The following table shows particulars of this industry for each State during 1959–60 and for Australia for a series of years.

**ELECTRICAL MACHINERY, CABLES AND APPARATUS.**  
1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	636	430	72	115	91	16	1,360
Number of persons employed ..	32,729	15,027	1,996	2,046	1,036	255	53,089
Salaries and wages paid .. £'000	34,019	15,303	1,817	1,795	861	216	54,011
Value of power, fuel, etc., used £'000	1,676	862	55	52	26	14	2,685
Value of materials used .. £'000	70,060	31,113	3,396	2,686	1,043	414	108,712
Value of production .. £'000	59,205	23,761	2,621	2,854	1,327	431	90,199
Total value of output .. £'000	130,941	55,736	6,072	5,592	2,396	859	201,596
Value of land and buildings £'000	21,616	13,232	1,394	1,484	755	198	38,679
Value of plant and machinery £'000	14,904	10,892	952	591	172	91	27,602
Horse-power of engines ordinarily in use .. .. h.p.	69,386	37,456	7,025	2,446	1,655	331	118,299

**AUSTRALIA.**

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	1,099	1,153	1,152	1,213	1,360
Number of persons employed ..	43,841	44,594	46,394	50,069	53,089
Salaries and wages paid .. £'000	36,663	38,780	41,892	46,979	54,011
Value of power, fuel, etc., used .. £'000	1,808	1,964	2,155	2,493	2,685
Value of materials used .. £'000	75,129	76,256	84,212	94,964	108,712
Value of production .. £'000	57,036	63,198	69,589	76,808	90,199
Total value of output .. £'000	133,973	141,418	155,956	174,265	201,596
Value of land and buildings .. £'000	19,992	25,306	28,316	32,958	38,679
Value of plant and machinery .. £'000	13,854	16,409	20,046	23,627	27,602
Horse-power of engines ordinarily in use h.p.	83,279	91,991	98,679	111,980	118,299

11. Railway and Tramway Workshops (Government and Local Authority).—The railway and tramway workshops, which form an important part of Class IV., are owned chiefly by State Governments and Local Authorities. *Workshops (fourteen in 1959–60) controlled by non-public bodies are not included in the figures below.*

**TRAMCARS AND RAILWAY ROLLING STOCK.(a)**  
1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	38	22	30	13	19	7	129
Number of persons employed ..	13,510	7,214	7,776	3,955	3,511	780	36,746
Salaries and wages paid .. £'000	12,802	6,862	7,100	3,709	3,020	715	34,208
Value of power, fuel, etc., used £'000	454	221	162	136	111	28	1,112
Value of materials used .. £'000	5,049	6,136	3,279	3,048	1,645	257	19,414
Value of production .. £'000	15,548	8,707	8,150	4,570	3,598	900	41,473
Total value of output .. £'000	21,051	15,064	11,591	7,754	5,354	1,185	61,999
Value of land and buildings £'000	6,291	2,215	1,203	1,741	605	706	12,761
Value of plant and machinery £'000	10,540	1,426	1,520	2,365	985	338	17,174
Horse-power of engines ordinarily in use .. .. h.p.	42,241	24,104	20,591	14,686	11,554	3,267	116,443

**AUSTRALIA.**

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	125	125	124	139	129
Number of persons employed ..	38,357	38,780	38,079	37,993	36,746
Salaries and wages paid .. £'000	33,159	33,670	32,946	33,599	34,208
Value of power, fuel, etc., used .. £'000	1,061	1,090	1,083	1,080	1,112
Value of materials used .. £'000	20,555	21,565	20,050	19,563	19,414
Value of production .. £'000	40,404	41,172	40,685	41,557	41,473
Total value of output .. £'000	62,020	63,827	61,818	62,200	61,999
Value of land and buildings .. £'000	11,076	11,494	11,775	12,374	12,761
Value of plant and machinery .. £'000	14,072	14,673	15,234	16,547	17,174
Horse-power of engines ordinarily in use h.p.	116,775	122,852	114,805	115,162	116,443

(a) Government and Local Authority only.

Two railway workshops in the Northern Territory are engaged in repairing rolling stock, etc., no new goods being manufactured. Particulars of these establishments are not included in any of the tables in this chapter.

12. Motor Vehicles.—The industries catering for the motor trade are included in Class IV., Industrial Metals, Machines and Conveyances. In the following table, a summary is given of the principal statistics for 1959–60 for each branch of industry associated with the motor trade of Australia.

**MOTOR VEHICLES: CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.**  
1959-60.

Items.	Construction and Assembly.	Repairs.	Motor Bodies. (a)	Motor Accessories.	Total.
Number of factories .. ..	57	9,898	1,859	275	12,089
Number of persons employed .. ..	21,758	60,297	27,899	10,277	120,231
Salaries and wages paid .. .. £'000	25,266	48,203	29,670	10,710	113,849
Value of power, fuel, etc., used .. .. £'000	1,718	1,547	1,169	689	5,123
Value of materials used .. .. £'000	52,387	51,454	57,018	15,068	175,927
Value of production .. .. £'000	43,887	75,501	43,216	19,656	182,260
Total value of output .. .. £'000	97,992	128,502	101,403	35,413	363,310
Value of land and buildings .. .. £'000	20,500	66,572	19,121	7,569	113,762
Value of plant and machinery .. .. £'000	16,972	13,688	12,588	7,060	50,308
Horse-power of engines ordinarily in use h.p.	58,662	69,368	63,614	36,766	228,410

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

In the next table, similar details are shown on a State basis for 1959-60 and for Australia for a series of years for these industries combined.

**MOTOR VEHICLES: CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	5,069	2,899	1,436	1,203	1,135	347	12,089
Number of persons employed .. ..	40,493	40,548	10,525	19,090	7,177	2,398	120,231
Salaries and wages paid .. .. £'000	36,826	41,245	8,004	20,201	5,597	1,976	113,849
Value of power, fuel, etc., used .. .. £'000	1,604	2,094	253	868	243	61	5,123
Value of materials used .. .. £'000	73,217	44,693	9,259	37,775	8,729	2,254	175,927
Value of production .. .. £'000	59,532	67,070	15,565	27,328	9,294	3,471	182,260
Total value of output .. .. £'000	134,353	113,857	25,077	65,971	18,266	5,786	363,310
Value of land and buildings .. .. £'000	42,556	42,146	7,502	13,131	5,991	2,436	113,762
Value of plant and machinery .. .. £'000	17,255	18,794	2,082	9,891	1,715	571	50,308
Horse-power of engines ordinarily in use .. .. h.p.	64,550	81,923	13,736	50,600	14,552	3,049	228,410

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	9,707	10,334	10,909	11,354	12,089
Number of persons employed .. ..	105,959	107,480	110,380	113,200	120,231
Salaries and wages paid .. .. £'000	84,082	86,282	91,886	97,078	113,849
Value of power, fuel, etc., used .. .. £'000	3,189	3,747	4,250	4,603	5,123
Value of materials used .. .. £'000	126,933	120,297	143,724	149,577	175,927
Value of production .. .. £'000	126,459	132,018	148,383	161,569	182,260
Total value of output .. .. £'000	256,581	256,062	296,357	315,749	363,310
Value of land and buildings .. .. £'000	66,235	78,817	89,561	99,734	113,762
Value of plant and machinery .. .. £'000	32,390	40,890	46,630	47,742	50,308
Horse-power of engines ordinarily in use h.p.	202,963	206,792	211,264	223,901	228,410

The table below shows the production and imports of motor bodies for 1955-56 to 1960-61.

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

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.	1960-61. (b)
Motor Bodies(a)—						
Made .. .. No.	129,700	120,781	160,675	169,486	204,007	213,828
Assembled from Panels imported or made elsewhere .. .. No.	94,676	77,548	81,630	77,835	99,013	85,461
Imported (c) .. .. No.	19,041	7,062	(d) 5,890	(d) 6,104	(d) 6,178	(d) 8,352

(a) Excludes sidescars. (b) Preliminary—subject to revision. (c) Includes bodies on complete vehicles imported. (d) Since 20th March, 1958, includes only those bodies imported as complete vehicles.

13. **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 1959-60 and for Australia for a series of years.

### AGRICULTURAL MACHINES AND IMPLEMENTS.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	154	108	63	40	39	..	404
Number of persons employed ..	1,821	5,910	1,616	1,645	367	..	11,359
Salaries and wages paid .. £'000	1,831	6,246	1,365	1,546	328	..	11,316
Value of power, fuel, etc., used £'000	72	437	83	119	11	..	722
Value of materials used .. £'000	2,442	10,595	1,770	2,305	495	..	17,607
Value of production .. £'000	2,706	8,852	2,145	2,650	494	..	16,847
Total value of output .. £'000	5,220	19,884	3,998	5,074	1,000	..	35,176
Value of land and buildings £'000	1,801	2,869	977	811	379	..	6,857
Value of plant and machinery £'000	536	2,797	671	609	112	..	4,725
Horse-power of engines ordinarily in use .. .. h.p.	8,418	20,537	6,629	5,839	1,499	..	42,922

### AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	..	324	348	370	358
Number of persons employed ..	..	11,938	10,387	10,449	10,727
Salaries and wages paid .. £'000	..	10,364	9,107	9,534	10,178
Value of power, fuel, etc., used .. £'000	..	670	581	638	674
Value of materials used .. £'000	..	13,082	11,084	13,438	14,162
Value of production .. £'000	..	14,650	14,038	15,599	15,426
Total value of output .. £'000	..	28,402	25,703	29,675	30,262
Value of land and buildings .. £'000	..	5,774	6,153	6,620	6,666
Value of plant and machinery .. £'000	..	4,673	4,800	4,537	4,418
Horse-power of engines ordinarily in use h.p.	..	39,878	40,254	39,652	39,201
					42,922

14. **Wireless and Amplifying Apparatus.**—This industry is confined mainly to New South Wales, Victoria and South Australia. Technical advances and the requirements of the fighting forces led to considerable expansion in the industry during the 1939-45 War and this development has continued, with one or two exceptions, in each subsequent year. The introduction of television services in 1956 gave a further stimulus to the industry. The number of broadcast listeners' licences increased from a third of a million in 1930-31 to 2,256,000 at 30th June, 1961, and this increase reflects the advancement of the industry during that period. At 30th June, 1961, 1,217,000 television viewers' licences were in force.

### WIRELESS AND AMPLIFYING APPARATUS: AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	181	205	211	257	289
Number of persons employed ..	..	9,171	12,074	16,002	16,482
Salaries and wages paid .. £'000	..	7,051	9,145	13,264	14,264
Value of power, fuel, etc., used .. £'000	..	231	312	479	550
Value of materials used .. £'000	..	10,363	16,801	36,756	39,255
Value of production .. £'000	..	8,907	11,767	20,725	23,431
Total value of output .. £'000	..	19,501	28,880	57,960	63,236
Value of land and buildings .. £'000	..	3,428	4,752	6,374	7,897
Value of plant and machinery .. £'000	..	1,761	3,101	4,250	5,018
Horse-power of engines ordinarily in use h.p.	..	9,624	11,658	13,506	12,952
Articles Produced—					
Wireless receiving sets made (a) No.	458,012	366,282	380,753	378,316	402,588
Television receiving sets made .. No.	2,636	121,232	282,430	316,412	438,101

(a) Including radiograms and car radios.

15. Cotton.—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. Production shows marked fluctuations over the long term, varying during the last forty years from 27 million lb. in 1934–35 to 719,000 lb. in 1949–50. During 1959–60, 9.5 million lb. were produced and in 1960–61, 15.5 million lb. The growing of cotton, which is confined mainly 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 which 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 1960–61) from the United States of America, Mexico, China (Mainland), Pakistan and Peru.

(iii) *Spinning and Weaving.* The post war expansion in the spinning and weaving section of the cotton industry marks an important stage 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 1955–56 to 1959–60.

## COTTON SPINNING AND WEAVING: AUSTRALIA.

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	97	91	97	97	92
Number of persons employed .. ..	9,598	9,754	9,879	9,770	9,780
Salaries and wages paid .. £'000	7,297	7,799	8,268	8,116	8,853
Value of power, fuel, etc., used .. £'000	703	890	958	988	997
Value of materials used .. .. £'000	18,571	19,485	24,025	19,403	20,631
Value of production .. .. £'000	12,227	14,202	15,622	14,751	16,224
Total value of output .. .. £'000	31,501	34,577	40,605	35,142	37,852
Value of land and buildings .. .. £'000	5,719	6,478	7,179	10,625	9,706
Value of plant and machinery .. .. £'000	4,637	5,312	6,702	9,949	9,414
Horse-power of engines ordinarily in use h.p.	34,657	34,568	35,880	38,779	37,240

16. 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.

1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	39	81	4	3	3	4	134
Number of persons employed .. ..	6,351	11,691	1,012	639	(a)	(a)	22,433
Salaries and wages paid .. £'000	5,194	9,604	623	502	(a)	(a)	18,052
Value of power, fuel, etc., used £'000	424	858	50	48	(a)	(a)	1,563
Value of materials used .. .. £'000	11,821	25,506	1,880	1,090	(a)	(a)	47,440
Value of production .. .. £'000	9,089	14,508	864	827	(a)	(a)	29,131
Total value of output .. .. £'000	21,334	40,872	2,794	1,965	(a)	(a)	78,134
Value of land and buildings .. .. £'000	2,816	6,509	256	235	(a)	(a)	10,625
Value of plant and machinery .. .. £'000	3,821	6,679	330	329	(a)	(a)	12,599
Horse-power of engines ordinarily in use .. .. h.p.	15,842	42,117	3,745	1,623	(a)	(a)	70,811

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

WOOL CARDING, SPINNING AND WEAVING—*continued.*

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	145	143	146	141	134
Number of persons employed .. ..	21,899	23,217	22,386	20,809	22,433
Salaries and wages paid .. .. £'000	14,409	16,340	16,380	15,714	18,052
Value of power, fuel, etc., used .. .. £'000	1,345	1,479	1,463	1,445	1,563
Value of materials used .. .. £'000	39,532	49,303	46,012	37,252	47,440
Value of production .. .. £'000	24,082	27,649	25,737	26,458	29,131
Total value of output .. .. £'000	64,959	78,431	73,212	65,155	78,134
Value of land and buildings .. .. £'000	7,713	9,019	9,364	10,515	10,625
Value of plant and machinery .. .. £'000	10,673	10,855	11,641	12,082	12,599
Horse-power of engines ordinarily in use h.p.	71,752	99,385	70,433	72,301	70,811
Articles produced—					
Woolen and worsted cloth(a)(b)'000 sq. yds.	30,279	32,782	31,719	27,265	30,235
Blankets and rugs(a) .. .. '000	1,799	1,841	2,032	1,838	2,113

(a) Includes production in other industries.

(b) Includes mixtures, predominantly Wool.

17. Hosiery and Other Knitted Goods.—Details for each State for 1959-60 and for Australia for a series of years are shown in the following table.

## HOSIERY AND OTHER KNITTED GOODS.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	195	482	5	8	7	4	701
Number of persons employed .. ..	6,492	16,938	607	129	(a)	(a)	24,414
Salaries and wages paid .. .. £'000	5,016	13,146	385	78	(a)	(a)	18,791
Value of power, fuel, etc., used .. .. £'000	203	573	12	3	(a)	(a)	798
Value of materials used .. .. £'000	11,780	27,695	1,526	164	(a)	(a)	41,479
Value of production .. .. £'000	9,708	23,798	754	116	(a)	(a)	34,629
Total value of output .. .. £'000	21,691	52,066	2,292	283	(a)	(a)	76,906
Value of land and buildings .. .. £'000	3,072	9,486	213	57	(a)	(a)	12,962
Value of plant and machinery .. .. £'000	2,262	6,581	219	37	(a)	(a)	9,171
Horse-power of engines ordinarily in use .. .. h.p.	5,198	15,643	709	190	(a)	(a)	22,019

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

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	664	665	657	663	701
Number of persons employed .. ..	23,409	23,492	22,939	22,851	24,414
Salaries and wages paid .. .. £'000	15,117	16,052	16,124	16,421	18,791
Value of power, fuel, etc., used .. .. £'000	687	744	770	787	798
Value of materials used .. .. £'000	31,822	34,769	38,002	34,701	41,479
Value of production .. .. £'000	27,236	29,035	28,615	31,325	34,629
Total value of output .. .. £'000	59,745	64,548	67,387	66,813	76,906
Value of land and buildings .. .. £'000	9,339	9,939	10,910	12,144	12,962
Value of plant and machinery .. .. £'000	8,159	8,143	8,539	9,353	9,171
Horse-power of engines ordinarily in use h.p.	20,315	22,911	21,858	23,290	22,019

The following quantities of yarn were used in these establishments during 1959-60:—Worsted or woollen 8,898,762 lb.; mixtures predominantly woollen or worsted, 1,637,901 lb.; cotton, 12,449,066 lb.; mercerised cotton, 266,385 lb.; rayon, spun, 951,820 lb.; rayon filament, 3,306,928 lb.; silk, 4,637 lb.; polyamides (nylon, etc.), spun, 949,794 lb.; filament, 3,712,573 lb.; other, including mixtures, 2,412,484 lb. Production of garments and stockings is shown in § 10 (see p. 189).

18. 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.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. .. .	58	34	13	7	5	1	118
Number of persons employed ..	1,753	1,764	556	217	(a)	(a)	4,435
Salaries and wages paid .. £'000	1,939	1,763	543	228	(a)	(a)	4,612
Value of power, fuel, etc., used £'000	196	201	47	28	(a)	(a)	484
Value of materials used .. £'000	7,009	5,272	2,231	757	(a)	(a)	15,766
Value of production .. £'000	2,928	2,639	836	310	(a)	(a)	6,967
Total value of output .. £'000	10,133	8,112	3,114	1,095	(a)	(a)	23,217
Value of land and buildings £'000	1,501	1,606	105	99	(a)	(a)	3,399
Value of plant and machinery £'000	873	813	237	154	(a)	(a)	2,152
Horse-power of engines ordinarily in use .. h.p.	12,590	13,327	4,407	1,955	(a)	(a)	33,516

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

AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. .. .	137	133	124	123	118
Number of persons employed ..	4,972	4,746	4,708	4,617	4,435
Salaries and wages paid .. £'000	4,468	4,383	4,413	4,510	4,612
Value of power, fuel, etc., used .. £'000	415	446	470	490	484
Value of materials used .. £'000	11,180	11,738	11,938	12,635	15,766
Value of production .. £'000	6,082	5,736	6,214	6,919	6,967
Total value of output .. £'000	17,677	17,920	18,622	20,044	23,217
Value of land and buildings .. £'000	2,176	2,314	2,341	2,535	3,399
Value of plant and machinery .. £'000	2,231	2,264	2,154	2,223	2,152
Horse-power of engines ordinarily in use h.p.	31,590	30,799	32,378	30,749	33,516

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1959-60 are shown in the following table.

**TANNERIES: MATERIALS USED AND PRODUCTION, 1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<i>Materials used—</i>							
<i>Hides (cattle)—</i>							
Yearling .. No.	(a)	(a)	(a)	(a)	(a)	..	140,780
Light Hides(b) .. .. .	446,551	468,750	218,727	80,070	(a)	(a)	1,268,071
Heavy Hides(c) .. .. .	351,148	409,191	174,655	52,267	(a)	(a)	1,042,961
<i>Skins—</i>							
Calf .. .. .	681,244	..	(a)	(a)	..	..	692,825
Goat .. .. .	(a)	..	(a)	(a)	..	..	470,076
Sheep including Pelts .. .. .	1,883,940	336,384	(a)	(a)	..	..	2,727,144
Marsupial .. .. .	104,035	..	(a)	(a)	(a)	..	240,678
<i>Bark used—</i>							
Wattle .. tons	1,252	3,617	527	(a)	..	(a)	5,543
Mallet and Other .. .. .	(a)	174	..	(a)	(a)	..	410
Tanning extract (veg.) used ..	1,794	2,351	1,441	(a)	596	(a)	6,625
<i>Articles produced—</i>							
<i>Leather made—</i>							
Sole .. .. lb.	4,882,332	9,838,107	4,738,211	(a)	(a)	(a)	22,432,381
Harness, Belting, etc. .. .. .	456,961	220,640	(a)	(a)	(a)	..	1,121,181
Upholstery .. .. sq. ft.	(a)	(a)	(a)	(a)	(a)	..	1,276,447
<i>Dressed and Upper from Hides—</i>							
<i>Sold by Measurement—</i>							
Patent .. .. sq. ft.	(a)	(a)	..	..	..	..	766,463
All Other .. .. .	23,190,524	19,860,995	9,868,047	4,458,743	(a)	(a)	58,830,432
<i>Sold by Weight (all kinds)—</i>							
.. .. lb.	(a)	(a)	..	..	(a)	(a)	199,069
<i>Dressed from skins—</i>							
Calf .. .. sq. ft.	(a)	931,164	73,562	(a)	..	..	4,676,811
Goat .. .. .	2,269,117	(a)	(a)	(a)	..	..	2,322,669
Sheep .. .. .	9,903,423	787,975	(a)	(a)	..	..	12,117,347
Marsupial .. .. .	459,940	186,098	(a)	(a)	(a)	..	1,173,570

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

(b) Up to

45 lb.

(c) Over 45 lb.

19. Tailoring and Ready-made Clothing.—Statistics showing the distribution of this industry among the States in 1959-60 and for Australia for a series of years are shown in the following table.

**TAILORING AND READY-MADE CLOTHING.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	940	584	108	95	116	17	1,860
Number of persons employed ..	18,491	10,401	2,097	1,307	684	190	33,170
Salaries and wages paid .. £'000	12,245	7,587	1,094	758	337	112	22,133
Value of power, fuel, etc., used .. £'000	241	169	24	21	10	2	467
Value of materials used .. £'000	22,805	15,009	1,406	894	608	69	40,791
Value of production .. £'000	19,866	11,759	1,747	1,042	610	142	35,166
Total value of output .. £'000	42,912	26,937	3,177	1,957	1,228	213	76,424
Value of land and buildings £'000	6,960	4,649	541	637	405	95	13,287
Value of plant and machinery £'000	1,618	1,204	158	93	62	12	3,147
Horse-power of engines ordinarily in use .. .. h.p.	5,840	3,688	638	468	220	45	10,899

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	1,952	1,944	1,914	1,841	1,860
Number of persons employed ..	32,587	31,920	31,457	31,406	33,170
Salaries and wages paid .. £'000	18,261	18,760	19,337	19,533	22,133
Value of power, fuel, etc., used .. £'000	393	416	422	440	467
Value of materials used .. £'000	35,941	35,883	36,680	36,253	40,791
Value of production .. £'000	28,940	29,811	31,117	31,371	35,166
Total value of output .. £'000	65,274	66,110	68,219	68,064	76,424
Value of land and buildings .. £'000	9,484	10,137	11,014	11,948	13,287
Value of plant and machinery .. £'000	2,746	2,861	2,913	3,063	3,147
Horse-power of engines ordinarily in use h.p.	9,017	9,133	9,671	10,143	10,899

20. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1955-56 to 1959-60 are shown in the following table.

**DRESSMAKING AND MILLINERY: AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	1,410	1,311	1,295	1,249	1,228
Number of persons employed ..	17,675	16,265	15,668	15,048	15,021
Salaries and wages paid .. £'000	9,063	8,783	8,859	8,599	9,205
Value of power, fuel, etc., used .. £'000	177	185	184	184	190
Value of materials used .. £'000	13,029	12,447	11,999	11,272	11,758
Value of production .. £'000	14,585	14,244	14,220	13,766	14,764
Total value of output .. £'000	27,791	26,876	26,403	25,222	26,712
Value of land and buildings .. £'000	5,788	5,966	6,693	6,937	7,623
Value of plant and machinery .. £'000	1,174	1,152	1,246	1,171	1,114
Horse-power of engines ordinarily in use h.p.	4,697	4,635	4,558	5,159	4,880

21. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1959-60 and for Australia for a series of years.

**SHIRTS, COLLARS AND UNDERCLOTHING.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	158	154	21	27	14	2	376
Number of persons employed ..	5,001	5,798	1,072	448	(a)	(a)	12,891
Salaries and wages paid .. £'000	3,322	3,915	544	245	(a)	(a)	8,326
Value of power, fuel, etc., used £'000	57	61	8	5	(a)	(a)	137
Value of materials used .. £'000	7,975	6,529	694	272	(a)	(a)	15,823
Value of production .. £'000	5,222	6,782	763	347	(a)	(a)	13,572
Total value of output .. £'000	13,254	13,372	1,465	624	(a)	(a)	29,532
Value of land and buildings £'000	1,714	1,875	183	129	(a)	(a)	4,050
Value of plant and machinery £'000	548	494	75	38	(a)	(a)	1,206
Horse-power of engines ordinarily in use .. .. h.p.	1,887	2,513	294	163	(a)	(a)	5,090

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

**SHIRTS, COLLARS AND UNDERCLOTHING—continued.**  
**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	404	397	384	394	376
Number of persons employed .. ..	12,686	13,157	13,038	13,589	12,891
Salaries and wages paid .. .. £'000	6,957	7,640	7,718	8,223	8,326
Value of power, fuel, etc., used .. .. £'000	119	129	134	147	137
Value of materials used .. .. £'000	16,112	16,285	16,595	16,410	15,823
Value of production .. .. £'000	11,328	12,051	11,945	13,271	13,572
Total value of output .. .. £'000	27,559	28,465	28,674	29,828	29,532
Value of land and buildings .. .. £'000	2,999	3,543	3,587	3,924	4,050
Value of plant and machinery .. .. £'000	1,146	1,229	1,233	1,317	1,206
Horse-power of engines ordinarily in use h.p.	4,881	5,177	5,064	5,357	5,090

22. Boots and Shoes.—(i) *Details of Industry.* Boot and shoe factories hold an important place in respect of both 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 sand shoes, goloshes and gum, etc., boots of rubber are not included here, being classified under Rubber Goods, see para. 39, page 220.

**BOOTS AND SHOES.**  
**1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Aust.
Number of factories .. ..	159	196	28	14	11	47	455
Number of persons employed .. ..	6,371	11,040	975	1,121	523	171	20,201
Salaries and wages paid .. .. £'000	5,020	8,911	714	995	371	90	16,101
Value of power, fuel, etc., used .. .. £'000	88	167	11	15	6	2	289
Value of materials used .. .. £'000	8,197	16,385	1,192	1,662	530	172	28,138
Value of production .. .. £'000	7,327	13,691	932	1,429	503	177	24,059
Total value of output .. .. £'000	15,612	30,243	2,135	3,106	1,039	351	52,486
Value of land and buildings .. .. £'000	1,771	3,035	165	265	164	151	5,551
Value of plant and machinery .. .. £'000	876	2,914	232	415	177	37	4,651
Horse-power of engines ordinarily in use .. .. h.p.	4,489	10,603	971	953	489	169	17,674

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	494	474	486	482	455
Number of persons employed .. ..	21,557	21,432	20,839	20,449	20,201
Salaries and wages paid .. .. £'000	14,310	15,234	15,090	15,148	16,101
Value of power, fuel, etc., used .. .. £'000	233	257	266	275	289
Value of materials used .. .. £'000	21,812	22,221	22,854	25,222	28,138
Value of production .. .. £'000	20,480	21,222	22,019	22,530	24,059
Total value of output .. .. £'000	42,525	43,700	45,139	48,027	52,486
Value of land and buildings .. .. £'000	3,846	4,267	4,567	5,254	5,551
Value of plant and machinery .. .. £'000	3,646	3,715	3,979	4,307	4,651
Horse-power of engines ordinarily in use h.p.	16,485	16,496	16,663	17,572	17,674

(a) Includes details of boot and shoe repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made in factories producing boots and shoes in each State are shown for 1959-60 in the following table. Particulars relating to the output of sand shoes, goloshes and gum, etc., boots of rubber are not included.

**BOOT AND SHOE FACTORIES: OUTPUT, 1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Boots, shoes and sandals							
pairs	8,287,830	14,008,321	1,042,657	1,616,089	599,557	74,335	25,628,789
£	15,027,739	25,110,082	1,934,198	2,995,433	889,642	175,566	46,132,660
Slippers .. pairs	2,175,289	7,072,402	321,609	19,626	163,040	..	9,751,966
£	1,768,072	3,654,081	274,000	21,130	142,867	..	5,860,150

23. Flour-milling.—(i) *Details of Industry.* The following table shows particulars of the flour-milling industry in each State for the year 1959-60 and for Australia for a series of years.

## FLOUR-MILLING.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	45	34	12	22	18	4	135
Number of persons employed .. ..	1,572	1,292	570	447	396	133	4,410
Salaries and wages paid .. .. £'000	1,782	1,338	525	465	405	142	4,657
Value of power, fuel, etc., used .. .. £'000	381	234	93	95	110	15	928
Value of materials used .. .. £'000	21,361	17,472	6,083	5,795	6,012	1,232	57,955
Value of production .. .. £'000	4,963	3,340	926	851	786	234	11,100
Total value of output .. .. £'000	26,705	21,046	7,102	6,741	6,908	1,481	69,983
Value of land and buildings .. .. £'000	2,793	2,026	810	426	743	184	6,982
Value of plant and machinery .. .. £'000	2,450	1,781	805	478	537	124	6,175
Horse-power of engines ordinarily in use .. .. h.p.	18,743	14,801	5,169	4,079	5,151	1,310	49,253

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	151	143	142	135	135
Number of persons employed .. ..	4,548	4,729	4,284	4,301	4,410
Salaries and wages paid .. .. £'000	4,073	4,375	4,190	4,281	4,657
Value of power, fuel, etc., used .. .. £'000	835	946	827	827	928
Value of materials used .. .. £'000	54,498	59,094	53,659	51,806	57,955
Value of production .. .. £'000	7,575	9,608	9,934	9,816	11,100
Total value of output .. .. £'000	62,908	69,648	64,420	62,449	69,983
Value of land and buildings .. .. £'000	5,211	5,686	6,322	6,711	6,982
Value of plant and machinery .. .. £'000	5,405	5,690	5,962	5,902	6,175
Horse-power of engines ordinarily in use .. h.p.	47,786	48,103	48,449	48,684	49,253

(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 1955-56 to 1960-61 was as follows.

## FLOUR-MILLING: PRODUCTION OF FLOUR.(a)

(Tons of 2,000 lb.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 ..	571,084	454,628	169,793	154,327	193,490	27,983	1,571,305
1956-57 ..	621,476	492,956	170,397	164,274	184,717	29,157	1,662,977
1957-58 ..	416,490	482,731	143,613	138,537	163,347	28,739	1,373,457
1958-59 ..	455,709	431,656	151,457	137,806	160,909	29,707	1,367,244
1959-60 ..	564,149	434,444	160,382	146,527	170,839	30,872	1,507,213
1960-61 (b) ..	573,856	470,142	160,780	154,730	183,120	28,405	1,571,033

(a) Includes wheatmeal for baking and sharps.

(b) Preliminary, subject to revision.

In addition, 565,827 tons (2,000 lb. per ton) of bran and pollard were produced in 1959-60 and 583,711 tons in 1960-61. The total quantity of wheat ground in flour mills was 67,999,773 bushels in 1959-60 and 72,129,000 bushels in 1960-61.

24. 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 table does not give complete details of the industry, as a large number of bakeries, etc. 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).

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Aust.(a)
Number of factories .. ..	1,601	1,146	513	294	294	151	3,999
Number of persons employed ..	8,081	6,006	2,581	1,732	1,087	1,766	21,253
Salaries and wages paid .. £'000	5,805	4,238	1,503	1,259	623	1,508	14,936
Value of power, fuel, etc., used .. £'000	1,035	779	284	210	139	177	2,624
Value of materials used .. £'000	17,922	12,919	5,376	4,068	2,458	5,644	48,387
Value of production .. £'000	13,797	10,110	3,664	2,837	1,794	3,193	35,395
Total value of output .. £'000	32,754	23,808	9,324	7,115	4,391	9,014	86,406
Value of land and buildings .. £'000	9,873	7,706	1,874	1,701	1,116	1,680	23,950
Value of plant and machinery .. £'000	5,375	4,189	1,376	1,149	830	2,203	15,122
Horse-power of engines ordinarily in use .. .. h.p.	11,432	8,670	3,287	3,395	2,226	5,943	34,953

## AUSTRALIA.(a)

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	3,878	3,813	3,986	4,150	3,999
Number of persons employed .. ..	19,543	19,964	20,323	20,994	21,253
Salaries and wages paid .. .. £'000	11,611	12,663	13,110	13,729	14,936
Value of power, fuel, etc., used .. .. £'000	2,090	2,308	2,440	2,546	2,624
Value of materials used .. .. £'000	37,820	40,704	43,476	45,612	48,387
Value of production .. .. £'000	26,418	29,706	29,816	32,182	35,395
Total value of output .. .. £'000	66,328	72,718	75,732	80,340	86,406
Value of land and buildings .. .. £'000	15,865	17,991	20,205	22,220	23,950
Value of plant and machinery .. .. £'000	9,461	10,590	11,797	13,551	15,122
Horse-power of engines ordinarily in use h.p.	29,535	30,204	32,162	33,716	34,953

(a) Includes confectionery in Tasmania.

25. 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 included 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 1955–56 to 1959–60.

## SUGAR-MILLS.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
<b>NEW SOUTH WALES.</b>					
Number of factories .. .. .	3	3	3	3	3
Number of persons employed .. ..	152	153	170	254	243
Cane crushed .. .. . tons	284,539	294,087	303,086	471,658	574,527
Raw sugar produced (94 net titre) tons	36,028	35,918	36,854	58,743	70,526
<b>QUEENSLAND.</b>					
Number of factories .. .. .	31	31	31	31	31
Number of persons employed .. ..	7,044	7,099	6,547	6,621	6,197
Cane crushed .. .. . tons	8,616,163	8,978,081	8,945,617	9,740,795	8,427,731
Raw sugar produced (94 net titre) tons	1,135,685	1,171,879	1,256,271	1,353,543	1,217,020
<b>Molasses—</b>					
Sold to distilleries .. .. '000 gals	22,772	24,094	20,558	24,045	21,287
Used as fodder .. .. .	5,285	5,536	4,861	6,028	5,347
Used as manure .. .. .	10,637	9,177	10,880	10,059	6,287
Sold or used for other purposes .. ..	2,292	1,979	1,077	724	716
Total molasses disposed of .. ..	40,986	40,786	37,376	40,856	33,637

26. *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 1959–60, there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The total quantity of raw sugar treated amounted to 558,510 tons for a yield of 540,087 tons of refined sugar.

27. *Confectionery.*—Particulars for 1959–60 for each State and for Australia for a series of years are shown hereunder.

## CONFECTIONERY.

1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories .. .. .	88	89	18	13	6	(a)	214
Number of persons employed .. ..	867	3,102	109	359	268	(a)	6,765
Salaries and wages paid .. .. £'000	370	2,524	88	226	185	(a)	5,493
Value of power, fuel, etc., used £'000	268	236	9	23	19	(a)	555
Value of materials used .. .. £'000	8,683	7,441	366	596	588	(a)	17,674
Value of production .. .. £'000	5,976	4,280	154	351	378	(a)	11,139
Total value of output .. .. £'000	14,927	11,957	529	970	985	(a)	29,368
Value of land and buildings £'000	2,400	2,392	93	328	96	(a)	5,309
Value of plant and machinery £'000	2,240	2,218	67	143	77	(a)	4,745
Horse-power of engines ordinarily in use .. .. h.p.	13,607	14,649	352	1,462	501	(a)	30,571

## AUSTRALIA.(b)

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. .. .	226	213	217	209	214
Number of persons employed .. ..	7,183	6,818	6,789	6,704	6,765
Salaries and wages paid .. .. £'000	4,805	4,866	4,982	5,037	5,493
Value of power, fuel, etc., used .. .. £'000	473	509	529	536	555
Value of materials used .. .. £'000	15,583	15,391	16,052	16,842	17,674
Value of production .. .. £'000	8,932	9,885	9,771	10,586	11,139
Total value of output .. .. £'000	24,988	25,785	26,352	27,964	29,368
Value of land and buildings .. .. £'000	3,324	3,239	4,351	4,812	5,309
Value of plant and machinery .. .. £'000	3,612	3,582	3,891	4,572	4,745
Horse-power of engines ordinarily in use h.p.	29,156	27,348	29,256	30,504	30,571

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

(b) Excludes Tasmania.

28. 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 1959–60 and for Australia for a series of years.

**JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR.**  
1959–60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	53	56	20	20	9	19	177
Number of persons employed ..	2,450	4,748	1,359	878	129	1,229	10,793
Salaries and wages paid .. ..	£'000 2,284	4,610	1,170	668	94	1,068	9,894
Value of power, fuel, etc., used ..	£'000 267	485	80	56	8	96	992
Value of materials used .. ..	£'000 8,476	21,270	5,111	2,338	320	2,438	39,953
Value of production .. ..	£'000 5,091	10,069	2,068	1,179	213	1,634	20,254
Total value of output .. ..	£'000 13,834	31,824	7,259	3,573	541	4,168	61,199
Value of land and buildings ..	£'000 2,342	7,250	732	677	153	941	12,095
Value of plant and machinery ..	£'000 1,729	6,025	422	1,076	69	841	10,162
Horse-power of engines ordinarily in use .. ..	h.p. 10,425	20,513	2,631	2,734	370	5,577	42,250

**AUSTRALIA.**

Items.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of factories .. ..	..	183	182	187	180
Number of persons employed ..	..	11,578	12,019	11,407	10,762
Salaries and wages paid .. ..	£'000	8,924	9,698	9,752	9,186
Value of power, fuel, etc., used ..	£'000	802	957	978	949
Value of materials used .. ..	£'000	32,323	39,874	41,159	38,358
Value of production .. ..	£'000	16,103	18,792	19,753	17,458
Total value of output .. ..	£'000	49,228	59,623	61,890	56,765
Value of land and buildings ..	£'000	8,874	9,790	10,621	11,630
Value of plant and machinery ..	£'000	8,083	8,752	9,275	9,573
Horse-power of engines ordinarily in use h.p.	..	38,508	45,820	55,824	48,539

(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. Production in recent years has been considerably lower, and in 1959–60 was 84.7 million lb. Preliminary figures for 1960–61 show production as being 81.3 million lb.

Production of preserved fruit in 1959–60 was 344.3 million lb., the highest on record being 349.4 million lb. in 1957–58. Preliminary figures for 1960–61 show production as being 310.5 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 1959–60 amounted to 83.2 million lb. Preliminary figures for 1960–61 show production as being 90.0 million lb.

The following table shows the total quantity of jams, pickles, sauces and other items manufactured in each State in 1959–60.

**JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES, 1959–60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Jams .. ..	'000 lb. 22,922	39,584	9,733	(a)	(a)	(a)	84,702
Fruit, preserved .. ..	39,312	184,369	70,265	27,640	(a)	(a)	344,294
Fruit Pulp .. ..	cwt. (a)	28,256	(a)	(a)	(a)	58,859	115,418
Fruit Juices, natural .. ..	'000 gals. 562	187	(a)	(a)	203	112	5,041
Vegetables, preserved .. ..	'000 lb. 32,741	31,969	1,897	2,170	(a)	(a)	83,159
Tomato Pulp(b) .. ..	cwt. 22,118	782,436	(a)	(a)	14,058	11,089	852,913
Tomato Paste, Puree, etc., ..	'000 pints 1,161	5,385	..	..	21	..	6,568
Tomato Juice .. ..	'000 gals. 111	671	(a)	465	(a)	..	1,298
Pickles .. ..	'000 pints 3,940	2,386	(a)	1,662	(a)	..	8,310
Chutney .. ..	" " 486	(a)	(a)	(a)	(a)	..	1,690
Sauces .. ..	" " 12,539	16,357	1,409	2,725	(a)	(a)	34,281
Soup (canned) .. ..	" " 5,310	35,475	..	161	192	..	41,138
Soup, Dry Mix .. ..	'000 lb. 4,751	354	(a)	(a)	(a)	..	5,363

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

(b) Includes quantities made and used in the works producing them.

29. Bacon-curing.—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1959-60 and for Australia for a series of years.

## BACON-CURING.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	30	15	9	16	5	8	83
Number of persons employed ..	721	774	1,659	509	288	117	4,068
Salaries and wages paid .. £'000	762	754	1,445	533	242	117	3,853
Value of power, fuel, etc., used £'000	88	87	128	76	36	17	432
Value of materials used .. £'000	5,640	5,464	10,134	3,320	2,729	931	28,218
Value of production .. £'000	1,275	1,366	2,636	885	389	228	6,779
Total value of output .. £'000	7,003	6,917	12,898	4,281	3,154	1,176	35,429
Value of land and buildings £'000	747	642	1,136	494	163	206	3,388
Value of plant and machinery £'000	454	335	772	318	115	56	2,050
Horse-power of engines ordinarily in use .. .. h.p.	2,775	3,100	5,341	2,671	1,238	545	15,670

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	82	81	80	80	83
Number of persons employed ..	3,414	3,472	3,745	4,162	4,068
Salaries and wages paid .. £'000	2,754	2,956	3,311	3,649	3,853
Value of power, fuel, etc., used .. £'000	339	362	403	431	432
Value of materials used .. £'000	20,814	22,373	22,147	25,037	28,218
Value of production .. .. £'000	4,997	5,273	6,798	6,473	6,779
Total value of output .. .. £'000	26,150	28,008	29,348	31,941	35,429
Value of land and buildings .. £'000	2,308	2,452	2,667	3,104	3,388
Value of plant and machinery .. £'000	1,329	1,512	1,654	1,806	2,050
Horse-power of engines ordinarily in use h.p.	13,019	13,472	14,747	14,108	15,670

(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 1959-60 are shown in the following table.

## BACON-CURING FACTORIES: PIGS CURED AND PRODUCTION, 1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Pigs killed for bacon and ham—							
For curing on own account	154,309	162,472	262,203	83,793	79,177	38,817	780,771
For curing on commission	1,877	1,347	1,969	203	(a)	(a)	5,563
Pork and green bacon used for—							
Curing on own account							
'000 lb.	6,872	5,498	(a)	1,043	(a)	..	14,877
Curing on commission							
'000 lb.	5,591	(a)	..	(a)	..	(a)	5,608
Sugar used .. .. tons	37	40	154	22	27	20	300
Finished bacon and ham made (b)—							
On own account '000 lb.	15,965	15,423	18,171	6,556	6,941	1,763	64,819
On commission .. ..	5,418	319	915	80	(a)	(a)	6,753
Green bacon and ham ..	474	1,211	913	428	578	323	3,927
Lard produced .. .. cwt.	3,359	4,602	24,567	2,881	(a)	(a)	43,137

(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.

30. Butter, Cheese and Condensed and Processed Milk.—(i) *Details of Industry.* The following table shows particulars of butter, cheese and condensed and dried milk factories in each State for 1959-60 and for Australia for a series of years.

**BUTTER, CHEESE AND CONDENSED AND PROCESSED MILK.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	77	131	75	39	19	22	363
Number of persons employed .. ..	2,474	5,677	1,650	627	315	396	11,139
Salaries and wages paid .. £'000	2,392	5,906	1,493	584	270	397	11,042
Value of power, fuel, etc., used £'000	735	1,604	329	106	66	80	2,920
Value of materials used .. £'000	19,599	55,757	23,212	4,561	3,640	5,538	112,307
Value of production .. £'000	5,329	13,681	3,075	1,126	534	1,071	24,816
Total value of output .. £'000	25,663	71,042	26,616	5,793	4,240	6,689	140,043
Value of land and buildings £'000	3,365	7,185	2,042	621	396	413	14,022
Value of plant and machinery £'000	3,659	8,351	2,591	668	436	464	16,169
Horse-power of engines ordinarily in use .. h.p.	31,252	42,755	24,876	5,953	3,524	2,789	111,149

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	375	371	366	363	363
Number of persons employed .. ..	11,119	11,189	10,870	10,897	11,139
Salaries and wages paid .. £'000	9,568	10,068	9,995	10,270	11,042
Value of power, fuel, etc. used .. £'000	2,741	2,797	2,692	2,816	2,920
Value of materials used .. £'000	106,883	101,517	94,566	101,929	112,307
Value of production .. £'000	18,893	19,265	19,561	21,446	24,816
Total value of output .. £'000	128,517	123,579	116,819	126,191	140,043
Value of land and buildings .. £'000	11,188	11,985	12,558	13,518	14,022
Value of plant and machinery .. £'000	13,923	14,631	15,254	15,819	16,169
Horse-power of engines ordinarily in use h.p.	102,182	108,157	109,647	107,880	111,149

(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 1959-60. These details are restricted to factory production and therefore exclude farm output.

**BUTTER, CHEESE AND CONDENSED MILK, ETC., FACTORIES: PRODUCTION.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
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**MATERIALS USED.**

Whole Milk used in manufacture of—							
Butter .. .. '000 gal.	192,303	408,939	174,593	25,892	32,975	54,111	888,813
Cheese .. .. '000 gal.	9,134	44,204	19,644	23,729	3,145	799	100,655
Condensed, Dried and other Processed Milk Products '000 gal.	15,621	60,858	9,580	..	3,845	3,401	93,305
Sugar .. .. tons	1,089	14,320	(a)	..	(a)	(a)	16,670

**PRODUCTION.**  
(Tons.)

Butter .. ..	41,373	89,389	38,932	6,193	7,376	11,744	195,007
Cheese (Green Weight) .. ..	4,348	19,217	8,492	10,930	1,443	328	44,758
Cheese (Processed) (b) .. ..	(a)	(a)	(a)	..	..	(a)	16,531
Casein .. ..	1,392	8,967	(a)	..	(a)	..	10,433
Condensed, Concentrated and Evaporated Milk—							
Full Cream—Sweetened .. ..	(a)	31,530	..	..	(a)	..	33,867
Unsweetened .. ..	(a)	16,248	..	..	(a)	(a)	32,462
Skim and/or Buttermilk .. ..	..	(a)	(a)	..	(a)	..	4,461
Milk Powder—							
Full Cream .. ..	(a)	10,635	(a)	..	..	..	19,591
Skim .. ..	11,185	28,016	937	(a)	(a)	..	41,204
Buttermilk and Whey .. ..	1,450	3,860	1,272	(a)	(a)	(a)	7,215
Other Whole Milk Products .. ..	..	(a)	..	..	..	(a)	16,909
Ice Cream Mix—Powder .. ..	(a)	639	(a)	(a)	(a)	..	743

(a) Not available for publication; figures are included in the total for Australia. (b) The cheese used in the manufacture of these products is included in Cheese (Green Weight) made as shown above.

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

31. **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.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	10	13	34	19	48	4	128
Number of persons employed ..	457	805	6,223	258	1,511	72	9,326
Salaries and wages paid .. £'000	430	854	6,768	198	1,580	84	9,914
Value of power, fuel, etc., used £'000	74	177	782	24	176	11	1,244
Value of materials used .. £'000	2,055	6,025	51,261	1,543	4,030	202	65,116
Value of production .. £'000	965	1,895	8,501	370	2,328	136	14,195
Total value of output .. £'000	3,094	8,097	60,544	1,937	6,534	349	80,555
Value of land and buildings £'000	343	1,556	3,962	203	2,422	131	8,617
Value of plant and machinery £'000	218	794	3,115	163	1,206	83	5,579
Horse-power of engines ordinarily in use .. h.p.	1,473	3,043	24,507	1,021	8,908	438	39,390

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	116	113	114	115	128
Number of persons employed .. ..	9,550	8,866	8,878	10,142	9,326
Salaries and wages paid .. £'000	8,704	8,366	8,690	10,699	9,914
Value of power, fuel, etc. used .. £'000	1,119	1,099	1,128	1,292	1,244
Value of materials used .. £'000	46,359	45,483	45,695	61,816	65,116
Value of production .. £'000	14,345	14,385	13,723	15,354	14,195
Total value of output .. £'000	61,823	60,967	60,546	78,462	80,555
Value of land and buildings .. £'000	5,934	6,241	6,710	7,459	8,617
Value of plant and machinery .. £'000	4,118	4,147	4,594	5,261	5,579
Horse-power of engines ordinarily in use h.p.	33,086	36,517	36,956	38,994	39,390

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.

32. **Breweries.**—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1959-60 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 directly concerned with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

**BREWERIES.**  
1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	6	6	5	3	3	2	25
Number of persons employed ..	1,908	(a)	760	(a)	(a)	(a)	5,701
Salaries and wages paid .. £'000	2,167	(a)	765	(a)	(a)	(a)	6,438
Value of power, fuel, etc. used £'000	548	(a)	201	(a)	(a)	(a)	1,491
Value of materials used .. £'000	8,391	(a)	2,252	(a)	(a)	(a)	22,731
Value of production .. £'000	7,099	(a)	2,736	(a)	(a)	(a)	18,620
Total value of output(b) .. £'000	16,038	(a)	5,189	(a)	(a)	(a)	42,842
Value of land and buildings £'000	4,065	(a)	3,140	(a)	(a)	(a)	12,924
Value of plant and machinery £'000	5,413	(a)	2,225	(a)	(a)	(a)	15,426
Horse-power of engines ordinarily in use .. h.p.	17,056	(a)	8,684	(a)	(a)	(a)	48,396

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

(b) Excludes

**BREWERIES—continued.**  
**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	28	27	26	27	25
Number of persons employed .. ..	6,835	6,107	5,909	5,830	5,701
Salaries and wages paid .. .. £'000	6,588	6,196	6,228	6,232	6,438
Value of power, fuel, etc., used .. .. £'000	1,396	1,509	1,479	1,488	1,491
Value of materials used .. .. £'000	22,437	21,238	22,146	22,416	22,731
Value of production .. .. £'000	15,224	16,266	17,271	16,964	18,620
Total value of output(a) .. .. £'000	39,057	39,013	40,896	40,868	42,842
Value of land and buildings .. .. £'000	10,099	11,069	11,797	12,716	12,924
Value of plant and machinery .. .. £'000	12,917	14,863	15,510	15,727	15,426
Horse-power of engines ordinarily in use h.p.	44,908	45,268	44,869	46,525	48,396

(a) Excludes Excise Duty.

(ii) *Production, Consumption, Materials Used.* The quantity of ale, beer and stout 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 annual output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter, production increased, and in 1960-61 amounted to nearly 242 million gallons.

The average annual consumption of ale, beer and stout per head of population exceeded 11 gallons prior to the economic depression of the early thirties; it dropped to 7.3 gallons in 1931-32, increased to 13.8 gallons in 1941-42 and declined again to about 13 gallons during the period of control from 1942 to 1946. The consumption per head in 1960-61 was 22.2 gallons.

The table below shows the quantities of materials used and the quantity and value of ale, beer (excluding waste beer) and stout brewed in each State during 1959-60.

**BREWERIES: MATERIALS USED AND PRODUCTION, 1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MATERIALS USED.</b>							
Malt .. .. '000 bus.	(a)	(a)	749	488	(a)	(a)	6,633
Hops .. .. '000 lb.	2,058	(a)	497	407	(a)	(a)	4,520
Sugar .. .. tons	20,219	(a)	4,587	(a)	(a)	(a)	43,775

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

Quantity	'000 gals.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Quantity .. .. '000 gals.	94,712	(a)	25,408	18,454	(a)	(a)	(a)	231,675
Value (b) .. .. £'000	15,842	(a)	5,142	3,605	(a)	(a)	(a)	42,894

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

33. *Wineries and Distilleries.*—The following table shows particulars of the operations of Wineries and Distilleries for each State during 1959-60 and for Australia for a series of years.

**WINERIES AND DISTILLERIES.**  
**1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	33	30	5	72	25	..	165
Number of persons employed .. ..	226	309	152	1,295	76	..	2,058
Salaries and wages paid .. .. £'000	263	283	154	1,150	40	..	1,890
Value of power, fuel, etc., used .. .. £'000	131	63	67	138	3	..	402
Value of materials used .. .. £'000	2,347	703	465	4,295	177	..	7,987
Value of production .. .. £'000	947	1,072	325	2,441	115	..	4,900
Total value of output .. .. £'000	3,425	1,838	857	6,874	295	..	13,289
Value of land and buildings .. .. £'000	390	414	173	1,699	83	..	2,759
Value of plant and machinery .. .. £'000	653	402	366	1,318	69	..	2,808
Horse-power of engines ordinarily in use .. .. h.p.	1,817	1,226	780	7,375	406	..	11,604

WINERIES AND DISTILLERIES—*continued.*

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	155	157	160	158	165
Number of persons employed .. ..	1,908	2,027	2,066	2,021	2,058
Salaries and wages paid .. .. £'000	1,532	1,699	1,800	1,827	1,890
Value of power, fuel, etc., used .. .. £'000	368	423	426	396	402
Value of materials used .. .. £'000	5,074	6,461	7,448	7,900	7,987
Value of production .. .. £'000	2,890	3,704	4,569	3,889	4,900
Total value of output .. .. £'000	8,332	10,588	12,443	12,185	13,289
Value of land and buildings .. .. £'000	2,254	2,363	2,458	2,588	2,759
Value of plant and machinery .. .. £'000	2,099	2,348	2,339	2,573	2,808
Horse-power of engines ordinarily in use h.p.	11,159	11,412	11,548	10,773	11,604

34. **Tobacco, Cigars and Cigarettes.**—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1959-60 are shown below for each State and for Australia for a series of years. There were no such factories in South Australia or Tasmania.

## TOBACCO, CIGARS AND CIGARETTES.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	W. Aust.	Aust.
Number of factories .. ..	8	8	3	2	21
Number of persons employed .. ..	2,930	2,058	(a)	(a)	5,046
Salaries and wages paid .. .. £'000	2,789	1,944	(a)	(a)	4,774
Value of power, fuel, etc., used .. .. £'000	86	88	(a)	(a)	176
Value of materials used .. .. £'000	22,340	14,189	(a)	(a)	36,578
Value of production .. .. £'000	11,251	5,606	(a)	(a)	16,889
Total value of output(b) .. .. £'000	33,677	19,883	(a)	(a)	53,643
Value of land and buildings .. .. £'000	1,550	2,021	(a)	(a)	3,620
Value of plant and machinery .. .. £'000	2,585	2,339	(a)	(a)	4,961
Horse-power of engines ordinarily in use h.p.	5,927	4,230	(a)	(a)	10,417

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	33	29	27	22	21
Number of persons employed .. ..	4,622	4,630	4,754	4,779	5,046
Salaries and wages paid .. .. £'000	3,728	4,038	4,203	4,178	4,774
Value of power, fuel, etc., used .. .. £'000	128	127	145	160	176
Value of materials used .. .. £'000	31,227	33,535	35,408	35,775	36,578
Value of production .. .. £'000	9,244	10,999	11,177	13,451	16,889
Total value of output(b) .. .. £'000	40,599	44,661	46,730	49,386	53,643
Value of land and buildings .. .. £'000	1,867	1,764	2,962	2,700	3,620
Value of plant and machinery .. .. £'000	2,784	3,059	4,156	4,178	4,961
Horse-power of engines ordinarily in use h.p.	10,778	10,990	10,586	10,384	10,417
Leaf used—					
Australian (stemmed) .. .. '000 lb.	5,204	5,299	7,158	8,792	11,533
Imported (stemmed) .. .. '000 lb.	37,399	40,860	38,369	40,179	38,186
Tobacco made .. .. '000 lb.	18,836	18,917	18,192	17,087	15,262
Cigars made .. .. '000 lb.	132	114	119	109	106
Cigarettes made .. .. '000 lb.	27,162	30,513	32,748	35,255	39,391

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

(b) Excludes

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 and the 1959-60 usage was 11.5 million lb. For further information see Chapter XXII.—Agricultural Production.

Imports of tobacco during 1959-60 comprised: manufactured tobacco, 591,796 lb., cigars, 139,714 lb., cigarettes, 975,434 lb., unmanufactured tobacco, 37,004,900 lb.; and in 1960-61 were 611,072 lb., 155,394 lb., 1,028,701 lb. and 35,711,198 lb. respectively.

35. 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 and veneer mills. The figures exclude particulars of a small number of itinerant and travelling sawmills.

## SAWMILLS AND PLYWOOD AND VENEER MILLS.

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	975	525	613	94	238	346	2,791
Number of persons employed ..	11,019	7,106	8,493	2,500	4,070	2,852	36,040
Salaries and wages paid .. £'000	9,771	6,696	6,739	2,176	3,332	2,458	31,172
Value of power, fuel, etc., used £'000	817	601	445	194	303	244	2,604
Value of materials used .. £'000	27,171	16,920	13,735	6,786	5,764	6,300	76,676
Value of production .. £'000	18,848	12,559	11,499	4,144	6,491	4,871	58,412
Total value of output .. £'000	46,836	30,080	25,679	11,124	12,558	11,415	137,692
Value of land and buildings £'000	5,584	4,100	2,089	2,604	1,232	1,047	16,656
Value of plant and machinery £'000	5,689	3,425	3,484	2,826	2,009	2,202	19,635
Horse-power of engines ordinarily in use .. .. . h.p.	121,850	84,697	92,012	26,926	41,910	40,045	407,440

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	3,025	3,000	2,910	2,805	2,791
Number of persons employed ..	37,102	35,835	35,185	35,891	36,040
Salaries and wages paid .. £'000	27,086	27,563	27,932	29,478	31,172
Value of power, fuel, etc., used .. £'000	1,938	2,056	2,143	2,382	2,604
Value of materials used .. .. £'000	65,618	66,817	69,644	70,253	76,676
Value of production .. .. £'000	47,042	47,928	50,246	53,649	58,412
Total value of output .. .. £'000	114,598	116,801	122,033	126,284	137,692
Value of land and buildings .. £'000	11,136	12,079	13,924	14,545	16,656
Value of plant and machinery .. £'000	16,201	17,086	17,971	18,737	19,635
Horse-power of engines ordinarily in use h.p.	371,003	378,902	380,203	395,630	407,440

The sawmill output of Australian grown timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depression, recovered to 717 million super. feet in 1938-39, and in 1960-61 stood at 1,397 million super. feet. Further reference is made to the sawmilling industry in Chapter XXV.—Forestry.

36. Cabinet and Furniture Making and Upholstery.—These industries constitute the principal manufactures in Class XI. The following table shows particulars for each State in 1959-60 and for Australia for a series of years.

## CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	566	507	231	151	153	56	1,664
Number of persons employed ..	6,516	4,585	2,242	1,657	1,069	406	16,475
Salaries and wages paid .. £'000	6,167	4,056	1,624	1,291	743	306	14,187
Value of power, fuel, etc., used £'000	144	102	40	35	19	6	346
Value of materials used .. £'000	12,197	6,733	2,994	2,189	1,550	460	26,123
Value of production .. £'000	10,342	6,833	2,566	1,991	1,260	509	23,501
Total value of output .. £'000	22,683	13,668	5,600	4,215	2,829	975	49,970
Value of land and buildings £'000	4,643	3,821	1,196	1,029	650	279	11,618
Value of plant and machinery £'000	1,126	835	354	315	182	57	2,869
Horse-power of engines ordinarily in use .. .. . h.p.	15,736	12,674	6,741	5,882	3,588	1,334	45,955

CABINET AND FURNITURE MAKING AND UPHOLSTERY—*continued.*

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	1,642	1,635	1,644	1,629	1,664
Number of persons employed .. ..	15,250	15,164	15,929	16,012	16,475
Salaries and wages paid .. .. £'000	10,840	11,193	12,462	12,963	14,187
Value of power, fuel, etc., used .. .. £'000	272	289	311	334	346
Value of materials used .. .. £'000	17,470	17,926	20,860	22,222	26,123
Value of production .. .. £'000	17,064	18,059	20,163	21,228	23,501
Total value of output .. .. £'000	34,806	36,274	41,334	43,784	49,970
Value of land and buildings .. .. £'000	6,799	7,759	9,069	10,457	11,618
Value of plant and machinery .. .. £'000	2,292	2,424	2,515	2,679	2,869
Horse-power of engines ordinarily in use h.p.	46,957	45,096	46,447	46,539	45,955

37. **Printing Works.**—Printing and bookbinding rank high in importance among the industries of Australia and in 1959-60 afforded employment for 43,181 employees, and paid £43,766,529 in salaries and wages while the value of output amounted to £143,647,122. The following table gives particulars of establishments engaged in general printing in each State for 1959-60 and for Australia for a series of years. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works.

## GOVERNMENT AND GENERAL PRINTING WORKS, 1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	679	567	120	93	85	29	1,573
Number of persons employed .. ..	11,530	9,851	2,431	1,792	1,482	658	27,744
Salaries and wages paid .. .. £'000	11,654	9,719	1,949	1,604	1,222	563	26,711
Value of power, fuel, etc., used .. .. £'000	356	295	52	40	37	17	797
Value of materials used .. .. £'000	16,484	12,803	2,107	1,883	1,367	531	35,175
Value of production .. .. £'000	20,488	17,027	3,293	2,691	2,163	905	46,567
Total value of output .. .. £'000	37,328	30,125	5,452	4,614	3,567	1,453	82,539
Value of land and buildings .. .. £'000	9,987	8,203	1,012	989	833	575	21,599
Value of plant and machinery .. .. £'000	8,190	7,246	1,329	1,322	886	378	19,351
Horse-power of engines ordinarily in use .. .. h.p.	18,302	16,462	3,067	2,578	2,210	942	43,561

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	1,347	1,399	1,431	1,518	1,573
Number of persons employed .. ..	24,453	25,271	25,916	26,827	27,744
Salaries and wages paid .. .. £'000	19,421	20,632	22,099	23,705	26,711
Value of power, fuel, etc., used .. .. £'000	551	621	675	729	797
Value of materials used .. .. £'000	25,792	27,202	29,809	32,420	35,175
Value of production .. .. £'000	32,075	35,136	38,068	41,036	46,567
Total value of output .. .. £'000	58,418	62,959	68,552	74,185	82,539
Value of land and buildings .. .. £'000	11,715	13,310	15,084	19,041	21,599
Value of plant and machinery .. .. £'000	13,560	14,586	15,705	17,535	19,351
Horse-power of engines ordinarily in use h.p.	35,667	36,784	37,963	40,751	43,561

The following table gives similar particulars in respect of establishments producing newspapers and periodicals.

## NEWSPAPERS AND PERIODICALS, 1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	180	133	56	36	19	5	429
Number of persons employed ..	7,138	3,633	2,264	1,232	754	416	15,437
Salaries and wages paid .. £'000	7,978	4,063	2,314	1,335	881	485	17,056
Value of power, fuel, etc., used .. £'000	288	144	83	43	47	10	615
Value of materials used .. £'000	12,296	9,549	3,532	2,417	1,522	410	29,726
Value of production .. £'000	14,511	6,922	4,450	2,355	1,861	668	30,767
Total value of output .. £'000	27,095	16,615	8,065	4,815	3,430	1,088	61,108
Value of land and buildings .. £'000	7,779	2,955	1,391	1,989	829	250	15,193
Value of plant and machinery .. £'000	7,785	2,750	1,470	1,092	619	244	13,960
Horse-power of engines ordinarily in use .. .. h.p.	15,091	11,171	5,756	4,503	2,651	944	40,116

## AUSTRALIA.

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	416	412	407	423	429
Number of persons employed .. ..	14,446	14,640	14,387	14,878	15,437
Salaries and wages paid .. .. £'000	13,273	13,134	13,997	15,291	17,056
Value of power, fuel, etc., used .. .. £'000	511	551	562	590	615
Value of materials used .. .. £'000	23,491	24,009	25,299	27,746	29,726
Value of production .. .. £'000	23,437	25,110	25,580	27,738	30,767
Total value of output .. .. £'000	47,439	49,670	51,441	56,074	61,108
Value of land and buildings .. .. £'000	9,414	10,763	12,112	13,739	15,193
Value of plant and machinery .. .. £'000	10,716	11,315	10,833	11,595	13,960
Horse-power of engines ordinarily in use h.p.	40,305	36,980	37,440	37,440	40,116

38. 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.

Mills producing pulp from eucalypt timber are operating in Victoria and Tasmania, while 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 in 1959-60 nearly 213,000 tons were produced.

The number of factories operating in 1959-60 comprised four in New South Wales, nine in Victoria, two in Queensland, one each in South Australia and Western Australia, and three in Tasmania. In Tasmania, 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.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	17	17	18	18	20
Number of persons employed .. ..	7,480	7,903	8,088	8,406	8,775
Salaries and wages paid .. .. £'000	7,813	8,783	9,752	10,422	11,980
Value of power, fuel, etc., used .. .. £'000	2,735	2,996	3,131	3,341	3,906
Value of materials used .. .. £'000	18,963	22,419	22,903	25,025	26,601
Value of production .. .. £'000	17,330	19,383	23,910	25,817	28,326
Total value of output .. .. £'000	39,028	44,798	49,944	54,183	58,833
Value of land and buildings .. .. £'000	9,312	9,527	12,203	12,317	13,307
Value of plant and machinery .. .. £'000	18,640	18,141	21,835	22,482	27,018
Horse-power of engines ordinarily in use h.p.	164,123	170,382	174,557	179,364	189,774

39. **Rubber Goods.**—The following table shows particulars of this industry for each State during 1959–60 and for Australia for a series of years. Establishments engaged primarily in the retreading and repairing of tyres are excluded.

**RUBBER GOODS, 1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	42	52	14	8	2	..	118
Number of persons employed .. ..	6,864	6,566	1,189	(a)	(a)	..	15,620
Salaries and wages paid .. .. £'000	7,545	7,433	1,005	(a)	(a)	..	17,142
Value of power, fuel, etc., used .. .. £'000	929	1,153	118	(a)	(a)	..	2,318
Value of materials used .. .. £'000	18,651	20,557	2,840	(a)	(a)	..	43,382
Value of production .. .. £'000	9,396	12,974	1,803	(a)	(a)	..	26,072
Total value of output .. .. £'000	28,976	34,684	4,761	(a)	(a)	..	71,772
Value of land and buildings .. .. £'000	2,727	3,834	487	(a)	(a)	..	7,585
Value of plant and machinery .. .. £'000	2,928	5,966	358	(a)	(a)	..	9,543
Horse-power of engines ordinarily in use .. .. h.p.	54,073	61,124	8,822	(a)	(a)	..	128,393

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

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	117	120	118	122	118
Number of persons employed .. ..	14,480	14,859	15,017	15,227	15,620
Salaries and wages paid .. .. £'000	13,616	14,296	14,931	15,442	17,142
Value of power, fuel, etc., used .. .. £'000	1,831	2,007	2,131	2,205	2,318
Value of materials used .. .. £'000	38,329	34,378	36,044	36,339	43,382
Value of production .. .. £'000	21,211	23,246	24,782	27,108	26,072
Total value of output .. .. £'000	61,371	59,631	62,957	65,652	71,772
Value of land and buildings .. .. £'000	5,841	6,292	7,120	7,288	7,585
Value of plant and machinery .. .. £'000	7,156	6,645	7,839	7,632	9,543
Horse-power of engines ordinarily in use .. .. h.p.	106,720	114,562	120,602	126,901	128,393

40. **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 VII.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1959–60 and for Australia for a series of years are shown below.

**ELECTRIC LIGHT AND POWER WORKS.**

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	62	44	61	34	91	12	304
Number of persons employed .. ..	5,162	3,470	1,640	(a)	1,080	(a)	12,810
Salaries and wages paid .. .. £'000	5,590	4,218	1,747	(a)	1,229	(a)	14,564
Value of power, fuel, etc., used .. .. £'000	15,754	10,472	6,595	(a)	3,610	(a)	40,756
Value of materials used .. .. £'000	1,806	700	1,344	(a)	328	(a)	4,839
Value of production .. .. £'000	31,979	17,977	6,619	(a)	3,916	(a)	68,582
Total value of output .. .. £'000	49,539	29,149	14,558	(a)	7,854	(a)	114,177
Value of land and buildings .. .. £'000	48,947	21,184	10,058	(a)	4,470	(a)	136,087
Value of plant and machinery .. .. £'000	88,512	74,548	37,761	(a)	16,260	(a)	259,899
Generators installed—Kilowatt capacity .. .. '000 kW	2,525	1,367	703	(a)	340	(a)	5,953

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	332	328	319	305	304
Number of persons employed .. ..	12,111	12,473	12,833	13,124	12,810
Salaries and wages paid .. .. £'000	12,497	13,571	13,467	14,011	14,564
Value of power, fuel, etc., used .. .. £'000	37,479	39,830	40,261	39,383	40,756
Value of materials used .. .. £'000	4,090	4,396	4,740	4,744	4,839
Value of production .. .. £'000	43,219	50,722	55,514	63,422	68,582
Total value of output .. .. £'000	84,788	94,948	100,515	107,549	114,177
Value of land and buildings .. .. £'000	71,680	100,011	104,512	122,460	136,087
Value of plant and machinery .. .. £'000	152,672	191,352	213,926	235,844	259,899
Generators installed—Kilowatt capacity .. .. '000 kW	4,140	4,705	4,881	5,531	5,953

(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 248.

(ii) *Production.* The generation of electricity in each of the States for a series of years to 1960-61 is shown in the following table.

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

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1955-56 .. ..	6,505	4,633	1,786	1,204	753	1,794	16,675
1956-57 .. ..	7,008	5,037	1,937	1,315	782	2,210	18,289
1957-58 .. ..	7,595	5,320	2,133	1,581	829	2,338	19,796
1958-59 .. ..	8,275	5,704	2,305	1,583	876	2,456	21,199
1959-60 .. ..	9,200	6,198	2,467	1,864	938	2,532	23,199
1960-61(a) ..	9,992	6,578	2,790	2,054	1,031	2,627	25,072

(a) Preliminary—subject to revision.

41. 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 1959-60 and for Australia for a series of years.

**GAS-WORKS.**

1959-60.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	37	27	16	3	3	2	88
Number of persons employed ..	1,310	1,513	335	(a)	176	(a)	3,790
Salaries and wages paid .. £'000	1,585	1,789	307	(a)	190	(a)	4,367
Value of power, fuel, etc., used £'000	2,152	503	41	(a)	133	(a)	2,942
Value of materials used .. £'000	5,725	5,471	1,068	(a)	581	(a)	14,738
Value of production .. £'000	6,037	3,807	1,046	(a)	360	(a)	12,037
Total value of output .. £'000	13,914	9,781	2,155	(a)	1,074	(a)	29,717
Value of land and buildings £'000	1,593	3,031	785	(a)	217	(a)	5,946
Value of plant and machinery £'000	7,956	13,701	2,137	(a)	1,569	(a)	29,346
Horse-power of engines ordinarily in use .. .. h.p.	17,982	16,717	2,924	(a)	1,356	(a)	46,058

**AUSTRALIA.**

Items.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number of factories .. ..	95	94	88	88	88
Number of persons employed .. ..	4,087	4,138	3,783	3,917	3,790
Salaries and wages paid .. .. £'000	4,148	4,448	4,309	4,298	4,367
Value of power, fuel, light, etc., used £'000	2,297	2,591	2,720	2,712	2,942
Value of materials used .. .. £'000	15,350	15,598	15,030	14,996	14,738
Value of production .. .. £'000	9,272	9,894	10,577	11,239	12,037
Total value of output .. .. £'000	26,919	28,083	28,327	28,947	29,717
Value of land and buildings .. .. £'000	2,748	5,189	5,710	6,079	5,946
Value of plant and machinery .. .. £'000	19,828	27,667	26,823	28,127	29,346
Horse-power of engines ordinarily in use h.p.	42,082	44,373	44,913	46,743	46,058

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

(ii) *Coal Used and Production.* The following table shows details for 1959–60.

**GAS-WORKS: COAL USED AND PRODUCTION, 1959-60.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal used '000 tons	848	466	187	174	(a)	(a)	1,744
Gas produced million cu. ft.	22,625	17,992	3,216	3,973	(a)	(a)	49,593
Gas sold	19,075	15,766	2,772	3,619	(a)	(a)	42,737
Coke produced (b) '000 tons	398	135	76	103	(a)	(a)	759

(a) Not available for publication; figures are included in the total for Australia. (b) In addition, 2,376,097 tons of metallurgical coke were made in Coke Works in 1959–60.

Since 1938–39, when the output of gas was 21 thousand million cubic feet, production has increased each year with one exception (1949–50) and reached 50,648 million cubic feet, with an equivalent of 265,783 thousand therms (1 Therm = 100,000 B.T.U.), in 1960–61.