## CHAPTER XXIV.

 MANUFACTURING INDUSTRY.
## § 1. General.

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

Prior to the federation of the Australian States in 190r, the manufacturing industry in Australia was primarily engaged in the production of goods for local use, mainly of food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.

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

A check was made in this expansion by the world-wide economic depression of 1929-33, but returning general prosperity and the opportunities opened to local manufacturers by import restrictions initiated revival in 1933 and, with depreciation of Australian currency, gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties and primage were reduced, but without materially prejudicing the progress of local manufactures.

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

The cessation of war production and the transition of industry to a peace-time basis temporarily retarded progress, but from 1945-46 onward, there was renewed expansion of the manufacturing industrics to which an inflow of capital from overseas contributed.
2. Decentralization of Manufacturing Industries.-Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Commonwealth and State Ministers in August, 1945 to formulate a national policy for the decentralization of secondary industries. It was agreed that the State Governments should seek to promote decentralization along the lines appropriate to each, providing necessary services, assistance and concessions to the full extent of State resources. The Commonwealth undertook to collaborate in all matters of Commonwealth industrial policy affecting the development and location of industry, to investigate in association with the. States the prospects of developing secondary industries in selected areas, to advise the States of developments desirable for defence purposes, and to provide financial assistance for projects of national importance where the cost would be great relative to the State's resources.

The Commonwealth has assisted decentralization by allocating to private industry munitions and other defence buildings in decentralized areas and accommodating migrants in provincial centres with prospects of development. Oversea firms contemplating establishment in Australia are encouraged to selent locations in rural areas or the less industrialized States.
3. Commonwealth Division of Industrial Development.-The Secondary Industries Commission was established in 1943 to investigate post-war uses for munitions factories, to plan for the transition of secondary industries from war-time to peace-time activities, and gencrally to seek to increase industrial efficiency and to explore opportunities for new industries. The Commission was disbanded in April, 1950.

The functions of the Division of Industrial Development (formed in February, 1945 as the Secondary Industries Division of the Department of Post-war Reconstruction) were extended in August, 1948 to include the encouragement of industrial development, the exercising of Commonwealth responsibilities for the decentralization of industry, the promotion of industrial efficiency (especially the study of technical, production, and managerial problems and the dissemination and application of new knowledge and methods), the encouragement of the development of technological institutes and the publication of studies of the structure and operation of Australian manufacturing industries. The Division was attached to the Ministry of National Development when formed in March, i950 to plan the development of national resources and to promote decentralization and regional development in conjunction with the States.
4. Customs and Excise Tariffs and Bounties on Manufactures.-Particulars of Australian customs and excise tariffs, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia, are given in Chapter VIII.-'Trade of this volume.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The Statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.
5. Scientific Research and Standardization.-(i) The Commonwealth Scientific and Industrial Research Organization. The function of this Organization, reference to which also appears in Ch. XXIX., is to initiate and conduct research in connexion with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.
(ii) The Standards Association of Australia. This Association, which is referred to also in Ch. XXIX., acts as the national standardizing organization of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry, and standards are evolved and accepted by general consent.
(iii) The National Association of Testing Authorities. The National Association of Testing Authorities organizes national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily in respect of tests within their competence and the Association is to ensure the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.
6. Definitions in Factory Statistics.-The statistics relating to factories have been compiled from returns supplied annually by manufacturers to, and tabulated by, the several State Statisticians, in the terms of the Statistical Acts of the States. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing precess. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries) but does not cover smallgoods makers, laundries, farriers, photography studios, florists and seedsmen, and most abattoirs.

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 if practicable for each industry.

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

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

Working proprietors are included in all employment figures other than those relating to montbly 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 ontput 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 ealue 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 s:uwmills 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 ouly. 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 io per cent. to the value of materials and fuel used and other factury costs, including salaries and wages paid.
7. Classification of Factories.-In the compilation of statistical data relating to factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian statisticians in 1902 and revised from time to time, was used until the year 1929-30. A new classification was introduced in 1930-31, and this in turn, was revised and extedded (principally in regard to the placement and composition. of sub-classes) in accordance with decisions of the Statistician's Conference, 1945.

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

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

## CLASSIFICATION OF FACTORIES.

Class I.-Treatment of Non-Metalliferout Mine and Quarry Proddcts.
Coke Works.
Briquetting and Pulverized Coal.
Carbide.
Lime, Plaster of Paris, Asphalt.
Fibrous Plaster and Products.
Marble, Slate, etc.
Cement.
Asbestos Cement Sheets, etc.
Other Cemest Goods.
Other.
Class II.-Brioks, Pottery, Glass, eto.
Bricks and Tiles, Fire Bricks and Fire-clay Goods.
Earthenware, China, Porcelain, Terra-cotta.
Glass (other than Bottles).
Glass Bottles.
Other.
Class III.-Chemtoals, Dyes, Explosives, Paints, Oils, Grease.
Industrial and Heavy Chemicals and Acids.
Pharmaceutical and Toilet Preparations.
Explosives.
White Lead, Paints, Varnish.
Oils, Vegetable.
Oils, Mineral.
Oils, Animal.
Boiling Down, Tallow Refining.
Soap and Candles.
Ohemical Fertilizers.
Inks, Polishes, etc.
Matches.
Other.
Class IV.-Industrial Metals, Machinis, Conveyances.
Smelting, Converting, Refining and Rolliag of Irou and Steel.
Foundries-Ferrous.
Plant, Equipment and Machinery.
Other Engiuecring.
Extracting and Refining of other Metals, Alloys.
Electrical Machinery, Cables and Apparatus.
Construction and hepair of Vehicles (ro groups).
Ship and Boat Building and Repairing, Marine Engineering.
Cutlery and Small Hand Tools.
Agricultural Machines and Implements.
Non-Firerous Metals-.
Rolling and Extrusion.
Foundries, Casting, etc.
Iron and Steel Sheets.
Sheet Metal Working, Pressing, and Stamping.
Pipes, Tubes and Fittings--Ferrous.
Wire and Wire Netting (including Nails).
Stoves, Ovens and langes.
Gas Fittings and Meters.
Lead Mills.

Class IV.-Indostrial Metals, Mactines, Conveyances-continued.
Sewing Machines.
Arms, Ammunition (excluding Explosives).
Wireless and Amplifying Apparatus.
Other Metal Works.
Class V.-Precious Metals, Jewellery, Plate.
Jewellery.
Watches and Clocks (including Repairs).
Electroplating (Gold, Silver, Chromium).
Class VI.-Textiles and Textile Goods (Not Dress).
Cotton Ginning.
Cotton Spinning and Weaving.
Wool-Carding, Spinning, Weaving.
Hosiery and other Knitted Goods.
Silk, Natural.
Rayon, Nylon and other Synthetic Fibres.
Flax Mills.
Rope and Cordage.
Canvas Goods, Tents, Tarpaulins, etc.
Bags and Sacks.
Other.
Class VII.-Skins and Leather (not Clothing or Footwear).
Furriers and Fur Dressing.
Woolscouring and Fellmongery.
Tanning, Currying, and Leather Dressing.
Saddlery, Harness, Whips.
Machine Belting.
Bags, Trunks, etr.
Class Vili.-(lothing (except Knitted).
Tailoing and Ready-made Cluthing.
Waterproof and Oilskin Clothing.
Dress naking.
Millinery.
Shirts. Collars, Underclothing.
Foundation Garments.
Handkerchiefs, Ties, Scarves.
Hats and Caps.
Gloves.
Boots and Shoes (not rubber).
Boot and Shoe Repairing.
Boot and Shoe Accessories.
Umbrellas and Walking Sticks.
Dyeworks and Cleaning.
Other.
Class IX.-Food, Drink and Tobagco.
Flour Milling.
Cereal Foods and Starch.
Animal and Bird Foods.
Chafficutting and Cora Crushing.
Bakeries (including Cakes and Pastry).
Biscuits.
Sugar Mills.

Class IX.-FOod, . Drink and Tobaccocontinued.
Sugar Refining.
Sugar Confectionery (including Chocolate).
Jam, Fruit and Vegetable Canning.
Pickles, Sauces, Vinegar.
Bacon Curing.
Butter Factories.
Cheese Factorles.
Condensed and Dried Milk Factories.
Margarine.
Meat and Fish Preserving.
Condiments, Coffee, Spices, etc.
Ice and Refrigerating.
Salt Refining.
Aerated Waters, Cordials, etc.
Breweries.
Distilleries.
Wine Making.
Cider and Perry Making.
Malting.
Bottling.
Tobacco, Cigars, Cigarettes, Snuff.
Dehydrated Fruit and Vegetables.
Ice-cream.
Sausage Skins.
Arrowroot.
Other.
Class X.-Sawhills, Joinery Boxes, ETO., Wood Turning and Carving.
Sawmills.
Plywood and Venecr Mills.
Bark Mills.
Joinery.
Cooperage.
Boxes and Cases.
Basketware and Wickerware (including Sea-grass and Bamboo Furniture).
Perambulators.
Wall and Ceiling Boards (not Plaster or Cement).
Other.
Class XI.-Furniture of Wood, Bedding, eto.
Billiard Tables, Cabinet and Furniture Making and Upholstery.
Bedding and Mattresses.
Furnishing Drapery, etc.

Class XL-Furntive op Wood, Bedding, Picture Frames ETO.-continued.
Blinds.
Other.
Class Xif.-Paper, Stationery, Printing, boorbinding, etc.
Newspapers and Periodicals.
Printing-
Government.
General, including Bookbinding.
Manufactured Stationery.
Stereotyping and Electrotyping.
Process and Photo Engraving.
Cardboard Boxes, Cartons and Containers.
Paper Bags.
Paper Making.
Pencils, Penholders, Chalks, Crayons.
Other.
Class XIIt.-Rubber.

Rubber Goods and Tyres Made.
Tyre Retreading and Repairing.
Class XIV.-Musical Instruments.
Gramophones and Gramophone Records.
Pianos, Piano-Players, Organs.
Other.
Class XY.-Miscellaneods Products.
Linoleum, Leather Cloth, Oil Cloth, ctc.
Bone, 'Horn, Ivory and Shell.
Plastic Moulding and Products.
Brooms and Brushes.
Optical Instruments and Appliances.
Surgical and other Scientific Instruments and Appliances.
Photographic Materials, including Developing and Printing.
Toys, Games and Sports Requisites.
Artificial Flowers.
Other.
Class XVI.-Heat, Light, and Power.
Electric Light and Power.
Gas works.
8. Factory Development since 1901-Australia.-The development of the manufacturing industries in Australia at intervals since 1901 is summarized in the following table :-

FACTORIES: AUSTRALIA.

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

Single year tables in this issue relate to the year 1950-51 and in the immediately preceding issue to the year 1949-50.

## § 2. Number of Factories.

1. Number of Factories in each State.-The following table shows the number of factories operating in each State in the years $1938-39,1945-46$ and $1947-48$ to 1950-51:-

FACTORIES : NUMBER.

2. Number of Factories in Industrial Classes.-(i) Australia. The next table shows the number of factories in Australia during 1938-39, 1945-46 and 1947-48 to $1950-51$ classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902. Details of some of the principal industries included in the table will be found in $\S$ ir hereunder.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

| Class of Industry. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 564 | 591 | 933 | 1,025 | I, 126 | 1,235 |
| II. Bricks, Pottery, Glass, etc. | 471 | 410 | 517 | 544 | 561 | 583 |
| II. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 666 | 886 | 975 | 1,010 | 1,006 | 1,020 |
| IV. Industrial Metals, Machines, Conveyances | 7,255 | 8,816 | 10,910 | Ir, 801 | 12,362 | 13,106 |
| V. Precious Metals, Jewellery and Plate. | 290 | 337 | 555 | 623 | 619 | 629 |
| VI. Textiles and Textile Goods (not Dress) | 611 | 883 | 982 | 1,065 | 1,155 | 1,190 |
| VII. Skins and Leather (not Clothing or Footwear) | 533 | 651 | 727 | 746 | 751 | 761 |
| VIII. Clothing (except Knitted) | 4,314 | 5,215 | 6,069 | 6,533 | 6,620 | 6,684 |
| IX. Food, Drink and Tobacco . . . | 5,202 | 5,865 | 6,475 | 6,659 | 6,796 | 6,865 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 2,822 ! | 3,148 | 4,001 | 4,530 | 4,893 | 5,165 |
|  | 1,149 | 1,140 | 1,568 | 1,726 | 1,820 | 1,936 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 1,816 | 1,703 | 1,852 | 1,942 | 1,981 | 2,010 |
| XIII. Rubber | 299 | 308 | 371 | 39 r | 404 | 411 |
| XIV. Musical Instruments | 34 | 41 | 56 | 64 | 59 | 66 |
| XV. Miscellaneous Products | 413 | 714 | 899 | 947 | 985 | 1,032 |
| Total, Classes I. to XV. | 26,439 | 30,708 | 36,890 | 39,606 | 41,138 | 42,693 |
| XVI. Heat, Light and Power | 502 | 476 | 466 | 464 | 458 | 454 |
| Grand Total | 26,94 5 | 31,184 | 37,356 | 40,070 | 41,596 | 43,147 |

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. Except for the two war years 194T-42 and 1942-43, when there were decreases, the number of factories increased each year from $1931-32$ to $1950-51$; in the latter year the number of factories in Australia reached the record total of 43,147 or 60.2 per cent. greater than in 1938-39.
(ii) States, 1950-51. The following table shows the number of factories in each State classified according to the nature of the industry :-

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1950-51.

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 438 | 399 | 90 | 140 | 111 | 57 | 1,235 |
| II. Bricks, Pottery, Glass, etc. . . | 277 | 138 | 49 | 59 | 43 | 17 | 583 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 513 | 303 | 63 | 69 | 49 | 23 | 1,020 |
| IV. Industrial Metals, Machines, Conveyances | 5,297 | 3,966 | 1,459 | 1,013 | 994 | 377 | 13,106 |
| V. Precious Metals, Jewellery and Plate | 265 | 218 | 38 | 52 | 50 | 6 | 629 |
| VI. Textiles and Textile Goods (not Dress) | 435 | 630 | 32 | 46 | 35 | 12 | 1,190 |
| VII. Skins and Leather (not Clothing or Footwear) | 346 | 272 | 53 | 44 | 36 | 10 | 761 |
| VIII. Clothing (except Knitted) | 2,965 | 2,360 | 469 | 397 | 427 | 66 | 6,684 |
| IX. Food, Drink and Tobaceo . . | 2,376 | 1,961 | 1,028 | 648 | 552 | 300 | 6,865 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 1,942 | 1,268 | 874 | 272 | 338 | 471 | 5,165 |
| XI. Furniture of Wood, Bedding, etc. | 643 | 624 | 273 | 150 | 158 | 88 | 1,936 |
| XII. Paper, Stationery, Printing, Book- | 833 | 725 | 179 | 122 | 123 | 28 | 2,010 |
| XIII. Rubber . | 152 | 122 | 57 | 41 | 23 | 16 | 411 |
| XIV. Musical Instruments | 30 | 20 | 4 | 7 | 5 | - | 66 |
| XV. Miscellaneous Products | 488 | 393 | 47 | 44 | 50 | 10 | 1,032 |
| Total Classes I. to XV. | 17,000 | 13,399 | 4,715 | 3,104 | 2:994 | 1,48I | 42,693 |
| . XVI. Heat, Light and Power | 129 | 105 | 61 | 37 | 117 | 5 | 454 |
| Grand Total | 17,129 | 13,504 | 4,776 | 3,141 | 3,111 | 1,486 | 43,147 |

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

1. General.-The size classification of factories is based on the average weekly number of persons employed during the period of operation (including working proprietors). Prior to $1945-46$ there was no dissection of the " over 100 employees" group, but for that and subsequent years this group was subdivided into the seven size groups as shown in the table below.
2. States, 1950-51.-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, 1950-5I.

| Size of Factory (Persons employed). | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tasmania. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Factories. |  |  |  |  |  |  |  |
| Under 4. | 5,129 | 4,087 | 1,469 | 852 | 1,25I | 605 | 13,393 |
| 4 | 1,438 | 1,159 | 454 | 284 | 198 | 162 | 3,695 |
| 5 to 10 | 4,776 | 3,372 | 1,349 | 859 | 828 | 372 | 11,556 |
| 11 to 20 | 2,525 | 2,020 | 658 | 493 | 392 | 153 | 6,241 |
| 21 to $50 \ldots$ | 1,953 | 1,723 | 514 | 374 | 278 | 118 | 4,960 |
| 51 to 100.. | 658 | 593 | 153 | 154 | 102 | 45 | 1,705 |
| IOI to 200 | 362 | 308 | ro2 | 68 | 44 | 18 | 902 |
| 201 to 300 | 101 | 103 | 46 | 20 | II | 4 | 285 |
| 301 to 400 | 53 | 50 | 11 | 14 | 3 | 1 | 132 |
| 401 to 500 | 25 | 28 | 4 | 5 | 2 | 1 | 65 |
| 501 to 750 | 54 | 36 | 9 | 6 |  | 3 | Io8 |
| 751 to 1,000 | 19 | 8 | 4 | 4 | I | 1 | 37 |
| Over 1,000 | 36 | 17 | 3 | 8 | 1 | 3 | 68 |
| Total | 17,129 | 13,504 | 4,776 | 3,14I | 3,111 | 1,486 | 43,147 |

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

## FACTORIES: CLASSIFICATION OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1950-51.

| Size of Factory <br> (Persons employed). | N.S.W. ' Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Average Number Employed during Period Worked.

3. Australia, 1938-39, 1945-46 and 1947-48 to 1950-51.-In the following table factories in Australia are classified according to the number of persons employed in conformity with the practice prior to 1945-46.

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

| Year. | Establishments Employing on the Average- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20 and under. |  | 21 to roo. |  | ror and upwards. |  | Total. |  |
|  | $\begin{aligned} & \text { Es- } \\ & \text { tablish- } \\ & \text { ments. } \end{aligned}$ |  | Es-tablishments. | Persons em. ployed. | Esments. ments | Persons employed. | ES-tablishments. | $\begin{gathered} \text { Persons } \\ \text { em- } \\ \text { ployed. } \end{gathered}$ |
| $\begin{aligned} & 1938-39- \\ & \text { Number } \end{aligned}$ | 21,982 | 129,505 | 4,013 | 170,971 | 946 | 272,022 | 26,941 | 572,498. |
| Average per establish- ment |  | 5.89 |  | 42.60 |  | 287.55 |  | 21.25 |
| Proportion of total \% | 8 r .59 | 22.62 | 14.90 | 29.86 | 3.51 | 47.52 | 100 | 100 |
| 1945-46- Number | 24,819 | 154,242 | 5,080 | 211,781 | 1,285 | 390,538 | 31,184 | 756,56r |
| Average per establishment Proportion of total | 79.59 | 6.21 20.39 | 16.29 | 41.69 27.99 | 4. | 303.92 51.62 | 100 | $\begin{gathered} 24.26- \\ 100 \end{gathered}$ |
| 1947-48- |  |  |  |  |  |  |  |  |
| Number ${ }^{\text {Average }}$ per ${ }^{\text {establ }}$ | 29,947 | 187,085 | 6,014 | 249,858 | 1,395 | 419,725 | 37,356 | 856,668 |
|  |  | 6.25 |  | 41.55 |  | 300.88 |  | 22.93 |
| Proportion of total \% 1948-49- | 80.17 | 21.84 | 16.09 | 29.16 | 3.74 | 49.00 | 100 |  |
| Number | 32,394 | 200,889 | 6,226 | 257,204 | I,450 | 439,71 | 40,070 | 897,803 |
| Average per establish- ment |  | 6.20 |  |  |  |  |  | 22.4 I |
| Proportion of total \% | 80.84 | 22.38 | 15.54 | 28.65 | 3.62 | 48.97 | 100 | 100 |
| ${ }_{\text {1 }}^{\text {1949-50- }}$ Number | 33,673 | 207,600 | 6,442 | 266,476 | 1,481 | 454,900 | 41,596 | 928,976 |
| Average per establish ment |  | 207,600 6.17 |  |  |  | 307.16 |  | 928,976 22.33 |
| Proportion of total \% | 80.95 | 22.35 | 15.49 | 28.68 | 3.56 | 48.97 | 100 | 100 |
| 1950-5I- Number |  |  |  |  |  |  |  |  |
| Number <br> Average per establish ment | 34,885 | 214,044 6.14 | 6,665 | 274,621 41.20 | 1,597 | 488,420 305.84 | 43, 1 | 977,085 22.65 |
| Proportion of total \% | 80.85 |  | 15.45 | ${ }_{28.17}$ | 3.70 | 305.84 49.98 | 100 | 100 |

## § 4. Power Equipment in Factories.

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

In par. 2 below, 883 factories are shown in 1950-5I as using no power other than hand-power, the distribution of these factories among the various industries being as follows: Lime, Plaster and Asphalt, io; Industrial and Heavy Chemicals and Acids and Pharmaceutical and Toilet Preparations, in ; Galvanized Ironworking, Tinsmithing, 39 ; Tailoring and Ready-made Clothing, 246; Dressmaking, 59; Millinery, 20; Bakeries, 89 ; Cabinet and Furniture Making, 25; all other industries, 384.
2. Rated Horse-power of Engines in Factories other than Central Electric Stations.The following table shows the number of factories using power-driven machinery, those using manual labour only, and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1950-51:-
FACTORIES $(a)$ : TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1950-51.

| State. | Number of Establishments.(a) |  |  | Rated Horse-power of Engines and Motors. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Using Power | Others. | Total. | Ordinarily in use. | In Reserve or Idle (omitting obsolete) |
| New South Wales | 16.980 | 59 | 17,039 | 1,451,191 | 186,003 |
| Victoria | 13,153 | 282 | 13,435 | 928,163 | 134,884 |
| Queensland | 4,518 | 213 | 4,731 | 338,836 | 40,232 |
| South Australia | 2,964 | 143 | 3,107 | 251,764 | 33,336 |
| Western Australia | 2,840 | 158 | 2,998 | 130,200 | 20,610 |
| Tasmania | 1,455 | 28 | 1,483 | 150,804 | 21,722 |
| Australia.. | 41,910 | 883 | 42,793 | 3,250,958 | 436,787 |

(a) Excludes Central Electric Stations.
3. Rated Horse-power of Engines and Electric Motors Ordinarily in Use.-(i) According to Type, States. Particulars of the types of engines, etc., and the total rated horse-power ordinarily in use in each State are given below :-
FACTORIES $(a)$ : TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1950-5I.

(a) Excludes Central Electric Stations.
(b) Excludes particulars in column (c).
(ii) According to Type, Australia. In the following table details of the total rated horse-power of the various types of engines in use are given for Australia for the years 1938-39, 1945-46 and 1947-48 to 1950-51.

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

| Year. | Steam. |  | Internal Combustion. |  |  | Water. | Motors driven by electricity. |  | Total. <br> (b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  | Reciprocating. | Turbine. | Gas. | Light Oils. | $\begin{aligned} & \text { Heavy } \\ & \text { Oils. } \end{aligned}$ |  | Purchased. | Generation. (c) |  |
| 1938-39 | 268,409 | 84,149 | 32,914 | 17,970 | 55,800 | 1,616 | 1,017,911 | 179,889 | 1,478,769 |
| 1945-46 | 236,378 | 117,736 | 20,481 | 23,876 | 56,189 | 1,737 | 1,755,036 | 226,692 | 2,211,433 |
| 1947-48 | 235,116 | I10,646 | 17,182 | 33,656 | 63,728 | I, 830 | 2,073,409 | 177,598 | 2,535,567 |
| 1948-49 | 229,953 | 120,289 | 16,024 | 55,158 | 72,165 | 1,515 | 2,249,360 | 177,296 | 2,744,464 |
| 1949-50 | 232,047 | 135,217 | 15,035 | 67,986 | 92,151 | 1,703 | 2,421,174 | 186,566 | 2,965,313 |
| 1950-51 | 230,664 | 140,145 | 15,879 | 91,415 | 135,260 | 1,882 | 2,635,713 | 181,788 | 3,250,958 |

(a) Excludes Central Electric Stations.
(b) Excludes particulars in column (c).
(iii) In Classes of Industry, 1950-5I. The next table shows the total rated horsepower 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, 1950-51.

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Treatment of Non-metalliferous Mine and Quarry |  |  |  |  |  |  |  |
| Products .. | 74,027 | 39,004 | 10,753 | 12,279 | 7,316 | 13,350 | 156,729 |
| II. Bricks, Pottery, Glass, etc.. - | 43,365 | 26,413 | 6,001 | 6,760 | 5,745 | 1,792 | 90,076 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 87,762 | 70,860 | 5,490 | 13,686 | 9,346 | 2,288 | 189,432 |
| IV. Industrial Metals, Machines, Conveyances | 685,905 | 267,972 | 75,363 | 115,013 | 34,640 | 44,360 | 1,223,253 |
| V. Precious Metals, Jewellery and Plate | 4.375 | 5,605 | 380 | 970 | 488 | 58 | 11,876 |
| VI. Textiles and Textile Goods (not Dress) | 55,195 | 82,026 | 4,958 | 6,650 | 2,009 | 4,704 | 155,542 |
| VII. Skins and Leather (not Clothing or Footwear) | 18,372 | 17,981 | 4,207 | 4,648 | 2,117 | 1,436 | 48,761 |
| VIII. Clothing (except Knitted) - | 27,756 | 26,970 | 2,968 | 2,558 | 1,728 | 498 | 62,478 |
| IX. Food, Drink and Tobacco .. | 171,552 | 145,016 | 136,618 | 44,624 | 29,596 | 13,657 | 541,063 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 136,707 | 98,093 | 70,497 | 22,348 | 27,195 | 25,790 | 380,630 |
| XI. Furniture of Wood, Bedding, etc. | 17,645 | 15,610 | 7,143 | 5,745 | 3,697 | 1,713 | 51,553 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 57,463 | 67,386 | 6,715 | Ir,096 | 4,278 | 40,484 | 187,422 |
| XIII. Rubber | 38,910 | 38,900 | 5,489 | 2,230 | 364 | 224 | 86,117 |
| XIV. Musical Instruments | 2,422 | 352 | 43 | 13 | 7 |  | 2,837 |
| XV. Miscellaneous Products | 16,128 | 16,163 | 358 | 1,584 | 412 | 339 | 34,984 |
| Total, Classes I. to XV. | 437,584 | 918,351 | 336,983 | 250,204 | 128,938 | 150,693 | 3,222,753 |
| XVI. Gas Works | 13,607 | 9,812 | 1,853 | 1,560 | 1,262 | III | 28,205 |
| Grand Total | 1,451,191 | 928,163 | 338,836 | 251,764 | 130,200 | 150,804 | 3,250,958 |

(a) Excludes Central Electric Stations.
4. Capacity of Engines and Gemerators 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 1950-5r are given in the following table :-

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA, 1950-51.

| Particulars. | Capacity of Engines and Generators. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Steam. |  | Internal Combustion. |  |  | Wate | Total. |
|  | Reciprocating. | Turbine. | Gas. | Light Oils. | Heavy Oils. |  |  |
| Eagines installed Rated H.P. | 17,362 | 2,703,225 | 19,374 | 7,116 | 236,620 | 393,742 | 3,377,439 |
| Generators installedKilowatt capacity- |  |  |  |  |  |  |  |
| Total installed ... K.W. | 11,291 | $2,008,583$ $1,725,808$ | 14,793 11,357 | 4,343 3,083 | 155,199 143.885 |  | $2,477,729$ $2,183,409$ |
| Effective capacity ", | 10,954 | 1,725,808 | 11,357 | 3,083 | 143.385 | 288,862 | 2,183,409 |
| Horse-power equivalent- |  |  |  |  |  |  |  |
| 'rotal installed ... H.P. | 15,135 | 2,692,465 | 19,830 | 5,822 | 208,04. | 380,053 | 3,321,346 |
| Effective capacity $\quad$, | 14,630 | 2,313,4II | 15,224 | 4,133 | 192,204 | 387,214 | 2,926,816 |

(ii) States. Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1950-51 are given in the next table.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, 1950-5I.


## § 5. Employment in Factories.

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

Prior to the year 1928-29 average employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures therefore, represented the average number employed over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29 the figures represent the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of persons employed (see $\S 3$ ante), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.
(ii) Australia. Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for years 1938-39, 1945-46 and 1947-48 to 1950-51 in the following table:-

FACTORIES : EMPLOYMENT, AUSTRALIA.

| Year. | Males. |  | Females. |  |  | Persons. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Number } \\ & \text { Em- } \\ & \text { ployed. } \end{aligned}$ | Increase on Preceding Year. | $\begin{aligned} & \text { Number } \\ & \text { Em- } \\ & \text { ployed. } \end{aligned}$ | Increase on Preceding Year. |  | Number Employed. | Increase on Preceding Year. |  |
|  |  | Number. ${ }^{\text {Per Cent. }}$ |  | Number. | Per Cent. |  | Number. | Per Cent. |
| 1938-39 | \| 412,591 | 3,989 ! 0.98 | 152,515 | 1,957 | 1.30 | 565,106 | 5,946 | 1.06 |
| 1945-46 | 548,888 | $\mathbf{1 2 , 9 9 5}$ 2.42 | 196,370 | -18,316 | $-8.53$ | 745,258 | -5,321 | -0.71 |
| 1947-48 | 640,925 | 36,625 6.06 | 207,95 | 7,322 | 3.65 | 848,876 | 43,947 | 5.46 |
| 1948-49 | - 670,076 | 29,151 4.55 | 220,156 | 12,205 | 5.87 | 890,232 | 41,356 | 4.87 |
| 1949-50 | - 689,508 | 19,432 2.90 | 228,153 | 7,997. | 3.63 | 917,661 | 27,429 | 3.08 |
| 1950-51 | - 726,226 | 36,718 | 242,867 | 14,714 | 6.45 | 969,093 | 51,432 | 5.60 |

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

FACTORIES : EMPLOYMENT.


Average Number Employed during Full Year (52 Weers).

| $1938-39$ | $\ldots$ | $\ldots$ | $228,78 \mathbf{I}$ | 201,831 | 54,110 | 43,371 | 23,211 | 13,802 | 565,106 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1945-46$ | $\ldots$ | $\ldots$ | 310,870 | 256,249 | 65,460 | 63,188 | 30,256 | 19,235 | 745,258 |
| $1947-48$ | $\ldots$ | $\ldots$ | 363,365 | 278,271 | 76,754 | 73,346 | 35,967 | 21,173 | 848,876 |
| $1948-49$ | $\ldots$ | $\ldots$ | 378,380 | 292,006 | 82,945 | 75,945 | 38,354 | 22,602 | 890,232 |
| $1949-50$ | $\ldots$ | $\ldots$ | 382,385 | 303,476 | 88,963 | 78,598 | 40,733 | 23,506 | 917,661 |
| $1950-51$ | $\ldots$ |  | 406,965 | 316,792 | 94,579 | 83,169 | 43,761 | 23,827 | 969,093 |

Percentage of Australtan Total.

| $1938-39 \ldots$ | $\ldots$ | 40.48 | 35.72 | 9.58 | 7.67 | 4.11 | 2.44 | 100.00 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1945-46$ | $\ldots$ | $\ldots$ | 41.72 | 34.38 | 8.78 | 8.48 | 4.06 | 2.58 | 100.00 |
| $1947-48$ | $\ldots$ | $\ldots$ | 42.81 | 32.78 | 9.04 | 8.64 | 4.24 | 2.49 | 100.00 |
| $1948-49$ | $\ldots$ | $\ldots$ | 42.50 | 32.80 | 9.32 | 8.53 | 4.3 I | 2.54 | 100.00 |
| $1949-50$ | $\ldots$ | $\ldots$ | 41.67 | 33.07 | 9.69 | 8.57 | 4.44 | 2.56 | 100.00 |
| $1950-51$ | $\ldots$ |  |  |  |  | 9.96 | 8.58 | 4.52 | 2.46 |

FACTORIES: EMPLOYMENT-continued.

| Year. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Per io,000 of Population. |  |  |  |  |  |  |  |
| 1938-39 | 836 | 1,078 | 537 | 729 | 497 | 581 | 815 |
| 1945-46 . | 1,060 | 1,272 | 604 | 1,002 | 617 | 769 | 1,003 |
| 1947-48. | 1,209 | 1,345 | 690 | 1,124 | 707 | 809 | I, 11 I |
| 1948-49 . | 1,235 | 1,382 | 731 | 1,142 | 734 | 843 | 1,14I |
| 1949-50 .. | 1,206 | 1,398 | 765 | I,I44 | 746 | 847 | 1,140 |
| 1950-51 .. | 1,243 | 1,416 | 793 | 1,170 | 766 | 829 | 1,166 |

2. Rates of Increase, 1938-39, 1945-46 and 1947-48 to 1950-51.-The percentage increase on the average number of persons employed in the preceding year is shown below for each State :-
factories : annual percentage increase of persons employed.

| Year. |  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | I. 74 | 0.02 | 3.82 | -1. 62 | 0.34 | 4.80 | 1.06 |
| 1945-46 | . | -1.21 | -0.54 | 2.07 | $-3.49$ | 3.81 | -1.4I | -0.71 |
| 1947-48 | . | 5.90 | $4 \cdot 71$ | 7.20 | $3 \cdot 73$ | 6.39 | 6.20 | $5 \cdot 46$ |
| 1948-49 | $\cdots$ | $4 \cdot 13$ | 4.94 | 8.07 | $3 \cdot 54$ | 6.64 | 6.75 | 4.87 |
| 1949-50 | . | 1.06 | 3.93 | 7.26 | 3.49 | 6.20 | 4.00 | 3.08 |
| 1950-51 | -• | 6.43 | $4 \cdot 39$ | 6.31 | 5.82 | $7 \cdot 43$ | 1.37 | 5.60 |

Note.-Minus sign ( - ) indicates decrease.
3. Persons Employed in Classes of Industry.-(i) Australia. The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1938-39, 1945-46 and 1947-48 to 1950-51:-

FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

| Class of Industry. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 10,343 | 9,929 | 14,263 | 15,572 | 16,598 | 18,436 |
| II. Bricks. Pottery, Glass, etc. | 15,709 | 13,466 | 17,536 | 18,702 | 19,24 | 20,449 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 19,816 | 31,471 | 31,808 | 33,355 | 34,525 | 36,323 |
| IV. Industrial Metals, Machines, Conveyances | 177,677 | 292,477 | 320,948 | 333,313 | 344,313 | 373,798 |
| V. Precious Metals, Jewellery and Plate | 3,726 | 3,240 | 6,069 | 6,414 | 6,638 | 6,344 |
| VI. Textiles and Textile Goods (not Dress) | 46,082 | 55,008 | 6r,911 | 64,855 | 65,528 | 68,280 |
| VII. Skins and Leather (not Clothing or Footwear) | 10,767 | 14,492 | 15,624 | 15,902 | 16,277 | 15,801 |
| VIII. Clothing (except Knitted) | 86,092 | 93,370 | III,693 | 118,133 | 118,757 | 122,464 |
| IX. Food, Drink and Tobacco -ic | 83,846 | 105,878 | 113,595 | 118,259 | 122,783 | 124,350 |
| X. Sawmills, Joinery, Boxes, ctc., Wood Turning and Carving | 30,739 | 38,346 | 47,052 | 51,206 | 53,169 | 56,300 |
| XI. Furniture of Wood, Bedding, etc. | 15,287 | 13,107 | 18,546 | 20,024 | 21,021 | 22,8土8 |
| XII. Paper, Stationery, Printing, Book- | 39,913 | 39,905 | 47,813 | 50,571 | 53,002 | 55,328 |
| XIII. Rubber .. | 7,502 | 8,699 | 10,753 | 11,808 | 1 2,382 | 13,526 |
| XIV. Mrisical Instruments | 451 | 459 | 887 | 1,250 | 1,456 | 1,614 |
| XV. Miscellaneous Products | 7.727 | 14,838 | 18,235 | 18,123 | 18,561 | 19,401 |
| Total, Classes I. to XV. | 555,677 | 734,685 | 836.733 | 877,487 | 904,251 | 955.232 |
| XVI. Heat, Light and Power | 9,429 | 10,573 | 12,143 | 12,745 | 13,410 | 13,861 |
| Grand Total .. ......... | 565,106 | 745,258 | 848,876 | 890,232 | 917,661 | 969,093 |

948.-31
(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, 1950-51.

| Class of Industry. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferrous Mine and Quarry Products |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | 7,600 r,106 | 5,418 4,856 | 1,642 1,046 | 1,479 | 1,584 | 713 311 | 18,436 20,449 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 106 | 856 | 1,046 |  |  | 3 II | 9 |
|  | 17,409 | 12,619 | 1,3 | 2,982 | ,628 | 300 | 36,323 |
| IV. Industrial Metals, Machines, Conveyances | 172,256 | 105,354 | 31,496 | 41,435 | 15,971 | 7,286 | 373,798 |
| V. Precious Metals, Jewellery and Plate | 2,138 | 3,265 | 315 | 360 | 247 | 19 | 6,344 |
| VI. Textiles and Textile Goods (not Dress) | 25,299 | 35,320 | 1,997 | 2,592 | 8 r 6 | 2,256 | 68,280 |
| VII. Skins and Leather (not Cloth- | 6,252 | 5,626 | 1,396 | 1,451 | 711 | 365 | 15,801 |
| VIII. Clothing (except Knitted) | 49,947 | 49,186 | 9,999 | 7,230 | 5,144 | 958 | 122,464 |
| IX. Food, Drink and Tobacco .. | 40,342 | 38,821 | 23,570 | 10,757 | 6,051 | 4,809 | 124,350. |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving | 19,705 | 14,279 | 10,388 | 3,990 | 4,864 | 3,074 | 56,300 |
| XI. Furniture of Wood, Bedding, etc. | 8,574 | 6,503 | 3,440 | 2,13I | 1.500 | 670 | 22,818 |
| XII. Paper, Stationery, Printing, |  |  |  |  |  |  |  |
| XII Bookbinding, etc. | 24,332 | 18,039 | 4,704 | 3,422 | 2,267 | 2,564 | 55,328 |
| XIII. Rubber | 6,431 | 4,948 | 1,155 | 733 | 138 | 121 | 13,526 |
| XIV. Musical Instruments | 1,320 | 187 | 35 | 50 | 22 |  | 1,614 |
| XV. Miscellaneous Products | 8,790 | 8,527 | 567 | 905 | 404 | 208 | 19,401 |
| Total, Classes I, to XV. | 401,501 | 312,948 | 93,135 | 81,439 | 42,555 | 23,654 | 955,232 |
| XVI. Heat, Light and Power | 5,464 | 3,844 | 1,444 | 1,730 | 1,206 | 173 | 13,861 |
| Grand Total | 406,965 | 316,792 | 94,579 | 83,169 | 43,761 | 123,827 | 969,093 |

4. Persons Employed According to Occupational Status.-(i) General. In the following table the average number of persons employed in each State during 1950-51 are classified according to their occupational status. 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 $\S 5$, par. r.

FACTORIES : PERSONS EMPLOYED-OCCUPATIONAL STATUS, 1950-51.

| State. | Average Number of Persons Employed. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Working Proprietors. | Managerial and Clerical Staff, etc.(a) | Chemists, Draftsmen, etc. | $\begin{aligned} & \text { Foremen } \\ & \text { and } \\ & \text { overseers. } \end{aligned}$ | Workers in Factory (Skilled and Unskilled). | Carters (excluding Delivery only) and Messengers, etc. (b) | Total. |
| New South Wales | 13,503 | 42,258 | 5,001 | 16,258 | 327,454 | 2,49I | 406,965 |
| Victoria . | 1 1,526 | 31,089 | 3.745 | 13,343 | 254,555 | 2,534 | 316,792 |
| Queensland | 4,169 | 8,308 | 764 | 3,133 | 77,386 | 819 | 94,579 |
| South Australia . | 2,217 | 8,814 | 1,034 | 3,346 | 67,397 | 361 | 83,169 |
| Western Australia | 2302 |  | 285 | 1,606 | 36,254 | 139 |  |
| Tasmania | 980 | 2,238 | 292 | 974 | 19,223 | 120 | $23,827$ |
| Australia | 34,697 | 95,882 | II,12I | 38,66o | 782,269 | 6,464 | 969,093 |

[^0](ii) Outworkers. The term " outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and embraces only persons to whom work is given out by factories to be done at home. Owing to the amended employment groupings adopted in 1945-46 (see §5. I.) persons working regularly at home for factories are now included with carters, messengers and others and separate details are no longer available. The number of " outworkers" employed by factories in 1944-45 was 1,049.
5. Monthly Employment, 1938-39, 1945-46 and 1948-49 to 1950-51.-The following table shows the number of persons (excluding working proprietors) employed in factories on the pay-day nearest to the 15th of each month for years up to 1949-50 and on the last pay-day of the month thereafter.

FACTORIES : MONTHLY EMPLOYMENT, AUSTRALIA. (Excluding Working Proprietors.)

6. Distribution of Employees According to Age.-(i) States. The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 onwards, instead of three as in previous years. The particulars are collected as at June. The numbers employed in each agegroup in June, 1951, are given below :-

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1951. (Excluding Working Proprietors.)

| Age Groups. |  | N.S.W. | Vic. | Qland. | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |

Females.


Persons.

| Under 16 years | $3,951$ | - 4,929 | 2,845 | 1,454 | 1,133 | 143 | 14,455 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 years .. | 7,780 | 5,395 | 2,529 | 1,430 | 1,337 | 529 | 19,000 |
| 17 | 8,846 | 6,r 54 | 2,508 | 1,580 | 1,381 | 657 | 21,126 |
| 18 ," | 10,144 | 6,481 | 2,582 | 1,708 | 1,422 | 665 | 23,002 |
| 19 | 9,825 | 6,326 | 2,326 | 1,59x | 1,300 | 637 | 22,005 |
| 20 " | 10,084 | 6,468 | 2,429 | 1,755 | 1,258 | 640 | 22,634 |
| 21 , and over | 348,425 | 273,561 | 77,457 | 72,521 | 34,763 | 20,029 | 826,756 |
| Total | 399,055 | 309,314 | 92,676 | 82,039 | 42,594 | 23,300 | 948,978 |

(ii) Australia. As comparative details based on the new age grouping are not available for the years prior to $1945-46$, the following table shows the age distribution in sexes for Australia in June, 1939, 1946 and 1948 to 1951 on the old basis.

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, AUSTRALIA.
(Excluding Working Proprietors.)

|  | Under 16 Years. |  | $\begin{gathered} 16 \text { and under } \\ \text { Years. } \end{gathered}$ |  | 21 Years and Over. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Per Cent. | No. | Per Cent. | No. | Per Cent. | No. | Per Cent. |
| Males. |  |  |  |  |  |  |  |  |
| 1939 | 16,109 | 4.12 | 76,418 | 19.55 | 298,446 | 76.33 | 390,973 | 100.00 |
| 1946 | 9,016 | 1.61 | 69,413 | 12.43 | 479,999 | 85.96 | 558,428 | 100.00 |
| 1948 | 7,734 | 1.24 | 68,818 | 11.01 | 548,467 | 87.75 | 625,019 | 100.00 |
| 1949 | 7,791 | I. 20 | 66,035 | 10.22 | 572,557 | 88.58 | 646,383 | 100.00 |
| $195{ }^{\circ}$ | 7,812 | 1.15 | 63,316 | $9 \cdot 34$ | 606,554 | 89.51 | 677,682 | 100.00 |
| 1951 | 8,219 | 1.17 | 60,919 | 8.64 | 635,572 | 90.19 | 704,710 | 100.00 |
| Females. |  |  |  |  |  |  |  |  |
| 1939 | I5,497 | 10.43 | 56,273 | 37.87 | 76,831 | 51.70 | 148,601 | 100.00 |
| 1946 | 7,881 | 4 . 10 | 53,ОІ 8 | 27.59 | 131,238 | 68.31 | 192,137 | 100.00 |
| 1948 | 6,549 | 3.15 | 52,201 | 25.09 | 149,291 | 71.76 | 208,041 | 100.00 |
| 1949 | 6,326 | 2.88 | 51,562 | 23.47 | 161,764 | 73.65 | 219,652 | 100.00 |
| 1950 | 6,055 | 2.62 | 48,021 | 20.77 | 177,131 | 76.61 | 231,207 | 100.00 |
| 1951 | 6,236 | 2.55 | 46,848 | 19.18 | 191,184 | 78.27 | 244,268 | 100.00 |
| Persons. |  |  |  |  |  |  |  |  |
| 1939 | 31,606 | 5.86 | 132,69I | 24.59 | 375,277 | 69.55 | 539,574 | 100.00 |
| 1946 | 16,897 | 2.25 | 122,43I | 16.31 | 6II,237 | 81.44 | 750,565 | 100.00 |
| 1948 | 14,283 | 1.71 | 121,019 | 14.53 | 697,758 | 83.76 | 833,060 | 100.00 |
| 1949 | 14,117 | 1.63 | 117,597 | 13.58 | 734,321 | 84.79 | 866,035 | 100.00 |
| 1950 | 13,867 | 1.53 | 111,337 | 12.25 | 783,685 | 86.22 | 908,889 | 100.00 |
| 1951 | 14,455 | 1.52 | 107,767 | 11.36 | 826,756 | 87.12 | 948,978 | 100.00 |

## § 6. Sex Distribution in Factories.

1. Distribution According to Sex of Persons Employed.-(i) General. In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four ; and in 1950-51 was one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and in 1950-51 was about two to five. For Australia as a whole the ratio of females employed in factories was highest in 1943-44 at about two females to five males but by 1946-47 the ratio had declined to the level of one female to three males, where it has since remained.
(ii) Average Number of Males and Females Employed. The following table shows the average number of males and females employed in factories in each State for 1938-39, 1945-46 and 1947-48 to 1950-51 :-

FACTORIES : MALES AND FEMALES EMPLOYED.'

| State. |  | 1938-39. | re45-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

2. Rate of Variation for each Sex.-The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown below for the years 1938-39, 1945-46 and 1947-48 to 1950-51 :-

FACTORIES: ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

| State. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |
| New South Wales | 1. 69 | I. 65 | 6.60 | $3 \cdot .56$ | 6.17 | 6.07 |
| Victoria | 0.04 | 2.60 | 5.43 | 4.61 | 3.85 | 4.03 |
| Queensland. . | 3.79 | 4.09 | 7.11 | 7.65 | 6.67 | 5.80 |
| South Australia | $-2.39$ | 0.95 | 4.11 | 3.27 | 3.75 | 5.88 |
| Western Australia | $-0.30$ | 8.32 | 7.04 | $7 \cdot 33$ | 6.40 | 7.83 |
| 'Tasmania | $4 \cdot 40$ | 2.37 | 6.31 | $7 \cdot 55$ | 4.29 | 0.79 |
| Total | 0.98 | 2.42 | 6.06 | $4 \cdot 55^{\circ}$ | 2.90 | $5 \cdot 33$ |
| Females. |  |  |  |  |  |  |
| New South Wales | I. 88 | $-8.24$ | 3.87 | 5.84 | 2.35 | 7.45 |
| Victoria . | -0.03 | -7.11 | 2.95 | $5 \cdot 75$ | $4 \cdot 12$ | 5.26 |
| Queensland. | 3.96 | $-6.16$ | 7.63 | 10.07 | 9.99 | 8.63 |
| South Australia | I. 98 | $-16.76$ | 2.17 | 4.66 | 2.44 | 5.55 |
| Western Australia | 3.06 | -11.18 | 3.5I | $3 \cdot 44$ | 5.25 | $5 \cdot 55$ |
| Tasmania | 6.51 | -13.14 | 5.71 | 3.25 | 2.72 | 4.02 |
| Total | 1.30 | $-8.53$ | 3.65 | 5.87 | 3.63 | 6.45 |

Note.--The minus sign (-) indicates decrease.
3. Masculinity of Persons Employed in Factories.-The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons employed in each State. The following table shows particulars for the years 1938-39, 1945-46 and 1947-48 to 1950-51 :-

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

| Year. |  | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1938-39$ | $\ldots$ | $\ldots$ | 271 | 208 | 432 | 445 | 415 | 420 | 271 |
| $1945-46$ | $\ldots$ | $\ldots$ | 273 | 232 | 451 | 362 | 405 | 366 | 280 |
| $1947-48$ | $\ldots$ | $\ldots$ | 300 | 251 | 480 | 414 | 458 | 434 | 308 |
| $1948-49$ | $\ldots$ | $\ldots$ | 294 | 248 | 470 | 408 | 475 | 452 | 304 |
| $1949-50$ | $\ldots$ | $\ldots$ | 289 | 248 | 455 | 414 | 480 | 459 | 302 |
| $1950-51$ | $\ldots$ | $\ldots$ | 285 | 245 | 444 | 415 | 490 | 445 | 299 |

(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 too females. With the subsequent recovery of employment in the heavier industries the proportion of males per roo females increased to 27 I in 1937-38 and 1938-39. The enlistment of men in the armed services and the expansion of industry and the consequential absorption of women brought about by the 1939-45 War caused a decrease in masculinity from 1938-39 to 1943-44. However, following the cessation of hostilities in 1945 and the return of servicemen to civilian life, the number of females employed in factories declined and masculinity increased, and in 1950-5I there were 299 males to every 100 females employed in factories.
4. Employment of Females in Particular Industries.-(i) General. The greater number of females in manufacturing industries are employed in four classes, namely :IV., Industrial Metals, Machines, etc. ; VL., Textiles; VIII., Clothing ; and IX., Food, Drink and Tobacco. In 1950-51 these industries accounted for 80.44 per cent. of all femoles in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 125 females to every ioo males and in Class VIII., Clothing, with 25! females per soo males. The following tables show the average number of males and females employed in each of these classes in 1950-5I :-
MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1950-51.

| Class. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |  |
| IV. Industrial Metals, etc. <br> VI. Textiles and Textile Goods | 153.165 | 93.535 | 29,749 | 37,348 | 15,296 | 6,951 | 336,044 |
| (not Dress) | 11,039 | 15,885 | 727 | 1,389 | 408 | 920 | 30,368 |
| VIII. Clothing (except Knitted) | 13,363 | 14,937 | 2,602 | 2,082 | 1.543 | 366 | 34,893 |
| IX. Food, Drink and Tobacco | 27,937 | 28,257 | 19,979 | 8,023 | 4,661 | 3,371 | 92,228 |
| All Other Classes | 95,803 | 72,305 | 24,125 | 18,173 | 14,441 | 7,846 | 232,693 |
| Total | 301,307 | 224,919 | 77,182 | 67,015 | 36,349 | 19,454 | 726,2:26 |
| Females. |  |  |  |  |  |  |  |
| IV. Industrial Metals, etc. <br> V1. Textiles and Textile Goods | 19,091 | 11,819 | 1,747 | 4,087 | 675 | 335 | 37,754 |
| (not Dress) | 14,260 | 19,435 | 1,270 | 1,203 | 408 | 1,336 | 37,912 |
| VIII. Clothing (except Knitted) | 36,584 | 34,249 | 7,397 | 5,148 | 3,601 | 592 | 87,571 |
| IX. Food, Drink and Tobacco | 12,405 | 10,564 | 3,591 | 2,734 | 1,390 | 1,438 | 32,122 |
| All Other Classes | 23,318 । | 15,806 | 3,392 | 2,982 | 1,338 | 672 | 47,508 |
| Total .. .. | 105,658 | 91,873 | 17,397 | 16,154 | 7,412 | 4,373 | 242,867 |

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

FEMALES EMPLOYED IN CLOTHING INDUSTRIES, 1950-5!.

| Industry. | New South Wales. |  |  | Victoria. |  |  | Other States. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | $\begin{gathered} \text { Fe- } \\ \text { males. } \end{gathered}$ | Femininity. (a) | Males. | Females. | Femininity. (a) | Males. | Females. | Femininity. <br> (a) |
| Tailoring and Ready-made |  |  |  |  |  |  |  |  |  |
| Clothing | 3,499 | 16,327 | 467 | 3,268 | 7,634 | 234 | 1,829 | 5,978 | 327 |
| Waterproof and Oilskin Clothing | 119 | 725 | 609 | 155 | 434 | 280 | 15 | 116 | 773 |
| Dressmaking, Hemstitching | 196 | 2,661 | 1,358 | 1,541 | 10,686 | 693 | 190 | 3,860 | 2,032 |
| Millinery .. .- | 234 | 1,439 | 615 | 257 | 907 | 418 | 43 | 583 | 1,356 |
| Shirts, Collars and Underclothing | 553 | 4,727 | 855 | 589 | 4,602 | 781 | 194 | 2,205 | 1,137 |
| Foundation Garments | 124 | 1,582 | 1,276 | 190 | 1,204 | 634 | 22 | 212 | 964 |
| Handkerchiefs, Ties and Scarves | 173 | 983 | 568 | 87 | 408 | 469 | 2 | 6 | 300 |
| Hats and Caps | 657 | 676 | 103 | 399 | 272 | 68 | 25 | 134 | 536 |
| Gloves | 107 | 372 | 348 | 116 | 376 | 324 | 38 | 176 | 463 |
| Boots and Shoes | 3,903 | 4,208 | 108 | 5,587 | 5,718 | 102 | 2,333 | 1,974 | 85 |
| Boot and Shoe Repairing. - | 1,401 | 88 | 6 | 624 | 29 | 5 | 705 | 34 | 5 |
| Boot and Shoe Accessories | 235 | 249 | 106 | 389 | 284 | 73 | 28 | 4 | 14 |
| Umbrellas and Walking | 49 | 93 | 190 | 26 | $62^{\circ}$ | 238 | 18 | 49 | 272 |
| Dyeworks and Cleaning (including Renovating and Repairing) | 2,063 | 2,169 | 105 | 1,676 | 1,435 | 86 | 1,15I | 1,407 | 122 |
| Other .. | 50 | 285 | 570 | 73 | 198 | 271 | 1,15 |  | . . |
| Total | 13,363 | 36,584 | 274 | 14,937 | 34,249 | 229 | 6,593 | 16,738 | 254 |

(a) Number of females per 100 males.

## § 7. Child Labour in Factories.

1. Conditions of Child Labour.-The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.
2. Number of Children Employed, 1939, 1946 and 1948 to 1951. - 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 14,455 in June, 1951, which is most marked in all States excepting Western Australia, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate which occurred about 1929, and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

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

FACTORIES : CHILDREN(a) EMPLOYED, JUNE.

(a) Under sisteen years of age.
3. Proportion of Children Employed to Total Employees.-The following table shows the proportion of children to total employees (excluding working proprietors) employed in factories in the various States in June of each of the years 1939, 1946 and 1948 to 1951. In 1951 the proportion was highest in Queensland and lowest in Tasmania.

## FACTORIES : PROPORTION OF CHILDREN EMPLOYED TO TOTAL EMPLOYEES,

 JUNE.(Per Cent.)
(Excluding Worring Proprietors.)

| State. | 1939. | 1946. | 1948. | 1949. | 1950. | 1951. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New South Wales | 5.85 | 1.48 | 1.11 | 1.06 | 0.96 | 0.99 |
| Victoria | 5.81 | 2.53 | I. 95 | 1.82 | I. 64 | 1.59 |
| Queensland | 6.01 | 3.63 | 2.88 | 2.91 | 2.98 | 3.07 |
| South Australia | 5.78 | 2.64 | 2.01 | 1.87 | 1.82 | 1.77 |
| Western Australia.. | 5.61 | 3.99 | 3.04 | 2.85 | 2.69 | 2.66 |
| Tasmania | 6.78 | 2.77 | I. 35 | 1.08 | 0.83 | 0.6I |
| Australia | 5.86 | 2.25 | 1.71 | 1.63 | I. 53 | 1.52 |

4. Industries Employing Child Labour.-The distribation of children employed in factories in June, 1951, and the proportion of children employed to total employees is given in the following table according to the class of industry :-

FACTORIES : CHILDREN EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1951.

| Class of Industry. | Children Employed. |  | Total Employees. <br> (a) |  | Proportion of Children Employed to Total Employees.$(a)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Males. | Females. | Males. | Females. |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 100 | 15 | 17,126 | 702 | \% ${ }^{\circ}$ | $\stackrel{\%}{\%}$ |
| II. Bricks. Pottery, Glass, etc. .- | 102 | 25 | 18,858 | 1,682 | 0.54 | 1.49 |
| III. Chemicals, Dyes, Explosives, Paints. Oils and Grease | 191 | 177 | 27,934 | 9,152 | 0.68 | 1.93 |
| IV. Industrial Metals, Machines, Conveyances | 3,629 | 644 | 330,318 | 39,134 | 1.10 | 1.65 |
| V. Precious Metals, Jewellery and Plate | 78 | 4 I | 4,549 | 1,208 | 1.71 | $3 \cdot 39$ |
| VI. Textiles and Textile Goods (not Dress) | 490 | 987 | 30,636 | 38,8ı8 | 1.60 | 2.54 |
| VII. Skins and Leather (not Clothing or Footwear) | 99 | 42 | 11,126 | 3,640 | 0.89 | 1.15 |
| VIIT. Clothing (except Knitted) | 496 | 3,006 | 30,343 | 87,608 | 1.63 | 3.43 |
| IX. Food, Drink and Tobacco . - | 922 | 609 | 87,880 | 31,038 | 1.05 | I. 96 |
| X. Sawmills. Joincry, Boxes. etc. ; Wond Turning and Carving. | 564 | 58 | 50,891 | 2,374 | 1.11 | 2.44 |
| XI. Furniture of Wood, Bedding, etc. | 653 | 65 | 17,972 | 3,532 | 3.63 | r. 8.4 |
| XII. Paper, Stationery, Printing, | 633 | 410 | 39,112 | 15,246 | 1.62 | 2.69 |
| XIII. Rubber .. .. . | 60 | 4 I | 10,700 | 3,022 | 0.56 | 2. 36 |
| XIV. Musical Instruments | 31 | 3 | 1,204 | 357 | 2.57 | 0.84 |
| XV. Miscellaneous Products | 136 | 112 | 11,948 | 6,639 | 1.14 | 1. 69 |
| Total, Clnsses I. to XV. | 8,184 | 6,235 | 690,597 | 244,152 | 1.19 | 2.55 |
| XVI. Heat, light and Power | 35 | 1 | 14,113 | 116 | 0.25 | 0.86 |
| Grand Total | 8,219 | 6,236 | 704,710 | 244,268 | 1.17 | 2.55 |

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

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

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

1. General.-The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for $1950-51$ was $£_{2}, 151,000,000$, of which amount $£_{1,235,000,000}$ represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and $£_{72,000,000}$ the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, namely $£ \$_{44}, 000,000$, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e. "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production." The total amount of salaries and wages paid in factories in $1950-51$ was $£_{492,000,000 \text {. This figure, which excludes }}$ amounts drawn by working proprietors, was the highest ever recorded and shows an increase of $£_{106}, 000,000$ or 27.5 per cent. on that for the previous year.
2. Salaries and Wages Paid.-(i) In Classes of Industry, 1950-51. 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, 1950.51. ( $\mathrm{E}^{\prime} 000$. )

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products |  | 2,921 | 805 | 793 | 709 | 347 | 10,022 |
| II. Bricks, Pottery, Glass, etc. . | 6,299 | 2,664 | 507 | 1,O3S | 597 | 149 | 11,254 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 9,543 | 7,256 | 694 | 1,569 | 926 | 18.4 | 20,172 |
| 1V. Industrial Metals, Machines, Conveyances | 98,474 | 59,462 | 14,855 | 23,309 | 7,518 | 3,524 | 207,442 |
| V. Precious Metals, Jewellery and Plate | 972 | 1,741 |  | 165 | 106 | 7 | 3,103 |
| VI. Textiles and Textile Goods (not Dress) | 11,403 | 16,660 | 753 | 1,304 | 328 | 997 | 31,445 |
| VII. Skins and Leather (not Clothing or Footwear) | 3,261 | 2.985 | 680 | 803 | 339 | 191 | 8,259 |
| V1II. Clothing (except Knitted) . | 18,394 | 19.826 | 3.166 | 2,486 | 1,594 | 324 | 45,790 |
| IX. Food, Drink and Tobacco . | 19,677 | 20,245 | 11,723 | 5138 | 2,883 | 2,282 | 61,948 |
| X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving | 9,212 | 6:981 | 4,435 | 1,882 | 2,110 | 1,353 | 25,973 |
| XI. Furniture of Wood, Bedding, | 4,048 | 2,912 | 1,347 | 894 | 589 | 254 | 10,044 |
| II. Paper, Stationery, Printing, | 12,967 | 9,877 | 2,154 | 1,708 | 1,021 | 1,575 | 29,302 |
| XIIT. Rubler . | 4.034 | 3,115 | 540 | 382 | 65 | 58 | 8,194 |
| XTV. Musical Instruments | 586 | 94 | 15 | 23 | 7 |  | 725 |
| XV. Miscellaneous Products | 4,238 | 4.027 | 205 | 407 | 144 | 82 | 9,103 |
| Total, Classes I. to XV. | 207,555 | 160,766 | 41,991 | 41,901 | 18,936 | 11,627 | 482,776 |
| XVI. Heat, Light and Power | 3,784 | 2,44 I | 846 | 1,178 | 722 | 110 | 9,081 |
| Grand Total | 211,339 | 163,207 | 42,337 | 43,079 | 19,658 | 11,737 | 491,857 |

(ii) Totals and Averages, 1938-39, 1945-46 and 1947-48 to 1950-51. The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years indicated. The figures exclude working proprietors and the amounts drawn by them
factories : total and average salaries and wages paid.

| Year. | Particulars. | N.S.W. | Vic. | 'la | S. Aust. | W | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 |  |  |  |  |  | 74 |  |  |
|  | Average per employee £ | 201.77 | 185.64 | 210.78 | 195.57 | 207.90 | 188.31 | . 31 |
| 1945-46 | Total amount paid £'000 | 87,647 | 70,499 | 18;012 | 16,770 | 7,884 | 5, | 819 |
|  | Average per employee $£$ | 290.75 | 284.09 | 285.00 | 272.71 | 273.01 | 269.85 | 285.17 |
| 1947-48 | Total amount paid £'ooo | 125,346 | 93,802 | 24,163 | 24,853 | 10,736 | 6,865 | 285,765 |
|  | Average per employee $£$ | 357.03 | 379.36 | 327.72 | 348.42 | 316.26 | 337.45 | 348.95 |
| 1948-49 | Total amount paid $£$ '000 | 146,5 | I12,410 | 29,447 | 29.510 | 12,928 | 8,456 | 339,287 |
|  | Average per employee $\mathfrak{f}$ | 401.06 | 399.86 | 371.11 | 399.22 | 357.18 | 389.57 | . 60 |
| 1949-50 | Total amount paid £'ooo | 162,147 | 130,255 | 34,748 | 33,807 | 15,293 | 9,646 | 385,896 |
|  | Average per emplovee $£$ | 439.04 | 446.05 | 408.67 | 442.05 | 397.13 | 428.30 | 436.59 |
| 1950-5r | Total amount paid £'ooo | 211,339 | 163,207 |  | 43,079 | 19,658 | 11,737 | 491.857 |
|  | Average per employee $£$ | 537.13 | 534.64 | 473.80 | 532.15 | 474.15 | 513.74 | 526.39 |

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there is a large number of hands employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1950-5I were paid in New South Wales, Victoria and South Australia, in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a record high level of $£ 291$ was attained as a result of war-time conditions. In 1944-45 the average dropped to $£_{285}$ and remained at this level in 1945-46. From 1945-46 average earnings rose each year and in 1950-51 reached a new record level of over $£_{526}$.
(iii) Earnings of Males and Females, 1950-51. The following table shows the amount of salaries and wages paid to males and females in each class of industry in each State:-

FACTORIES : SALARIES AND WAGES PAID-MALES AND FEMALES, 1950-51. ( $\mathrm{f}^{\prime} 000$. )

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

FACTORIES : SALARIES AND WAGES PAID—MALES AND FEMALES, 1950-5I-continued.
(£'ooo.)

(iv) Total and Average Earnings of Males and Females, 1938-39, 1945-46 and 1947-48 to 1950-51. Particulars for these years are given in the table hereunder:-

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

|  | Particulars. | N.S.W. | Fic. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |  |  |
| 1938-39. | Amount paid .. £'000 | 38,272 | 29,006 | 9,920 | 7,488 |  |  |  |
|  | Proportion of total \% | 85.80 | 80.51 | 91. 12 | 9 9 .66 | 4,129 90.28 | 2,234 90.10 | 91,049 85.30 |
|  | Average per employee $\mathbf{E}^{\text {d }}$ | 239.24 | 224.47 | 238.59 | 220.95 | 235.49 | 212.09 | 235.84 |
| 1945-46. | Amount paid .. E'ooo | 73,380 | 56,773 | 16,178 | 14,654 | 7,038 | 4,353 | 172,376 |
|  | Proportion of total \% | 83.72 | 80.53 | 89.82 | 87.39 | 89.27 | 86.96 | 83.75 |
|  | A verage per employee $£$ | 335.34 | 330.86 | 314.56 | 305.70 | 306.74 | 301.35 | 326.99 |
| 1947-48. | Amount paid .. £'000. | 106,027 | 76,312 | 21,659 | 22,035 | 9,630 | 6,069 | 241,732 |
|  | Proportion of total \% | 84.58 | 81.35 | 89.64 | 88.66 | 89.70 | 88.39 | 84.59 |
|  | Average per employee $£$ | 405.77 | 401.52 | 357.14 | 385.31 | 349.33 | 369.89 | 394.24 |
| 1948-49. | Amount paid . £'ooo | 123,263 | 90,765 | 26,331 | 26,140 | 11,555 | 7.503 | 285,557 |
|  | Proportion of total \% | 84.12 | 80.74 | 89.42 | 88.58 | 89.38 | 88.73 | 84.16 |
|  | A verage per employce $£$ | 455.88 | 457.85 | 405.20 | 442.11 | 390.29 | 425.40 | 446.20 |
| 1949-50. | Amount paid .. £'ooo | 1 35,875 | 105,135 | 30,948 | 29.907 | 13,692 | 8,538 | 324,095 |
|  | Proportion of total \% | 83.80 49933 | 80.71 510.86 | 89.06 46.87 | 88.47 487 | 89.53 | 88.51 | 83.99 |
|  | Average per employce $£$ | 499.33 | 510.86 | 446.87 | 487.71 | 433.40 | 465.44 | 492.23 |
| 1950-51. | Amount paid .. £'ooo | $176,031$ | $130,923$ | $37,870$ |  | 17,620 | 10,336 | 410,705 |
|  | Proportion of total \% | $83.29$ | $80.22$ |  | 88.04 583 | 89.63 515.67 | 88.06 558.67 | 83.50 |
|  | A verage per employee $£$ | 609.05 | 610.44 | 516.83 | 583.93 | 515.67 | 558.67 | 591.46 |

# FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES-MALES AND FEMALES-continued. 

|  | Particulars. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | 'Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Females. |  |  |  |  |  |  |  |
| 1938-39. | Amount paid $\quad$ '000 Proportion of total | 6,334 | 7,021 | 967 8.88 | 681 | 445 | 246 | 15,694 |
|  | Proportion of total | 14.20 | 19.49 | 8.88 | 8.34 | 9.72 | 9.90 | 14.70 |
|  | Average per employee $£$ | 103.66 | 108.25 | 96,00 | 86.44 | 99.58 | 93.19 | 103.92 |
| 1945-46. | Amount paid .. E'ooo | 14,267 | 13,726 | 1,834 | 2,116 | 846 | 654 | 33,443 |
|  | Proportion of total \% | 16.28 | 19.47 179 | 10.18 | 12.61 | 10.73 | 13.04 | 16.25 |
|  | Average per employee $£$ | 172.65 | 179.26 | 155.85 | 156.05 | 142.62 | 159.02 | 171.88 |
| 1947-48. | Amount paid .. £'000 | 19.319 | 17,490 | 2,504 | 2,818 | 1,106 | 796 | 44,033 |
|  | Proportion of total \% | 15.42 215.4 | 18:65 | 10. 36 | Ir. 34 | 10.30 | 11.61 | 15.41 |
|  | Average per employee ${ }_{\text {d }}$ | 215.16 | 222.98 | 191.38 | 199.25 | 173.38 | 202.32 | 253.99 |
| 1948-49. | Amount paid . £'ooo | 23.273 | 21,645 | 3,116 | 3,370 | 1,373 | 953 | 53,730 |
|  | Proportion of total ${ }_{\text {average }}$ \% | 15.83 24502 | 19.26 2617 | 10.58 216.90 | 11.42 227.81 | 10.62 208.35 | 11.27 234.25 | 15.84 24683 |
|  | Average per employee ${ }_{\text {A }}$ | 245.02 26.272 | 261.17 25,120 | 216.90 3.800 | 227.81 3,900 | 208.35 1.601 | 234.25 I.108 | 246.83 $6 \mathrm{r}, 801$ |
| 1949-50. | Amount paid . \&'ooo | 26,272 16.20 | 25,120 | 3.800 | 3,900 it | 1,601 | 1,108 | 61,801 16.01 |
|  | Proportion of total ${ }_{\text {A }}$ \% $\%$ | 16.20 270.27 | 19.29 291.35 | 10.94 240.93 | 11.53 257.30 | 10.47 231.50 | 11.49 265.32 | 16.01 274.12 |
| 1950-51. | Armount paid .. f'ooo | 35,308 | 32,284 | 4,967 | 5,154 | 2,038 | 1,401 | 81,152 |
|  | Proportion of total \% | 16.71 | 19.78 | 11.59 | 11.96 | 10.37 | 11.94 | 16.50 |
|  | A verage per employee $\underset{ \pm}{ }$ | 338.08 | 355.57 | 289.82 | 322.04 | 279.55 | 322.46 | 338.12 |

(v) Managers, Clerical Staff and Other Employees. A further analysis of salaries and wages paid is given in the following table for 1950-51 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, 1950-51., ( $\mathrm{f}^{\prime} 000$. )

3. Power, Fuel and Light Used.-(i) In Classes of Industry, 1950-51. The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1950-51 it amounted to a new high level of $£_{71}, 682,000$, an increase of $£_{16} 6,852,000$ as compared with the previous year and approximately four and one half times the corresponding value in 1938-39. The following table shows the value of power, fuel and light, etc., used in the different classes of industry :-

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED(a), 1950-51. ( £'000.) $^{\prime}$

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| I. Treatment of Non-metallifer- |  |  |  |  |  |  |  | (

(a) Includes value of lubricants and water.
(ii) Values of Items, 1950-51. 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), 1950-51. ( $\boldsymbol{E}^{\prime} \mathbf{0 0 0}$.)


[^1](iii) Quantities of Fuel Used, 1950-51. The following table shows the quantities of fuel used in factories in each State during the year:-

FACTORIES : QUANTITIES OF FUEL USED, 1950-51.

| Particalars. | Unit. | N.S.W. | Victoria. | Q'land. | S. Anst. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coal, Black | '000 tons | 4,569 | 622 | 1,149 | (a) 699 | 459 | 141 | (a) 7,639 |
| ", Brown | " | . . | 5,779 | . | . | . . | . | 5,779 |
| Brown Coal Briquettes | " | . | 505 | . | - | -• | - | 505 |
| Coke | " | I,734 | 150 | 24 | (b) 244 | 22 | 16 | (b) 2,190 |
| Wood | " | 194 | 657 | 249 | 181 | 435 | 126 | 1,842 |
| Fuel 011 | 'ooo gals. | 86,368 | 51,590 | 8,226 | 21,974 | IT,210 | 3,043 | I82,4 1 I |
| Tar (Fuel) . . | " | 20,893 | 4,665 | 158 | 1,971 | 862 | 405 | 28,954 |

(a) Includes 263,000 tons of Leigh Creek coal.
(b) Includes 15,000 tons of coke breeze.
(iv) Total Value, 1938-39, 1945-46 and 1947-48 to 1950-51. The uext table shows the amounts expended on power, fuel and light during these years :-

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.(a)
( $£^{\prime} 000$.)

| Year. |  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | $\cdots$ | 7,652 | 4,000 | 1,423 | 1,018 | 1,169 | 438 | 15,700 |
| 1945-46 | $\cdots$ | 12,207 | 6,941 | 2,298 | 2,851 | 1,836 | 904 | 27,037 |
| 1947-48 | $\cdots$ | 17,314 | 9,015 | 3.184 | 4,281 | 2,285 | 1,015 | 37,094 |
| 1948-49 | $\cdots$ | 21,611 | 11,337 | 4,086 | 5,123 | 2,745 | 1,160 | 46,062 |
| 1949-50 | $\cdots$ | 25,536 | 13,695 | 5,119 | 5,942 | 3,184 | 1,354 | 54,830 |
| 1950-51 |  | 35,381 | 17,371 | 6,295 | 7,267 | 3,759 | 1,609 | 71,682 |

(a) Includes value of lubricants and water.
4. Value of Materials Used.-(i) In Classes of Industry, 1950-51. 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 1950-51 reached $£_{1,235,281,000}$, representing 57.4 per cent. of the value of the final output (see par. 5). The following table shows the value of the materials used in various classes of industry in each State :-

FACTORIES : VALUE OF MATERIALS USED, 1950-5I. ( $\mathrm{E}^{\prime} 000$.)

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products .. | 11,998 | 5,316 | I,714 | 1,528 | 1,126 | 667 | 22.349 |
| II. Bricks, Pottery, Glass, etc. . . | 4.578 | 2,137 | 345 | 879 | 370 | 89 | 8,398 |
| III. Chemicals, Dyes, Explosives, | 46.735 | 27,348 | 3,826 | 6,413 | 4,933 | 604 | 89,859 |
| IV. Industrial Metals, Machines, Conveyances | 191,880 | 81.707 | 21,323 | 51,862 | 10,165 | 9,884 | 366,821 |
| V. Precious Metals, Jewellery and Plate | 1,034 | 2,342 | 61 | 119 | 65 | 4 | 3,625 |
| VI. Textiles and Textile Goods (not Dress) | 39,183 | 60,151 | 3,750 | 4,722 | 2,550 | 4,416 | 114,7\%2 |
| VII. Skins and Leather (not Clothing or Footwear) | 18,685 | 14,03I | 2,977 | 14,773 | 2,057 | 1,961 | 54,484 |
| VIII. Clothing (except Knitted) | 33,537 | 34,103 | 4,770 | 2,833 | 2,143 | 265 | 77,651 |
| IX. Food, Drink and Tobacco .. | 92,339 | 90,040 | 79,233 | 22,204 | 16,206 | 9,319 | 309,341 |
| X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving | 22,944 | 14,483 | 7,723 | 4,959 | 3,168 | 2,564 | 55,841 |
| XI. Furniture of Wood, Bedding, | 8,433 | 6,541 | 2,697 | 1,932 | 1,295 | 362 | 21,260 |
| XII. Paper, Stationery, Printing, |  |  |  |  |  |  |  |
| XIII. Rubber Bookbinding, etc. | 24,547 13,748 | 18,896 13,731 | 3,127 1,473 | 2,648 712 | 1,441 141 | 1,926 119 | 52,585 29,924 |
| XIV. Musical Instruments | 947 | 65 | , | 4 | 4 |  | 1,024 |
| XV. Miscellaneous Products | 6,437 | 7,253 | 328 | 990 | 105 | 71 | 15,184 |
| Total, Classes I. to XV. | 517,025 | 378,144 | 133,352 | 116,578 | 45,768 | 32,25x | 1,223,118 |
| XVI. Heat, Light and Power | 5,397 | 3,858 | 1,105 | 969 | 684 | 150 | 12,163 |
| Grand Total | ;522,422 | 382,002 | 134,457 | 117,547 | 46,452 | 32,401 | 1,235,28 |

(ii) Total Amount, 1938-39, 1945-46 and 1947-48 to 1950-51. The following table shows the values of materials used in factories for these years :-
factories : Value of materials used.
( $\mathrm{E}^{\prime} 000$.)

| Year. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tasmania. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | 120,502 | 82,971 | 42,596 | 20,309 | 9,604 | 5,321 | 281,303 |
| 1945-46 | 201,706 | 159,798 | 58,633 | 37,770 | 18,361 | 12,019 | 488,287 |
| 1947-48 | 292,557 | 209,896 | 79,174 | 61,620 | 24,957 | 15,525 | 683,729 |
| 1948-49 | 336,914 | 252,741 | 97,045 | 75,22 7 | 29,199 | 19,422 | 810,548 |
| 1949-50 | 384,467 | 293,528 | 108,682 | 83,277 | 34,750 | 24,390 | 929,094 |
| 1950-51 | 522,422 | 382,002 | 134,457 | 117,547 | 46,452 | 32,401 | I,235,281 |

5. Value of Output.-(i) In Classes of Industry, 1950-51. The value of the output of factories in the various classes in each State in 1950-51 is shown in the following table. It represents the selling value at the factory of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the real value of factory production (see par. 6).

FACTORIES : VALUE OF OUTPUT, 1950-51.
( $\mathrm{E}^{\prime} 000$. )

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarty Products . . | 20,285 | 11,457 | 3,371 | 3,127 | 2,639 | 1,450 | 42,329 |
| II. Bricks, Pottery, Glass, etc. . | 15,971 | 7,286 | 1,226 | 2,783 | 1,612 | 357 | 29,235 |
| III. Chemicals, Dyes, Explosives, Paints. Oils and Grease | 77,359 | 45,720 | 5,340 | 10,119 | 6,874 | 1,072 | 146,484 |
| IV. Industrial Metals, Machines, Conveyances | 356,042 | 175,170 | 49,938 | 89,340 | 22,596 | 19,658 | 712,744 |
| V. Precious Metals, Jewellery and Plate | 2,701 | 5,126 | $25^{6}$ | 397 | 248 | 17 | 8,745 |
| VI. Textiles and Textile Goods (not Dress) | 59,927 | 90,126 | 5,098 | 6,674 | 3,4I9 | 6,413 | 171,657 |
| VII. Skins and Ieather (not Clothing or Footwear) | 24,493 | 19,859 | 4,102 | 16,240 | 2,723 | 2,616 | 70,033 |
| VIII. Clothing (except Knitted) | 63,385 | 65,834 | 9,604 | 6,344 | 4,682 | 748 | 150,597 |
| IX, Food, Drink and Tobacco .. | 137,066 | 130,329 | 101,334 | 32,026 | 22,945 | 13,823 | 437,523 |
| X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving | 39,938 | 26,849 | 15,365 | 8,276 | 6,892 | 4,952 | 102,268 |
| XI. Furniture of Wood, Bedding, etc. | 15,196 | 11,898 | 4,936 | 3,494 | 2,315 | 761 | 38,600 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 49,904 | 37,372 | 7,004 | 3,494 5,983 | 3,428 | 5,514 | 38,600 109,205 |
| XIII. Rubber | 19,081 | 20,772 | 2,342 | 1,364 | 296 | 245 | 44,100 |
| XIV. Musical Instruments | 2,050 | 188 | 34 | 3 I | 14 |  | 2,317 |
| XV. Miscellaneous Products | 14,084 | 14,146 | 675 | 1,741 | 331 | 205 | 31,182 |
| Total, Classes I. to XV. | 897,482 | 662,132 | 210,621 | 187,939 | 81,014 | 57,831 | 2,097,019 |
| XVI. Heat, Light and Power | 26,430 | 12,901 | 5,591 | 4,417 | 3,417 | 793 | 53,549 |
| Grand Total | 923.912 | 675,033 | 216,212 | 192,356 | 84,43 I | 58,624 | 2,150,568 |

(ii) Total, 1938-39, 1945-46 and 1947-48 to 1950-51. The following table shows the value of output in each State during these years:-

FACTORIES : VALUE OF OUTPUT.
( $£^{\prime} 000$.)

6. Value of Production.-(i) In Classes of Industry, 1950-5I. The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production".

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

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 9, par. 4, was estimated at $£_{37,014,000}$ for 1950-51. Many miscellaneous expenses, such as taxation, insurance, advertising and other sundry charges have not been taken into account. Therefore, it must not be inferred that when wages and salaries are deducted from the value of production the whole of the "surplus" is available for interest and profit.

The value of factory production therefore approximates " net valuc added" in the manufacturing process. It amounted in $1950-51$ to $£ 8_{43} .6$ million to which Class IV., Industrial Metals, etc., with $£_{327}$ million or more than five times the value of production of this class in 1938-39, made the greatest contribution. This total value of production in 1950-51 represented an increase of $£_{182.1}$ million over the figure for $1949-50$ and £640 million ( 315 per cent.) over the value of production recorded in 1938-39.

The following table shows the value of production in 1950-51 in each State for the various classes of industry :-

FACTORIES : VALUE OF PRODUCTION, 1950-51.
( $\mathbf{f}^{\prime} \mathbf{0 0 0}$.)

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous sine and Quarry Products | 7,289 | 5,419 | 1,381 | 1,337 | 1,252 | 647 | 17,325 |
| II. Bricks, Pottery, Glass, etc. . . | 9,045 | 4,076 | 737 | 1,609 | 999 | 201 | 16,667 |
| III. Chemicals. Dyes, Explosives, | 28,698 | 17,155 | 1,388 | 3,274 | 1,767 | 421 | 52,703 |
| IV. Industrial Dletals, Machines, Conveyances | 152,038 | 90,916 | 27,898 | 34,886 | 12,005 | 9,250 | 326,993 |
| V. Precious Metals, Jewellery and Plate | 1,616 | 2,720 | 189 | 263 | 177 | 13 | 4,978 |
| VI. Textiles and Textile Goods (not Dress) | 19,921 | 28,780 | 1,3II | 1,813 | 844 | 1,939 | 54,608 |
| VII. Skins and Leather (not Clothing or Footwear) | 5,538 | 5,496 | 1,075 | 1,368 | 627 | 617 | 14.72 I |
| VIII. Clothing (except Knitted) ... | 29,385 | 31,214 | 4,756 | 3,442 | 2,494 | 466 | 7x,757 |
| IX. Food, Drink and Tobacco .. | 41,292 | 37,248 | 20,447 | 8,928 | 6,161 | 4,246 | 118,322 |
| X. Sawmills, Joinery, Boxes, etc.; <br> Wood Turning and Carving | 16,332 | 12,012 | 7,389 | 3,242 | 3,591 | 2,315 | 44,881 |
| XI. Furniture of Wood, Bedding, etc. | 6,678 | 5,304 | 2,213 | 1,539 | 1,008 | 395 | 17,137 |
| XII. Paper. Stationery, Printing, Bookbinding, etc. | 24,705 | 17.836 | 3,807 | 3,213 | 1,950 | 3,214 | 54,725 |
| XIII. Rubber .. | 4,859 | 6,508 | 818 88 | 614 | 148 | 118 | 13,065 |
| XIV. Musical Instruments | 1,073 | 121 | 28 | 27 | 11 |  | 1,260 |
| XV, Miscellaneous Products | 7,413 | 6,689 | 334 | 725 | 221 | 132 | 15,514 |
| Total, Classes I. to XV. | 355,882 | 271,494. | 73,771 | 66,280 | 33,255 | 23.974 | 824,656 |
| XVI. Heat, Light and Power .. | 10,227 | 4,166 | 1,689 | 1,262 | 965 | 640 | 18,949 |
| Grand Total | 366,109 | 275,660 | 75,460 | 67,542 | 34,220 | 24,614 | 843,605 |

(ii) Total and Averages, 1938-39, 1945-46 and 1947-48 to 1950-51. The value of production and the amount per person employed and per head of population are shown in the following table. For Australia as a whole the value of production per head of population increased from $£ 29.41$ per head in 1938 - 39 to $\mathfrak{E x o r} .5$ per head in 1950-51. For value per person employed, the increase was not quite so pronounced (from $£_{360}$ per head in 1938-39 to $£ 871$ in 1950-51) owing to the considerable increase in the numbers of persons employed in 1950-51 as compared with 1938-39.

## FACTORIES : VALUE OF PRODUCTION.

| Year. | N.S.W. | Victoria. | Qland. | S. Aust. | W. Aust. | Tasmania. | Australia. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Per Person Employed. ( $£$. )

| 1938-39 | $\ldots$ | 395 | 327 | 357 | 315 |  | 378 | 39 I | 360 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1945-46 | $\cdots$ | 493 | 469 | 462 | 405 | , | 457 | 478 | 473 |
| 1947-48 | $\cdots$ | 602 | 570 | 559 | 527 | + | 511 | 578 | 576 |
| 1948-49 | . | 664 | 626 | 645 | 575 |  | 560 | 711 | 639 |
| 1949-50 |  | 741 | 722 | 690 | 666 |  | 639 | 823 | 721 |
| 1950-5I | - | 900 | 870 | 798 | 812 | 1 | 782 | 1,033 | 871 |

Per Head of Porulation. (e.)

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1938-39$ | $\ldots$ | $\cdots$ | 32.99 | 35.25 | 19.15 | 22.99 | 18.79 | 22.72 | 29.41 |
| $1945-46$ | $\ldots$ | $\cdots$ | 52.23 | 59.66 | 27.92 | 40.57 | 28.21 | 36.74 | 47.42 |
| $1947-48$ | $\ldots$ | $\cdots$ | 72.71 | 76.60 | 38.54 | 59.28 | 36.13 | 46.77 | 64.04 |
| $1948-49$ | $\cdots$ | $\cdots$ | 89.98 | 86.48 | 47.18 | 65.65 | 41.12 | 59.92 | 72.92 |
| $1949-50$ | $\ldots$ | $\ldots$ | 111.82 | 121.02 | 52.75 | 76.16 | 47.72 | 69.70 | 82.18 |
| $1950-51$ | $\ldots$ |  |  |  |  |  |  |  |  |

7. Value of Output and Cost of Production.--As the total value of the output for Australia for 1950-5I was estimated at $£ 2,150,568,000$, there remained, after payment of $£_{1,235,281,000}$ for the value of the materials used, $£_{491}, 857,000$ for salaries and wages, and $\mathfrak{£}_{71,682,000}$ for power, fuel and light, a balance of $£_{351,748,000}$ to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit. The following table gives corresponding particulars for each State expressed absolutely and as percentages of the total value of the output for the year 1950-51:-


[^2] (b) Includes lubricants and water.
(c) See paragraph preceding this table.

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1950-51continued.

| State. | Materials Used. (a) | Power, Fuel and Light. (b) | Salaries and Wages. | Balance (Output less Materials, Fuel and Wages.)(c) | Total Value of Output. |
| :---: | :---: | :---: | :---: | :---: | :---: |

Profortion of Costs, etc., to Total Valde.
(Per Cent.)

| New South Wales | $\cdots$ | 56.54 | 3.83 | 22.88 | 16.75 | 100.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Victoria. | $\cdots$ | 56.60 | 2.57 | 24.18 | 16.65 | 100.00 |
| Queensland | $\cdots$ | 62.19 | 2.91 | 19.81 | 15.09 | 100.00 |
| South Australia | $\cdots$ | 61.10 | 3.78 | 22.40 | 12.72 | 100.00 |
| Western Australia | . | 55.02 | 4.45 | 23.28 | 17.25 | 100.00 |
| Tasmania | - | 55.27 | 2.75 | 20.02 | 21.96 | 100.00 |
| Australia | $\cdots$ | 57.44 | $3 \cdot 33$ | 22.87 | 16.36 | 100.00 |

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

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

I. General.-The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1950-51 :-

FACTORIES : VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY( $a$ ), 1950-51. ( ${ }^{\prime} \mathbf{0 0 0 .}$ )

| Value of- | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tasmania. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Land and buildings | 130,468 | 101,326 | 23,958 | 23,303 | 13,380 | 10,971 | 303,406 |
| Plant and machinery | 136,492 | 107,261 | 34,235 | 26,759 | 14,713 | 19,470 | 338,930 |
| Total | 266,960 | 208,587 | 58,193 | 50,062 | 28,093 | 30,44I | 642,336 |

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

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.
2. Value of Land and Buildings.-(i) Total for Australia. The following table shows for Australis as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39, 1945-46 and 1947-48 to 1950-51.

FACTORIES: VALUE OF LAND AND BUILDINGS(a), AUSTRALIA. ( $£^{\prime} 000$. )

| Class of Industry. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous |  |  |  |  |  |  |
| Mine and Quarry Products . | 2,779 | 3,020 | 3,860 | 4,331 | 4,851 | 6,281 |
| II. Bricks, Pottery, Glass, etc. | 2,953 | 3,33I | 3,952 | 4.246 | 4,719 | 5,883 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 7,377 | 18,461 | 18,624 | 20,254 | 22,076 | 20,920 |
| IV. Industrial Metals, Machines, Conveyances | 34,84 I | 59,530 | 64,868 | 73,247 | 81,682 | 97,021 |
| V. Precious Metals, Jewellery and Plate | 633 | 752 | 1,279 | 7.515 | 1,614 | 1,688 |
| VI. Textiles and Textile Goods (not Dress) | 6,000 | 9.112 | 10,603 | 11,905 | 14,838 | 18,004 |
| VII. Skins and Leather (not Clothing or Footwear) | 2,096 | 2,966 | 3,441 | 3,777 | 4,158 | 4,764 |
| VIII. Clothing (except Knitted) - | 10,624 | 13,994 | 16,917 | 18,440 | 19,763 | 22,12S |
| IX. Food, Drink and Tobaceo .- | 33,273 | 40,129 | 45,451 | 48.075 | 52,197 | 60,217 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving. . | 4,107 | 5,441 | 6,912 | 8,072 | 9,442 | $1 \mathrm{x}, 680$ |
| XI. Furniture of Wood, Bedding, etc. | 2,533 | 2,829 | 3,835 | 4,235 | 4,828 | 5,776 |
| XII. Paper, Stationery, Printing, | 10,639 | 11,605 | 13,023 | 14,517 | 16,234 | 20,828 |
| XIIL. Pubber .. .. | 1,676 | 1,865 | 2,152 | 2,476 | 1,038 | 3,792 |
| XIV. Musical Instruments | 105 | 133 | 234 | 268 | 325 | 387 |
| XV. Miscellaneous Products | 1,433 | 2,965 | 3,680 | 3,929 | 4.360 | 5,035 |
| Total, Classes I. to XV. . . | 121,069 | 176,133 | 198,831 | 219,287 | 244,125 | 284,404 |
| XVI. Heat, Light and Power . | 9,851 | 10,806 | 12,312 | 13,453 | 15,424 | 19,002 |
| Grand Total | 130,920 | 186,939 | 211,143 | 232.740 | 259.549 | 303,406 |

(a) Includes estimated value of rented premises.
(ii) In Classes of Industry in States, 1950-51. The following table gives particulars of the various classes of industry in each State.

FACTORIES: VALUE 0F LAND AND BUILDINGS( $\alpha$ ), 1950-51.
( $\left.{ }^{\prime} \mathbf{\prime} 000.\right)$

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 2,766 | , | 09 |  |  | 510 |  |
| II. Bricks, Pottery, Glass, etc. | 3,427 | 1,440 | 241 | 4 II | 259 | 105 | 6,281 5,883 |
| III. Chemicals, Dycs, Explosives, Paints, Oils and Grease | 9,774 | 7,830 | 433 | 1,633 | 1,015 | 235 | 20,920 |
| IV. Industrial Metals, Machines, Conveyances | 45,596 | 30,160 | 6,901 | 7,919 | 3,714 | 2,73 1 | 97,02 1 |
| V. Precious Metals, Jewellery and Plate | 555 | 870 | 62 | 104 | 86 | II | 1,688 |
| VI. Textiles and Textile Goods (not Dress) | 6,619 | 9,985 | 440 | 495 |  | 260 | 18,004 |
| VII. Skins and Leather (not Clothing or Footwear) | 1,772 | 9,985 | 238 | 509 | 165 | 217 | 18,004 4,764 |
| VIII. Clothing (except Knitted) | 9,842 | 8,644 | 1,276 | 5,251 | 940 | 175 | 22,128 |
| IX. Food, Drink and Tobacco .. | 21,408 | 19,256 | 8,616 | 5,129 | 3,648 , | 2,160 | 60,217 |
| X. Sawmills, Joinery, Boxes, etc., | 4,917. | 3,410 | 1,24 | 873 | 791 | 448 | 1 1 ,680 |
| XI. Furnitare of Wood, Bedding, etc. | 2,096 | 1,997 | 725 | 442 | 361 | 155 | 5,776 |
| XII. Paper, Stationery, Printing, | 8,490 | 6,692 | 1,265 | 1,109 | 669 | 2,603 | 20,828 |
| XIII. Rubber . | 1,249 | 1,857 | 382 | 175 | 74 | 55 | 3,792 |
| XIV. Musical Instruments | 296 | 66 | 3 | 15 | 7 |  | 387 |
| XV. Miscellaneous Products | 2,445 | 2,037 | 125 | 253 | 111 | 64 | 5,035 |
| Total, Classes I. to XV. | 121,252 | 98,006 | 22,357 | 20,701 | 12,359 | 9,729 | 284,404 |
| XVI. Heat, Light and Power .. | 9,216 | 3,320 | 1,601 | 2,602 | 1,021 | 1,242 | 19,002 |
| Grand Total | 130,468 | 101,326 | 23,958 | 23,303 | 13.380 | 10,971 | 303,406 |

(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 i938-39, 1945-46 and 1947-48 to 1950-5I :-

FACTORIES : VALUE OF LAND AND BUILDINGS. (a) ( $\mathrm{E}^{\prime} 000$.)

(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 $£_{1} 18$ million in $1929-30$, a growth of $£_{95}$ million in 27 years. During the three years ended 1932-33, there was a decline of $£ 12$ million to $\mathbf{£}_{105} .8$ million, but since that year the value has risen annually and stood at $£_{303.4}$ million in 1950-51.
3. Value of Plant and Machinery.-(i) Total for Australia, 1938-39, 1945-46 and 1947-48 to 1950-51. The following table shows for Australia the approximate value of plant and machinery used in factories.

FACTORIES: VALUE OF PLANT AND MACHINERY( $a$ ), AUSTRALIA.

| Class of Industry. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products. |  |  |  |  |  |  |
| II. Bricks, Pottery, Glass, etc. . . | 7,028 3,145 | 4,916 2,968 | 6,061 3,700 | 7,342 4,333 | 8,055 4,991 | 9,239 6,057 |
| III. Chemicals, Dyes, Fxplosives, Paints, Oils and Grease | 6,754 | 17,792 | 17,516 | 19,255 | 23,518 | 26,247 |
| IV. Industrial Metals, Machines, Conveyances | 33,038 | 53,902 | 61,080 | 70,155 | 77,597 | 90,801 |
| V. Precious Metals, Jewellery and | 33,038 197 | 53,902 253 | 61,080 581 | 70,155 721 | 77,597 770 | 90,801 808 |
| VI. Textiles and Textile Goods (not Dress) | 6,657 | 7,737 | 10,201 | 12,797 | 17,485 | 21,218 |
| VII. Skins and Leather (not Clothing or Footwear) | 6,65 973 | 7,784 1,584 | 1,964 | 12,797 2,063 | 17,485 2,535 | 21,218 |
| VIII. Clothing (except Knitted) | 2,557 | 4,135 | 5,905 | 6,923 | 7,792 | 9,294 |
| IX. Food, Drink and Tobacco | 32,101 | 33,234 | 37,999 | 42,796 | 48,318 | 56,489 |
| X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving. | 3.908 | 5,023 | 6,991 | 8,481 | 10,377 | 12,614 |
| XI. Furniture of Wood, Bedding, ete. | 728 | 741 | 1,190 | 1,427 | 1,679 | 2,035 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. .. | 9,188 | 8,556 | 11,517 | 15,027 | 19,193 | 27,616 |
| XIII. Rubber .. | 1,368 | 1,219 | I,855 | 2,244 | 2,754 | 3,456 |
| XIV. Musical Instruments | 12 | 23 | 80 | 134 | 154 | 227 |
| XV. Miscellaneous Products | 758 | 1,856 | 2,356 | 2,806 | 3,275 | 4,008 |
| Totnl, Classes I. to XV. . . | 108,412 | 143,939 | 168,896 | 196,504 | 228,493 | 273,103 |
| XVI. Heat, Light and Power | 35,250 | 41,606 | 44,823 | 49,990 | 57,109 | 65,827 |
| Grand Total | 143,662 | 185,545 | 213,719 | 246,494 | 285,602 | 338,930 |

(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 Australia The increase in 1950-51 of $£_{53.3}$ million over r949-50 extended over all industrial classes. The greatest increase occurred in Class IV., Industrial Metals, Machines, Implements and Conveyances.
(ii) Totals in each State. The following table shows the value of plant and machinery in each State during the years 1938-39, 1945-46 and 1947-48 to 1950-51. During 1950-5r increases occurred in all States, New South Wales showing the largest increase, £22. 6 million.

FACTORIES : VALUE OF PLANT AND MACHINERY. (a) ( $\left.£^{\prime} 000.\right)$

| Year. |  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tasmania. | Australia. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |
| $1938-39 \ldots$ | $\ldots$ | 62,693 | 38,627 | 18,095 | 9,750 | 8,095 | 6,402 | 143,662 |
| $1945-46 \ldots$ | $\ldots$ | 72,561 | 58,537 | 18,690 | 19,018 | 8,508 | 8,231 | 185,545 |
| $1947-48 \ldots$ | $\ldots$ | 86,714 | 65,829 | 21,831 | 20,239 | 9,190 | 9,916 | 213,719 |
| $1948-49 \ldots$ | $\cdots$ | 99,812 | 76,080 | 25,757 | 22,792 | 9,800 | 12,253 | 246,494 |
| $1949-50 \ldots$ | $\ldots$ | 113,864 | 92,748 | 28,904 | 24,901 | 11,457 | 13,728 | 285,602 |
| $1950-51 \ldots$ | $\cdots$ | 136,492 | 107,261 | 34,235 | 26,759 | 14,713 | 19,470 | 338,930 |

(a) Includes estimated value of rented plant and machinery.
(iii) Value according to Class of Industry, 1950-51. The following table shows the value of plant and machinery used in factories in each State during 1950-51 according to class of industry.

FACTORIES : VALUE OF PLANT AND MACHINERY $(a)$, 1950-51. ( $f^{\prime} 000$. )

| Class of Industry. | N.S.W. | Victorla. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products. . | 4,832 | 2,151 | 555 | 1,009 | 390 | 302 | 9,239 |
| II. Bricks, Pottery, Glass, etc. . . | 3,440 | 1,432 | 265 | 393 | 340 | 187 | 6,057 |
| III. Chemicals, Dyes, Explosives, Paints, Oils and Grease | 11,595 | 9,867 | 485 | 2,472 | 1,389 | 439 | 26,247 |
| IV. Industrial Metals, Machines, Conveyances | 46,697 | 25,367 | 5,633 | 8,567 | 2,488 | 2,049 | 90,801 |
| V. Precious Metals, Jewellery and Plate | 251 | 462 | 25 | 41 | 25 | 4 | 808 |
| VI. Textiles and Textile Goods (not Dress) | 8,003 | 11,521 | 72 I | 353 | 173 | 447 | 21,218 |
| VII. Skins and Leather (not Clothing or Footwear) | 1,116 | 1,066 | 234 | 302 | 139 | 137 | 2,994 |
| VIII. Clothing (except Knitted) . . | 3,794 | 3,913 | 579 | 531 | 383 | 94 | 9,294 |
| IX. Food. Drink and Tobacco .: | 16,964 | 15,723 | 14,660 | 4,290 | 3,243 | 1,609 | 56,489 |
| X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving | 4,795 | 3,238 | 2,195 | 599 | 1,066 | 721 | 12,614 |
| XI. Fiurniture of Wood, Bedding, etc. | 763 | 578 | 271 | 195 | 171 | 57 | 2,035 |
| XII. Paper, Stationery, Printing, Bookbinding, etc. | 8,474 | 9,228 | 1,476 | 1,142 | 698 | 6,598 | 27,616 |
| XIII. Rubber . . . | 1,179 | 1,636 | 406 | 175 | 34 | 26 | 3,456 |
| XIV. Musical Instruments | 184 | $3^{8}$ | 3 | , | 1 |  | 227 |
| XV. Miscellaneous Products | 1,732 | 1,937 | 77 | 190 | 46 | 26 | 4,008 |
| Total, Classes I, to XV. | 113,819 | 88,157 | 27,585 | 20,260 | 10,586 | 12,696 | 273,103 |
| XVI. Heat, Light and Power . . | 22,673 | 19,104 | 6,650 | 6,499 | 4,127 | 6,774 | 65,827 |
| Grand Total | 136,492 | 107,261 | 34,235 | 26,759 | 14,713 | 19,470 | 338,930 |

(a) Includes estimated value of rented plant and machinery.
4. Depreciation of Land and Buildings and Plant and Machinery, 1950-51.-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, 1950-5I.
( $\mathrm{E}^{\prime} 000$.)

| Class of Industry. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of Non-metalliferous Mine and Quarry Products | 764 | 259 | 109 | 83 | 47 | 31 | 1,293 |
| II. Bricks, Pottery, Glass, ete. . . | 625 | 240 | 32 | 55 | 46 | 14 | 1,012 |
| 1II. Chemicals, Dyes, Explosives, Paints, Oits and Grease | 1,273 | 759 | 82 | 232 | 192 | 135 | 2,673 |
| IV. Industrial Metals, Machines, Conveyances | 5,899 | 2,975 | 733 | 1,244 | 1,085 | 717 | 1x,853 |
| V. Precious Metals, Jewellery and Plate | 39 | 73 | 3 | 7 | 4 | I | 127 |
| VI. Textiles and Textile Goods (not Dress) | 946 | 1,789 | 62 | III | 36 | 78 | 3,022 |
| VII. Skins and Leather (not Clothing or Footwear) | 124 | 164 | 25 | 58 | 20 | 39 | 430 |
| VIII. Clothing (cxcept Knitted) | 605 | 498 | 67 | 56 | 44 | 13 | 1,283 |
| 1X. Food, Drink and Tobacco | 1,914 | 2,194 | 1,385 | 612 | 313 | 195 | 6,613 |
| X. Sawmills, Joinery, Roxes, etc.; Wood Turning and Carving | 637 | 436 | 254 | I 2 | 168 | 69 | 1,676 |
| XL. Furniture of Wood, Bedding, etc. | 139 | 99 | 40 | 33 | 30 | 6 | 347 |
| XII. Paper, Stationery. Printing, | 1,104 | 1,022 | 182 | 152 | 98 | 460 | 3,018 |
| XIII. Rubber . . .. | 300 | 295 | 136 | 38 | 6 | 6 | 781 |
| XIV. Musical Instruments <br> XV. Miscellaneous Products | $\begin{array}{r} 24 \\ 265 \end{array}$ | 3 289 | ${ }^{13}$ | . 26 | 5 | 3 | 27 601 |
| Total, Classes I. to XV. | 13,858 | 11,095 | 3,123 | 2,819 | 2,094 | 1,767 | 34,756 |
| XVI. Heat, Light and Power . . | 919 | 232 | 315 | 507 | 182 | 103 | 2,258 |
| Grand Total . | 14,777 | 11,327 | 3,438 | 3,326 | 2,276 | 1,870 | 37,014 |

5. Land and Buildings, Plant and Machinery-Values, Additions and Replacements, Depreciation, 1938-39, 1945-46 and 1947-48 to 1950-51.-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.
( $\mathrm{E}^{\prime} \mathbf{0 0 0}$.)

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

## § 10. Principal Factory Products.

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

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 3oth June, 1949 to $195 \pi$. 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. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acid- |  |  |  |  |  |
| Nitric | $\cdots$ | Ton | 3,292 | 6,361 | 7,367 |
| Sulphuric |  |  | 585,298 | 612,245 | 639,856 |
| Aerated and Carbonated Waters |  | '000 gal. | 44,339 | 50,190 | 55,000 |
| Asbestos Cement Building Sheets | $\cdots$ | '000 sq. yd. | 18,559 | 18,345 | 21,247 |
| Bacon and Fam | . | 'ooolb. | 92,491 | 89,946 | 81,863 |
| Bags <br> Leather, Fibre, etc.Hand bags- |  |  |  |  |  |
|  |  |  |  |  |  |
| Leather | * | No. | 1,070,849 | 1,060,057 | 903,333 |
| Plisstic |  | " | 344,218 | 502,666 | 565,945 |
| Other | . | " | 59,104 | 88,462 | 128,498 |
| Kitbags . |  | " | 94,978 | 109,246 | (a) |
| School Bags | $\cdots$ | " | 73,328 | 107,222 | 118,712 |
| Suitcases |  | " | 661,592 | 683,682 | (b) $1,185,115$ |
| Trunks |  | " | 31,768 | 4,690 | 4,032 |
| All other |  |  | 457,164 | 611,749 | 324,877 |
| Textile, Hessian, etc. | $\ldots$ | Doz. | 1,597,732 | 1,594,822 | 1,895,236 |
| Baking Powder | . | lb. | 1,004,984 | 929,326 | 951,839 |
| Bath Heaters- ${ }^{\text {- }}$ |  |  |  |  |  |
| Electric | $\ldots$ | No. | 12,803 | 13,313 | 28,361 |
| Gas |  | " | 32,954 | 28,285 | 33,007 |
| Solid Fuel and Oil | . | ," | 56,084 | 70,007 | 73,291 |
| Bathing Suits . | $\cdots$ | Doz. | 106,710 | 97,731 | 125,334 |
| Baths, all types | - | No. | 157,801 | 172,197 | 185,103 |
| Batteries, Wet Cell type | $\cdots$ |  | 872,224 | 1,113,875 | 1,091,830 |
| Berr (excluding Waste Beer) | . | 'ooo gal. | 144,452 | 154,189 | 170,635 |
| Biscuits | . | 'ooo lb. | 107,088 | 117,904 | 130,116 |
| Blankets - . | . | Pair | 689,154 | 895,586 | 972,576 |
| Boots, Shoes and Slippers- |  |  |  |  |  |
| Boots | . | 'ooo pair | 1,828 | I, 813 | \} 16,902 |
| Shoes |  | ," | 13,619 | 13,597 | \} 16,902 |
| Sandals | $\cdots$ | " | 1,773 | I,789 | 2.004 |
| Slippers . | . |  | 8,832 | 8,582 | 8,64 |
| Bran (Wheaten) | . | Ton (2,000 lb.) | 318,705 | 273,336 | 302,222 |
| Brassieres $\quad$ - |  | Doz. | 264,808 | 318,897 | 369,583 |
| Bricks, Clay |  | ${ }^{\circ} \mathrm{O} 00$ | 617,391 | 604,066 | 689,43x |
| Brooms | $\cdots$ | Gross | $\begin{array}{r}17,368 \\ \hline 24,733\end{array}$ | 19,079 126,565 | 21,757 55,862 |
| Brushes Butter | $\cdots$ | Ton | 124,733 161,090 | 126,565 168,075 | 159,861 159,631 |
|  |  |  |  |  |  |
| Cardigans, Sweaters, etc. | $\cdots$ | Doz. | 564,876 | 604,632 | 719,141 |
| Cement, Portland | $\ldots$ | Ton | 1,031,489 | 1,367,189 | 1,234.626 |
| Cheese |  |  | 43,160 | 44,777 | 44.300 |
| Cigarettes | $\cdots$ | '000 lb. | 9,701 | 10,34 1 | 10,679 |
| Cloth- |  | Cwt. | 73,062 | 62,380 | 90,650 |
|  |  |  |  |  |  |
| Cotton | $\cdots$ | '000 sq. yd. | 24,670 | 32,739 | 32,357 |
| Woollen |  |  | 40,430 | 36,908 | 37,026 |
| Coke- |  |  |  |  |  |
| Metalurgical |  | Ton | $1,150,039$ 1,181,516 | $1,182,773$ $1,094,982$ | $\begin{aligned} & \mathbf{1}, 5 \times 5,782 \\ & \text { 1.1. } \end{aligned}$ |
| Colours- |  |  |  |  |  |
| Dry in ${ }^{\text {a }}$ | $\cdots$ | Cwt. | 54,153 | 58,130 | 81,828 |
| Ground in Oil (c) .. | . | " | 9,934 | 20,857 | 11,819 |
| Confectionery- ${ }^{\text {Com }}$ |  |  |  |  |  |
| Chocolate . . | $\cdots$ | '000 lb. | 67,612 | 78,742 | 69,122 |
| Other |  | , | 69,94 1 | 70,744 | 73,429 |
| Coppers- ${ }^{\text {C }}$ |  |  |  |  |  |
| Electric |  | No. | 24,517 | 29.995 | 47,759 |
| Gas |  | " | 29,980 | 36,861 | 43,394 |
| Inserts (including Oil Coppers) |  |  | 105.092 | 110,670 | 125,409 |
| Cordials and Syrups .. |  | 'ooo gal. | 4,268 | 4,523 | 5,349 |
| Corsets and Corselets |  | Doz. | 133,996 | 109,814 | 122,248 |

(a) Included with Suitcases.
(b) Includes Kitbags.
(c) Excludes Zinc Oxide Paste.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES :官 AUSTRALIA-continued.


[^3](b) Includes Wheatmeal for Baking. (c) Includes Canned Apple, all types.

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

(a) Includes Malted Milk and Infants' Milk Powder.
(b) Includes Industrial flakes and chips.

[^4]QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA-continued.

(a) Excludes Wheatmeal for Baking included with Flour.

## § 11. Individual Industries.

1. General.-Particulars in pages 968-97, §§ 2-9 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State or the Commonwealth, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

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

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

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

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

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

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

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

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

For more detailed definitions see § 1, par. 6 of this Chapter, page 965.
Details of some of the principal articles produced in factories in Australia during the years $1948-49$ to 1950-5I are shown in the table in the preceding pages (§ ro).
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 1950-5I and for a selected number of years in the following table.
PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT G00DS.

| AUSTRALIA, 1950-5I. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Items. |  | Portland Cement. | Asbestos Cement Sheets and Mouldings. | Other Cement Goods. |  | Total. |
| Number of factories |  | II |  | 14 | 501 | 526 |
| Number of persons employed |  | 2,304 |  |  | 4,693 | 9,192 |
| Salaries and wages paid .. | £ | 1,336,258 | 1,237,4 |  | 6,487 | 4,860,238 |
| Value of power. fuel, etc., used | £ | 1,628,846 |  |  | 9,816 | 1,793,952 |
| Value of materials used .. | £ | 2,277,881 | 2,588,2 |  | 9,292 | 9,025,463 |
| Value of production | £ | 2,544,403 | 1,903,0 |  | 7,050 | 8,634,479 |
| Total value of output | £ | 6,451,130 | 4,566, |  | 6,158 | 9,453,894 |
| Value of land and buildings | £ | 1,282,981 |  |  | I, 385 | 3,250,416 |
| Value of plant and machinery | £ | 2,617,255 |  |  | 0,697 | 4,691,392 |
| Horse-power of engines ordinarily in use | h.p. | 56,960 | 7,4 |  | 1,141 | 75,584 |
| Australia. |  |  |  |  |  |  |
| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| Number of factories | 132 | 152 | 328 | 38 I | 450 | 526 |
| Number of persons employed | 3,932 | 4,582 | 6,756 | 7,301 | 8,033 | 9,192 |
| Salaries and wages paid .. £'000 | 897 | 1,334 | 2,426 | 3,036 | 3,673 | 4,860 |
| Value of power, fuel, etc., used E'000 | 562 | 593 | 950 | 1,192 | 1,444 | 1,794 |
| Value of materials used .. £'000 | 1,542 | 2,498 | 4,373 | 5,372 | 6,671 | 9,025 |
| Value of production -. £'ooo | 2,385 | 2,577 | 4,739 | 5,394 | 6,540 | 8,635 |
| Total value of output . . $£$, 000 | 4.489 | 5,668 | 10,062 | 11,958 | 14,655 | 19,454 |
| Value of land and buildings ${ }_{\text {Value of }}$ | 1,350 | 1,464 | 1,839 2,918 | 2,087 3,680 | 2,283 | 3,250 |
| Value of plant and machinery forsoo | 2,516 | 2,005 | 2,918 |  | 3,970 | 4,691 |
| use .. .. .. h.p. | 39,617 | 42,578 | 57,553 | 69,975 | 71,000 | 75,584 |

3. Chemicals, Drugs and Medicines.-In 1945-46 the classification of factories was amended to provide for the separate tabulation of factories engaged in the production of Industrial and Heavy Chemicals and Acids and those engaged in producing Pharmaceutical and Toilet Preparations, which previously had been combined. Details for each of these industries are given in the next two tables for $1950-51$ with comparisons with previous years. However, it should be noted that in order to avoid the publication of confidential information, particulars relating to Industrial and Heavy Chemicals include details for the Explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPlosives). 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust.! | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 110 | 66 | 16 | 7 | 7 | 1 | 207 |
| Number of persons employed . | 4,255 | 5,163 | 226 | 719 | (a) | (a) | 10,615 |
| Salaries and wages paid | 2,554,886 | 3,020,228 | r20,606 | 401,214 | (a) | (a) | 6,243,097 |
| Value of power, fuel, etc., used $£$ | 701,858 | 476,513 | 30,566 | 288,344 | (a) | (a) | 1,545,855 |
| Value of materials used | 9,258,349 | 6,772,307 | 177,461 | 437,393 | (a) | (a) | 16,857,405 |
| Value of production . . | 6,283,286 | 5,766,004 | 235,926 | 848, 138 | (a) | (a) | 13,373,047 |
| Total value of output.id $£$ | 16,203,493 | 13,014,824 | 443,953 | I,573,875 | (a) | (a) | 31,776,307 |
| Value of land and buildings £ | 2,637,011 | 4,315,897 | 74,820 | 626,850 | (a) | (a) | 7,769,883 |
| Value of plant and machinery $\mathcal{E}$ | 3,805,046 | 5,350,637 | 113,257 | 1,347,195 | (a) | (a) | 11,042,539 |
| Horse-power of engines ordinarily <br> in use .. .. h.p. | 29,296 | $38,89 \mathrm{I}$ | 982 | 2,993 | (a) | (a) | 74,613 |

Australia.

| Items. |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

(a) Not available for publication; Included with total for Australis.

## PHARMACEUTICAL AND TOILET PREPARATIONS. <br> 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |

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

PHARMACEUTICAL AND TOILET PREPARATIONS-continued. Australia.

| Items. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 215 | 213 | 216 | 205 | 201 |
| Number of persons employed | 5,514 | 5,491 | 5,474 | 5,157 | 5,538 |
| Salaries and wages paid | 1,699 | 1,556 | 1,801 | 1,840 | 2,423 |
| Value of power, fuel, etc., used . . £'ooo | 57 | 63 | 69 | 73 | 9 T |
| Value of materials used . . £'ooo | 5,402 | 5,75工 | 6,414 | 6,371 | 8,291 |
| Value of production .. .. £'000 | 4,790 | 5,545 | 5,85 | 6,566 | 8,985 |
| Total value of output ... ... £'000 | 10,249 | 11,359 | 12,334 | 13,010 | 17,367 |
| Value of land and buildings . . £'000 | 1,534 | 1,635 | 1,718 | 1,706 | 1,963 |
| Value of plant and machinery $\because$ £'ooo | 598 | 727 | 755 | 767 | 823 |
| Horse-power of engines ordinarily in use h.p. | 6,324 | 7,408 | 7,660 | 7,816 | 8,357 |

4. White Lead, Paint and Varnish.-The following table shows particulars of this industry for each State during 1950-51 and for Australia for a series of years :-

WHITE LEAD, PAINTS AND VARNISH.
1950-51.

(a) Not available for publication; figures are included in the total for Australia.
5. Soap and Candle Factories.-The following table shows particulars of factories in the soap and candle industry in each State for 1950-5I and for Australia for a series of years :-

SOAP AND CANDLES.
1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 51 | 20 | 10 | 5 | 4 | 3 | 93 |
| Number of persons employed | 2,099 | 792 | 321 | 198 | (a) | (a) | 3,502 |
| Salaries and wages paid ${ }_{\text {d }}$ | 1,214,121 | 480,558 | 147,229 | 91,277 | (a) | (a) | 1,973,984 |
| Value of power, fuel, etc., used 5 | 146,903 | 180,345 | 1 1 , 655 | 10,216 | (a) | (a) | -353,257 |
| Value of materials used | 3,722,359 | I,895,233 | 336,469 | 206,657 | (a) | (a) | 6,329,593 |
| Value of production . . | 2,822,026 | 1,320,319 | 290,212 | 82,225 | (a) | (a) | 4,609,265 |
| Total value of output.. | 6,691,288 | 3,395,897 | 638,336 | 299,098 | (a) | (a) | I1,292,115 |
| Value of land and buildings | 609,020 | 398,53I | 63,319 | 83,346 | (a) | (a) | 1,200,060 |
| Value of plant and machinery ${ }^{\text {g }}$ | 571,962 | 633,776 | 41,256 | 72,071 | (a) | (a) | 1,340,917 |
| Horse-power of engines ordinarily in use | 4,161 | 2,183 | 551 | 38 I | (a) | (a) | 7,447 |

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

## SOAP AND CANDIES-continued.

Australia.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 65 | 73 | 88 | 91 | 90 | 93 |
| Number of persons employed | 2,620 | 3,020 | 3.204 | 3,578 | 3,646 | 3,502 |
| Salaries and wages paid .. £'ooo | 501 | 860 | 1,124 | 1,461 | 1,605 | 1,974 |
| Value of power, fuel, etc., used f'ooo | 76 | 123 ! | 173 | 259 | 285 | 353 |
| Value of materials used .. £',000 | 1,568 | 3,05I | 4,295 | 5,277 | 5,499 | 6,330 |
| Value of production .. £',000 | 1,886 | 2,628 | 2,935 | 3,816 | 4,442 | 4,609 |
| Total value of output .. £'000 | 3,530 | 5,802 | 7,403 | 9,352 | 10,226 | 11,292 |
| Value of land and buildings £'000 | 666 | 676 | 709 | 715 | 1,115 | 1,200 |
| Value of plant and machinery £'ooo | 577 | 373 | 398 | 518 | I,201 | 1,341 |
| Horse-power of engines ordinarily in use | 5,267 | 6,630 | 7,173 | 7,569 | 7,515 | 7,447 |
| Materials used- |  |  |  |  |  |  |
| Tallow . . cwt. | 535,511 | 834,057 | 893,826 | 972,474 | 1,008,257 | 1,123,817 |
| Alkali for Soap (a) . ${ }_{\text {c }}$ | 194,869 | 281,313 | 293,389 | 329,974 | 326,648 | 343,126 |
| Coconut oil-refined and unrefined | 138,954 | 86,576 | 80.518 | 98,751 | 78,261 | 90,738 |
| Articles produced- <br> Soap (b) .. .. cwt. | 978,113 | 1,065,439 | 1,150,774 | 1,149,868 | 1,174,605 | 1,365,669 |
| Soap Extracts and Powders , | 191,232 | 469,865 | 529,97x | 609,631 | 697,848 | 754,758 |
| Candles made | 28,649 | 23,844 | $\pm 3,782$ | 15,692 | 21,245 | 12,871 |

(a) Includes Soda Ash. (b) Soap made in all factories including those not classifled as "Soap and Candle" factories.
6. Chemical Fertilizers.-The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1950-51 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XX.-Agricultural Production.

CHEMICAL FERTILIZERS.

7. Iron and Steel Works and Engineering.-(i) General. In 1945-46 the classification of factories was amended to provide for the tabulation in four separate groups of those industries previously included under Iron and Steel and Engineering. The first group (Smelting, Converting, Refining and Rolling of Iron and Steel) covers blast furnaces, steel works and rolling mills. The second group, Foundries (Ferrous), covers those engaged in the founding of iron and steel. The third group (Plant, Equipment and Machinery including Machine Tools) covers those industries engaged in the production
of boilers, ergines, machines and machinery, machine tools, atructural steel fabrications, steel furniture, etc. The fourth group (Other Engineering) includes jobbing and genera] engineers, not elsewhere included.
(ii) Smelting, Converting, Refining and Rolling of Iron and Steel. In the following table particulars are shown for 1950-51 for each State and for Australia in selected years for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

## SmElTing, converting, REFINiNG AND ROLLING of iron and steel.

1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. A | ast. | W. Aus | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 17 | 9 |  |  | 3 |  |  | 30 |
| Number of persons employed | 12,173 | 924 |  | (a) |  | (a) |  | 13,419 |
| Salaries and wages paid $£$ | 8,369,530 | 675,078 |  | (a) |  | (a) | $\cdots$ | 9,245,432 |
| Value of power, fuel, etc., used $£$ | 6,932,586 | 144,591 |  | (a) |  | (a) |  | 7,895,622 |
| Value of materials used $£$ | 39,713,401 | 562,510 |  | (a) |  | (a) |  | 40,580,191 |
| Value of production . . £ | 15,176,684 | 1,000,724 |  | (a) |  | (a) |  | 16,594,461 |
| Total value of output $£$ | 61,822,671 | 1,707,825 |  | (a) |  | (a) |  | 65,070,274 |
| Value of land and buildings $£$ | 3,029,589 | 162,805 |  | (a) |  | (a) |  | 3,259,007 |
| Value of plant and machinery $£$ | 8,739,296 | 236,755 |  |  |  | (a) |  | 9,191,192 |
| Horse-power of engines ordinarily in use .. h.p. | 207,218 | 6,848 |  |  |  | (a) |  | 216,617 |
| AUSTRAJIA. |  |  |  |  |  |  |  |  |
| Items. |  | 1945-46. | 1947-48. | 1948-49. |  |  | 1949-50. | 1950-51. |
| Number of factories |  | 27 | 31 |  | 32 |  | 30 |  |
| Number of persons employed |  | 10,413 | 12,503 |  | 12,3356,583 |  | 11,509 | 30 13,419 |
| Salaries and wages paid | £'000 | 4,164 |  |  |  |  | 6,9785,516 | 9,245 |
| Value of power, fuel, etc., used | £'000 | 2,777 | 4,233 |  | 4,568 |  |  | 7,896 |
| Value of materials used . . | £'000 | 19,134 | $\begin{aligned} & 25,419 \\ & 12,280 \end{aligned}$ |  | $26,750$ |  | 29.747 | $\begin{array}{r} 40,580 \\ 16,594 \end{array}$ |
| Value of production | £'000 | 7,393 |  |  | 12,784 |  |  |
| Total value of output | £'000 | 29,304 | 41,932 |  |  |  | 43,268 |  | 48,047 | 65,070 |
| Value of land and buildings | £'000 | 2,197 | $\begin{array}{r} 2,379 \\ 5,670 \end{array}$ |  | 2,6976,375 |  | 2,812 | $\begin{aligned} & 3,259 \\ & 9: 191 \end{aligned}$ |
| Value of plant and machinery | £'000 | 5,669 |  |  | 213,529 |  |  |
| Horse-power of engines ordinaril | in use h.p. | 198,317 | $\begin{array}{r} 5,670 \\ 198,223 \end{array}$ |  |  | 202,332 |  | 216,617 |

(a) Not avallable for publication; figures are included in the total for Australia.
(iii) Foundries (Ferrous). Particulars covering those industries classified as founding of iron and steel are shown for each State for 1950-51 and for Australia in selected years in the following table :-

FOUNDRIES-FERROUS.
1950-51.

(iv) Plant, Equipnent and Machinery (including Machine Tools). The next table shows particulars for this group for each State during 1950-51 and for Anstralia for the years 1945-46 ard 1947-48 to 1950-5I :-

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS). 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australla. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Australia.

| Items. |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

(v) Other Engineering. Details covering jobbing and general engineering works not elsewhere included are shown for each State for $1950-51$ and for selected years for Australia in the following table:-

## OTHER ENGINEERING.

1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Items.} \& \multicolumn{5}{|l|}{Australia.} <br>
\hline \& 1945-46. \& 1947-48. \& 1948-49. \& 1949-50. \& 1950-51. <br>
\hline Number of factories \& 963 \& 1,267 \& 1,358 \& 1,495 \& 1,627 <br>
\hline Number of persons employed \& 13,112 \& 14,232 \& 14,844 \& 76,798 \& 18,487 <br>
\hline Salaries and wrages paid .. ${ }^{\prime}$ '000 \& 3,634 \& 4,803 \& 5,741 \& 6,977 \& 9,495 <br>
\hline Value of power, fuel, etc., used .. f'000 \& 162 \& 172 \& 193 \& 241 \& ${ }^{291}$ <br>
\hline Value of materials used . . .. £'000 \& 3,599 \& 4,567 \& 5,217 \& 6,637 \& 9,855 <br>
\hline Value of production . . . ${ }^{\text {c'ooo }}$ \& 5,432 \& 7,425 \& 8,950 \& 11,086 \& 15,323
25,69 <br>
\hline Total value of output $\because$. $\quad$. . ${ }^{\prime}$,ooo \& 9,193 \& 12,164 \& 14,360 \& 17,964 \& 25,469
5
5 <br>
\hline Falue of land and buildinge .. £'000 \& 2,369 \& 3,653 \& 5,128 \& 5,191 \& 5,089 <br>
\hline Value of plant and machinery io s'ooo \& 2,091
26,095 \& 2,899

3 \& 3,128 \& 3,515
41,668 \& 4,098
47396 <br>
\hline Horse-power of engines ordinarily in use h.p. \& 26,095 \& 31,804 \& 41,577 \& 41,668 \& 47,396 <br>
\hline
\end{tabular}

8. Extracting and Refining of Non-ferrous Metals; Alloys.-The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore, for each State during 1950-5I and for Australia for a series of years.

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

1950-5I.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. (a) | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 18 | 12 | 3 |  |  | 65 |
| Number of persons employed | 2,05I | 201 | 1,050 | (b) |  | (b) | 7,664 |
| Salaries and wages paid $£$ | 1,554,265 | 137,370 | 596,760 | (b) | . $\cdot$ | (b) | 5,267,948 |
| Value of power, fuel, etc., usedf. | 845,165 | 19,430 | 210,034 | (b) | . . | (b) | 2,323,138 |
| Value of materials used $£$ | 25,303,846 | 1,571,139, | 4,251,288 | (b) | - | (b) | 59,734,442 |
| Value of production .. | -5,375,449 | 384,476 | 5,681,650 | (b) | . | (b) | 20,435,204 |
| Total value of output f | ; $31,524,460$ | 1,975,045 | 10,142,972 | (b) |  | (b) | 82,492,784 |
| Value of land and buildings ${ }_{\text {f }}$ | 566,132 | 107,668 | 389,286 | (b) |  | (b) | 2,017,095 |
| Value of plant and machinery £ | 1,711,165 | 31,177 | [,111,75 | (b) |  | (b) | 4,723,478 |
| Horse-power of engines ordinarily in use .. h.p. | 31,483 | 372 | 14,914 | (b) | $\ldots$ | (b) | 88,410 |

Australia.

(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.
9. Electrical Machinery, Cables and Apparatus.-The following table shows particulars of this industry for each State during 1950-5I and for Australia for a series of years :-

ELECTRICAL MACHINERY, CABLES AND APPARATUS.
1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factorics | 423 | 249 | 52 | 61 | 66 | 16 | 867 |
| Number of persons employed | 23,753 | 8,027 | 1,415 | 1,378 | 82 I | 100 | 35,494 |
| Salaries and wages paid £ | 12,795,763 | 4,287,536 | 693,956 | 641,456 | 356,754 | 40,639 | 18,816,104 |
| Value of power, fuel, etc., used $£$ | 454,114 | 133,267 $7,170,035$ | 16,503 | 21,265 | 10,583 | 1,335 52,292 | 637,067 $31,679,650$ |
| Value of materials used Value of production ¢ | $21,731,386$ $21,308,072$ | $7,470,035$ $6,700,026$ | 1,121,584 | 810,413 983,924 | 493,940 570,763 | 52,292 71 | 31,679,650 $30,867,270$ |
| Total value of output - | 21,308,072 | 14,700,026 | $1,232,970$ $2,371,057$ | T,815,602 | 570,763 $1,075,286$ | 71,515 125,142 | $30,867,270$ $63,183,987$ |
| Value of land and buildings ${ }_{\text {d }}$ | 5,268,326 | 2,143,731 | 263,727 | 273,638 | 212,075 | 62,523 | 8,224,020 |
| Value of plant and machinery $£$ | 3,358,303 | 1,821,891 | 305,787 | 143,677 | 68,782 | 20,629 | 5,719,069 |
| Horse-power of engines ordinarily in use .. h.p. | 37,123 | 12,787 | 3,560 | 1,358 | 809 | 217 . | 55,854 |

Australia.

| Items. | 1938 -39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 360 | 551 | 732 | 79 I | 8II | 867 |
| Number of persons employed | 10,666 | 22,825 | 27,579 | 29,961 | 30,956 | 35,494 |
| Salaries and wages paid .. £',oo | 2,031 | 6,301 | 9,454 | 11,703 | 13.563 | 18,816 |
| Value of power, fuel, etc., used £'ooo | 105 | 209 | 291 | 366 | 453 | 637 |
| Value of materials used .. £'ooo | 3,195 | 8,085 | 14,310 | 16,510 | 21,149 | 31,680 |
| Value of production . £'000 | 3,655 | 9,496 | 13,290 | 17,834 | 21,154 | 30,867 |
| Total value of output .. £'000 | 6,955 | 17,790 | 27,891 | 34,710 | 42,756 | 63,184 |
| Value of land and buildings $£^{\prime}$ '000 | 1,627 | 3,507 | 4,488 | 5,382 | 6,293 | 8,224 |
| Value of plant and machinery ${ }^{\text {c }}$ '000 | 897 | 2,084 | 2,988 | 3,664 | 4,127 | 5.719 |
| Horse-power of engines ordinarily in use .. .. .. h.p. | 12,043 | 26,244 | 34,661 | 39,382 | 43,995 | 55,854 |

10. Railway and Tramway Workshops.-The railway and tramway workshops, which form an important item in Class IV., are chiefly owned by State Governments and Local Authorities. Workshops (fourteen in 1950-51) controlled by non-public bodies are not included in the figures below :-

## TRAMCARS AND RAILWAY ROLLING STOCK(a).

| 1950-51. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. W. Aust. | Tas. | Australia. |
| Number of factories | 47 | 25 | II | 14.22 | 7 |  |
| Number of persons employed | 17,269 | 6,482 | 5,901 | 4,282. 3,502, | 817 | 38,253 |
| Salaries and wages paid $\mathfrak{f}$ | 9,955,429 | 3,312,73I | 3,062,802 | 2,476,310, $1,694,2531$ | 412,128 | ,913,653 |
| Value of power, fuel, etc., used ${ }^{5}$ | 241,155 | 115,286 | 73.345 | 114,115 58,197 | 14,329, | 616,427 |
| Value of materials used $\quad \mathbf{£}$ | 5,384,388 | 2,054,035 | 1,637,803 | 1,412,65 \|r $_{1,526,866 ~}^{1}$ | 149,041, | 12,164,784 |
| Value of production .. $\quad$ ¢ | 11,805:409 | 4,352,469 | 3,463,948 | 2,861,702 2,808,394 | 446,4 16 | 25,738,338 |
| Total value of output ${ }_{\text {c }}$ | 17,430 952 | 6,521,790 | 5,175,096 | 4,388,468 $4,3,393,457$ | 609,786 | 38,519,549 |
| Value of land and buildings $\underset{\sim}{\text { d }}$ | 4,290,052 | 1,336,073 | 566,775 | 1,179,166 182,036 | 429,103 | 7,983,205 |
| Value of plant and machinery $£$ | 5,371,797 | 519,207 | 540,687 | $\begin{array}{llll}1,222,666 & 321,942\end{array}$ | 300,607 | 8,276,906 |
| Borse-power of engines ordinarily in use .. h.p. | 38,062 | 15,079 | 13,417 | 16,642 7,255 | 3,112 | 93,507 |

AUSTRAIIA.

(a) Government and Local Authority only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars of this establishment are not included in any of the tables in this chapter.
II. Motor Vehicles.-The industries catering for the motor trade are included in Class IV., Industrial Metals, Machines and Conveyances. In the table below a summary is given of the principal statistics for 1950-51 for each branch of industry associated with the motor trade of Australia.

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

| Items. | Construction and Assembly. | Motor Bodies. | Repairs. | Motor <br> Accessories. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 78 | 519 | 4,998 | 135' | 5,730 |
| Number of persons employed . . . | 13.714 | 17,708 | 38,590 | 5,568 | 75,580 |
| Salarics and wages paid | 8,811,236. | 10,195,208 | 16,731,975 | 3,050,945 | 38,789,364 |
| Value of power, fuel, etc., used . . | 308,301 | 274,550 | 477,963 | 154,179 | 5,214,993 |
| Value of materials used . . $£$ | 10,616,358 | 15,967,334 | 18,220,497 | 3,737,713 | 48,541,902 |
| Value of production .. .. £ | 15,584,177 | 13,991,133 | 25,761,443 | 5,254,874 | 60,591,627 |
| Total value of output .. .. | 26,508,836 | 30,233,017 | 44,459,903 | 9,146,766 | 110,348,522 |
| Value of land and buildings .. \& | 2,645,535 | 3,421,165 | 14,887,729 | 2,406,128 | 23,360,557 |
| Value of plant and machinery $\quad \because \quad$ ¢ | 2,136,017 | 2,542,379 | 5,031,878. | 1,784,893 | 11,495,167 |
| Horse-power of engines ordinarily in use h.p. | 20,704; | 34,375. | 38,167. | 16,46r | 109,707 |

In the next table similar details are shown on a State basis for 1950-51 and for Australia for selected years for these branches combined.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.
1950-51.

(a) Includes horse-drawn vehicles.

The table below shows the output of motor bodies and the imports ${ }^{\text {b }}$ of motor bodies and motor chassis for 1938-39, 1945-46 and 1947-48 to 1950-51 :-
PRODUCTION AND IMPORTS OF MOTOR BODIES( $a$ ) AND IMPORTS OF MOTOR CHASSIS: AUSTRALIA.

| Items. |  |  | 1938-39. | 45-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Motor Bōdies- ${ }^{\text {- }}$ |  |  |  |  |  |  |  |  |
| Number made | $\cdots$ | No. | 79,436 | 19,473 | 58,354 | 68,230 | 67,097 | 92,621 |
| Value . | . | £'000 | 6,421 | 2,357 | 9,210 | 12,145 | 14,057 | 18,421 |
| Number imported |  | ¢ No. | 532 | 223 | 13,724 | 34,728 | 115,484 | 92,791 |
| Motor Chassis- ${ }_{\text {l }}$ |  |  |  |  |  |  |  |  |
| Number imported |  | No. | 76,094 |  | 66,832 |  | 187,363 |  |
| Value .. | . | £'000 | 7,315 | 1,879 | 15,180) | 23,636 | 44,965 | 46,919 |

(a) Excludes sidecars.
12. Agricultural Machines and Implements.-Owing to the extensive agricultural activities conducted in Australia and the demand for modern mechanized farm equipment, the manufacture of agricultural implements constitutes an important branch of Australian industry. The articles manufactured include a wide range of implements for tillage, seeding, and planting and the harvesting of crops. Other farm machinery made includes windmills, chaff-cutters and machinery used in the dairying industry.

The following table shows details of agricultural implement works in each State for 1950-5I and for Australia for a series of years :-
agricultural machines and implements.
1950-5I.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | V. Aust. | Tas. | Australis. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 71 | 30 | 30. | 21 |  | 5 |
| Number of persons employed | 2,258 | 6,240 | 1,493 | 1,394 | 266 |  | 11,651 |
| Salaries and wages paid $£$ | 1,376,891 | 3,920,965 | 720,418 | 743,023 | 133,144 |  | 6,894,44I |
| Value of power, fuel, etc., usedx | 45,835 | 286,847 | 37,821 | 58,718\| | 3,943 |  | 433,164 |
| Value of materials used | 2,117,611 | 6,042,755 | 868,53I | 803,760, | 119,537 | . | 9,952,194 |
| Value of production.. | 1,940,163 | 5,565,243 | 1,007,594 | r,136,000 | 204,833 |  | 9,853,833 |
| Total value of output | 4,103,609 | 11,894,845. | 1,913,946! | 1,998,478 | 328,3131 |  | [20,239,191 |
| Value of land and buildings $£$ | 675,590 | 1,430,135 | 357,809 ${ }_{1}$ | 187,067 | 163,09r |  | 12,813,692 |
| Value of plant and machinery $\mathfrak{E}$ | 490,084 | 1,789,330 | 294,678 | 262,081 | 40,913 |  | 2,877,086 |
| Horse-power of engines ordi- <br> narily in use .. h.p. | -7,268 | 17,383 | $3,800$ | 4,523 | 490 | $\cdots$ | 33,464 |

AGRICULTURAL MACHINES AND IMPLEMENTS-continued.
Australia.

| Items. |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

13. Wireless and Amplifying Apparatus.-The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-3I a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined mainly to New South Wales and Victoria, but is becoming increasingly important in South Australia, The number of broadcast listeners' licences increased from a third of a million in 1930-3I to about two millions at December, 1952, and this increase reflects the advancement of the industry during that period. During the war years considerable expansion took place in the industry to meet the requirements of the fighting services and apart from a slight drop in output in 1945-46, this expansion has continued.

WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 72 | 97 | 134 | 136 | 129 | 139 |
| Number of persons employed | 4,828 | 8,709 | 9,543 | 9,213 | 9,283 | 10,628 |
| Salaries and wages paid .. £'0oo | 754 | 2,296 | 3,071 | 3,362 | 3,745 | 5,140 |
| Value of power, fuel, etc., used £'ooo | 23 | 58 | 91 | 103 | 101 | 147 |
| Value of materials used .. £'ooo | 1,356 | 3,446 | 4,920 | 5,197 | 6,409 | 9,229 |
| Value of production .. £'000 | 1,123 | 3,011 | 4,225 | 4,612 | 5,252 | 7,219 |
| Total value of output .. £'000 | 2,502 | 6,515 | 9,236 | 9,912 | 11,762 | 16,595 |
| Value of land and buildings ${ }^{\text {s }}$,ooo | 558 | 969 | 1,115 | 1,106 | 1,205 | 1,339 |
| Value of plant and machinery £'ooo | 305 | 712 | 644 | 688 | 770 | 946 |
| Horse-power of engines ordinarily in use <br> h.p. | 2,710 | 4,949 | 6,813 | 7,230 | 10,357 | 13,565 |
| Domestic receiving sets madc No. | 163,821 | 93,048 | 335,203 | 294.119 | 343,323 | 459,436 |

14. Cotton.-(i) General. Cotton has been grown in Australia since 1860 , but never on a very large scale. The average annual quantity of unginned cotton produced during the five years ended 1938 - 39 was 18 million lb . and slightly under $1_{4}^{3}$ million lb. in the five years ended 1950-5I. Arising out of the development in the local manufacture of cotton materials and the further expansion following the outbreak of war in 1939, plans were completed for an extension of the area devoted to the cultivation of this crop, but the downward trend which commenced with the war in the Pacific has persisted. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XX.-Agricultural Production.
(ii) Ginning. The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly (1950-5I) from India, Pakistan, Brazil, Egypt and the United States of America.
(iii) Spinning and Weaving. The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been established and Australia is now producing an extensive range of cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre
cord and tyre cord fabric. The number of establishments engaged in cotton spinning and weaving in Australia and other particulars of the industry are shown in the following table for the years $1938-39,1945-46$ and 1947-48 to 1950-51.

COTTON SPINNING AND WEAVING : AUSTRALIA.

| Items. |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |

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

WOOL CARDING, SPINNING AND WEAVING.
1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 62 | 9 |  |  |  |  | 17 |
| Number of persons employed . | 8,225 | 12,239 | 898 | 626 | 341 | 2,004 | 24,333 |
| Salaries and wages paid $£$ | 3,758,972 | 5,916,839 | 342,832 | 286,075 | 155,791 | 888,964 | II 1,349,473 |
| Value of power, fuel, etc., used $£$ | 293,713 | 540,006 | 25,300 | 29,391 | 15,828 | 48,258 | 952,496 |
| Value of materials used | 15,590,001 | 29,181,087 | 1,886,459 | 1,472,986 | 1,759,340 | 3,981,644 | 53,871,517 |
| Value of production .- £ | 5,887,337 | 9,569,533 | 524,929 | 432,200 | 498,315 | 1,697,457 | 18,609,771 |
| Total value of output $£$ | 21,771,051 | 39,290,626 | 2,436,688 | 1,934,577 | 2,273,483 | 5,727,359 | 73,433,784 |
| Value of land and buildings $\mathcal{E}$ | 1,857,939 | 3,065,142 | 141,13I | 35,864 | 66,470 | 202,872 | 5,369,418 |
| Value of plant and machinery $£$ | 2,164,676 | 4,008,096 | 282,105 | 65,610 | 89,314 | 288,4II | 6,898,212 |
| Horse-power of engines ordinarily in use .. h.p. | 21,115 | 38,571 | 2,419 | 1,814 | 850 | 4,301 | 69,070 |

Australta.

| Items. | $\begin{gathered} 1938-39 . \\ (a) \end{gathered}$ | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-5 5. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 90 | 114 | 142 | 153 | 168 | 176 |
| Number of persons employed | 19,608 | 21,536 | 23,480 | 24,893 | 24,354 | 24,333 |
| Salaries and wages paid .. £'ooo | 2,888 | 5,324 | 7,165 | 8,684 | 9,404 | 11,349 |
| Value of power, fuel, etc., used £'000 | 393 | 511 | 672 | 787 | 831 | 952 |
| Value of materials used .. £'000 | 7,331 | 12,315 | 16,072 | 23,643 | 32,741 | 53,872 |
| Value of production .. £'000 | 4,791 | 8,951 | 12,287 | 13,598 | 16,426 | 18,610 |
| Total value of output . . £'0oo | 12,515 | 21,777 | 29,031 | 38,028 | 49,998 | 73,434 |
| Value of land and buildings $£$ '0oo | 2,380 | 3,028 | 3,460 | 3,654 | 4,347 | 5,369 |
| Value of plant and machinery £'ooo | 3,370 | 2,926 | 3,527 | 4,246 | 5,235 | 6,898 |
| Horse-power of engines ordinarily in use <br> h.p. | 42,944 | 52,739 | 56,254 | 58,083 | 63,669 | 69,070 |
| Articles Produced- <br> Woollen cloth and tweed (b) 'ooo sq. yds. | 8,336 | 16,707 | 18,812 | 16,319 | 13,245 | 11,126 |
| Worsted cloth . . ," ," | 17,986 | 12,644 | 16,459 | 18,074 | 19,074 | 19,832 |
| Serge (b) <br> Flannel | 792 | 1,022 | 828 | 1:573 | 817 | 1,043 |
| Forane -uter clothing | 2,144 |  |  |  | 1,856 | 2,614 |
| For underwear (purc) ", ", | 1,557 | 2,193 | \} 3,227 | 2,937 | 1,856 1,659 | 2,614 1,916 |
| For underwear (mixtures) , ", | -814 | - 656 | $\} \mathrm{x}, 64 \mathrm{I}$ | 1,527 | 1,659 | 1,916 |
| Blankets (b) .. .. 'ooo pr. | 574 | 981 | 721 | 689 | 896 | 973 |

[^5]16. Hosiery and Other Knitted Goods.-Details for each State for 1950-51 and for Australia for a series of years are shown in the following table :-

HOSIERY AND OTHER KNITTED G00DS.
1950-5I.

| Items. | N.S.W. | Victoria. | Q"Iand. | S. Aust. | W. Aust. | Ius. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |

AUStralia.

| Iterns. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 313 | 376 | 420 | 465 | 496 | 510 |
| Number of persons employed | 18,159 | 17,091 | 20,337 | 21,116 | 21,577 | 22,268 |
| Salaries and wages paid .. £'ooo | 2:332 | 3,687 | 5,470 | 6,526 | 7,382 | 9,605 |
| Yalue of power, fuel, cte., used £'ooo | 133 | 185 | 235 | 272 | 315 | 386 |
| Value of materials used .- £'000 | 4,28.4 | 7,203 | 10,898 | 14,137 | 16,637 | 22,834 |
| Value of production .- £'000 | 3,809 | 5,865 | 9,528 | 10,542 | 12,399 | 16,257 |
| Total value of output .. £'000 | 8,226 | I3,253 | 20,661 | 24,951 | 29,351 | 39,477 |
| Value of land and buildings £'000 | 1,962 | 2,444 | 2,754 | 3:210 | 3,877 | 4,755 |
| Value of plant and machinery £'000 | 1,935 | 1,358 | 1,965 | 2,763 | 3,815 | 4,905 |
| $\begin{array}{cccc}\text { Horse-power of engines ordinarily in } \\ \text { use } & . & \ldots & . .\end{array}$ h.p. | 8,884 | 11,465 | 12,569 | 13,011 | 14,625 | 16,925 |

(a) Includes 15,697 females.

The following quantities of yarn were used in these establishments during 1950-51, viz. :-Worsted, $8,282,599 \mathrm{lb}$. ; woollen, $124,838 \mathrm{lb}$.; cotton, $8,850,834 \mathrm{lb}$.; mercerised cotton, $650,967 \mathrm{lb}$. ; rayon, $8,271,091 \mathrm{lb}$. ; silk, $122,67 \mathrm{llb}$. ; nylon, $7 \mathrm{I} 8,699 \mathrm{lb}$.; other, including mixtures, $611,723 \mathrm{lb}$. Production of garments and stockings is shown in § 10 .
17. Tanning, Currying and Leather Dressing.-(i) Details of Industry. In Class VII. the most import 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 varietiẹ.

TANNING, CURRYING AND LEATHER DRESSING.
1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Number of persons employed . | 1,845 | 2,489 | 562 | 219 | (a) | (a) | 5.363 |
| Salaries and wages paid | 1,173,258 | 1,483,382 | 294,763 | 123,194 | (a) | (a) | 3,200,479 |
| Value of power, fuel, etc., used £ | 107,146 | 127,264 | 21.997 | 10,317 | (a) | (a) | 3,200,057 |
| Value of materials used | 3,568,094 | 3,302,225 | 768,667 | 285,032 | (a) | (a) | 8,221,157 |
| Value of production $\quad$. | 1,768,814 | 2,243,598 | 492,665 | 218,806 | (a) | (a) | 4,949.382 |
| Total value of output | 5,444,054 | 5,673,087 | 1,283,329 | 514,155 | (a) | (a) | 13,445,596 |
| Value of land and buildings Value of plant and machinery ¢ | 658,360 <br> 580,886 | 778,051 | 82,134 | $72.682!$ | 1 (a) | (a) | 1,638,382 |
| Value of plant and machinery Horse-power of engines ordinarily | 580,886 |  | 128,367. | 113,113 | (a) | (a) | 1,424,696 |
| in use $\quad . \quad$. $\quad$ h.p. | 11,818 | 11,075 | 2,560 | 1,352 | (a) | (a) | 27,684 |

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

TANNING, CURRYING AND LEATHER DRESSING-continued.
Australia.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-5 1. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 132 | 152 | 149 | 144 | 145 | 143 |
| Number of persons employed | 4,375 | 5,022 | 5,361 | 5,421 | 5,473 | 5,362 |
| Salaries and wages paid ... £'000 | 920 | 1,662 | 2,183 | 2,502 | 2,755 | 3,200 |
| Value of power, fuel, etc., used £'000 | 88 | 128 | 166 | 189 | 243 | 275 |
| Value of materials used . ${ }^{\text {¢ }}$, 000 | 2,983 | 5,238 | 6,308 | 6,466 | 6,846 | 8,221 |
| Value of production .. f'000 | 1,522 | 2,690 | 3,33I | 3,871 | 4,330 | 4,950 |
| Total value of output . . £'000 | 4,593 | 8,056 | 9,805 | 10,526 | 11,419 | 13,446 |
| Value of land and buildings f'ooo | 814 | 1,048 | I, 154 | 1,271 | 1,355 | 1,638 |
| Value of plant and machinery £'ooo | 524 | 705 | 857 | 980 | 1,171 | 1,425 |
| Horse-power of engines ordinarily in <br> use | 12,345 | 17,850 | 21,673 | 24,032 | 25,792 | 27,684 |

(ii) Materials Used and Articles Produced. The quantities of materials used and leather produced in tanneries in each State in 1950-51 are shown in the following table:-

TANNERIES : MATERIALS USED AND PRODUCTION, 1950-51.

| Particulars. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Materials Used- |  |  |  |  |  |  |  |
| Hides. . .. no. | 856,708 | 1,107,561 | 293,141 | (a) | 139,465 | (a) | 2,538,673 |
| Skins- |  |  | 156,651 | (a) | (a) |  | 1,243,430 |
| Goat $\quad \therefore \quad$ ", | 775,245 | (a) | (a) ${ }^{\text {a }}$ | (a) | (a) |  | 1,248,430 |
| Sheep, including Pelts " | b2,706,305 | 469,073 | (a) | (a)(b) |  | (a) | $b_{4,}, 889,561$ |
| Marsupial . . | 31,017 | T1,587 | (a) | (a) |  |  | 65,240 |
| Bark used- <br> Wattle <br> tons | 3,506 | 4,9 I I | (a50 | (b) $93+$ | (a) | (a) | (b) 10,382 |
| Mallet and Other " | (a) | 860 | (a) | (a) $\dot{(b)}$ | (b) (a) | (a) | (b) $\begin{aligned} & 1,318 \\ & \\ & \text { (b) }\end{aligned}$ |
| Articles produced- |  |  |  |  |  |  | (b) 9,974 |
| Leather madeSole and Belting | 12,287,501 | 14,538,206 | 6,337,215 | (a) | 3,335,984 | (a) | 38,106,698 |
| Harness ${ }^{\text {a }}$, | 345,449 | 417,718 | 849,842 | 62,300 | 49,089 | (a) | 1,724,398 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Sold by Measure- |  |  |  |  |  |  |  |
| ment- |  |  |  |  |  |  |  |
| Patent sq. ft. | (a) | (a) |  |  |  |  | 1,404,668 |
| All Other | 13,407, 114 | 18,933,639 | 5,330,078 | 3,03I,367 | (a) | (a) | 42,455,447 |
| Sold by Weight (all kinds) lb. | $\left\lvert\, \begin{gathered}3,407,124 \\ (a)\end{gathered}\right.$ | 104,491 | (a) | (a) | 9,546 | (a) | 291,786 |
| Dressed from skins- |  | 104,491 |  |  |  |  |  |
| Calf . $\quad$ sq. ft. | 3,826,326 | 4,021,070 | 1,039,328 | 42,930 | 33,612 |  | 8,963,266 |
| Goat . . ", | 3,472,459 | (a) | (a) |  | .. |  | 3,646,872 |
| Sheep . . , , | $b^{6,162,647}$ | 1,017,736 | (a) | $(a)(b)$ |  |  | bI 3,431,14 1 |
| Diarsupial .. ,", | 158,946 | 5I,540 | (a) | (a) | . | $\ldots$ | 321.791 |

(a) Not available for publication; flgures are included in the total for Australia.
(b) Includes an amount produced or used in other works.
18. Tailoring and Ready-made Clothing.-Statistics showing the distribution of this industry between States in 1950-51 and for Australia for a series of years are shown in the following table:-

## TAILORING AND READY-MADE CLOTHING.

1950-5I.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factorics | 880 | 558 | 154 | 132 | 146 | 20 | 1,890 |
| Number of persons employed | 19,826 | 10,902 | 3,352 | 2,634 | 1,432 | 389 | 38,535 |
| Salaries and wages paid i | 7,311,482 | 4,429,034 | 1,003,572 | 896,317 | 432,211 | 133,474 | 14,206,090 |
| Value of power, fuel, etc., used 5 | 125,614 | 79,194 | 17,368 | 17,348 | 7,323 | 2,070 | 248,917 |
| Value of materials used $\quad$ E | 14,62in, 812 | 9,146,882 | 1,833,907 | 1,142,93I | 666,642 | 126,092 | 27,539,266 |
| Value of production ... | 11,043,299 | 6,708,227 | 1,568,145 | 1,217,462 | 642,619 | 168,616 | 21,348,368 |
| Total value of output | 25,791,725 | 15,934,303 | 3,419,420 | 2,377,74I | 1,316,584 | 296,778 | 49,136,551 |
| Value of land and buildings $£$ | 3,428,458 | I,900,984 | 391,325 | 492,68I | 268,119 | 55,995 | 6,537,562 |
| Value of plant and machinery $£$ | 1, 153,439 | 627,971 | 95,633 | 105,324 | 38,031 | 10,094 | 2,030,492 |
| Horse-power of engines ordinarily in use .. h.p. | 6,403 | 2,586 | 443 | 48 I | 169 | ${ }_{55}$ | 10,137 |

## TAILORING AND READY-MADE CLOTHING-continued.

Australia.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factorics | 1,177 | 1,420 | 1,687 | 1,874 | 1,902 | 1,890 |
| Number of persons employed | 26,499 | 30,047 | 35,375 | 37,958 | 37,250 | 38,535 |
| Salaries and wages paid .. £'ooo | 3,168 | 5,507 | 8,186 | 10,323 | 11,246 | 14,206 |
| Value of power, fuel, etc., used £'000 | 72 | 116 | 150 | 187 | 204 | 249 |
| Valuc of materials used .. £'000 | 4,947 | 9,617 | 15,233 | 19,344 | 20,187 | 27,539 |
| Value of production .. £',000 | 4,812 | 8,881 | 12,490 | 15,668 | 17,085 | 21,349 |
| Total value of output .. £'000 | 9,831 | 18,614 | 27,873 | 35,199 | 37,476 | 49,137 |
| Value of land and buildings $£$ | 3,176 | 4,142 | 4,915 | -5,550 | 5,872 | 6,538 |
| Value of plant and machinery £'ooo | 356 | 829 | 1,215 | 1,461 | 1,666 | 2,030 |
| Horse-power of engines ordinarily in use | 2,607 | 5,148 | 6,34x | 7,375 | 8,895 | 10,137 |

19. Dressmaking and Millinery Establishments.-Particulars of dressmaking and millinery establishments in Australia for the years 1938-39, 1945-46 and 1947-48 to 1950-5I are shown in the following table:-

DRESSMAKING AND MILLINERY: AUSTRALIA.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 869 | 998 | 1,175 | 1,270 | 1,313 | 1,328 |
| Number of persons employed | 16,398 | 18,051 | 20,893 | 21,934 | 22,384 | 22,557 |
| Salaries and wages paid . . £'000 | 1,653 | 3,038 | 4,368 | 5,497 | 6,244 | 7,568 |
| Value of power, fuel, etc., used £',oo | 33 | 57 | 77 | 95 | 112 | 130 |
| Value of materials used .. £'000 | 2,610 | 5,281 | 8,300 | 10,104 | 8,996 | 11,567 |
| Value of production .. £'000 | 2,592 | 5,170 | 7,288 | 8,787 | 9.812 | 11,868 |
| Total value of output . . £'00o | 5,235 | 10,508 | 15,665 | 18,986 | 18,920 | 23,565 |
| Value of land and buildings f,000 | 2,052 | 2,724 | 3,304 | 3.421 | 3,626 | 4,068 |
| Value of plant and machinery $£$ '000 | 189 | 362 | 510 | 601 | 713 | 903 |
| Horse-power of engines ordinarily in use .. .. .. h.p. | 1;732 | 3,142 | 3,671 | 3,898 | 4,361 | 4,671 |

20. Shirts, Collars and Underclothing.-Particulars of this industry are shown below for each State for 1950-51 and for Australia for a series of years :-

## SHIRTS, COLLARS AND UNDERCLOTHING.

1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 196 | 139 | 0 | 31 | 22 | 2 | 410 |
| Number of persons employed | 5,280 | 5,191 | 1,217 | 53 I | (a) | (a) | 12,870 |
| Salaries and wages paid | 1,815,867 | 1,903.515 | 385,860 | 160,148 | (a) | (a) | 4,451,680 |
| Value of power, fuel, etc., used $£$ | 28,725 | 32,950 | 5,653 | 2,670 | (a) | (a) | 72,437 |
| Value of materials used $\quad £$ | 5,118,373 | 4,402,821 | 663,822 | 236,140 | (a) | (a) | 10,729,981 |
| Value of production . . $£$ | 2,932,594 | 3,479,081 | 574,762 | 234,145 | (a) | (a) | 7,502,681 |
| Total value of output | 8,079,692 | 7,914,852 | 1,244,237 | 472,955 | (a) | (a) | 18,305,099 |
| Value of land and buildings $£$ | 864,688 | 1,020,447 | 128.564 | 70,555 | (a) | (a) | 2,154,856 |
| Value of plant and machinery $£$ | 350,916 | 387,837 | 42.589 | 24,714 | (a) | (a) | -844,537 |
| Horse-power of engines ordinarily in use .. h.p. | 2,24 | 3,269 | 188 | 165 | (a) | (a) | 6,017 |

Australia.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 283 | 347 | 404 | 410 | 397 | 410 |
| Number of persons employed | 11,081 | 9,902 | 11,880 | 12,760 | 12,545 | 12,870 |
| Salaries and wages paid ... £'000 | 1,143 | 1,729 | 2,622 | 3,299 | 3,515 | 4:452 |
| Value of power. fuel, etc., used E'ooo | 23 | 32 | 46 | 55 | 60 | 72 |
| Value of materials used .. £'000 | 2,651 | 4,446 | 7,066 | 9,199 | 8.915 | 10,730 |
| Value of production .. £'000 | 1,761 | 2,601 | 4,354 | 5,482 | 5,978 | 7,503 |
| Total value of output . . £'000 | 4,435 | 7,079 | 11,466 | 14,736 | 14,953 | r8,305 |
| Value of land and buildings £'000 | 946 | 1,311 | 1,632 | 1,790 | 1,833 | 2,155 |
| Value of plant and machincry £'000 | 231 | 397 | 548 | 608 | 693 | 845 |
| Horse-power of engines ordinarily in use | 1,874 | 2,676 | -3.346 | 3,521 | 3.795 | 6,017. |

(a) Not available for separate publication; figures are included in total for Australia.
21. Boots and Shoes.-(i) Details of Industry. The boot and shoe factories hold an important place both in regard to employment afforded and extent of output. The following tables refer to boot and shoe factories as distinct from those devoted to repairing. It has been necessary to include details of Boot and Shoe Repairing in Tasmania, in order to conceal confidential information for that State. Factories engaged in the manufacture of rubber boots and shoes are excluded, being classified under Rubber Goods, see par. 38.

BOOTS AND SHOES.
1950-51.

(a) Includes details of loot and Shoe Repairnig.
(ii) Quantity and Value of Production. The number and value of boots, shoes and slippers made in factories producing and repairing boots and shoes in each State are shown for $1950-51$ in the following table. Particulars relating to the output of rubber boots and shoes are not included :-

B00T AND SHOE FACTORIES : OUTPUT, 1950-51.

(a) Not available for publication; figures are included in total for Australia.
(b) Made for sale as such.
22. Flour-milling.-(i) Details of Industry. The following table shows the position of the grain-milling industry in each State for the year 1950-51 and for Australia for a series of years :-

FLOUR-MILLING.
1950-5I.

| Items. | N.S.W. | Victoria, | Qland. | S. Aust. \|W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 38 | 10 | 30.20 | ${ }^{1}$ | 165 |
| Number of persons employed | 1,881 | 1,279 | (a) | 532,546 | (a) | 4,842 |
| Salaries and wages paid it | 1,186,549, | 777,049 | (a) | 305,082, 346,395 | (a) | 2,933,120 |
| Value of power, fuel, etc., usedx | 218,109 | 129,101 | (a) | 72,925 79,031 | (a) | 544,520 |
| Value of materials used $\quad £$ | 13,948,914 | 8,918,983 | (a) | 3,729,135'4,605,556 | (a) | 34,349,960 |
| Value of production . . | 2,433,274 | 1,459,576 | (a) | 594,049, 656,7761 | (a) | 5,636,588 |
| Total value of output | 16,600,297 | 10,507,660 | (a) | 4,390,105, 5,341,363 | (a) | 40,53x,068 |
| Value of land and buildings ${ }_{\text {d }}$ | 1,157,476 | 829,834 | (a) | 219.919: 636.778 | (a) | 3,177,201 |
| Value of plant and machinery $£$ | 1,477,271 | 773,480 | (a) | 330,712; 607,935 | (a) | 3,408,243 |
| Horse-power of engines ordinarily in use .. h.p. | 15,0,4 | 1 T .059 | (a) | $4.211 \quad 4.655$ | (a) | 38,413 |

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

## FLOUR-MILLING-continued.

Austraida.

| Items. |  | 1938-39. | $1945-46$. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 172 | 170 | 167 | 164 | 165 | 165 |
| Number of persons employed |  | 3,783 | 4,099 | 4,623 | 4,768 | 4,541 | 4,842 |
| Salaries and wages paid .. | £'000 | 896 | 1,376 | 1,885 | 2,272 | 2,349 | 2,933 |
| Value of power, fuel, etc., used | £'000 | 231 | 300 | 365 | 427 | 444 | 545 |
| Value of materials used .. | £'000 | 10,573 | 14,180 | 24,043 | 29,800 | 27,837 | 34,350 |
| Value of production | £'00\% | 2,091 | 2,367 | 3,705 | 4,539 | 4,277 | 5,636 |
| Total value of output | £'000 | 12,895 | 16,847 | 28,113 | 34,766 | 32,558 | 40,53I |
| Value of land and buildings | £'000 | 2,091 | -2,244 | 2,505 | +2,456 | 2,557 | 3,177 |
| Value of plant and machinery | £'000 | 1,814 | 1,835 | 2,034 | 2,330 | 2,593 | 3,408 |
| Horse-power of engines ordin use | ily in h.p. | 27,795 | 32,132 | 34,976 | 35,573 | 2,593 36,081 | 3,408 3,413 |

(ii) Production of Flour and By-products. The production of flour by the mills in each State (including other than flour mills) for the years 1938-39, 1945-46 and 1947-48 to r950-5I was as follows :-

FLOUR-MILLING: PRODUCTION OF FLOUR.
(Tons of $\mathbf{2 , 0 0 0} \mathbf{l b}$.

| Year. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tasmania. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 | 547,162 | 436,829 | 84,314 | 146,262 | 138,583 | 19,582 | 1,372,732 |
| 1945-46 | 451,895 | 315,525 | 96,984 | 164,986 | 166,791 | 22,657 | 1,218,838 |
| 1947-48 (a) | 552,784 | 501,325 | 108,022 | 215,155 | 197,104 | 23,753 | 1,598,143 |
| 1948-49 (a) | 667,645 | 479,288 | 110,843 | 211,787 | 183,143 | 26,484 | 1,679,190 |
| 1949-50 (a) | 597,491 | 447,784 | 112,995 | 162,259 | 161,25I | 27,243 | 1,509,023 |
| 1950-51 (a) | 694,036 | 448,881 | 116,503 | 189,962 | 218,84 1 | 27,336 | 1,695,559 |

(a) Includes Wheatmeal for Baking.

In addition, 641,296 tons of bran and pollard were made. The quantity of wheat ground was $80,368,016$ bushels.
23. Bakeries.-Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on is given in the table below. It should be noted, however, that the details refer only to establishments coming within the definition of a factory as explained at the beginning of this section. For that reason the tables do not give complete details of the industry, as a large number of bakehouses not coming within the definition is 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).

1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. (a) | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,170 | 958 | 444, |  | 266 | 134 | 3,167 |
| Number of persons employed | 6,846 | 4,860 | 2,6031 | 1,173 | 967 | 1,480 | 17,929 |
| Salaries and wages paid $£$ | 2,745,354 | 1,873,498 | 879,988 | 492,733 | 320,177 | 630,668 | 6,942,418 |
| Value of power, fuel, etc., used $£$ | 448,612 | 306,153 | 142,831 | 81,133 | 56,796 | 80,115 | I, 115,640 |
| Value of materials used | 7,578,225 | 5,371,636 | 2,699,748 | 1,422,867 | 1,042,848 | 2,670,574 | 20,785,898 |
| Value of production .. | 5,978,943 | 4,080,759 | 1,975,099 | 1,006,265 | 734,565 | 1,117,759 | 4,893,390 |
| Total value of output | 14,005,780 | 9,758,548 | 4,817,678 | 2,510,265 | 1,834,209 | 3,868,448 | 36,794,928 |
| Value of land aud buildings | 4,030,803 | 2,634,362 | 845,879 | 648,145 | 469,056 | 571,011 | 9,199,256 |
| Value of plant and machinery $£$ | 1,546,673 | 1,181,057 | 429,665 | 352,339 | 226,595 | 341,553 | 4,077,882 |
| $\begin{array}{cc}\text { Horse-power of engines } \\ \text { narily in use } & \ldots\end{array} \begin{gathered}\text { ordi- } \\ \text { h.p. }\end{gathered}$ | 7,033 | 5,047 | 2,525 | 1,802 | 1,114 | 2,962 | 20,483 |

(a) Includes confectionery.

## BAKERIES (INCLUDING CAKES AND PASTRY)--continued.

Austraifa.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,958 | 2,494 | 2,831 | 2,950 | 3,064 | 3,167 |
| Number of persons employed | 11,715 | 14,535 | 16,814 | 17,420 | 17,925 | 17,929 |
| Salaries and wages paid S'O $^{\prime}$,000 | 1,993 | 3,314 | 4,460 | 5,182 | 5,891 | 6,942 |
| Value of power, fuel, etc., used f'000 | 306 6.65 | 574 | 665 | ${ }_{1} 784$ | 91917 | 1,116 |
| Value of materials used .. £'000 | 6,651 | 11,087 | 13,924 | 16,477 | 18,406 | 20,786 |
| Value of production .. £'000 | 4,509 | 7,265 | 9,067 | 10,852 | 12,987 | 14,893 |
| Total value of output . . £'000 | 11,466 | 18,926 | 23,656 | 28,113 | 32,310 | 36,795 |
| Value of land and buildings fooo | 4,960 | 6,222 | 7,525 | 7,973 | 8,817 | -9,199 |
| Value of plant and machinery fooo | 1,478 | 1,804 | 2,575 | 3,092 | 3,635 | 4,078 |
| Horse-power of engines ordinarily in use in | 10,855 | 13,695 | 16,194 | 17,622 | 19,160 | 20,483 |

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

The products of the sugar-mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Particulars of cane crushed and sugar produced embodied in the following table refers 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 XX.-Agricultural Production, which relate to harvest years.
(ii) Details for States. The following table shows details of the operations of sugar mills in New South Wales and Queensland for the years 1938-39, 1945-46 and 1947-48 to 1950-5I :-

SUGAR-MILLS.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New South Wales. |  |  |  |  |  |  |
| Number of factories | 3 | 3 | 3 | 3 | 3 | 3 |
| Number of persons employed . | 2 I 2 | 283 | 236 | $223^{\circ}$ | 227 | 282 |
| Cane crushed . tons | 337,038 | 166,069 | 267,261 | 273,974 | 330,740 | (a) |
| Raw sugar produced (94 net titre) .. .. tons | 45,106 | 21,220 | 33,560 | 33,003 | 40,706 | 41,258 |
| Molasses produced . . gals. | 1,489,090 | 1,110,000 | (a) | 1,348,480 | 1,631,200 | (a) |
| Queensland. |  |  |  |  |  |  |
| Number of factories | 33 |  | 32 | 32 | 32 | 32 |
| Number of persons employed . | 4,419 | 4,665 | 4,762 | 5,531 | 5,898 | 6,394 |
| Cane crushed | 5,432,193 | 4,551,971 | 4,150,986 | 6,707,530 | 6,518,006 | 6,691,704 |
| Raw sugar produced (94 net titre) .. .. tons | 775,064 | 644,66I | 571,694 | 910,049 | 896,413 | 879,844 |
| Molasses- <br> Sold to distillers and others 'ooo gals |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 8,276 | 9,381 | 8,257 | 18,233 | 17,596 | 15,234 |
| Used as fodder .. ", | 4,237 | 4,676 | 5,321 | 5,846 | 5,563 | 5,582 |
| Used as manure .. ", ", | 3,293 | 3,075 | 3,558 | 5,282 | 7,517 | 5,555 |
| Run to waste | 499 | 51 | 15 | 168 | 283 | 50 |
| Burnt as fuel | 3,749 | 1,748 | 1,428 | 1,677 | 1,490 | 2,371 |
| Sold or used for other purposis | 232 | 423 | 313 | 402 i | 727 | 581 |
| Total molasses disposed of . .'ooo gals | 20,286 | 19,354 | 18,892 | 31,608 | 33,176 |  |
|  |  | 19,354 |  | 31,608 | 33,176 | 29,373 |

(a) Not available for publication.
25. Sugar-refining.-The establishment of the sugar-refining industry considerably antedates the establishment of the sagar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1950-5r there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The quantity of raw sugar treated amounted to 470,824 tons, for a yield of 451,170 tons of refined sugar.
26. Confectionery.-The figures for 1950-5I for each State and for Australia for ab series of years are shown hereunder :-

CONFECTIONERY.
1050-51.

(a) Not available for publication.
(b) Excludes Tasmania.
27. Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar.-(i) Details of Industry. The following table shows particulars of factories included in this class for each State for 1950-51 and for Australia for a series of years :-

Jam, fruit and vegetable canning, pickles, etc.
1950-51.

(ii) Production. During the 1939-45 War, production of jams increased greatly and a high level of output of 171 million lb. was attained in 1943-44. Production afterwards decreased, but attained a new record of 198.5 million lb . in 1947-48. It dropped to 125.3 million lb. in 1950-5I. The peak output of preserved fruit occurred in 1950-51 with 233.5 million lb., compared with the previous highest level of 211.4 million $\mathbf{l b}$. attained in the previous year.

There has also been a marked development in the production of canned vegetables. In 1938-39 output totalled $10,255,000 \mathrm{lb}$. but, as a result of the war-time demand by the armed services, production reached the record level of $119,149,000 \mathrm{lb}$. in $1944-45$. However, it has since declined and in 1950-51 amounted to 79,510,000 lb.

The following table shows the total quantity and value of jams, pickles, sauces and other items manufactured in each State in 1950-5I :-

Jams, PRESERVEd FRUIT and VEGETABLES, Pickles and Sauces : output, 1950-51.

(a) Includes Tasmania.
(b) Included with Victoria.
(c) Not available for publication;
figures are included in total for Australia.
28. Bacon-curing.-(i) Details of Industry. The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1950-5I and for Australia for a series of years :-

## BACON-CURING.

1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 35 | 15 | 8 | 12 | 4 | 10 | 84 |
| Number of persons employed | 758 | 719 | 834 | $3^{16}$ | 258 | 76 | 2,96I |
| Salaries and wages paid $\mathcal{L}$ | 412,114 | 398,620 | 410,413 | 180,364 | 136,888 | 38,221 | 1,536,620 |
| Value of power, fuel, etc., usedx | 54,672 | 42,247 | 43,060 | 41,844 | 18,017 | 4,347 | 204,187 |
| Value of materials used $\quad \pm$ | 3,624,028 | 3,176,220 | 3,882,862 | 1,441,094 | 1,541,905 | 409,772 | 14,075,881 |
| Value of production. | 979,242 | 639,372 | 676,017 | 265,496 | 285,583 | 83,893 | 2,929,603 |
| Total value of output ${ }^{\text {S }}$ | 4,657,942 | 3,857,839 | 4,601,939 | 1,748,434 | 1,845,505 | 498,012 | 17,209,675 |
| Value of land and buildings $\mathcal{f}$ | 430,442 | 259,090 | 319,385 | 158,655 | 66,308 | 35,936 | 1,269,816 |
| Value of plant and machinery $£$ | 167,802 | 129,370 | 183,123 | 80,558 | 38,749 | 10,808 | 6x0,410 |
| Horse-power of engines ordinarily in use .. h.p. | 1,992 | 2,296 | 3,258 | x,701 | 901 | 324 | 10,472 |

## BACON-CURING-continued.

## Australia.


(ii) Quantity and Value of Production. The number of pigs cured and the quantity of bacon and ham and lard produced in factories in each State for 1950-5I are shown in the following table:-

BACON-CURING FACTORIES: PIGS CURED AND PRODUCTION, 1950-51.

(a) Not available for publication; figures are included in total for Australia.
(b) Includes particulars of articles produced in other works.

Bacon and ham and other pig products are dealt with more fully in Chapter XXI.Farmyard, Dairy and Bee Products.
29. Butter, Cheese and Condensed and Dried Milk.-(i) Details of Industry. The following table shows particulars of butter, cheese and condensed and dried milk factories in each State for 1950-51 and for Australia for a series of years.

BUTTER, CHEESE AND CONDENSED AND DRIED MILK.
1950-51.

(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 $1950-5 \mathrm{I}$. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED, ETC. MILK FACTORIES : PRODUCTION, 1950-51.

| Particulars. | N.S.W. | Victoria. | Q'land. | S. Aust. W. Aust. | Tas. |
| :---: | :---: | :---: | :---: | :---: | :---: |

Mifk Usen ('ooo Gallons).


Products.

(a) Not available for publication; figures are included in total for Australia.
Whole Milk equivalent of cream and butter fat purchased as such. (b) Includes
(c) Includes 265 tons of cheese valued at $\mathfrak{£}_{34,776}$, made in establishments not classified as factories.

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

3o. 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 has already been referred to in Chapter XIX.-Pastoral Production. In recent years there has been considerable expansion in the canning of meat and fish.

MEAT AND FISH PRESERVING.
1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

## MEAT AND FISE PRESERVING-continued.

Australia.

| rtems. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

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 Cbapter XIX.Pastoral Production.
31. Breweries.-(i) Details of Industry. The following table gives particulars of breweries in each State for the year 1950-5I and for Australia for a series of years. It should be noted, however, that the data shown are not strietly comparable throughout, owing to the inability or failure of some breweries to furnish a separate return for each branch of activity. Consequently the figures for some States include details of employment, wages, output, etc., not connected with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

BREWERIES.
1950-51.

(a) Not available for publication; figures are included in total for Australia.
(b) Excludes Excise Duty.
(ii) Production, Consumption, Materials Used. The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter increased each year to 109.2 million gallons in 1941-42. Under the Control of Liquor Order which operated between March, 1942 and March, 1946, the production of beer was restricted and consequently output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter production increased, and in 1951-52 amounted to 185 million gallons.

The average annual consumption of ale, stout and beer prior to the economic depression of the early thirties exceeded II gallons per head of the population : it dropped to 7.32 gallons in 1931-32, increased to 13.76 gallons in $1941-42$ and declined again to about 13 gallons during the period of control. The consumption per head had increased to 20.46 gallons by 1951-52.

The table below shows the quantities of raw materials used and the quantity and . value of ale, stout and beer (excluding waste beer) brewed in each State during 1950-51 :-

BREWERIES : MATERIALS USED AND PRODUCTION, 1950-51.

(a) Not available for publication; figures are included in total for Australia.
(b) Excludes Excise Duty.
32. Wineries and Distilleries.-The following table shows particulars of the operations of Wineries and Distilleries for each State during 1950-51 and for Australia for a series of years.

## WINERIES AND DISTILLERIES.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. W. Aust |  | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 25 | 3 I | 5 |  | 18 |  | 153 |
| Number of persons employed | 294 | 394 | 146 | 1,269 | (a) | (a) | 2,158 |
| Salaries and wages paid $£$ | 169,767 | 202,027 | 78,012 | 652,171 | (a) | (a) | 1,121,559 |
| Value of power, fuel, etc., used $£$ | 63,470 | 80,371 | 52,567 | 96,360 | (a) | (a) | 294,049 |
| Value of materials used $£$ | 872,512 | 661,537 | 190,328 | 3,003,694. | (a) | (a) | 4,809,716 |
| Value of production . . £ | 409.726 | 46r, 113 | 272,982 | 1,437,900 | (a) | (a) | 2,636,977 |
| Total value of output | 1,345,708 | ,1,203,021 | 515,877 | 4,537,954 | (a) | (a) | 7,740,742 |
| Value of land and buildings $£$ | 516,088 | 232,525 | 78,511 | 923,437. | (a) | (a) | 1,795,178 |
| Value of plant and machinery $£$ | 401,211 | 290,648 | 161:990 | 668,883 | (a) | (a) | I,556,364 |
| Horse-power of engines ordinarily in use .. b.p. | 1,369 | 2,285 | 305 | 4,979 | (a) | (a) | 9,189 |

## Austratia.



Number of factories
Number of persons employed
Salaries and wages paid Value of power, fuel, ctc., used Value of materials used Value of production Total value of output
Value of land and buildings Value of plant and machinery Horse-power of engines ordinarily in use $\qquad$

(a) Not available for pub
33. Tobacco, Cigars and Cigarettes.-Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1950-51 are shown below for each State and for Australia for a series of years. There are no such factories in Tasmania.

TOBACCO, CIGARS AND CIGARETTES.
1950-5I.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 13 | 14 | 8 | ${ }^{1}$ | I | 37 |
| Number of persons employed $\quad$. | 2,606 | 2,044 | (a) | (a) | (a) | 5,044 |
| Salaries and wages paid .. £ | I,246,641 | 976,331 | (a) | (a) | (a) | 2,380,244 |
| Value of power, fuel, etc., used £ | 61,055 | 24,902 | (a) | (a) | (a) | 89,866 |
| Value of materials used .. £ | 10,325,135 | 5,756,389 | (a) | (a) | (a) | 16,599,236 |
| Value of production $\quad$. | 2,381,899 | 2,194,664 | (a) | (a) | (a) | 4,897,339 |
| Total value of output . . | [12,768,089 | 7,975,955 | (a) | (a) | (a) | 21,586,441 |
| Value of land and buildings $£$ | 724,198 | 700,267 | (a) | (a) | (a) | 1,485,335 |
| Value of plant and machinery $£$ | 464,770 | 629,946 | (a) | (a) | (a) | 1,170,672 |
| Horse-power of engines ordinarily in use .. .. .. h.p. | 3.875 | I,942 | (a) | (a) | (a) | 6,056 |

## TOBACCO, CIGARS AND CIGARETTES-dontinued.

Australia.

| Items. |  | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 30 | 26 | 33 | 37 | 37 | 37 |
| Number of persons employed |  | 5,544 | 5,255 | 5,470 | 5,219 | 5,167 | 5,044 |
| Salarics and wages paid .. £'ooo |  | 1,096 | 1,300 | 1,677 | 1,828 | 1,992 | 2,380 |
| Value of power, fuel, etc., used £'000 |  | 34 | 52 | 62 | 74 | 89 | 90 |
| Value of materials used . . £'000 |  | 7,081 | 10,602 | 14,492 | 13,751 | 15,016 | 16,599 |
| Value of production $\quad$. ${ }^{\prime}$ '000 |  | 2,685 | 2,389 | 3,361 | 3,788 | 3,869 | 4,897 |
| Total value of output .. £'ooo |  | 9,800 | 13,043 | 17,915 | 17,613 | 18,974 | 21,586 |
| Value of land and buildings $£$ '000 |  | 1,042 | 959 | I,143 | 1,175 | 1,276 | 1,485 |
| Value of plant and machinery f'ooo |  | 943 | 724 | . 933 | 1,009 | 1,060 | 1,171 |
| Horse-power of engines ordinarily in use <br> h.p. |  | 4,610 | 5,267 | 5,946 | 6,190 | 4,610 | 6,056 |
| Leaf used- |  |  |  |  |  |  |  |
| Australian (stemmed) | ',ooolb. | 4,489 | 4,685 | 2,924 | 3,084 | 3,313 | 3,775 |
| Imported (stemmed) | ',ooolb. | 16,011 | 18,822 | 23,675 | 22,775 | 24,043 | 24,558 |
| Tobacco made | ,ooolb. | 16,305 | 17,901 | 19,715 | 19,256 | 20,168 | 20,967 |
| Cigars made | '000 lb. | 238 | 125 | 163 | 169 | 169 | 179 |
| Cigarettes made . . .. | '000 lb. | 6,731 | 8,482 | 10,147 | 9,701 | 10,341 | 10,679 |

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

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw material. Increased import duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb . in 1929-30 to over 3 million lb . in 1930-31. During the 1939-45 War about 4.7 million lb. of Australian-grown leaf was used annually, but in subsequent years the figure fell, and the $1950-51$ usage was 3.8 million lb. In this connexion, see Chapter XX.-Agricultural Production.

Imports of tobacco during 1950-51 comprised-manufactured tobacco, 540,407 lb.; cigars, $46,4 \mathrm{I} 3 \mathrm{lb}$. ; cigarettes, $10,594,207 \mathrm{lb}$. ; unmanufactured tobacco, 26,605,31 I lb.
34. Sawmills, etc.-The most important industry in Class $X$. is that of sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town, they have been combined in the following table, together with plywood and bark mills.

## SAWMILLS, PLYWOOD AND BARK MILLS.

| Items. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,010 | 620\| | 661 | 83 | 206 | 357 | 2,937 |
| Number of persons employed | 10,553 | 6,8471 | 8,140 | 1,929 | 3,369 | 2,140 | 32,978 |
| Salaries and wages paid $£$ | 4,766,980 | 3,342,279 | 3,534,437 | 924,407 | 1,472,925 | 958,121 | 14,999,149 |
| Value of power, fuel, etc., useds | 342,402 | 256,314 | 211,440 | 40,437 | 115,720 | 65,813 | 1,032,126 |
| Value of materials used | 13,853,386 | 7,941,043 | 5,858,875 | 3,331,279 | 2,217,556 | 1,762,68 | 34,964,826 |
| Value of production .. | 8,760,445 | 6,049,816 | 5,901,818 | 1,773,778 | 2,601,202 | 1,659,647 | 26,746,706 |
| Total value of output $\mathbf{E}^{\text {e }}$ | 22,956,233 | 14,247,173 | 1 1,972,133 | 5,145,494 | 4,934,478 | 3,488,147 | 62,743,658 |
| Value of land and buildings $£$ | 2,132,195 | 1,460,730 | 933,902 | 555,365 | 483,635 | 253,100 | 5,818,927 |
| Value of plant and machinery $\mathcal{L}$ | 2,927,338 | 2,240,693 | 1,873,310 | 352,822 | 887,900 | 598,560 | 8,880,623 |
| $\begin{array}{cc}\text { Horse-power of engines ordi- } \\ \text { narily in use } & \ldots\end{array}$ h.p. | 92,671 | 66,108 | 59,24 | 14,208 | 21,507 | 22,497 | 276,232 |

Australia.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,660 | 1,765 | 2,24I | 2,541 | 2,781 | 2,937 |
| Number of persons employed | 19,104 | 22,591 | 27,811 | 30,067 | 31,493 | 32,978 |
| Salaries and wages paid .. £ ¢,000 | 3,635 | 5,842 | 8,537 | 10,402 | 12,031 | 14,999 |
| Value of power, fuel, etc., used $£^{\prime \prime 000}$ | 226 | 375 | 534 | 657 | 804 | 1,032 |
| Value of materials used .. s'000 | 8,523 | 12,174 | 19,971 | 23,428 | 27,020 | 34,965 |
| Value of production ... £'000 | 5,789 | 9,159 | 14,453 | 17,505 | 20,727 | 26,747 |
| Total value of output .. £'000 | 14,538 | 21,708 | 34,958 | 41,590 | 48,551 | 62,744 |
| Value of land and buildings E'000 $^{\prime}$ | 2,055 | 2,523 | 3,292 | 3,825 | 4,477 | 5,819 |
| Value of plant and machinery f'ooo | 2,786 | 3,461 | 4,677 | 5,716 | 7,077 | 8,881 |
| Horse-power of engines ordinarily in | 90,345 | 132,767 | 175,822 | 208,230 | 243,927 | 276,232 |

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in $1938-39$ and by $195^{\circ}-51$ had risen to 1,261 million super. feet. Further reference is made to the sawmilling industry in Chapter XXII.-Forestry.
35. Cabinet and Furniture Making and Upholstery.-These industries constitute the principal manufactures in Class XI. The following table shows particulars for each State in 1950-51:-

## CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. 1 | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 44 I | 487 | 216 | 114 | 1411 | 71 | 1,470 |
| Number of persons employed | 5,719 | 5,015 | 2,792' | 1,653 ${ }^{1}$ | 1,263 | 584 | 17,026 |
| Salaries and wages paid £ | 2,810,385 | 2,260,86I | 1,102,076 | 699,282 | 489,751 | 223,190 | 7,585,545 |
| Value of power, fuel, etc., used $f$ | 62,307 | 41,458 | 21,603' | 18,002 | 10,691 | 3,244 | 157,305 |
| Value of materials used | 5,087,198 | 3,865,247 | 1,909,943 | 1,205,506 | 883,079 | 259,364 | 13,210,337 |
| Value of production .. $\mathbf{E}$ | 4,415,805 | 3,881,598 | 1,714,951 | 1,134,8 12 | 791,971 | 337,797 | 12,276,934 |
| Total value of output | 9,565,310 | 7,788,303 | 3,646,497 | 2,358,320 | 1,685,74 1 | 600,405 | 25,644,576 |
| Value of land and buildings $\underset{ \pm}{ }$ | I,495:551 | 1,488,73I' | 536,253 ${ }^{1}$ | 325,110 | 295,736 | 129,906 | 4,271,287 |
| Value of plant and machinery $£$ | 511,495 | 441,810 | 212,040 | 155,167, | 139,755 | 45,974 | 1,506,2.41 |
| Horse-power of engines ordinarily in use .. h.p. | I $4,853^{\text { }}$ | 8 3,765 | 6,049 | 4,933 | 3,255 | 1,436 | 44,291 |

36. Printing Works.-Printing and bookbinding rank high in importance among the industries of Australia, and in 1950-51 afforded employment for 35,292 employees, and
 The first table below gives particulars of establishments engaged in general printing in each State for 1950-51. These establishments include those engaged in lithographic printing, bookbinding, paper rvling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table to follow :-

GOVERNMENT AND GENERAL PRINTING WORKS, 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | , Aust | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 420 | 436 | 98 | 66 | 73 |  | 1,110 |
| Number of persons employed | 8,944 | 7,658 | 2,242 | 1,551 | 1,335 | 585 | 22,315 |
| Salaries and wages paid | 4,704,894 | 3,887,074 | 246,158 | 710,720 | 550,294 | 278,606 | 1 $1,077,746$ |
| Value of power, fuel, etc., used $\mathfrak{E}$ | 129,717 | 81,492. | 22,175, | 16,185 | 14,694 | 4,686 | 268,949 |
| Value of materials used $\quad \pm$ | 6,023,463 | 5,243,758 | 1,113,618 | 744,4951 | 703,600 | 242,872 | 14,071,806 |
| Value of production .. $£$ | 7,892,812: | 6,464,206 | 1,538,392 | 1,152,848 | 1,029,460 | 413,095 | 18,490,813 |
| Total value of output $£$ | [14,045,992] | 11,789,456 | 2,674,185 1 | 1,913,5281 | 1,747,754 | 660,653 | 32,831,568 |
| Value of land and buildings | 2,712,347 | 2,550,601 | 419,621! | 336,459 | 323,710: | 134,623 | 6,477,361 |
| Value of plant and machinery $£$ | 3,229,646 | 2,637,317 | 421,734, | 520,340 | 393,975 | 138,185 | 7,341,197 |
| Horse-power of engines ordinarily in use .. h.p. | ; 14,618 | $\mathrm{IO}_{2} 09 \mathrm{I}$ | 1,758 | $1,677$ | 1,638 | 657 | 30,439 |

## NEWSPAPERS AND PERIODICALS, 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factorics | 179 | 114 | 57. | 32 | 9 | 8 | 419 |
| Number of persons employed | 5,891 | 3,363 | 1,818 | 931 | 629 | $345^{1}$ | 12,977 |
| Salaries and wages paid £ | 3,418,841 | 2,053,159 | 932,416 ${ }^{\text {' }}$ | 534,842 | 340,090: | 201,357 | 7,480,705 |
| Value of power, fuel, etc., used $£$ | 125,709 | 62,595 | 38,238 | 17,330 | [6,373 | 4,688 | 265,933 |
| Value of materials used | 6,797,49 | 4,259,889 | 1,356,6781 | 1,039,077 | 552,512 | 154,336 | 14,159,990 |
| Value of production . ¢ | 6,670,178 | 3,408,766 | 1,684,266 | 1,068,571 | 698,055, | 255,414 | 13,785,250 |
| Total value of outpot | $13,594,385$ | 7,731,250 | 3,079,182, | 2,124,978 | 1,266,940 | 414,438 | 28,211,173 |
| Value of land and buildings $£$ | 2,728,048 | 936,415 | 660,43 ${ }^{1}$ | 498,702 | 263,972' | 110,092 | 5,197,667 |
| Value of plant and machinery $£$ | 2,587,679 | 2,572,702 | 848,011 | 172,282 | 251,9221 | 88,077 | 6,520,673 |
| Horse-power of engines ordinarily in use .. h.p. | 16,100; | 8,581 | 4,089 | 2,402 | 78 | 556 | 33,706 |

37. Paper Making.-Although the paper manufacturing industry has baen 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 occuared.

Plants producing pulp from eucalypt timber are operating in Victoria and Tasmania, whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in $1938-39$ to 88,000 tons in 1946-47, and remained about this level until $1950-5 \mathrm{I}$, when production totalled 95,000 tons.

The number of factories operating in 1950-51 comprised two in New South Wales, seven in Victoria, one in Queensland, South Australia and Western Australia and two in Tasmania. In the latter State, newsprint, writing and printing papers are produced, and in the other States wrappings, other papers and boards. Particulars for this industry are shown in the following table.

PAPER MAKING, INCLUDING PULP MILLS: AUSTRALIA.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 7 | 12 | 12 | 14 | 14 | 14 |
| Number of persons employed | 1,961 | 4,705 | 5,260 | 5,991 | 6,160 | 6,336 |
| Salaries and wages paid .. ¢'000 | 467 | 1,577 | 2,350 | 2,881 | 3,183 | 4,231 |
| Value of power, fuel, etc., used £'000 | 201 | 599 | 849 | 941 | 998 | I, 181 |
| Value of materials used .. f'000 | 1,096 | 3,802 | 4,979 | 5,768 | 6,554 | 7,487 |
| Value of production ${ }^{\text {E }}$ (000 | 1,005 | 3,017 | $4,43{ }^{\circ}$ | 5,649 | 6,581 | 9,165 |
| Total value of output . . £'000 | 2,302 | 7,418 | 10,258 | 12,358 | 13,733 | 17,833 |
| Value of land and buildings $\ddagger$ | 850 | 1,525 | 1,833 | 2,526 | 3,331 | 4,871 |
| Value of plant and machinery $£$ 'ooo | 1,713 | 2,509 | 3,585 | 4,641 | 5,754 | 9,814 |
| Horse-power of engines ordinarily in $\text { use } . . \quad \text {. } \quad \text {. } \quad \text { h.p. }$ | 31,548 | 68,215 | 75,453 | 79,223 | 95,999 | 103,098 |

38. Rubber Goods.-The following table shows particulars of this industry for each State during 1950-5I and excludes establishments engaged primarily in the retreading and repairing of tyres.

RUBBER G00DS, 1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 24 | 38 | (a) 8 | 8 | (a) |  | 80 |
| Number of persons employed | 5,687 | 4,448 | (a) | 505 | (a) | $\ldots$ | 11,454 |
| Salaries and wages paid | 3,699,571 | 2,859,043 | (a) | 268,097 | (a) | . | 7,218,405 |
| Value of power, fuel, etc., used $£$ | 433,613 | 500,232 | (a) | 22,593 | (a) | . | 984,529 |
| Value of materials used | 12,965,832 | 13,082,745 | (a) | 434,038 | (a) | $\ldots$ | 27,510,509 |
| Value of production . . £ | 4,104,58I | 5,875,555 | (a) | 434,396 | (a) | $\cdots$ | 10,929,642 |
| Total value of output ... $£$ | I7,504,026 | 19,458,532 | (a) | 891,027 | (a) |  | 39,424,680 |
| Value of land and buildings $\quad \underset{\text { d }}{ }$ | 849,949 | I,501,294 | (a) | 54,586 | (a) |  | 2,620,969 |
| Value of plant and machinery $£$ | 980,463 | 1,468,758 | (a) | 100,134 | (a) |  | 2,852,975 |
| Horse-power of engines ordinarily in use <br> h.p. | 37,024) | 37,584 | (a) | 1,788 | (a) | $\ldots$ | 81,315 |

(a) Not available for separate publication; flgures included in total for Australia.
39. Electric Light and Power Works.-(i) Details of Industry. The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. For further information on this subject see Chapter XXV.-Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1950-5I and for Australia for a series of years are shown below :-

## ELECTRIC LIGHT AND POWER WORKS.

1950-5I.

| Items. | N.S.W. |  | Victoria. |  | Q'land. |  | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories . . |  | 90 |  | 69 |  |  |  |  | 3 | 354 |
| Number of persons employed |  |  |  | 453 |  |  | 1,290 | \% 1,023 | ${ }^{125}$ | 6, 9,990 |
| Salaries and wages paid ${ }_{\text {d }}$ | 2,869 |  | 1,593 | 944 |  |  | 915,378 | 8 617,881 | 76,864 | 6,680,004 |
| Value of power, fuel, etc., used £ | 9,772, | 784 | 4,801 | 372 |  |  | 2,183,492 | $211,722,616$ |  | 21,258,820 |
| Value of materials used $\quad$ ¢ | I, 413 | 384 |  | 315 |  |  | 201,388 | 8 246,000 | 29,813 | 2,712,032 |
| Value of production .. | 7,762, | 553 | 3,140, | 519 | 1,207 |  | 964,571 | 1858,885 | 588,646 | 14,522,562 |
| Total value of output | 18,948 | 721 | 8,301, | 206 | 4,447 |  | 3,349,45 | I $2,827,501$ | 618,686 | 38,493,414 |
| Value of land and baildings $£$ | 8,129, | 029 | 2,754 | 496 | 1,362 | 49 | 2,571,460 | 6 927,126 | 1,187,255 | 16,931,621 |
| Value of plant and machinery $\mathbf{x}$ | +8,98 | , | , 6 | 496 | 5,666 |  | 15,228,374 | 413,345,871 | '6,588,914 | 53,441,192 |
| AUSTRALIA. |  |  |  |  |  |  |  |  |  |  |
| Items. |  |  | -39. |  | 46. |  | 7-48. | 1948-49. | 1949-50. | 1950-51. |
| Number of factories |  |  | 395 |  | 372 |  | 363 | 363 | 358 | 354 |
| Number of persons employed |  |  | 6,508 |  | 7,071 |  | 8,426 | 8,937 | 9,595 | 9,990 |
| Salaries and wages paid | £'000 |  | 1,977 |  | 2,588 |  | 3,874 | 4,819 | 5,466 | 6,680 |
| Value of power, fuel, etc., used | £'000 |  | 3,239 |  | 6,398 |  | 9,450 | 12,860 | 15,491 | 21,259 |
| Value of materials used | £'000 |  | 530 |  | 1,029 |  | I,334 | 1,845 | 2,180 | 2,712 |
| Value of production | £'000 |  | 8,714 |  | 10,563 |  | 11,065 | 12,179 | 12,841 | 14,522 |
| Total value of output | f'000 |  | 2,483 |  | 7,990 |  | 21,849 | 26,884 | 30,512 | 38,493 |
| Value of land and buildings | £'000 |  | 8,388 |  | 9,235 |  | 10,497 | 11,640 | 13,486 | 16,932 |
| Value of plant and machinery | £'000 |  | 7,751 |  | 32,13 1 |  | 34,818 | 39.083 | 45.454 | 53.44 I |

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 973.
(ii) Production. The increase in the production of electric light and power in each of the States since 1938 -39 is shown in the following table :-

ElECTRIC LIGHT AND POWER WORKS : ELECTRICITY PRODUCED. ('000 kWh.)

| Year. |  |  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tasmania. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1938-39 |  | $\cdots$ | 1,948,490 | 1,222,505 | 387,368 | 256,283 | 307,002 | 566,691 | 4,688,339 |
| 1945-46 |  | . | 2,831,801 | 1,904,403 | 612,672 | 402,134 | 338,799 | 819,958 | 6,909,767 |
| 1947-48 | . | . | 3,546,345 | 2,259,938 | 759,080 | 519,537 | 402,300 | 872,680 | 8,359,874 |
| 1948-49 |  | $\cdots$ | 3,717,030 | 2,503,981 | 890,258 | 566,606 | 398,594 | 976,474 | 9,052,943 |
| 1949-50 |  | . | 3,758,004 | 2,706,081 | 971,630 | 593,808 | 417,499 | 1,061,639 | 9,508,661 |
| 1950-51 |  | . | 4,251,442 | 2,875,866 | I, 115,34 ${ }^{8}$ | 713,034 | 469,914 | 1,077,723 | 10,503,327 |

40. Gasworks.-(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 1950-51 and for Australia for a series of years :-

GAS-WORKS.
1950-51.

| Items. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Australia.

| Items. | 1938-39. | 1945-46. | 1947-48. | 1948-49. | 1949-50. | 1950-51. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 107 | 104 | 103 | 101 | 100 | 100 |
| Number of persons employed | 2,93I | 3,502 | 3,718 | 3,808 | 3,815 | 3,871 |
| Salaries and wages paid ... £'000 | 785 | I,194 | I,643 | 1,837 | 2,027 | 2,401 |
| Value of power, fuel, light, etc., used | 251 | 448 | 595 | 723 | 845 | 1,179 |
| Value of materials used .. £'000 | 1,872 | 3,965 | 5,255 | 6,734 | 7,220 | 9,450 |
| Value of production .- £'000 | 2,694 | 3,313 | 3,672 | 3,653 | 3,663 | 4,426 |
| Total value of output . . £'0oo | 4,817 | 7,726 | 9,522 | itirio | 1 1,728 | 15,055 |
| Value of land and buildings $\quad$ £'000 | 1,463 | 1,571 | I,815 | 1,813 | 1,939 | 2,071 |
| Value of plant and machinery E'ooo | 7,498 | 9,475 | 10,005 | 10,907 | 11,656 | 12,386 |
| $\begin{array}{cccc}\text { Horse-power of engines ordinarily in } \\ \text { use } & . & . & . .\end{array}$ h.p. | 17,905 | 24,053 | 23,994 | 26,337 | 26,225 | 28,205 |

(a) Not available for publication; figures are included in the total for Australia.
(ii) Coal Used and Production. The following table shows details for 1950-5I :-

GAS-WORKS : COAL USED AND PRODUCTION, 1950-51.

| Particulars. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coal used , . tons | 878,483 | 671,020 | 208,047 | 125,625 | (a) | (a) | 1,963,865 |
| Gas produced 'ooo cubic ft. | 19,444, 111 | 11,445,506 | 2,819,527 | 2,383,6II | (a) | (a) | 37,875,418 |
|  | 16,743,161 | 9,935,806 | 2,479,635 | 2,099, 60 | (a) | (a) | 32,794,896 |
| Coke produced (b) tons | 586,605 | 364,925 | 2,4, 51 | 70,679 | (a) | (a) | 1,111,854 |

(a) Not available for publication; figures are included in total for Australia. (b) In addition, 1,515,782 tons of metallurgical coke were made in Coke Works in $1950-51$.

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached 38 thousand million cubic feet in 1950-51.


[^0]:    (a) Includes salaried managers and working directors.
    (b) Includes persons working regularly

[^1]:    (a) Includes value of labricants and water.
    (b) Includes $£ 507,000$, the value of 263,000 tons of Lolgh Greek coal. (c) Includes £ $_{3} 3,000$, the value of 15,000 tons of coke breeze.

[^2]:    (a) Includes the value of containers, packing, etc., also the coat of tools replaced and repairs to plant.

[^3]:    (a) Excludes Motor Car, Motor Cycle, Tractor and Aero Engines.

[^4]:    (c) Includes Stovettes, Cookers, etc

[^5]:    (a) Includes Woolscouring Works in Victoria and Tasmania and Woolscouring Works and Fellmongeries in South Australia.
    (b) Includes production in other factories.

