## CHAPTER VI

## MANUFACTURING INDUSTRY

Note.-Further detail on the subjects dealt with in this chapter is contained in the annual printed bulletins Secondary Industries, Parts I and II. Information is also published, as soon as the data can be prepared, in a series of 35 annual mimeographed bulletins, Manufacturing Industries, each relating to a particular industry or group of industries. Details of the industries covered are contained in Statistical Publications of Australia, of the Miscellaneous chapter. Advance annual information is published in mimeographed form in A Summary of Principal Statistics of Factories and in Principal Factory Products. Current information on factory products is available in the Quarterly Summary of Australian Statistics, the Monthly Review of Business Statistics, the Digest of Current Economic Statistics, and the Monthly Bulletin of Production Statistics. A preliminary annual statement (Factory Statistics) and monthly statement (Production Statistics) are also issued.

In addition to the above-mentioned publications, there is also a series of 48 Monthly Production Summaries, each relating to the production of a particular commodity or group of commodities (see reference above to Statistical Publications).

## § 1. General

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

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

After federation, steady expansion of the manufacturing industry resulted from the removal of interstate trade barriers and the operation of a uniform protective tariff. This expansion was quickened as a result of the demands created by the 1914-18 War, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development took place, iron and steel works and many related and subsidiary industries were established, extensive manufacture of machinery was begun, and a wide range of high-grade products-textiles, metal manufactures, electrical goods, etc.-was added to the list of commodities made in Australia. A factor in the post-war growth of manufacturing industry in Australia was the creation in 1921 of the Tariff Board (see Chapter XIV. Oversea Trade). As well as encouraging primary industries, the Board, by means of protective tariffs, assisted new manufacturing industries until they were soundly established, and local manufacturers who had been adversely affected by oversea competition.

This expansion was checked by the world-wide economic depression of 1929-33, but in 1933 returning general prosperity and the opportunities opened to local manufacturers by import restrictions, together with depreciation of Australian currency, gave renewed
stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties and 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 their demands, as well as those arising locally because of interruption of oversea imports, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibility 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 basiz temporarily retarded progress, but from 1945-46 onward there has been renewed expansion of the manufacturing industries, to which an inflow of capital from overseas contributed.
2. Decentralization of Manufacturing Industries.-Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Commonwealth and State Ministers in August, 1945, to formulate a national policy for the decentralization of secondary industries. It was agreed that the State Governments should seek to promote decentralization along the lines appropriate to each, providing necessary services, assistance and concessions to the full extent of State resources. The Commonwealth undertonk to collahorate in all matters of Commonwealth industrial policy affecting the development and location of industry, to investigate, in association with the States, the prospects of developing secondary industries in selected areas, to advise the States of developments desirable for defence purposes, and to provide financial assistance for projects of national importance where the cost would be great relative to the State's resources.

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

In the last ten years the proportion of total factory employment engaged in metropolitan factories has been relatively steady, varying from $73.6 \%$ in 1953-54 to $73.8 \%$ in $1956-57,73.9 \%$ in $1959-60$ and $73.7 \%$ in 1962-63.
3. Customs and Excise Tariffs and Bounties on Manufactures.-Particulars of Australian customs and excise tariffs, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia, are given in Chapter XIV. Oversea Trade.

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

Products on which bounties were paid in 1962-63 included tractors, certain processed milk products, sulphuric acid, sulphate of ammonia, cellulose acetate flake and rayon yarn.
4. Scientific Research and Standardization.-(i) The Commonwealth Scientific and Industrial Research Organization. The function of this Organization is to initiate and conduct researci in connexion with iñüstioes in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research. For further information concerning the work of the Organization, see Chapter XIX. Education, Cultural Activities and Research.
(ii) The Standards Association of Australia. The Standards Association of Australia is the national standardizing organization of Australia, and issues Australian standard specifications for materials and codes of practice. For further information on this organization see Chapter XIX. Education, Cultural Activities and Research.
(iii) The National Association of Testing Authorities. The National Association of Testing Authorities organizes testing facilities throughout Australia to serve private and governmental needs. For further information on this organization see Chapter XIX. Education, Cultural Activities and Research.
(iv) Industrial Design Council of Australia. The Industrial Design Council of Australia was established in June, 1958, for the purpose of encouraging better design in Australianmade goods and fostering an appreciation of good design throughout the community. The decision to set up the Council arose from a realization on the part of representatives of industry and government, designers and educationists, that there was a pressing need in Australia for an independent and authoritative body to promote better design in the interests of trade development.

The Council has a membership fully representative of industry, commerce and government, together with designers and educationists. It is financed by donations from industry and by Commonwealth grants. In 1962, the Commonwealth Government announced a grant to the Council of up to $£ 20,000$ a year for the next three years. State Committees for Industrial Design are being set up in order to extend the Council's activities throughout Australia and to co-ordinate efforts for the promotion of better design.

The Australian Design Index provides a detailed, illustrated record of well-designed Australian products. Housed in visual index cabinets, this constantly growing record of good Australian design is freely available for reference. Products accepted for the Design Index carry the "Gmod Design " label.

The first Australian Design Centre, established at 21 Degraves Street, Melbourne, exhibits products included in the Design Index and presents exhibitions which show the meaning of good design in everyday things. Displays and exhibitions are also arranged in other States.

As part of its programme of assisting industry, the Council conducts lectures dealing with various aspects of design and issues information bulletins. Design counselling is available to manufacturing companies on request, and manufacturers seeking the services of designers are put in touch with qualified people. A Record of Designers has been set up to register information about industrial designers and their work.

The Council is also concerned, in co-operation with education authorities, with raising the standard of training in industrial design.
5. Definitions in Factory Statistics.-The statistics relating to factories have been compiled from tabulations made by the Deputy Commonwealth Statisticians in the several States from returns supplied to them annually by manufacturers in accordance with the statistical acts of the States and the Commonwealth. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries), but does not cover smallgoods makers, laundries, photography studios, florists and seedsmen, or most abattoirs. It should be noted that details relating to small establishments not classified for statistical purposes as factories are not included in the figures contained in this chapter.

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

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

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

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

Value of materials used 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 includes also the cost of power and light used, of lubricants and of water.

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

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

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw material 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, timber from the sawmills used in furniture factories and in joinery, and synthetic resins from chemical works used to make plastic products. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason, the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

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

The rated horse-power of engines used for factories other than central electric stations relates to the rated horse-power of engines ordinarily in use.

Statistics relating to factory activity in the Australian Capital Territory and Northern Territory are not included in the figures contained in this chapter.
6. Classinication of Factories.-In the compilation of statistical data relating to factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian statisticians in 1902 and revised from time to time, was used until the year 1929-30. A new classification was introduced in 1930-31, and this in turn was revised and extended (principally in respect of the placement and composition of sub-classes) in accordance with decisions of the 1945 Conference of Statisticians.

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

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

# CLASSIFICATION OF FACTORIES 

Class I.-Treatment of Non-metalliferous
Coke works
Briquetting and pulverized coal
Carbide
Lime, plaster of paris, asphalt
Fibrous plaster and products
Marble, slate, etc.
Cement, portiand
Asbestos cement sheets and mouldings
Other cement goods
Other

Class II.-Bricks, Pottery, Glass, etc.
Bricks and tiles
Earthenware, china, porcelain and terracotta
Glass (other than bottles)
Glass bottles
Other

## Class III.-Chemicals, Dyes, Explosives Paints. Oils, Grease

Industrial and heavy chemicals and acids
Pharmaceutical and toilet preparations
Explosives (including fireworks)
White lead, paints and varnish
Oils, vegetable
Oils, mineral
Oils, animal
Boiling-down, tallow-refining
Soap and candles.
Chemical fertilizers
Inks, polishes, etc.
Matches
Other

## Class IV.-Industrial Metals, Machmes, CONVEYANCES

Smelting, converting, refining, rolling of iron and steel
Foundries (ferrous)
Plant, equipment and machinery, inciuding machino tools
Other engineering
Extracting and refining of other metals; alloys
Electrical machinery, cables and apparatus
Construction and repair of vehicles ( 9 groups)
Ship and boat building and repairing, marine
engineering (government and other)
Cutlery and small hand tools
Agricultural machines and implements
Non-ferrous metals-
Rolling and extrusion
Founding, casting, etc.
Sheet metal working, pressing, and stamping
Pipes, tubes and fittings-ferrous
Wire and wire working (including nails)
Stoves, ovens and ranges
Gas fittings and meters
Lead mills
Sewing machines

Class IV.-Industrial Metals, Machines, CONVEYANCES-continued

Arms, ammunition (excluding explosives)
Wireless and amplifying apparatus
Other metal works

Class V.-Precious Metals, Jewellery, Plate
Jewellery
Watches and clocks (including repairs)
Electroplating (gold, silver, chromium, etc.)

## Class VI.-Textiles and Textile Goods (not Dress)

Cotton ginning
Cotton spinning and weaving
Wool-carding, spinning, weaving
Hosiery and other knitted goods
Silk, natural
Rayon, nylon and other synthetic fibres
Flax mills
Rope and cordage
Canvas goods, tents, tarpaulins, etc.
Bags and sacks
Textile dyeing, printing and finishing
Other

## Class Vil.-Skins and Leather (not Clothina or Footwear)

Furriers and fur-dressing
Woolscouring and fellmongery
Tanning, currying and leather-dressing
Saddlery, harness and whips
Machine belting (leather or other)
Bags, trunks and other goods of leather and leather substitutes

## Class ViII.-Clothing (excrpt Knttied)

Tailoring and ready-made clothing
Waterproof and oilskin clothing
Dressmaking, hemstitching
Millinery
Shirts, collars, underclothing
Foundation garments
Handkerchiefs, ties and scarves
Hats and caps
Gloves
Boots and shoes (not rubber)
Boot and shoe repairing
Boot and shoe accessories
Umbrellas and walking sticks
Dyeworks and cleaning, etc.
Other

## Class IX.-Food, Drink and Tobacco

Flour-milling
Cereal foods and starch
Animal and bird foods
Chaffcuting and corncrushing
Bakeries (including cakes and pastry)
Biscuits
Sugar-mills
Sugar-refining

Class IX.-FOOD, Drink and Tobaccocontinued
Confectionery (including chocolate and icing sugar)
Jam, fruit and vegetable canning
Pickles, sauces, vinegar
Bacon curing
Butter factories
Cheese factories
Condensed and dried milk factories
Margarine
Meat and fish preserving
Condiments, coffee, spices
Ice and refrigerating
Salt
Aerated waters, cordials, etc.
Breweries
Distilleries
Wine-making
Cider and perry
Malting
Bottling
Tobacco, cigars, cigarettes, snuff
Dehydrated fruit and vegetables
Ice cream
Sausage casings
Arrowroot
Other
Class X.-Sawmills, Joinery, Boxes, etc., Wood Turning and Carving
Sawmills
Plywood mills (including veneers)
Bark mills
Joinery
Cooperage
Boxes and cases
Woodturning, woodcarving, etc.
Basketware and wickerware (including sea-grass and bamboo furniture)
Perambulators (including pushers and strollers)
Wall and ceiling boards (not plaster or cement)
Other
Class XI.-Furniture of Wood, Bedding. etc. Cabinet and furniture making (including billiard tables and upholstery)
Bedding and mattresses (not wire)
Furnishing drapery

Class XI.-Furniture of Wood, Bedding, etc.continued

Picture frames
Blinds
Class XII.--Paper, Stationery, Printino, BCOKEINDING, ETC.
Newspapers and periodicals
Printing-
Government
General, including bookbinding
Manufactured stationery
Stereotyping, electrotyping
Process and photo engraving
Cardboard boxes, cartons and containers
Paper bags
Paper-making
Pencils, penholders, chalks, crayons
Other

> Class XIII.-RUBber

Rubber goods (including tyres made)
Tyre retreading and repairing
Class XIV.-Musical Instruments
Gramophones and gramophone_records
Pianos, piano-players, organs
Other
Class XV.-Miscellaneous Products
Linoleum, leather-cloth, oil-cloth, etc.
Bone, horn, ivory and shell
Plastic moulding and products
Brooms and brushes
Optical instruments and appliances
Surgical and other scientific instruments and appliances
Photographic material (including developing and printing)
Toys, games and sports requisites
Artificial flowers
Other
Class XVI.-Heat, Light, and Power
Electric light and power
Gas works
7. Factory Development since 1901, Australia.-The development of the manufacturing industries in Australia at intervals since 1901 is summarized in the following table.

FACTORIES: AUSTRALIA

| Year |  | Factories | Employment $(a)$ | Salaries and wages paid(b) | Value of- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Materials and fuel used | Output | Production <br> (c) | Land and buildings | $\begin{aligned} & \text { Plant } \\ & \text { and } \\ & \text { ma- } \end{aligned}$ |
|  |  | No. | '000. | $\mathbf{£}^{\prime} 000$. | £'000. | £'000. | $£^{\prime} 0000$. | £'000. $^{\text {f }}$ | £'000. |
| 1901 | $\cdots$ | 11,143 | 198 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 1911 | . | 14,455 | 312 | 27,528 | 81,763 | 133,022 | 51,259 | 32,701 | 31,516 |
| 1920-21 |  | 17,113 | 367 | 62,932 | 213,559 | 323,993 | 110.434 | 60,831 | 68,655 |
| 1930-31 |  | 21,751 | 339 | 62.455 | 172,489 | 290,799 | 118,310 | 112,211 | 124,498 |
| 1940-41 | . | 27,300 | 650 | 137,919 | 386,881 | 644,795 | 257,914 | 144,094 | 161,356 |
| 1950-51 | . | 43,147 | 969 | 491,718 | 1,306,963 | 2,150,835 | 843,872 | 302,785 | 336,615 |
| 1958-59 | $\cdots$ | 54,888 | 1,088 | 970,553 | 2,649,331 | 4,491,932 | 1,842,601 | 947,899 | 1,108,385 |
| 1959-60 | $\cdots$ | 56,657 | 1,132 | 1,086,359 | 2,948,814 | 5,023,696 | 2,074,882 | 1,063,852 | 1,220,064 |
| 1960-61 | .. | 57,782 | 1,145 | 1,143,836 | 3,047,344 | 5.217,148 | $2,169,80+$ | 1,193,590 | 1,391490 |
| 1961-62 | $\cdots$ | 58,450 | 1,121 | 1,142,519 | 3,047,1 51 | 5,242,089 | 2,194,938 | 1,403,838 | 1,524,787 |
| 1962-63 |  | 59,146 | 1,167 | 1,222,466 | 13,332,149 | \|5,728,163 | 2,396,014 | 1,502,180 | 1,642,028 |
| 1963-64p | $\cdots$ | 59,362 | 1,210 | 1,325,971 | 3,684,267 | 6,319,040 | 2,634,773 | 1,602,181 | 1,739,633 |

(a) 1901 and 1911-average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (b) Excludes drawings by working proprietors. (c) Value added in process of manufacture (i.e., value of output less value of materials and fuel, etc., used).

Note.-Revised figures for the motor engineering and electricity generating industries in Victoria were received too late for insertion in $\$ \S 1-9$ of this chapter. They have however, been incorporated in the individual industry tables in $\S 11$, pages 187 and 202 . Amended figures for the earlier sections will be found in the appendix.

## § 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 1958-59 to 1962-63.

## FACTORIES: NUMBER

|  | Year | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1958-59 |  | 22,684 | 16,527 | 5,651 | 4,235 | 4,125 | 1,666 | 54,888 |
| 1959-60 | . | 23,274 | 16,979 | 5,758 | 4,684 | 4,279 | 1,683 | 56,657 |
| 1960-61 |  | 23,585 | 17,173 | 5,882 | 5,042 | 4,334 | 1,766 | 57,782 |
| 1961-62 |  | 23,629 | 17,300 | 5,824 | 5,519 | 4,418 | 1,760 | 58,450 |
| 1962-63 |  | 23,729 | 17,500 | 5,895 | 5,766 | 4,492 | 1,764 | 59,146 |

2. Number of Factories in Industrial Classes.-(i) Australia. The next table shows the number of factories in Australia for the years 1958-59 to 1962-63 classified to the industrial classes agreed upon by the Conference of Statisticians in 1930. Details of some of the principal industries included in the table will be found in § 11.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA

| Class of industry | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry |  |  |  |  |  |
| II. Pricks, pottery, glass, etc. | 1,344 | $\begin{array}{r}1,374 \\ \hline 682\end{array}$ | 1,434 | 1,454 | $\begin{array}{r}1,493 \\ \hline 692\end{array}$ |
| III. Chemicals, dyes, explosives, paints, oils, grease | 1,218 | 1,248 | 1.258 | 1,285 | 1,288 |
| IV. Industrial metals, machines, conveyances | 21,254 | 22,622 | 23,532 | 24,193 | 24.914 |
| V. Precious metals, jewellery, plate | 818 | 823 | 859 | 911 | 918 |
| VI. Textiles and textile goods (not dress) .. | 1.373 | 1,435 | 1,421 | 1,386 | 1,368 |
| VII. Skins and leather (not clothing or footwear) | 729 | 727 | 703 | 671 | 656 |
| VIII. Clothing (except knitted) | 7.195 | 7,267 | 7.493 | 7,561 | 7,614 |
| IX. Food, drink and tobacco | 7,580 | 7,449 | 7,331 | 7,251 | 7,161 |
| X. Sawmills, joinery, boxes, etc., wood turning and |  |  |  |  |  |
| XI. Furniture of ${ }^{\text {car wood, bedding, }}$ | 5,676 | 2,211 | 5,732 $\mathbf{2 , 1 7 6}$ | 5,634 | 5,521 |
| XII. Paper, stationery, printing, bookbinding, etc. | 2,518 | 2,619 | 2,688 | 2,739 | 2,774 |
| XIII. Rubber .. . . . . | 606 | 620 | '629 | 650 | 659 |
| XIV. Musical instruments | 86 | 87 | 88 | 85 | 86 |
| XV. Miscellaneous products | 1,251 | 1,330 | 1,370 | 1,409 | 1,486 |
| Total, Classes I. to XV. | 54,495 | 56,265 | 57,408 | 58,080 | 58,784 |
| XV1. Heat, light and power | 393 | 392 | 374 | 370 | 362 |
| Grand Total | 54,888 | 56,657 | 57,782 | 58,450 | 59,146 |

(ii) States, 1962-63. The following table shows the number of factories in each State classified by nature of industry.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1962-63

| Class of industry | N.S.W. | Vic. | Qland | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products . . | 512 | 477 | 120 | 182 | 151 | 51 | 1,493 |
| II. Bricks, pottery, glass, etc. ... | 307 | 183 | 53 | 80 | 50 | 19 | 692 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 612 | 390 | 86 | 97 | 74 | 29 | 1,288 |
| IV. Industrial metals, machines, conveyances | 10,087 | 6,944 | 2,440 | 2,781 | 2,060 | 602 | 24,914 |
| V. Precious metals, jewellery, plate | 365 | 247 | 44 | , 169 | 74 | 19 | 918 |
| VI. Textiles and textile goods (not dress) | 440 | 781 | 31 | 58 | 39 | 19 | 1,368 |
| VII. Skins and leather (not clothing or footwear) | 302 | 240 | 44 | 40 | 24 | 6 | 656 |
| VIII. Clothing (except knitted) -. | 3,423 | 2,545 | 565 | 594 | 390 | 97 | 7,614 |
| IX. Food, drink and tobacco .. | 2,530 | 1,989 | 976 | 744 | 624 | 298 | 7,161 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving . . | 2,072 | 1,332 | 799 | 409 | 451 | 458 | 5,521 |
| XI. Furniture of wood, bedding, etc. | 802 | 635 | 260 | 218 | 170 | 69 | 2,154 |
| XII. Paper, stationery, printing, bookbinding, etc. | 1,187 | 987 | 214 | 197 | 146 | 43 | 2,774 |
| XIII. Rubber . . . . . | 234 | 180 | 115 | 57 | 51 | 22 | 659 |
| XIV. Musical instruments | $\begin{array}{r}36 \\ 731 \\ \hline\end{array}$ | $\begin{array}{r}24 \\ 484 \\ \hline\end{array}$ | $7{ }^{7}$ | 11 96 | $\begin{array}{r}8 \\ 85 \\ \hline\end{array}$ |  | $\begin{array}{r}86 \\ 1.486 \\ \hline\end{array}$ |
| XV. Miscellaneous products | 731 | 484 |  | 96 | 85 | 16 | 1,486 |
| Total Classes I. to XV. | 23,640 | 17,438 | 5,828 | 5,733 | 4,397 | 1.748 | 58,784 |
| XVI. Heat, light and power | 89 | 62 | 67 | 33 | 95 | 16 | 362 |
| Grand Total | 23,729 | 17,500 | 5,895 | 5,766 | 4,492 | 1,764 | 59,146 |

## § 3. Classification of Factories by Number of Persons Employed

Note.-The size classification of factories is based on the average weekly number of persons employed during the period of operation (including working proprietors).

1. States, 1962-63.-The following table shows, for each State, the number of factories classified by the average number of persons employed.

FACTORIES: CLASSIFICATION BY SIZE OF FACTORY, 1962-63

| Size of factory (Persons employed) | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Factories |  |  |  |  |  |  |  |
| Under 4 | 10,357 | 6,332 | 2,186 | 2,674 | 2,235 | 759 | 24,543 |
| 4 | 1,872 | 1,347 | 542 | 491 | 355 | 180 | 4,787 |
| 5 to 10 | 5,283 | 4,124 | 1,550 | 1,228 | 950 | 425 | 13,560 |
| 11 to 20 | 2,773 | 2,424 | 731 | 621 | 440 | 179 | 7,168 |
| 21 to 50 | 1,977 | 1,856 | 524 | 429 | 328 | 140 | 5,254 |
| 51 to 100 | 761 | 709 | 172 | 171 | 111 | 40 | 1,964 |
| 101 to 200 | 381 | 397 | 99 | 82 | 42 | 22 | 1,023 |
| 201 to 300 | 114 | 129 | 52 | 25 | 17 | 6 | 343 |
| 301 to 400 | 71 | 55 | 18 | 12 | 7 | 4 | 167 |
| 401 to 500 | 34 | 36 | 6 | 8 | 4 | 1 | 89 |
| 501 to 750 | 42 | 55 | 9 | 12 | .. | 2 | 120 |
| 751 to 1,000 | 29 | 15 | 3 | 4 | 2 | 2 | 55 |
| Over 1,000.. | 35 | 21 | 3 | 9 | , | 4 | 73 |
| Total | 23,729 | 17,500 | 5,895 | 5,766 | 4,492 | 1,764 | 59,146 |

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

FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED, BY SIZE OP FACTORY, 1962-63

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

## Average Number Employed during Period Worked

| Under 4 | 19,086 | 12,665 | 4,516 | 4,846 | 4,130 | 1,512 | 46,755 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 7,484 | 5,388 | 2,168 | 1,964 | 1,420 | 720 | 19,144 |
| 5 to 10 | 36,733 | 29,129 | 10,668 | 8,531 | 6,453 | 2,973 | 94,487 |
| 11 to 20 | 40,954 | 35,766 | 10,619 | 9,149 | 6,333 | 2,595 | 105,416 |
| 21 to 50 | 62,108 | 58,890 | 16,623 | 13,739 | 10,317 | 4,477 | 166,154 |
| 51 to 100 | 54,360 | 49,734 | 12,114 | 11,819 | 7,653 | 2,860 | 138,540 |
| 101 to 200 | 52,918 | 56,308 | 13,950 | 11,497 | 5,670 | 2,939 | 143,282 |
| 201 to 300 | 27,661 | 31,505 | 12,563 | 5,913 | 3,811 | 1,473 | 82,926 |
| 301 to 400 | 24,768 | 18,940 | 6,464 | 3,984 | 2,305 | 1,297 | 57,758 |
| 401 to 500 | 15,181 | 16,100 | 2,581 | 3,555 | 1,833 | 448 | 39,698 |
| 501 to 750 | 25,633 | 32,908 | 5,331 | 7,684 |  | 1,282 | 72,838 |
| 751 to 1,000 | 24,663 | 13,578 | 2,787 | 3,497 | 1,713 | 1,757 | 47,995 |
| Over 1,000 | 86,856 | 38,247 | 5,229 | 19,584 | 2,686 | 6,797 | 159,399 |
| Total | 478,405 | 399,158 | 105,613 | 105,762 | 54,324 | 31,130 | 1,174,392 |
| Average per factory | 20.16 | 22.81 | 17.92 | 18.34 | 12.09 | 17.65 | 19.86 |

2. Australia.-(i) Size Group, 1958-59 to 1962-63. The following table gives details according to broad groups for the last five years.

## FACTORIES: CLASSIFICATION BY NUMBER OF PERSONS EMPLOYED, AUSTRALIA

| Year | Establishments employing on the average- |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20 and under |  | 21 to 100 |  | 101 and upwards |  | Total |  |
|  | $\begin{gathered} \text { Es- } \\ \text { tablish- } \\ \text { ments } \end{gathered}$ |  | Es-tablishments | $\begin{gathered} \text { Persons } \\ \text { em- } \\ \text { ployed } \end{gathered}$ | $\begin{gathered} \text { Es- } \\ \text { tablish- } \end{gathered}$ ments |  | Es. tablishments | Persons cmployed |
| $\begin{gathered} \text { 1958-59- } \\ \text { Number } \end{gathered}$ | 46,345 | 253,375 | 6,825 | 282,735 | 1,718 | 560,553 | 54,888 | 1,096,663 |
| Average |  | 5.47 |  | 41.43 | . | 326.28 | . | 19.98 |
| Number | 47.791 | 258,162 | 7,078 | 293,400 | 1,788 | 587,832 | 56,657 | 1.139,394 |
| Average per establish- ment | .. | 5.40 |  | 41.45 |  | 328.77 | .. | 20.11 |
| Number | 48,728 | 260,276 | 7,241 | 301,251 | 1,813 | 591,808 | 57.782 | 1,153,335 |
| Average per establish- |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 1961-62- \\ & \text { ment } \end{aligned}$ |  | 5.34 |  | 41.60 |  | 326.42 |  | 19.96 |
| Number | 49,546 | 261,679 | 7,111 | 296,907 | 1,793 | 569,976 | 58,450 | 1,128.562 |
| Average per establish- ment |  | 5.28 |  | 41.75 |  | 317.89 |  | 19.31 |
| $\begin{aligned} & 1962-63- \\ & \text { Number } \end{aligned}$ | 50,057 | 265,802 | 7,217 | 304,694 | 1,872 | 603,896 | 59,146 | 1,174,392 |
| Average per establish- |  | 5.31 | . 21 | 42.22 | . . | 322.59 | . | 19.86 |

(ii) Classes of Industry, 1962-63. In the following table, factories in industrial classes are classified in the same broad groups by the number of persons employed in 1962-63.

FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED IN INDUSTRIAL CLASSES, BY SIZE OF FACTORY, AUSTRALIA, 1962-63


## § 4. Employment in Factories

1. Number Employed.-(i) General. All persons employed in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see para. 4, p. 155), 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. From 1945-46 the occupational groupings collected were-(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; but from 1960-61 the last three categories were amalgamated into one group-(iv) foremen and overseers, workers in factory and others.

Statistics of factory employment represent the equivalent average number employed over a full year of fifty-two weeks except for the classification of factories according to the number of persons employed (see $\S 3$, p. 150), which is based on the average number employed over the period worked.
(ii) Australia. Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for the years 1958-59 to 1962-63 in the following table.

FACTORIES: EMPLOYMENT, AUSTRALIA

| Year | Males |  |  | Females |  |  | Persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Numberem-ployed | Increase on preceding year |  | Number employed | Increase on preceding year |  | Numberem-ployed | Increase on preceding year |  |
|  |  | Number | Per cent. |  | Number | Per cent. |  | Number | Per cent. |
| 1958-59 | 834,940 | 12,425 | 1.51 | 253,316 | 2,024 | 0.81 | 1,088,256 | 14,449 | 1.35 |
| 1959-60 | 862,185 | 27,245 | 3.26 | 269,492 | 16,176 | 6.39 | 1,131,677 | 43,421 | 3.99 |
| 1960-61 | 872,100 857 | 9,915 | 1.15 | 27.632 |  |  | 1,144,732 | - $\begin{array}{r}13,055 \\ -24,066\end{array}$ | - 1.15 |
| $1961-62$ $1962-63$ | 857,457 888,11 | - $\begin{array}{r}14,643 \\ \hline 0,656\end{array}$ | -1.68 | 263,209 278,745 | $\begin{array}{r}-9,423 \\ \hline 15,536\end{array}$ | -3.46 5.90 | 1,120,666 | $-24,066$ <br> 4,192 | -2.10 4.12 |
|  | 88,1] |  |  |  | 15,336 | 3.90 | 1,166,858 | 46,192 | 4.12 |

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

FACTORIES: EMPLOYMENT

| Year | N.S.W. | Vic. | Qland | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Average Number Employed during Full Year (52 Weeks)

| $1958-59$ | $\cdots$ | 449,518 | 362,979 | 104,753 | 94,165 | 48,417 | 28,424 | $1,088,256$ |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| $1959-60$ | $\ldots$ | 467,139 | 381,514 | 104,693 | 99,018 | 49,651 | 29,662 | $1,131,677$ |
| $1960-61$ | $\ldots$ | 472,061 | 387,430 | 104,462 | 99,955 | 50,666 | 30,158 | $1,144,732$ |
| $1961-62$ | $\ldots$ | 461,087 | 377,745 | 101,637 | 99,094 | 51,033 | 30,070 | $1,120,666$ |
| $1962-63$ | $\ldots$ | 475,249 | 397,156 | 104,998 | 105,265 | 53,435 | 30,755 | $1,166,858$ |

Percentage of Australian total

| $1958-59$ | $\cdots$ | 41.31 | 33.35 | 9.63 | 8.65 | 4.45 | 2.61 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1959-60$ | $\cdots$ | 41.28 | 33.71 | 9.25 | 8.75 | 4.39 | 2.62 | 100 |
| $1960-61$ | $\cdots$ | 41.24 | 33.85 | 9.13 | 8.73 | 4.43 | 2.62 | 100 |
| $1961-62$ | $\cdots$ | 41.14 | 33.71 | 9.07 | 8.84 | 4.56 | 2.68 | 100 |
| $1962-63$ | $\ldots$ | 40.72 | 34.04 | 9.00 | 9.02 | 4.58 | 2.64 | 100 |

Per 1,000 of Population

| $1958-59$ | $\ldots$ | 121 | 132 | 72 | 104 | 69 | 84 | 109 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1959-60$ | $\ldots$ | 123 | 135 | 71 | 106 | 69 | 86 | 111 |
| $1960-61$ | $\ldots$ | 120 | 131 | 68 | 102 | 68 | 85 | 108 |
| $1961-62$ | $\ldots$ | 117 | 128 | 67 | 101 | 68 | 84 | 106 |
| $1962-63$ | . | 118 | 131 | 68 | 105 | 70 | 85 | 109 |

2. Rates of Increase, 1958-59 to 1962-63.-The percentage increase on the average number of persons employed in the preceding year is shown below for each State.

## FACTORIES: ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED

| Year |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1958-59 |  | 0.83 | 1.63 | 2.86 | 1.83 | -0.09 | 1.21 | 1.35 |
| 1959-60 | . | 3.92 | 5.11 | -0.06 | 5.15 | 2.55 | 4.36 | 3.99 |
| 1960-61 | . | 1.05 | 1.55 | -0.22 | 0.95 | 2.04 | 1.67 | 1.15 |
| 1961-62 | . | -2.32 | -2.50 | -2.70 | -0.86 | 3.22 | -0.29 | -2.10 |
| 1962-63 | . | 3.07 | 5.14 | 3.31 | 6.23 | 4.71 | 2.28 | 4.12 |

3. Persons Employed in Industrial Classes.-(i) Australia. The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1958-59 to 1962-63.

FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA

| Class of industry | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalifferous mine and quarry products | 21,093 | 21,778 | 23,363 | 23,182 |  |
| II. Bricks, pottery, glass, etc. $\quad \because$ | 23,093 | 24,308 | 24,612 | 24,108 | 25,152 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 47,876 | 47,617 | 46,833 | 46,830 | 47,535 |
| IV. Industrial metals, machines, conveyances .. | 469,446 | 498,192 | 509,939 | 496,975 | 524,641 |
| V. Precious metals, je welle | 57,483 | 5,308 | 7,342 | 57,226 | 5,308 |
| VII. Skins and leather (not clothing or footwear) | 67,467 12,935 | 72,953 | 71,092 12,310 | 67,949 | 72,022 |
| VIII. Clothing (except knitted) | 106,098 | 106,830 | 107,158 | 104,655 | 107,932 |
| IX. Food, drink and tobacco | 125,408 | 126,154 | 126,477 | 128,590 | 131,301 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 60,101 | 61,651 | 60,810 | 57,279 | 5,114 |
| XI. Furniture of wood, bedding, etc. | 22,110 | 22,902 | 22,219 | 21,374 | 21,815 |
| XII. Paper, stationery, printing bookbinding, etc. | 68,327 | 71,672 | 74,582 | 73,839 | 76,263 |
| XIII. Rubber | 18,467 | 18,663 | 18,395 | 17,174 | 18,916 |
| XIV. Musical instruments | 1,025 | 936 | 812 | 733 | 749 |
| XV. Miscellaneous products | 22,286 | 23,851 | 24,757 | 24,682 | 26,124 |
| Total, Classes 1. to XV. | 1,071,215 | 1,115,077 | 1,128,701 | 1,104,551 | 1,151,025 |
| XVI. Heat, light and power | 17,041 | 16,600 | 16,031 | 16,115 | 15,833 |
| Grand Total | 1,088,256 | 1,131,677 | 1,144,732 | 1,120,666 | 1,166,858 |

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

FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, 1962-63

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 9,582 | 7,156 | 2,280 | 2,282 | 1,776 | 813 | 23,889 |
| II. Bricks, pottery, glass, etc. . | 12,617 | 7,007 | 1,403 | 2,225 | 1,518 | 382 | 25,152 |
| I. Chemicals, dyes, explosives, paints, oils, grease | 23,160 | 16,062 | 1,751 | 2,944 | 2,692 | 926 | 47,535 |
| . Industrial metals, machines, conveyances | 230,313 | 161,978 | 38,296 | 60,470 | 23,249 | 10,335 | 524,641 |
| V. Precious metals, ${ }^{\text {jewellery, }}$ plate .. | 2,179 | 2,022 | 316 | 539 | 209 | 43 | 5,308 |
| VI. Textiles and textile goods (not dress) | 21,232 | 41,930 | 2,243 | 2,533 | 871 | 3,213 | 72,022 |
| VII. Skins and leather (not clothing or footwear) |  | 3,993 |  |  | 625 | 61 | 12,264 |
| VIII. Clothing (except knitted) $\quad . \quad$ | 44,566 | 46,795 | 7,765 | 5,098 | 2,992 | 716 | 107,932 |
| IX. Food, drink and tobacco | 41,046 | 39,425 | 26,941 | 11,241 | 7,560 | 5,088 | 131,301 |
| Sawmills, joinery, boxes, etc., wood turning and carving | 19,055 | 14,639 | 9,097 | 5,311 | 5,347 | 3,665 | 7,114 |
| XI. Furniture of wood, bedding, etc. | 8,758 | 6,375 | 2,643 | 2,191 | 1,372 | 476 | 21,815 |
| XII. Paper, stationery, printing, bookbinding, etc. | 31,617 | 25,927 | 6,426 | 4,868 | 3,006 | 4,419 | 76,263 |
| XIII. Rubber ... | 7,591 | 7,806 | 1,891 | 1,148 | 348 | 132 | 18,916 |
| XIV. Musical instruments |  | 192 | 33 | 32 | 34 |  | 749 |
| XV. Miscellaneous products | 12,339 | 11,056 | 734 | 1,256 | 619 | 120 | 26,124 |
| Total, Classes I. 10 XV . | 469,750 | 392,363 | 103,003 | 103,302 | 52,218 | 30,389 | 1,151,025 |
| XVI. Heat, light and power | S,499 | 4,793 | 1,995 | 1,963 | 1,217 | 366 | 15,833 |
| Grand Total | 475,249 | 397,156 | 104,998 | 105,265 | 53,435 | 30,755 | 1.166,858 |

4. Persons Employed According to Occupational Grouping.-In the following table, the average number of persons employed in each State during 1962-63 is classified according to occupational grouping. As stated in para. 1 of this section (see p. 152), persons employed in factories are now classified on a basis different from that adopted prior to 1960-61.

FACTORIES: PERSONS EMPLOYED, OCCUPATIONAL GROUPING, 1962-63

| State |  | Average number of persons employed |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Working proprietors | Managerial and clerical staff, etc.(a) | Chemists, draftsmen, etc. | Foremen and overseers, workers in factory and others(b) | Total |
| New South Wales | $\ldots$ | 14,299 | 62,300 | 8,771 | 389,879 | 475,249 |
| Victoria |  | 12,784 | 50,730 | 7,839 | 325,803 | 397,156 |
| Queensland | $\cdots$ | 4,717 | 11,806 | 1,339 | 87,136 | 104,998 |
| South Australia |  | 4,103 | 13,237 | 1,923 | 86,002 | 105,265 |
| Western Australia | . | 2,879 | 5,242 | 620 | 44,694 | 53,435 |
| Tasmania |  | 1,080 | 3.407 | 674 | 25,594 | 30,755 |
| Total Males | $\ldots$ | 33,886 | 90,245 | 19,110 | 744,872 | 888,113 |
| Total Females | $\cdots$ | 5,976 | 56,477 | 2,056 | 214,236 | 278,745 |
| Total Persons | .. | 39,862 | 146,722 | 21,166 | 959,108 | 1,166,858 |

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

The term " outworker " or " homeworker " has acquired a special meaning in connexion with manufacturing industries, and includes only persons to whom work is given out by factories to be done at home. Persons working regularly at home for factories are included in the group foremen, overseers, workers in factory and others, and separate details are not available.
5. Monthly Employment, 1958-59 to 1962-63.-(i) Australia. The following table shows the number of persons (excluding working proprietors) employed in factories on the last pay-day of each month during the years 1958-59 to 1962-63.

## FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA

(Excluding Working Proprietors)

| Month | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :---: | :---: | :---: | :---: | :---: |

Males

| July |  | . | 794,374 | 811,912 | 844,659 | 809,433 | 842,528 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| August | . | . | 794,537 | 814,297 | 846,325 | 810,822 | 845,144 |
| September |  | . . | 795,464 | 817,277 | 848,593 | 806,514 | 847,175 |
| October |  | $\cdots$ | 796,964 | 820,178 | 849,211 | 816,327 | 849,228 |
| November |  | $\cdots$ | 799,368 | 821,316 | 849,265 | 820,488 | 851,666 |
| December | . | $\ldots$ | 792,351 | 817,217 | 843,037 | 816,602 | 846,391 |
| January | . | $\cdots$ | 794,996 | 824,919 | 843,995 | 822,210 | 852,458 |
| February | . | . | 800,208 | 831,022 | 838,482 | 830,641 | 859,136 |
| March | $\cdots$ | . | 802,408 | 835,371 | 829,781 | 834,926 | 862,292 |
| April |  | . | 804,259 | 835,236 | 823,500 | 832,434 | 860,614 |
| May | . | . | 804,691 | 839,084 | 818,065 | 837,001 | 860,682 |
| June | .- | . | 805,641 | 840,832 | 810,295 | 839,177 | 862,579 |

FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA—continued

| Month |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Females |  |  |  |  |  |  |
| July | - | 244,610 | 251,512 | 270,302 | 243,839 | 266,110 |
| August |  | 245,349 | 253,864 | 272,491 | 245,882 | 267,667 |
| September |  | 245,882 | 257,906 | 274,698 | 248,688 | 270,444 |
| October . |  | 246,199 | 260,105 | 275,647 | 253,485 | 272,697 |
| November |  | 247,098 | 262,514 | 276,226 | 256,261 | 273,746 |
| December |  | 244,235 | 259,753 | 271,401 | 255,779 | 270,252 |
| January | .. | 243,625 | 260,749 | 267,386 | 257,742 | 270,734 |
| February |  | 249,847 | 267,234 | 269,012 | 263,919 | 276,821 |
| March |  | 250,384 | 270,364 | 263,623 | 266,971 | 280,206 |
| April | $\ldots$ | 249,209 | 267,916 | 256,478 | 261,519 | 274,303 |
| May |  | 248,365 | 269,200 | 250,137 | 264,039 | 273,249 |
| June | . | 248,915 | 270,402 | 245,088 | 264,374 | 271,997 |
| Persons |  |  |  |  |  |  |
| July | $\cdots$ | 1,038,984 | 1,063,424 | 1,114,961 | 1,053,272 | 1,108,638 |
| August . | . | 1,039,886 | 1,068,161 | 1,118,816 | 1,056,704 | 1,112,811 |
| September | . | 1,041,346 | 1,075,183 | 1,123,291 | 1,055,202 | 1,117,619 |
| October | . | 1,043,163 | 1,080,283 | 1,124,858 | 1,069,812 | 1,121,925 |
| November |  | 1,046,466 | 1,083,830 | 1,125,491 | 1,076,749 | 1,125,412 |
| December | . | 1,036,586 | 1,076,970 | 1,114,438 | 1,072,381 | 1,116,643 |
| January | . | 1,038,621 | 1,085,668 | 1,111,381 | 1,079,952 | 1,123,192 |
| February | $\cdots$ | 1,050,055 | 1,098,256 | 1,107,494 | 1,094,560 | 1,135,957 |
| March | . | 1,052,792 | 1,105,735 | 1,093,404 | 1,101,897 | 1,142,498 |
| April | . | 1,053,468 | 1,103,152 | 1,079,978 | 1,093,953 | 1,134,917 |
| May |  | 1,053,056 | 1,108,284 | 1,068,202 | 1,101,040 | 1,133,931 |
| June | . | 1,054,556 | 1,111,234 | 1,055,383 | 1,103,551 | 1,134,576 |

(ii) States. Particulars of the numbers employed in each State on the last pay-day of each month in 1962-63 are shown in the following table.

FACTORIES: MONTHLY EMPLOYMENT, 1962-63
(Excluding Working Proprietors)

| Month |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males |  |  |  |  |  |  |  |  |
| July | .. | 342,420 | 268,558 | 84,171 | 81,180 | 42,337 | 23,862 | 842,528 |
| August | $\cdots$ | 343,013 | 269,449 | 84,460 | 81,790 | 42,603 | 23,829 | 845,144 |
| September | . | 343,725 | 270,637 | 84,160 | 81,950 | 42,834 | 23,869 | 847,175 |
| October | . | 345,267 | 271,697 | 83,370 | 82,038 | 42,914 | 23,942 | 849,228 |
| November | . | 346,018 | 273,300 | 82,495 | 82,494 | 43,348 | 24,011 | 851,666 |
| December | . | 345,033 | 273,432 | 77,162 | 82,407 | 43,503 | 24,854 | 846,391 |
| January | $\cdots$ | 345,723 | 275,857 | 78,746 | 83,379 | 43.676 | 25,077 | 852,458 |
| Fcbruary | . | 348,061 | 277,551 | 81,028 | 83,820 | 43,830 | 24,846 | 859,136 |
| March | . | 348,576 | 277,848 | 82,455 | 84,492 | 44,231 | 24,690 | 862,292 |
| April | . | 347,931 | 276,937 | 82,255 | 84,594 | 44,192 | 24,705 | 860,614 |
| May | . | 347,464 | 276,533 | 83,324 | 84,581 | 44,154 | 24,626 | 860,682 |
| June | . | 347,403 | 276,362 | 85,510 | 84,946 | 43,844 | 24,514 | 862,579 |

FACTORIES: MONTHLY EMPLOYMENT, 1962-63-continued

6. Distribution of Employees According to Age.-The following table shows the number of each sex employed in each age group on the last pay day in June for Australia in the years 1959 to 1963 .

FACTORIES: DISTRIBUTION OF EMPLOYEES BY AGE, AUSTRALIA
(Excluding Working Proprietors)

| June- |  | Males |  |  | Females |  |  | Persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under 16 years | $\begin{gathered} 16 \text { to } 20 \\ \text { years } \end{gathered}$ | 21 years and over | Under 16 years | $\begin{gathered} 16 \text { to } 20 \\ \text { years } \end{gathered}$ | 21 years and over | Under 16 years | $\begin{gathered} 16 \text { to } 20 \\ \text { years } \end{gathered}$ | $\left\lvert\, \begin{gathered} 21 \text { years } \\ \text { and } \\ \text { over } \end{gathered}\right.$ |
| 1959 |  | 8,411 | 78,461 | 718,769 | 7,234 | 46,011 | 195,670 | 15,645 | 124,472 | 914,439 |
| 1960 |  | 8,627 | 82,016 | 750,189 | 7,457 |  |  |  |  | 964,289 |
| 1961 |  | 8,849 | 79,941 | 721,505 | 7,162 | 44,432 | 193,494 | 16,011 | 124,373 | 914,999 |
| 1962 |  | 9,176 | 86,498 | 743,503 | 8,764 | 48,817 | 206,793 | 17,940 | 135,315 | 950,296 |
| 1963 | . | 8,736 | 92,163 | 761,680 | 7,852 | 51,778 | 212,367 | 16,588 | 143,941 | 974,047 |

## § 5. Sex Distribution in Factories

1. Average Number of Males and Females Employed.-The following table shows the average number of males and females employed in factories in each State for the years 1958-59 to 1962-63.

FACTORIES: MALES AND FEMALES EMPLOYED

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 1958-59 to 1962-63.
factories: annual percentage increases of males and females EMPLOYED

| State |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males |  |  |  |  |  |  |
| New South Wales | .. | 1.05 | 3.07 | 1.19 | -1.76 | 2.57 |
| Victoria .. | . | 1.71 | 4.35 | 1.58 | -2.23 | 4.27 |
| Queensland | . | 3.04 | -0.54 | -0.57 | -2.73 | 2.86 |
| South Australia | . | 2.00 | 5.02 | 0.72 | -0.12 | 5.93 |
| Western Australia | . | -0.21 | 2.40 | 2.05 | 0.81 | 4.66 |
| Tasmania .. | . | 1.83 | 3.85 | 1.65 | -0.28 | 2.87 |
| Australia |  | 1.51 | 3.26 | 1.15 | -1.68 | 3.58 |
| Females |  |  |  |  |  |  |
| New South Wales | . | 0.16 | 6.59 | 0.64 | -4.06 | 4.65 |
| Victoria .. | . | 1.43 | 7.13 | 1.47 | -3.20 | 7.42 |
| Queensland | . | 1.92 | 2.36 | 1.50 | -2.66 | 5.45 |
| South Australia | . | 1.06 | 5.78 | 1.98 | -4.24 | 7.63 |
| Western Australia | . | 0.67 | 3.53 | 2.03 | 0.15 | 5.01 |
| Tasmania |  | -1.66 | 6.79 | 1.77 | -0.36 | -0.49 |
| Australia |  | 0.81 | 6.39 | 1.17 | -3.46 | 5.90 |

Note.-Minus sign ( - ) indicates decrease.
3. Masculinity of Persons Employed in Factories.-The following table shows, for the years 1958-59 to 1962-63, the proportion of males to females employed in factories in each State.

FACTORIES: MASCULINITY(a) OF PERSONS EMPLOYED

| Year |  |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1958-59$ | $\ldots$ | $\ldots$ | 313 | 266 | 506 | 463 | 649 | 478 | 330 |
| $1959-60$ | $\ldots$ | $\ldots$ | 303 | 259 | 491 | 459 | 642 | 465 | 320 |
| $1960-61$ | $\ldots$ | $\ldots$ | 305 | 260 | 481 | 454 | 642 | 464 | 320 |
| $1961-62$ | $\ldots$ | $\ldots$ | 312 | 262 | 481 | 473 | 650 | 467 | 326 |
| $1962-63$ | $\cdots$ | $\cdots$ | 306 | 254 | 469 | 466 | 644 | 480 | 319 |

(a) Number of males per 100 females.
4. Employment of Females in Particular Industries.-(i) General. The majority of females in manufacturing industries are employed in four classes, namely:-IV., Industrial Metals, Machines, etc.; VI., Textiles; VIII., Clothing; and IX., Food, Drink and Tobacco. In 1962-63, these industries accounted for 78.27 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 139 females to every 100 males, and in Class VIII., Clothing, with 257 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes in 1962-63.

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1962-63

| Class | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males |  |  |  |  |  |  |  |
| IV. Industrial metals, etc. $\quad \because \quad$, | 200,455 | 140,678 | 35,686 | 53,643 | 22,048 | 9,768 | 462,278 |
| VI. Textiles and textile goods (not |  |  | 888 |  | 467 | 1,478 | 30,138 |
| VIII. Clothing (except knitted) $\because$ | 11,707 | 13,986 | 2,046 | 1,790 | 910 | 1,425 | 30,764 |
| IX. Food, drink and tobacco .. | 28,011 | 27,064 | 22,244 | 7,868 | 5,822 | 3,531 | 94,540 |
| All otherflasses .. .. | 109,196 | 86,057 | 25,672 | 22,112 | 17,005 | 10,351 | 270,393 |
| Total | 358,116 | 285,101 | 86,536 | 86,655 | 46,252 | 25,453 | 888,113 |

Females

| IV. Industrial metals, etc. VI. $_{\text {Textiles and textile goods (nöt }}$ |  |  |  | 29,858 | 21,300 | 2,610 | 6,827 | 1,201 | 567 | 62,363 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 12,485 | 24,614 | 1,355 | 1,291 | 404 | 1,735 | 41,884 |
|  | Clothing (except | nitted) | $\cdots$ | 32,859 | 32,809 | 5,719 | 3,308 | 2,082 | + 391 | 77,168 |
|  |  | obacco |  | 13,035 | 12,361 | 4,697 | 3.373 | 1,738 | 1,557 | 36,761 |
|  | All other classes | - |  | 28,896 | 20,971 | 4,081 | 3,811 | 1,758 | 1,052 | 60,569 |
|  | Total | - | . | 117,133 | 112,055 | 18,462 | 18,610 | 7,183 | 5,302 | 278,745 |

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

EMPLOYMENT IN CLOTHING INDUSTRIES: FEMININITY(a), 1962-63


(a) Number of females per 100 males.

## § 6. Children Employed in Factories

1. Number of Children Employed, 1961 to 1963.-In the returns for the various States, the term "child" denotes any person under sixteen years of age. The following table shows the number of children of each sex employed in manufacturing industries in June of the years 1961 to 1963.

FACTORIES: CHILDREN( $a$ ) EMPLOYED

| State | June, 1961 |  |  | June, 1962 |  |  | June, 1963 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Persons | Males | Females | Persons | Males | Females | Persons |
| New South Wales | 2,710 | 2,009 | 4,719 | 2,955 | 2,646 | 5,601 | 2,623 | 2,196 | 4,819 |
| Victoria | 2,707 | 2,586 | 5,293 | 2,625 | 3,049 | 5.674 | 2,444 | 2,653 | 5,097 |
| Queensland $\because \cdot$ | 1,478 | 1,318 | 2,796 | 1,521 | 1,564 | 3,085 | 1,665 | 1,630 | 3,295 |
| South Australia | 878 | 804 | 1,682 | 953 | 993 | 1,946 | 893 | 872 | 1,765 |
| Western Australia | 947 | 350 | 1,297 | 1,031 | 411 | 1,442 | 1,016 | 432 | 1,448 |
| Tasmania .. | 129 | 95 | 224 | 91 | 101 | 192 | 95 | 69 | 164 |
| Australia .. | 8,849 | 7,162 | 16,011 | 9,176 | 8,764 | 17,940 | 8,736 | 7,852 | 16,588 |

(a) Under sixteen years of age.
2. Industries Employing Children.-The distribution of children employed in factories in June, 1963, and the proportion of children employed to total employees are shown in the following table by the main classes of industry employing persons under sixteen years of age.

FACTORIES: CHILDREN(a) EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1963


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

## § 7. Power Equipment in Factories

1. General.-Since 1936-37, statistics of power equipment in factories relate to the " rated horse-power" of engines ordinarily in use and engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of central electric stations are collected in greater detail. To avoid duplication it is essential that some distinction should be made between central electric stations and other classes of industries. In the following tables central electric stations have been treated separately from other factories.
2. Rated Horse-power of Engines in Factories other than Central Electric Stations.The following table shows the total number of factories and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1962-63.
FACTORIES( $a$ ): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1962-63

|  | State |  |  |  | Factories(a) | Rated horse-power of engines and motors |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Ordinarily in use(b) | In reserve or idle (omitting obsolete) |
| New South Wales |  | - | -• | . | 23,675 | 2,756,795 | 401,433 |
| Victoria | - | . | $\cdots$ | . | 17,465 | 1,679,254 | 225,852 |
| Queensland | $\cdots$ | - | $\cdots$ | . | 5,844 | 605,931 | 85,817 |
| South Australia | . | .. |  | . | 5,737 | 499,139 | 62,991 |
| Western Australia |  | . | . | . | 4,400 | 292,425 | 43,518 |
| Tasmania | - | .. | - | -• | 1,750 | 302,742 | 43,298 |
| Australia | $\cdots$ | . | . | . | 58,871 | 6,136,286 | 862,909 |

[^0]3. Rated Horse-power of Engines and Electric Motors Ordinarily in Use.-(i) According to Type, States. Particulars of the types and the total rated horse-power of engines, etc., ordinarily in use in each State are given below.

FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1962-63

(a) Includes gas works but excludes central electric stations, details of which are shown on p. 163.
(b) Excludes motors driven by electricity generated in factories not classified as central electric stations. (c) Excludes particulars in column (d).
(ii) According to Type, Australia. In the following table, details of the total rated horse-power of the various types of engines in use are given for Australia for the years 1958-59 to 1962-63.

FACTORIES $(a): 3$ TYPES AND TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, AUSTRALIA


[^1](iii) In Classes of Industry, 1962-63. 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(b), 1962-63

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Treatment of non-metalliferous mine and quarry products | 110,123 | 95,448 | 28,539 | 36,366 | 21,356 | 21,029 | 312,861 |
| II. Bricks, pottery, glass, etc. .. | 69,019 | 49,610 | 12,405 | 12,400 | 13,532 | 3,067 | 160,033 |
| III. Chemicals, dyes, explosives, paints, oils, grease <br> IV. Industrial metals, machines, | 253,251 | 182,219 | 13,515 | 35,052 | 51,671 | 15,946 | 551,654 |
| IV. conveyances . . . | 1,524,050 | 569,924 | 124,785 | 219,531 | 80,185 | 63,475 | 2,581,950 |
| V. Precious metals, jewellery, plate | 4,822 | 3,776 | 485 | 2,314 | 656 | 97 | 12,150 |
| VI. Textiles and textile goods (not dress) | 60,813 | 111,315 | 7,316 | 8,063 | 3,043 | 9,851 | 200,401 |
| VII. Skins and leather (not clothing or footwear) | 18.472 | 14,728 | 6,586 | 6,142 | 2,916 | 518 | 49,362 |
| VIII. Clothing (except knitted) . | 27,247 | 29,636 | 5,065 | 4,352 67,708 | 2,676 | 831 285 | 69,807 |
| IX. Food, drink and tobacco ... | 230,771 | 225,064 | 241,617 | 67,708 | 47,031 | 28,538 | 840,729 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 195,757 | 127,645 | 118,018 | 54,187 | 53,459 | 48,856 | 597,922 |
| XI. Furniture of wood, bedding, etc. | 20,202 | 13,940 | 7,727 | 7,253 | 4,182 | 1,598 | 54,902 |
| XII. Paper, stationery, printing, bookbinding, etc. | 118,219 | 116,650 | 24,042 | 26,196 | 7,124 | 107,996 | 400,227 |
| XIII. Rubber . . . . | 61,593 | 70,873 | 11,752 | 8,444 | 1,613 | 546 | 154,821 |
| XIV. Musical instruments | 1,217 | 322 | 52 | 14 | 13 |  | 1,618 |
| XV. Miscellaneous products | 42,132 | 41,156 | 1,097 | 2,631 | 1,526 | 318 | 88,860 |
| Total, Classes I. to XV. .. | 2,737,688 | 1,652,306 | 603,001 | 490,653 | 290,983 | 302,666 | 6,077,297 |
| XVI. Gas works .. .. | 19,107 | 26,948 | 2,930 | 8,486 | 1,442 | 76 | 58,989 |
| Grand Total | 2,756,795 | 1,679,254 | 605,931 | 499,139 | 292,425 | 302,742 | 6,136,286 |

(a) Excludes central electric stations, details of which are shown below.
(b) Excludes motors driven by electricity generated in factories not classified as central electric stations.
4. Capacity of Engines and Generators installed in Central Electric Stations.-(i) According to Type, Australia. Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1962-63 are given in the following table.

CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1962-63

| Particulars | Capacity of engines and generators |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Steam |  | Internal combustion |  |  | Water | Total |
|  | $\begin{gathered} \text { Recipro- } \\ \text { cating } \end{gathered}$ | Turbine | Gas | Petrol or other light oils | $\begin{gathered} \text { Heavy } \\ \text { oils } \end{gathered}$ |  |  |
| Engines installed . . Rated H.P. | 2,350 | 7,306,757 | 10,445 | 39,022 | 289,535 | 2,550,045 | 10,198,154 |
| Generators installedKilowatt capacity- |  |  |  |  |  |  |  |
| Total installed $\quad . \quad \mathbf{k W}$ | 1,760 | 5,419,472 | 7,359 | 27,234 | 192,940 | 1,850,310 | 7,499,075 |
| Effective capacity .. ." | 1,700 | 5,267,930 | 5,074 | 24,038 | 173,336 | 1,844,801 | 7,316,879 |
|  |  |  |  |  |  |  |  |
| Total installed .. H.P. <br> Effective capacity . " | 2,359 | 7,264,694 | 9,865 6,802 | 36,507 $\mathbf{3 2 , 2 2 2}$ | 258,632 232,353 | 2,480,303 | $10,052,360$ $9,808,130$ |
| Effective capacity .. " |  | 1,061,555 | 6,802 | 32,22 i | 232,353 | 2,472,919 | 9,808,130 |

(ii) States. Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1962-63 are given in the next table.

CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1962-63


## § 8. Value of Production, Materials Used, Salaries and Wages


#### Abstract

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


1. General.-The gross value of factory output for $1962-63$ was $£ 5,728$ million, of which $£ 3,130$ million was the value of the materials used, including containers, etc., tools replaced, and repairs to plant and buildings, and $£ 202$ million the value of the power, fuel, light, water and lubricating oil used. The difference between the sum of the last two amounts and the gross value of output, namely, $£ 2,396$ million, represents the net value of factory production, defined as " the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production ". Depreciation, however, is not deducted (see para. 6 of this section, p. 171). The gross value of factory output and the value of materials used each contain inherent elements of duplication, as the output of some factories becomes the materials used in other factories. The net value of factory production indicates the relative importance of manufacturing in the Australian economy in current money terms. The total amount of salaries and wages paid in factories in 1962-63 was $£ 1,222$ million, excluding amounts drawn by working proprietors.
2. Salaries and Wages Paid.-(i) In Classes of Industry, 1962-63. 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, 1962-63

(£’000)

| Class of industry | N.S.w. | Vic. | Q'and | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 11,761 | 8,582 | 2,523 | 2,678 | 1,869 | 934 | 28,347 |
| II. Bricks, pottery, glass, etc. .- | 14,440 | 7,918 | 1,430 | 2,530 | 1,567 | 412 | 28,297 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 28,394 | 20,339 | 1,830 | 3,466 | 3,250 | 1,252 | 58,531 |
| IV. Industrial metals, machines, conveyances | 265,393 | 182,237 | 36,272 | 67,030 | 21,807 | 11,649 | 584,388 |
| V. Precious metals, jewellery, | 2,029 | 2,05t | 241 | 410 | 149 | 30 | 4,910 |
| VI. Textiles and textile goods (not dress) | 18,850 | 37,793 | 1,641 | 2,178 | 719 | 2,896 | ,077 |
| VII. Skins and leather (not clothing or foot wear) | 18,850 5,212 | 3,793 | 1,641 | 1,180 | 593 | 2,896 | 12,057 |
| VIII. Clothing (except knitted) -. | 32,332 | 36,334 | 4,531 | 3,299 | 1,651 | 481 | 78,628 |
| IX. Food, drink and tobacco | 41,591 | 40,450 | 27,242 | 10,397 | 7,129 | 4,835 | 131,644 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving. . | 19,022 | 15,147 | 7,882 | 4,925 | 4,798 | 3,425 | 55,199 |
| XI. Furniture of wood, bedding, etc. | 8,665 | 5,838 | 2,145 | 1,765 | 1,057 | 366 | 19,836 |
| XII. Paper, stationery, printing, bookbinding, etc. | 36,139 | 30,277 | 6,456 | 5,168 | 3,010 | 5,335 | 86,385 |
| XIII. Rubber ... ${ }^{\text {a }}$, | 9,262 | 9,122 | 1,693 | 1,451 | 306 | 124 | 21,958 |
| XIV. Musical instruments | 494 | 201 | 575 | 25 | 25 |  | 766 |
| XV. Miscellaneous products | 12,925 | 11,684 | 575 | 1,039 | 477 | 97 | 26,797 |
| Total, Classes I. to XV. | 506,509 | 411,864 | 95,598 | 107,541 | 48,407 | 31,901 | 1,201,820 |
| XVI. Heat, light and power | 7,099 | 6,687 | 2,317 | 2,492 | 1,533 | 518 | 20,646 |
| Grand Total .. | 513,608 | $\overline{418,551}$ | 97,915 | 110,033 | 49,940 | 32,419 | 1,222,466 |

(ii) Totals and Averages, 1958-59 to 1962-63. The following table shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each year. The figures exclude working proprietors and the amounts drawn by them.

In comparing the figures in the following table regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, a large number of hands are employed in Class VIII., Clothing, comprising a relatively high percentage of women and children.

FACTORIES: TOTAL AND AVERAGE SALARIES AND WAGES PAID

| Year | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Total Amount Paid ( $£^{\prime} 000$ )

| $1958-59$ | $\ldots$ | $\ldots$ | 413,015 | 324,336 | 85,497 | 83,145 | 38,732 | 25,828 | 970,553 |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1959-60$ | $\ldots$ | $\ldots$ | 461,144 | 370,181 | 89,367 | 95,238 | 41,643 | 28,786 | $1,086,359$ |
| $1960-61$ | $\ldots$ | $\ldots$ | 490,016 | 387,221 | 92,159 | 98,983 | 45,127 | 30,330 | $1,143,836$ |
| $1961-62$ | $\ldots$ | $\ldots$ | 488,070 | $\mathbf{3 8 4 , 4 3 3}$ | 93,345 | 99,531 | 46,420 | 30,720 | $1,142,519$ |
| $1962-63$ | $\ldots$ | $\ldots$ | 513,608 | 418,551 | 97,915 | 110,033 | 49,940 | 32,419 | $1,222,466$ |

Average Per Employee (£)

| 1958-59 |  |  | 952.82 | 928.60 | 856.33 | 911.89 | 847.81 | 942.94 | 927.13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959-60 |  |  | 1021.03 | 1005.62 | 896.09 | 995.96 | 890.43 | 1004.27 | 996.16 |
| 1960-61 |  |  | 1072.15 | 1034.77 | 927.20 | 1028.33 | 942.04 | 1041.07 | 1036.14 |
| 1961-62 |  |  | 1092.38 | 1053.31 | 963.84 | 1047.56 | 962.57 | 1057.29 | 1057.00 |
| 1962-63 |  |  | 1114.24 | 1088.89 | 976.41 | 1087.71 | 987.82 | 1092.47 | 1084.71 |

(iii) Total and Average Earnings of Males and Females, 1958-59 to 1962-63. Particulars for these years are given in the following table.

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

| Year | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Males
Total Amount Paid ( $\mathbf{f}^{\prime} 000$ )

| 1958-59 | $\cdots$ | 348,302 | 265,615 | 77,049 | 74,268 | 35,647 | 23,138 | 824,019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959-60 | . | 387,166 | 302,678 | 80,345 | 85,333 | 38,276 | 25,618 | 919,416 |
| 1960-61 | $\cdots$ | 412,560 | 317,907 | 82,669 | 88,623 | 41,474 | 26,952 | 970,185 |
| 1961-62 | . | 411,835 | 314,959 | 83,763 | 89,385 | 42,703 | 27,248 | 969,893 |
| 1962-63 | . | 432,252 | 341,980 | 87,743 | 98,911 | 45,958 | 28,918 | 1,035,762 |

Average Per Male Employer (£)

| 1958-59 |  | 1,065.21 | 1,052.69 | 926.77 | 992.28 | 905.12 | 1,026.66 | 1,031.05 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959-60 | $\ldots$ | 1,145.65 | 1,145.80 | 971.95 | 1,088.21 | 950.85 | 1,091.42 | 1,111.86 |
| 1960-61 | $\cdots$ | 1,204.20 | 1,183.16 | 1,006.38 | 1,125.21 | 1,005.06 | 1,130.89 | 1,158.71 |
| 1961-62 | $\ldots$ | 1,222.45 | 1,198.21 | 1,046.50 | 1,140.33 | 1,026.38 | 1,146.51 | 1,177.70 |
| 1962-63 | $\cdots$ | 1,249.71 | 1,245.42 | 1,063.35 | 1,188.42 | 1,054.64 | 1,183.51 | 1,212.51 |

Females
Total Amount Paid ( $\mathbf{£}^{\prime} 000$ )

| 1958-59 | $\cdots$ | 64,713 | 58,721 | 8,448 | 8,877 | 3,085 | 2,690 | 146,534 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959-60 | $\cdots$ | 73,978 | 67,503 | 9,022 | 9,905 | 3,367 | 3,168 | 166,943 |
| 1960-61 | . | 77,456 | 69,314 | 9,490 | 10,360 | 3,653 | 3,378 | 173,651 |
| 1961-62 |  | 76,235 | 69,474 | 9,582 | 10,146 | 3,717 | 3,472 | 172,626 |
| 1962-63 | $\cdots$ | 81,356 | 76,570 | 10,172 | 11,123 | 3,982 | 3,501 | 186,704 |

Average Per Female Employee (f)

| $1958-59$ | $\cdots$ | $\because$ | 607.71 | 605.66 | 505.75 | 543.49 | 489.60 | 554.24 | 591.74 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1959-60$ | $\cdots$ | $\because$ | 650.82 | 649.38 | 528.65 | 575.58 | 516.95 | 610.25 | 633.25 |
| $1960-61$ | $\cdots$ | 676.83 | 656.91 | 550.13 | 592.18 | 550.25 | 637.26 | 651.26 |  |
| $1961-62$ | $\cdots$ | 693.66 | 670.55 | 570.16 | 610.23 | 561.55 | 656.42 | 670.76 |  |
| $1962-63$ | $\cdots$ | $\cdots$ | 707.02 | 697.47 | 572.59 | 620.25 | 570.57 | 668.00 | 684.48 |

(iv) Managers, Clerical Staff and Other Employees. The following table shows, for 1962-63, 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. Amounts drawn by working proprietors are excluded in all cases.

FACTORIES: SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC., AND OTHER EMPLOYEES, AUSTRALIA, 1962-63

| Class of industry | Managers, clerical staff, chemists, draftsmen, etc. |  | All other employees |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females |
|  | £'000 | $£^{\prime} 000$ | £'000 | £'000 |
| I. Treatment of non-metalliferous mine and quarry | 4,428 | 760 | 23,017 | 142 |
| II. Bricks, pottery, glass, etc.. .. .. | 2,949 | 659 | 23,729 | 960 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 15,414 | 3,404 | 35,434 | 4,279 |
| IV. Industrial metals, machines, conveyances . | 93,199 | 18,556 | 447,546 | 25,087 |
| V. Precious metals, jewellery, plate .. | 6,629 | , 224 | 3,590 | $\begin{array}{r}25,467 \\ \hline 25725\end{array}$ |
| VI. Textiles and textile goods (not dress) . . | 6,514 | 2,638 | 29,200 | 25,725 |
| VII. Skins and leather (not clothing or footwear) | 1,428 | 309 | 8,404 | 1,916 |
| VIII. Clothing (except knitted) .. .. | 6,263 | 3,268 | 23,173 | 45,924 |
| IX. Food, drink and tobacco $\quad$. | 19,680 | 5,932 | 87,419 | 18,613 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 6,754 | 1,403 | 46,290 | 752 |
| XI. Furniture of wood, bedding, etc. ${ }^{\text {a }}$ | 2,286 | , 793 | 14,609 | 2,148 |
| XII. Paper, stationery, printing, bookbinding, etc. | 13,025 | 3,955 | 60,064 | 9,341 |
| XIII. Rubber .. .. . . . | 3,529 | 753 | 15,581 | 2,095 |
| XIV. Musical instruments | 102 | 24 | 559 | 81 |
| XV. Miscellaneous products | 4,347 | 1,426 | 16053 | 4,971 |
| Total, Classes I. to XV. | 180,547 | 44,104 | 834,668 | 142,501 |
| XVI. Heat, light and power | 2,051 | 76 | 18,496 | 23 |
| Grand Total | 182,598 | 44,180 | 853,164 | 142,524 |
| Average paid per employee | $\stackrel{f}{1,669.77}$ | $75$ | $\frac{£}{1,145.38}$ | $\stackrel{£}{665.27}$ |

3. Power, Fuel and Light Used.-(i) In Classes of Industry, 1962-63. The expenditure by factories on power, fuel and light, including the value of lubricants and water, is shown in the following table for each State and Australia for 1962-63.

FACTORIES: VALUE OF POWER, FUEL AND LIGHT USED(a), 1962-63 ( $\mathbf{£}^{\prime} \mathbf{0 0 0}$ )

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 5,516 | 2,865 | 1,011 | 1,052 | 629 | 463 | 11,536 |
| II. Bricks, pottery, glass, etc. . . | 4,113 | 2,501 | 546 | 728 | 568 | 166 | 8,622 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 8,530 | 7,307 | 303 | 1,095 | 2,299 | 539 | 20,073 |
| IV. Industrial metals, machines, conveyances | 47,762 | 10,925 | 2,924 | 5,772 | 1,538 | 2,992 | 71,913 |
| V. Precious metals, jewellery, plate .. .. .. | 173 | 161 | 16 | 41 | 11 | 2 | 404 |
| VI. Textiles and textile goods (not dress) | 1,761 | 2,786 | 98 | 218 | 51 | 259 | 5,173 |
| VII. Skins and leather (not clothing or foot wear) | 444 | 446 | 96 | 148 | 68 | 7 | 1,209 |
| VIII. Clothing (except knitted) - | 1,074 | 1,008 | 195 | 151 | 81 | 39 | 2,548 |
| IX. Food, drink and tobacco ... | 6,720 | 6,456 | 3,431 | 1,456 | 1,158 | 640 | 19,861 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving. | 1,520 | 858 | 656 | 369 | 343 | 364 | 4,110 |
| XI. Furniture of wood, bedding, etc. | 230 | 135 | 51 | 48 | 29 | 9 | 502 |
| XII. Paper, stationery, printing, bookbinding, etc. | 2,111 | 2,517 | 410 | 525 | 132 | 1700 | 7,395 |
| XIII. Rubber .. . | 1,182 | 1,399 | 203 | 168 | 33 | 19 | 3,004 |
| XIV. Musical instruments | 35 | 10 | 1 | 1 | (b) |  | 47 |
| XV. Miscellaneous products | 916 | 1,131 | 20 | 60 | 26 | 3 | 2,156 |
| Total, Classes 7. to XV... | 82,087 | 40.505 | 9,961 | 11,832 | 6.966 | 7,202 | 158,553 |
| XVI. Heat, light and power | 16,667 | 11,255 | 7,638 | 4,204 | 3,895 | 17 | 43,676 |
| Grand Total .. | 98,754 | 51.760 | 17,599 | 16,036 | 10,861 | 7,219 | 202,229 |

(a) Includes value of lubricants and water.
(b) Less than $\mathbf{f 5 0 0}$.
(ii) Values of Items, 1962-63. 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), 1962-63

 ( ${ }^{\prime} \mathbf{\prime} 000$ )| Particulars |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coal. black | $\cdots$ | 18,767 | 1,566 | 9.277 | (b)3,496 | 2,589 | 981 | 36,676 |
| ," brown |  |  | 6,567 |  |  |  |  | 6,567 |
| Brown coal briquettes | $\cdots$ |  | 6,111 |  |  |  | $\cdots$ | 6,111 |
| Coke | . | $\begin{array}{r}17.470 \\ \hline 389\end{array}$ | 743 449 | 400 | 2,445 | 219 | 333 | 21,610 |
| Wood | . | 389 | 449 | 312 | 364 | 384 | 96 | 1,994 |
| Fuel oil | $\cdots$ | 10.538 | 10,406 | 1,618 | 3,042 | 3,979 | 1,213 | 30,796 |
| Tar (fuel) | . | 1,427 | 79 | 28 | 103 |  | 14 | 1,655 |
| Electricity | .. | 30,324 | 19,918 | 4,526 | 4,985 | 2,505 | 3,976 | 66,234 |
| Gas .- | . | 10,204 | 1,724 | 264 | 298 | 98 | 43 | 12,631 |
| Other (charcoal, etc.) | .. | 4,023 | 657 | 167 | 447 | 456 | 324 | 6,074 |
| Water | . | 4,009 | 2,481 | 557 | 551 | 369 | 148 | 8,115 |
| Lubricating oils .. | . | 1,603 | 1,059 | 450 | 305 | 258 | 91 | 3,766 |
| Total | .. | 98,754 | 51,760 | 17,599 | 16,036 | 10,861 | 7,219 | 202,229 |

(a) Includes value of lubricants and water.
(b) Includes $£ 2,343,975$, the value of $\mathbf{1 , 3 8 2 , 0 9 5}$ tons of sub-bituminous Leigh Creek coal.
(iii) Quantities of Fuel Used, 1962-63. The following table shows the quantities of fuel used in factories in each State during the year.

FACTORIES: QUANTITIES OF FUEL USED, 1962-63

| Particulars |  |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coal, black | - . | '000 tons | 6,376 | 250 | 1,976 | (a) 1,601 | 674 | 196 | 11,073 |
| B brown | $\cdots$ | " | . . | 12,762 | . | . | . . | . . | 12,762 |
| Brown coal | briquettes | , |  | 1,089 |  |  |  |  | 1,089 |
| Coke | briques | " | 2,551 | 63 | 25 | 274 | 17 | 18 | 2,948 |
| Wood | . . . | ' | 182 | 235 | 151 | 249 | 239 | 68 | 1,124 |
| Fuel oil | . . | '000 gals. | 243,013 | 254,738 | 23,829 | 74,391 | 99,177 | 25,095 | 720,243 |
| Tar (fuel) | .. | " | 36,593 | 1,612 | 622 | 3,020 | 137 | 298 | 42,282 |

(a) Includes 1,382,095 tons of Leigh Creek coal.
(iv) Total Value, 1958-59 to 1962-63. The next 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1958-59 | 76,275 | 43,377 | 14,964 | 14,590 | 9.587 | 5,459 | 164,252 |
| 1959-60 | 87,108 | 47,140 | 15,183 | 15.093 | 10.071 | 6,220 | 180.815 |
| 1960-61 | 92,262 | 49.201 | 15.544 | 15.183 | 10.616 | 6.437 | 189.243 |
| 1961-62 | 93,911 | 49,529 | 16.066 | 15,323 | 10,368 | 6.568 | 191,765 |
| 1962-63 | 98,754 | 51,760 | 17,599 | 16,036 | 10,861 | 7,219 | 202,229 |

(a) Includes value of lubricants and water.
4. Value of Materials Used.-(i) In Classes of Industry, 1962-63. 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 $1962-63$ reached $£ 3,130$ million, or 54.6 per
cent. of the value of the final output (see para. 5). The following table shows the value of the materials used in various classes of industry in each State.

FACTORIES: VALUE OF MATERIALS USED, 1962-63
( ${ }^{\prime} \mathbf{\prime} 000$ )

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metallifer. ous mine and quarry products | 45,018 | 21,843 | 6,006 | 6,733 | 4,099 | 2,285 | 85,984 |
| II. Bricks, pottery, glass, etc. . . | 13,405 | 8,058 | 1,188 | 3,052 | 1,036 | 252 | 26,991 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 150,995 | 123,662 | 10,176 | 14,331 | 36,034 | 2,955 | 338,153 |
| IV. Industrial metals, machines, conveyances | 603,632 | 292,721 | 91,341 | 134,181 | 38,966 | 24,022 | 184,863 |
| V. Precious metals, jewellery, plate | 2,262 | 2,234 | 143 | 326 | 83 | 13 | 5,061 |
| VI. Textiles and textile goods (not dress) | 45,188 | 97,134 | 4,864 | 4,789 | 2,982 | 7,028 | 161,985 |
| VII. Skins and leather (not clothing or foot wear) | 15,032 | 10,086 | 2,955 | 6,849 | 749 | 407 | 36,078 |
| VIII. Clothing (except knitted) - | 58,033 | 57,770 | 5,192 | 3,755 | 1,949 | 426 | 127,125 |
| IX. Food, drink and tobacco .. | 198,193 | 216,498 | 195,732 | 46,592 | 35,981 | 21,436 | 714,432 |
| X. Sawmills, joinery، boxes, etc., wood turning and carving | 43,031 | 30,653 | 15,407 | 12,550 | 8,403 | 8,348 | 118,392 |
| XI. Furniture of wood, bedding. etc. | 18,650 | 12,060 | 5,231 | 3,754 | 2,566 | 646 | 42,907 |
| XII. Paper, stationery, printing, bookbinding, etc. | 69,191 | 65,376 | 11,275 | 8,200 | 4,654 | 9,537 | 168,233 |
| XIII. Rubber . . . | 21,758 | 21,292 | 3,964 | 2,273 | 721 | 255 | 50,263 |
| XIV. Musical instruments | 1,124 | 183 | 22 | 9 | 14 |  | 1,352 |
| XV. Miscellaneous products | 21,808 | 24,223 | 698 | 2,008 | 781 | 64 | 49,582 |
| Total, Classes I. to XV. | 1,307,320 | 983,793 | 354,194 | 249,402 | 139,018 | 77,674 | 111,401 |
| XVI. Heat, light and power | 7,504 | 5,093 | 2,670 | 2,028 | 860 | 364 | 18,519 |
| Grand Total .. .. | 1,314,824 | 988,886 | 356,864 | 251,430 | 139,878 | 78,038 | 3,129,920 |

(ii) Total Amounts, 1958-59 to 1962-63. The following table shows the value of materials used in factories for these years.

FACTORIES: VALUE OF MATERIALS USED
( ${ }^{\prime} 000$ )

| Year |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1958-59 | -• | 1,070,862 | 778,716 | 280,757 | 188,358 | 107,853 | 58,533 | 2,485,079 |
| 1959-60 | . | 1,206,255 | 875,973 | 291,388 | 207.636 | 119,138 | 67,609 | 2,767,999 |
| 1960-61 | . | 1,236,484 | 897,167 | 305,677 | 216,382 | 133,324 | 69.067 | 2,858,101 |
| 1961-62 | . | 1,223,666 | 907,804 | 305,003 | 212,560 | 135,085 | 71,268 | 2,855,386 |
| 1962-63 | . | 1,314,824 | 988,886 | 356,864 | 251,430 | 139,878 | 78,038 | 3,129,920 |

5. Value of Output.-(i) In Classes of Industry, 1962-63. The value of the output of factories in the various classes in each State in 1962-63 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done, such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the net value of factory production (see paras. 1 and 6 of this section).

## FACTORIES: VALUE OF OUTPUT, 1962-63

( $£^{\prime} 000$ )

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 75,284 | 44,473 | 13,218 | 15,149 | 9,332 | 5,017 | 162,473 |
| II. Bricks, pottery, glass, etc. .- | 42,212 | 24,635 | 4,543 | 8,629 | 4,548 | 1,096 | 85,663 |
| III. Chemicals, dyes, explosives paints, oils, grease | 257,713 | 202,440 | 16,986 | 25,773 | 54,920 | 6,082 | 563,914 |
| IV. Industrial metals, machines, conveyances | 1,113,718 | 599,107 | 151,968 | 241,745 | 78,806 | 50,377 | 2,235,721 |
| V. Precious metals, jewellery, plate | 6,051 | 5,812 | 565 | 1,175 | 413 | 72 | 14,088 |
| VI. Textiles and textile goods (not dress) | 83,685 | 167,007 | 7,848 | 8,855 | 4,372 | 12,283 | 284,050 |
| VII. Skins and leather (not clothing or footwear) | 23,974 | 17,221 | 5,140 | 8,718 | 1,851 | 513 | 57,417 |
| VIII. Clothing (except knitted) .. | 115,607 | 118,664 | 12,943 | 9,413 | 4,855 | 1,359 | 262,841 |
| IX. Food, drink and tobacco .. | 315,783 | 322,468 | 259,532 | 68,749 | 53,513 | 32,706 | 1,052,751 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 77,916 | 56,692 | 29,430 | 21,371 | 17,426 | 14,845 | 217,680 |
| XI. Furniture of wood, bedding, etc. | 33,747 | 22,702 | 9,008 | 7,062 | 4,589 | 1,296 | 78,404 |
| XII. Paper, stationery, printing, bookbinding, etc. | 146,028 | 128,515 | 23,798 | 18,380 | 10,949 | 23,414 | 351,084 |
| XIII. Rubber .. .. . | 36,118 | 41,080 | 7,928 | 5,231 | 1,529 | 542 | 92,428 |
| XIV. Musical instruments | 2,929 | 4782 | 62 | 55 | 52 |  | 3,580 |
| XV. Miscellaneous products . . | 46,386 | 47,506 | 1,691 | 4,120 | 1,702 | 217 | 101,622 |
| Total, Classes I. to XV. | 2,377,151 | 1,798,804 | 544,660 | 444,425 | 248,857 | 149,819 | 5,563,716 |
| XVI. Heat, light and power .. | 73,871 | 41,132 | 20,286 | 12,612 | 10,093 | 6,453 | 164,447 |
| Grand Total | 2,451,022 | 1,839,936 | 564,946 | 457,037 | 258,950 | 156,272 | 5,728,163 |

(ii) Totals, 1958-59 to 1962-63. The following table shows the value of output in each State during these years.

FACTORIES: VALUE OF OUTPUT
( $\mathbf{f}^{\prime} 000$ )

|  | Year |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1958-59 | $\cdots$ | $\cdots$ | 1,952,452 | 1,431,041 | 451,186 | 342,758 | 196,202 | 118,293 | 4,491,932 |
| 1959-60 | . | . | 2,209,809 | 1,609,614 | 468,963 | 385,702 | 215,583 | 134,025 | 5,023,696 |
| 1960-61 |  | .. | 2,295,502 | 1,649,650 | 491,848 | 401,627 | 240,570 | 137,951 | 5,217,148 |
| 1961-62 | . |  | 2,283,998 | 1,674,660 | 496,367 | 401,797 | 243,494 | 141,773 | 5,242,089 |
| 1962-63 | . | . | 2,451,022 | 1,839,936 | 564,946 | 457,037 | 258,950 | 156,272 | 5,728,163 |

6. Value of Production.-(i) in Ciasses of Industry, 1962-63. The vaiue 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". Because of the difficulty experienced in securing accurate figures for depreciation, however, it was subsequently decided that no deduction should be made on this account: All the deductions mentioned above, with the exception of depreciation, are included in the items "value of materials used" and " value of fuel used" as defined above. The net value of production as given in the following tables is obtained, therefore, by deducting only " value of materials used" and "value of fuel used" from the "value of output". The value of factory production, therefore, approximates " net value added" in the manufacturing process.

Only certain selected items of costs are recorded in the annual census of production. It must not, therefore, be inferred that, when wages and salaries are deducted from the value of production, the whole of the "surplus" is available for interest and profit, as many miscellaneous expenses such as taxation, insurance, advertising and other overhead charges, as well as depreciation, also have to be taken into account.

The following table shows, for 1962-63, the value of production in each State for the various classes of industry.

## FACTORIES: VALUE OF PRODUCTION, 1962-63

( ${ }^{\prime} \mathbf{0 0 0 )}$

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 24,749 | 19,765 | 6,201 | 7,364 | 4,604 | 2,270 |  |
| II. Bricks, pottery, glass, etc. .. | 24,694 | 14,075 | 2,809 | 4,850 | 2,944 | 678 | 50,050 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 98,188 | 71,471 | 6,506 | 10,347 | 16,587 | 2,589 | 205,688 |
| IV. Industrial metals, machines, conveyances | 462,324 | 295,461 | 57,702 | 101,792 | 38,303 | 23,363 | 978,945 |
| V. Precious metals, jewellery, plate | 3,617 | 3,416 | 405 | 809 | 318 | 58 | 8,623 |
| VI. Textiles and textile goods (not dress) | 36,736 | 67,088 | 2,886 | 3,848 | 1,339 | 4,995 | 116,892 |
| VII. Skins and leather (not clothing or footwear) |  |  |  |  |  | 99 | 20,130 |
| VIII. Clothing (except knitted) - | 56,501 | 59,886 | 7,555 | 5,507 | 2,825 | 894 | 133,168 |
| IX. Food, drink and tobacco : $\because$ | 110,871 | 99,514 | 60,369 | 20,700 | 16,374 | 10,630 | 318,458 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 33,365 | 25,182 | 13,367 | 8,452 | 8,680 | 6,133 | 95,179 |
| XI. Furniture of wood, bedding, etc. | 14,865 | 10,507 | 3,726 | 3,261. | ,995 | 640 | 34,994 |
| XII. Paper, stationery, printing, bookbinding, etc. | 74,725 | 60,622 |  | 9,656 | 6,164 | 12,176 |  |
| XIII. Rubber .. ${ }^{\text {a }}$. | 13,178 | 60,622 | 12,762 | 2,789 | 6,775 | 12, 268 | 39,161 |
| XIV. Musical instruments | 1,770 | 289 | 40 | 45 | 37 |  | 2,181 |
| XV. Miscellaneous products | 23,663 | 22,152 | 973 | 2,051 | 894 | 150 | 49,883 |
| Total, Classes I. so XV. | 987,744 | 774,506 | 180,504 | 183.192 | 102,873 | 64,943 | 2,293,762 |
| XVI. Heat, light and power | 49,699 | 24,784 | 9,979 | 6,379 | 5,338 | 6,073 | 102,252 |
| Grand Total | 1,037,443 | 799,290 | 190,483 | 189,571 | 108,211 | 71,016 | $\overline{2,396,014}$ |

(ii) Totals and Averages, 1958-59 to 1962-63. The value of production and the amount per person employed and per head of population are shown in the following table.

FACTORIES: VALUE OF PRODUCTION

| Year | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Value ( $£^{\prime} 000$ )

| 1958-59 | .. | 805,315 | 608,948 | 155,465 | 139,810 | 78,762 | 54,301 | 1,842,601 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959-60 | . | 916,446 | 686,501 | 162,392 | 162,973 | 86,374 | 60,196 | 2,074,882 |
| 1960-61 | $\cdots$ | 966,756 | 703,282 | 170,627 | 170,062 | 96,631 | 62,446 | 2,169,804 |
| 1961-62 | . | 966,421 | 717,327 | 175.298 | 173,914 | 98,041 | 63.937 | 2,194,938 |
| 1962-63 |  | 1,037,443 | 799.290 | 190,483 | 189,571 | 108,211 | 71,016 | 2,396,014 |

Per Person Employed (£)

| $1958-59$ | $\ldots$ | $\ldots$ | 1,792 | 1,678 | 1,484 | 1,485 | 1,627 | 1,910 | 1,693 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1959-60$ | $\ldots$ | $\ldots$ | 1,962 | 1,799 | 1,551 | 1,646 | 1,740 | 2,029 | 1,833 |
| $1960-61$ | $\ldots$ | $\ldots$ | 2,048 | 1,815 | 1,633 | 1,701 | 1,907 | 2,071 | 1,895 |
| $1961-62$ | $\ldots$ | $\ldots$ | 2,183 | 1,899 | 1,725 | 1,755 | 1,921 | 2,162 | 1,959 |
| $1962-63$ | $\ldots$ | 2,013 | 1814 | 1,801 | 2,025 | 2,309 | 2,053 |  |  |

Per Head of Population (e)

| $1958-59$ | $\ldots$ | $\ldots$ | 215.96 | 221.44 | 107.18 | 153.92 | 111.58 | 160.36 | 186.45 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1959-60$ | $\ldots$ | $\ldots$ | 241.40 | 243.47 | 109.86 | 174.56 | 120.41 | 174.93 | 205.65 |
| $1960-61$ | $\ldots$ | $\cdots$ | 249.43 | 243.06 | 111.74 | 173.51 | 129.57 | 175.07 | 208.82 |
| $1961-62$ | $\ldots$ | $\ldots$ | 244.76 | 242.41 | 114.80 | 177.44 | 131.46 | 179.25 | 206.95 |
| $1962-63$ | $\ldots$ |  |  |  |  |  |  |  |  |

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

1. General.-The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1962-63.

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1962-63 (£’000)

| Value of- | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Land and buildings | 689,767 | 475,802 | 96,742 | .106,482 | 51,428 | 81,959 | 1,502,180 |
| Plant and machinery | 719,191 | 500,344 | 140,292 | 146,804 | 66,318 | 69,079 | 1,642,028 |
| Total | 1,408,958 | 976,146 | 237,034 | 253,286 | 117,746 | 151,038 | 3,144,208 |

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

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. Consequently, the totals shown in the table do not represent the actual amount of capital invested in the items specified.
2. Value of Land and Buildings.-(i) Totals for Australia. The following table shows, for Australia as a whole, the approximate value of land and buildings occupied in connexion with manufacturing industries for 1958-59 to 1962-63.

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

| Class of industry | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 15,175 | 22,325 | 27,330 | 31,132 | 32,841 |
| II. Bricks, pottery, glass, etc. . | 16,580 | 19,616 | 22,249 | 26,099 | 31,530 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 76,645 | 80,477 | 87,052 | 95,874 | 100,514 |
| IV. Industrial metals, machines, conveyances | 336,282 | 387,934 | 455,442 | 505,778 | 550,370 |
| V. Precious metals, jewellery, plate | 3,845 | 3,955 | 4,516 | 4,984 | 5,394 |
| VI. Textiles and textile goods (not dress) | 46,671 | 48,379 | 53,313 | 57,791 | 61,477 |
| VII. Skins and leather (not clothing or footwear) | 7,702 | 9,166 | 9,333 | 10,000 | 10,796 |
| VIII. Clothing (except knitted) | 43,203 | 47,762 | 53,776 | 57,964 | 63,404 |
| IX. Food, drink and tobacco | 138,625 | 149,341 | 160,716 | 172,358 | 185,007 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 30,656 | 34,903 | 40,283 | 41,088 | 42,816 |
| XI. Furniture of wood, bedding, etc. | 14,677 | 16,251 | 17,884 | 18,881 | 20,541 |
| XII. Paper, stationery, printing, bookbinding, etc. .. | 61,059 | 68,997 | 77,498 | 85,219 | 91,395 |
| XIII. Rubber | 12,821 | 13,439 | 15,532 | 16,875 | 18,704 |
| XIV. Musical instruments | 730 | 930 | 922 | 796 | 797 |
| XV. Miscellaneous products | 14,688 | 18,345 | 20,720 | 26.092 | 29,107 |
| Total, Classes I. to XV. | 819,359 | 921,820 | 1,046,566 | 1,150,931 | 1,244,693 |
| XVI. Heat, light and power | 128.540 | 142,032 | 147,024 | 252,907 | 257,487 |
| Grand Total . . | 947,899 | 1,063,852 | 1,193,590 | 1,403,838 | 1,502,180 |

(a) At end of year. Includes estimated value of rented premses.
(ii) In Classes of Industry in States, 1962-63. The following table gives particulars of the various classes of industry in each State.

FACTORIES: VALUE OF LAND AND BUILDINGS( $a$ ), 1962-63 ( $£^{\prime} 000$ )

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 11,806 | 12,331 | 2,136 | 3,493 | 2,292 | 783 | 32,841 |
| II. Bricks, pottery, glass, etc. . . | 16,046 | 10,115 | 1,633 | 1,963 | 1,346 | 427 | 31,530 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 49,388 | 37,481 | 2,170 | 4,820 | 5,259 | 1,396 | 100,514 |
| IV. Industrial metals, machines, conveyances | 258,048 | 181,927 | 28,967 | 50,714 | 17,336 | 13,378 | 550,370 |
| V. Precious metals, jewellery, plate | 2,307 | 1,998 | 28,961 | 619 | 17,336 208 | 13,378 71 | 5,394 |
| VI. Textiles and textile goods (not dress) | 20,444 | 35,918 | 1,051 | 1,872 | 588 | 1,604 | 61,477 |
| VII. Skins and leather (not clothing or footwear) | 4,936 | 4,347 | 409 | 720 | 341 | 43 | 10,796 |
| VIII. Clothing (except knitted) | 27,059 | 27,012 | 3,270 | 3,382 | 1,883 | 798 | 63,404 |
| IX. Food, drink and tobacco .. | 58,011 | 65,347 | 28,322 | 15,339 | 10,425 | 7,563 | 185,007 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 16,794 | 13,445 | 4,376 | 4,020 | 2,196 | 1,985 | 42,816 |
| XI. Furniture of wood, bedding, etc. | 8,564 | 6,327 | 2,475 | 1,719 | 1,037 | 419 | 20,541 |
| XII. Paper, stationery, printing, bookbinding, etc. | 40,226 | 29,942 | 5,924 | 5,868 | 2,952 | 6,483 | 91,395 |
| XIII. Rubber . . . | 6,423 | 7,593 | 2,316 | 1,355 | 623 | 394 | 18,704 |
| XIV. Musical instruments | 463 | 205 | 36 | 56 | 37 |  | 797 |
| XV. Miscellaneous products | 12,117 | 14,759 | 510 | 989 | 610 | 122 | 29,107 |
| Total, Classes I. to XV. | 532,632 | 448,747 | 83,786 | 96,929 | 47,133 | 35,466 | 1,244,693 |
| XVI. Heat, light and power | 157,135 | 27,055 | 12,956 | 9,553 | 4,295 | 46,493 | 257,487 |
| Grand Total | 689,767 | 475,802 | 96,742 | 106,482 | 51.428 | 81,959 | 1,502,180 |

(a) At end of year. 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 1958-59 to 1962-63.

## FACTORIES: VALUE OF LAND AND BUILDINGS(a) <br> (£'000)


(a) At end of year. Includes estimated value of rented premises.
3. Value of Plant and Machinery.-(i) Totals for Australia, 1958-59 to 1962-63. The following table shews for Australia the approximate value of plant and machinery used in factories.

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

( ${ }^{\prime} \mathbf{\prime 0 0 0 )}$

| Class of industry | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 35,099 | 49,658 | 68,426 | 74,431 | 76,793 |
| II. Bricks, pottery, glass, etc. . . | 14,564 | 16,286 | 20,076 | 23,944 | 31,817 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 153,820 | 157,731 | 162,695 | 199,211 | 212,491 |
| IV. Industrial metals, machines, conveyances | 319,665 | 358,039 | 448,825 | 501,731 | 548,982 |
| V. Precious metals, jewellery, plate ... | 1,348 | 1,541 | 1,572 | 1,448 | 1,509 |
| VI. Textiles and textile goods (not dress) | 41,380 | 42,775 | 45,749 | 48,315 | 52,016 |
| VII. Skins and leather (not clothing or footwear) | 4,348 | 4,216 | 4,491 | 4,516 | 4,608 |
| VIII. Clothing (except knitted) .- | 16,407 | 17,244 | 18,659 | 19,167 | 21,503 |
| IX. Food, drink and tobacco ... .. | 138,940 | 147,262 | 159,600 | 168,620 | 181,270 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 29,121 | 30,841 | 33,264 | 34,197 | 34,462 |
| XI. Furniture of wood, bedding, etc. $\quad$. | 4,130 | 4,369 | 4,544 | 4,774 | 4,982 |
| XII. Paper, stationery, printing, bookbinding, etc. | 63,757 | 74,776 | 86,988 | 91,862 | 99,543 |
| XIII. Rubber $\because \quad . \quad . \quad$. | 10,333 | 12,240 | 12,990 | 13,074 | 14,278 |
| XIV. Musical instruments | 11,426 | 1386 | 354 15904 | 349 17766 | 21322 |
| XV. Miscellaneous products | 11,077 | 13,455 | 15,904 | 17,766 | 21,139 |
| Total, Classes I. to XV. | 844,415 | 930,819 | 1,084,137 | 1,203,405 | 1,305,715 |
| XVI. Heat, light and power .. | 263,970 | 289,245 | 307,353 | 321,382 | 336,313 |
| Grand Total . . | 1,108,385 | 1,220,064 | 1,391,490 | 1,524,787 | 1,642,028 |

(a) At end of year. Includes estimated value of rented plant and machinery.
(ii) In Classes of Industry in States, 1962-63. The foilowing table shows the value of plant and machinery used in factories in each State during 1962-63 according to class of industry.

FACTORIES: VALUE OF PLANT AND MACHINERY(a), 1962-63
( ${ }^{\prime} \mathbf{\prime} 000$ )

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metalliferous mine and quarry products | 36,402 | 24,918 | 4,427 | 7,305 | 2,415 | 1,326 | 76,793 |
| II. Bricks, pottery, glass, etc. . . | 15,873 | 10,427 | 2,030 | 1,839 | 1,230 | 418 | 31,817 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 93,237 | 74,441 | 3,001 | 18,312 | 20,558 | 2,942 | 212,491 |
| [V. Industrial metals, machines, conveyances | 316,784 | 127,871 | 20,254 | 53,815 | 10,714 | 19,544 | 548,982 |
| V. Precious metals, jewellery, plate | 645 | 579 | 59 | 163 | 49 | 14 | 1,509 |
| VI. Textiles and textile goods (not dress) | 16,742 | 28,814 | 1,329 | 2,019 | 477 | 2,635 | 52,016 |
| VII. Skins and leather (not clothing or footwear) | 2,050 | 1,512 | 413 | 429 1 | 180 | 24 | 4,608 |
| VIII. Clothing (except knitted) - | 8,611 | 9,242 | 1,358 | 1,308 | 593 | 391 | 21,503 |
| IX. Food, drink and tobacco .- | 49,706 | 57,740 | 47,168 | 12,190 | 7,593 | 6,873 | 181,270 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 12,527 | 7,889 | 5,524 | 4,151 | 2,100 | 2,271 | 34,462 |
| XI. Furniture of wood, bedding, etc. | 12,527 1,897 | 1,364 | 5,524 735 | 4,151 569 | 2,100 308 | 2,271 109 | 4,982 |
| XII. Paper, stationery, printing, bookbinding, etc. | 37,158 | 30,148 | 8,287 | 8,359 | 2,092 | 13,499 | 99,543 |
| XIII. Rubber . . . - | 4,321 | 7,928 | 945 | 678 | 273 | 133 | 14,278 |
| XIV. Musical instruments | 237 | 65 | 3 | 14 | 3 |  | 322 |
| XV. Miscellaneous products | 8,491 | 11,339 | 260 | 710 | 309 | 30 | 21,139 |
| Total, Classes I. to XV. | 604,681 | 394,277 | 95,793 | 111,861 | 48,894 | 50,209 | 1,305,715 |
| XVI. Heat, light and power . . | 114,510, | 106,067 | 44,499 | 34,943 | 17,424 | 18,870 | 336,313 |
| Grand Total | 719,191 | 500,344 | 140,292 | 146,804 | 66,318 | 69,079 | 1,642,028 |

(a) At end of year. Includes estimated value of rented plant and machinery.
(iii) Totals in each State. The following table shows the value of plant and machinery in each State during the years 1958-59 to 1962-63.

FACTORIES: VALUE OF PLANT AND MACHINERY(a)
( ${ }^{\prime} \mathbf{0 0 0 )}$

| Year |  | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1958-59 | $\cdots$ | 459,678 | 337,107 | 112,528 | 84,749 | 66,097 | 48,226 | 1,108,385 |
| 1959-60 | . | 506,638 | 377,092 | 120,211 | 98,240 | 64,225 | 53,658 | 1,220,064 |
| 1960-61 | $\bullet$ | 607,281 | 417,918 | 132,569 | 113,100 | 64,306 | 56,316 | 1,391,490 |
| 1961-62 | - | 670,635 | 467,887 | 137,251 | 126,503 | 61,716 | 60,795 | 1,524,787 |
| 1962-63 | - | 719,191 | 500,344 | 140,292 | 146,804 | 66,318 | 69,079 | 1,642,028 |

(a) At end of year. Includes estimated value of rented plant and machinery.
4. Depreciation of Land and Buildings and Plant and Machinery, 1962-63.-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, 1962-63 ( $£^{\prime} 000$ )

| Class of industry | N.S.W. | Vic. | Q'land | S. Aust. | W. Aust. | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Treatment of non-metaliferous mine and quarry products | 3,976 | 1,900 | 673 | 776 | 302 | 145 | 7,772 |
| II. Bricks, pottery, glass, etc. . . | 1,614 | 1,026 | 227 | 215 | 127 | 45 | 3,254 |
| III. Chemicals, dyes, explosives, paints, oils, grease | 10,242 | 9,709 | 321 | 1,070 | 2,929 | 398 | 24,669 |
| IV. Industrial metals, machines, conveyances | 32,863 | 15,760 | 2,272 | 6,407 | 1,250 | 1,646 | 60,198 |
| V. Precious metals, jewellery, plate | 64 | 49 | 6 | 14 | 4 | 1 | 138 |
| VI. Textiles and textile goods (not dress) | 1,886 | 3,939 | 185 | 188 | 51 | 424 | 6,673 |
| VII. Skins and leather (not clothing or footwear) | 211 | 158 | 48 | 59 | 27 | 3 | 506 |
| VIII. Clothing (except knitted) | 800 | 856 | 133 | 100 | 61 | 34 | 1,984 |
| IX. Food, drink and tobacco .. | 5,747 | 6,625 | 4,796 | 1,375 | 932 | 759 | 20,234 |
| X. Sawmills, joinery, boxes, etc., wood turning and carving | 1,325 | 790 | 668 | 387 | 300 | 356 | 3,826 |
| XI. Furniture of wood, bedding, etc. | 231 | 153 | 70 | 54 | 31 | 7 | 546 |
| XII. Paper, stationery, printing, bookbinding, etc. | 3,861 | 4,321 | 966 | 692 | 325 | 1,404 | 11,569 |
| XIII. Rubber . . $\quad$. | 940 | 1,375 | 172 | 179 | 53 | 30 | 2,749 |
| XIV. Musical instruments | 41 | 1,7 | 1 | 1 |  |  | 50 |
| XV. Miscellaneous products | 1,142 | 1,658 | 29 | 76 | 33 | 4 | 2,942 |
| Total, Classes I. to XV. | 64,943 | 48,326 | 10,567 | 11,593 | 6,425 | 5,256 | 147,110 |
| XVI. Heat, light and power .. | 12,657 | 5,055 | 2,849 | 1,446 | 1,399 | 793 | 24,199 |
| Grand Total .. | 77,600 | 53,381 | 13,416 | 13,039 | 7,824 | 6,049 | 171,309 |

5. Land and Buildings, Plant and Machinery-Values, Additions and Replacements, Depreciation, 1958-59 to 1962-63. -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 ( ${ }^{\prime} \mathbf{\prime 0 0 0 )}$

| Year |  | Book values at 30th June(a) |  | Additions and replacements during year(a) |  | Depreciation allowed during year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Land and buildings | Plant and machinery | Land and buildings | Plant and machinery | Land and buildings | Plant and machinery |
| 1958-59.. | $\cdots$ | 947,899 | 1,108,385 | 94,823 | 197,566 | 13,000 | 96,752 |
| 1959-60.. |  | 1,063,852 | 1,220,064 | 101,971 | 231,162 | 13,303 | 108,486 |
| 1960-61. . | $\ldots$ | 1,193,590 | 1,391,490 | 90,018 | 244,048 | 16,902 | 125,269 |
| 1961-62. | . | 1,403,838 | 1,524,787 | 179,861 | 280,466 | 18,446 | 139,764 |
| 1962-63. . | $\cdots$ | 1,502,180 | 1,642,028 | 95,645 | 282,804 | 19,398 | 151,911 |

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

## § 10. Principal Factory Products

The factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau, in the series Manufacturing Industries, and in the bulletin Secondary Industries, Part II.-Materials Used and Articles Produced in Factories (see Notr at beginning of this chapter).
VALUE OF PRODUCTION AND AVERAGE EMPLOYMENT
IN AUSTRALIAN FACTORIES, $1920-21$ TO $1962-63$


The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1961 to 1964. A more complete list, together with values, where available, is published in the bulletin Secondary Industries, Part II.-Materials Used and Articles Produced in Factories.

Preliminary figures for a restricted number of major commodities for the year 1964-65 are shown in the Appendix to this volume.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA


QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA-continued

| Article |  |  |  | 1960-61 | 1961-62 | 1962-63 | 1963-64(a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Copper, refined(c) |  |  | tons | 68,986 | 63,769 | 85,652 | 90,890 |
| Coppers- |  |  |  |  |  |  |  |
| Electric | . | $\cdots$ | no. | 15,437 | 13,188 | 10,385 | (b) |
| Gas |  |  | .. " | 15,282 | 14,405 | 10.867 | (b) |
| Inserts (all types) | - |  |  | 24,627 | 19,008 | 15,356 | (b) |
| Cordials and syrups | . | . | . '000 gals. | 5,289 | 5,415 | 6,259 | 6,999 |
| Corsets and corselets | . | . | . , doz. | 217,278 | 237,555 | 274,353 | 295,696 |
| Custard powder .. | $\cdots$ | . | '000 lb. | 5,559 | 5,770 | 6.493 | (b) |
| Cycles, assembled | . | . . | $\cdots$ no. | 64,384 | 55,065 | 59,168 | 62,571 |
| Dertifrices (toothpaste) |  | . | .. '000 lb. | 8,180 | 8,687 | 8,309 | (b) |
| Dynamos- |  |  |  |  |  |  |  |
| Alternators |  |  | no. | 582 | 687 | 1,022 | (b) |
| Generators |  | . | . $\%$ | 5,381 | 3,865 | 3,359 | (b) |
| Electricity |  | . | mill. kWh | 24,814 | 26,275 | 29,279 | 32,124 |
| Engines- |  |  |  |  |  |  |  |
| Diesel, other than ma Petrol- |  | $\cdots$ | . no. | 3,072 | 2,450 | 2,544 | 3,025 |
| Marine |  | . |  | 9,229 | 6,137 | 6,005 | 7,751 |
| Other (d) |  | - | .. $\quad$, | 183,731 | 203,764 | 268,405 | 285,673 |
| Essences, flavouring- |  |  |  |  |  |  |  |
| Domestic .. |  |  | .. gals. | 101,445 | 131,281 | 114,239 | (b) |
| Industrial |  |  | .. | 447,779 | 480,951 | 530,649 | (b) |
| Face powder | . | . | cwt. | 2,180 | 2,279 | 2,214 | (b) |
| Fans, electric | . | . . | no. | 267,520 | 183,819 | 146,193 | 156,664 |
| Fats, edible |  | . . | . '000 lb. | 66,710 | 75,934 | 60,225 | (b) |
| Feli(e) . |  | . . | . . sq. yds. | 11,115,055 | 11,373,394 | 12,239,938 | (b) |
| Fence posts and droppe |  | . | $\cdots$ tons | 54,820 | 37,397 | 53,934 | 66,621 |
| Fibrous plaster sheets |  | . | ${ }^{\prime} 000$ sq. yds. | 17,176 | 15,332 | 15,830 | 15,363 |
| Fish, canred (including | b loaf) | .. | . ${ }^{\prime} 000 \mathrm{lb}$. | 8,197 | 12,040 | 10,327 | 11,104 |
| Floorboards- |  |  |  |  |  |  |  |
| Imported timber |  |  | O00 super, f. | 144,817 1,178 | 135,125 | 139,776 | (b) |
|  |  |  |  |  |  |  |  |
| Soft - |  | $\ldots$ | '000 sq. yds. | 7,481 | 7,067 | 8,801 | 10,301 |
| Smooth surface |  | . |  | 6,214 | 6,445 | 7,566 | 8,284 |
| Flour, self-raising | . | . | . ${ }^{\text {cwt. }}$ | 955,417 | 1,024,098 | 1,006,692 | (b) |
| Wheaten(f) |  | . | tons (2,000 lb.) | 1,523,066 | 1,466,706 | 1,420,694 | 1,668,887 |
| Footwear (not rubber)- |  |  |  |  |  |  |  |
| Boots, shoes and sand Slippers |  | . | '000 pairs | 25,215 | 25,995 | 26,606 | 28,179 11177 |
| Fruit juices, natural |  | $\cdots$ | '000 gals. | 10,308 4,864 | 9,827 6,755 | 10,662 $\mathbf{7 , 7 1 0}$ | (b) ${ }^{\text {11,177 }}$ |
| Gas (town) <br> Gloves- |  | . | mill. cubic ft. | 50,684 | 50,247 | 51,351 | 52,594 |
| Dress- |  |  |  |  |  |  |  |
| Leather |  |  | doz. pairs | 330 | 527 | 1,021 | (g) |
| Other |  |  |  | 43,013 | 27.161 | 27,333 | 27.898 |
| Work (excluding unsu | pported | bber) |  | 391,759 | 349,775 | 420,687 | 483,347 |
| Golf clubs |  |  | doz. | 27,002 | 36,173 | 29,598 | 29,789 |
| Handkerchiefs- |  |  |  |  |  |  |  |
| Men's |  |  | $\cdots$ | 1,595,645 | 1,552,687 | 1,737,533 | (b) |
| Women's |  |  | . ${ }^{\text {a }}$ | 1,685,630 | 1,455,530 | 1,355,133 | (b) |
| Hats and caps (excludin | $g$ berets)( |  |  | 605,161 | 621,541 | 613,147 | (b) |
| Hose, rubber. garden |  |  | '000 lin. ft. | 2,179 | 2.152 | 2,543 | (b) |
| Plastic Other |  |  |  | 11,840 | 10,644 | 14,858 | (b) |
| Plastic, garden | . | . | " | 36,408 | 36,296 | 36,118 | (b) |
| Hot water systems- |  |  |  |  |  |  |  |
| Instantaneous . | $\ldots$ | $\ldots$ | no. | 33,885 | 27,136 | 25,726 | 30,039 |
| Storage |  | . | . | 87.880 | 89,757 | 106,586 | 130,042 |
| Heat exchange type | $\cdots$ | . | $\cdots$ | 14,363 | 14,163 | 12,960 | 15,152 |
| Ice .. | . | - | . ${ }^{\text {cons }}$ | 278,848 | 252,669 | 238,924 | (b) |
| Ice cream |  |  | . . ${ }^{\prime} 000$ gals. | 17,770 | 19,22] | 20,661 | 22,177 |
| Ice cream mix powder |  |  | . . '000 lb. | 1,248 | 1,360 | 1,341 | 1,003 |
| Infants' and invalids' milk based health beverages( $i$ ) 'ib.lnk, printing, news inks |  |  |  | 36,415 | 38,137 | 38,710 | 45,284 |
|  |  |  |  | 13,620,686 | 11,611,223 | 12,396,605 | (b) |
| Writing Other |  |  |  | 10,122,811 | 12,205.625 | 12,407,377 | (b) |
| Writing and drawin |  |  | ? | 131,612 | 153,005 | 110,757 | (b) |
| Iron and steel- |  |  |  |  |  |  |  |
| Fig iron $\quad$. | . | . | '000 tons | 3,002 | 3,380 | 3.400 | 3,763 |
| Steel ingots Blooms and slabs | . | . . | .. $\quad$ | 3,748 | 4,076 | 4,260 | 4,755 |
| Blooms and slabs | . | . |  | 3,193 | 3,326 | 3,672 | 4,081 |

(a) Subject to revision.
(b) Not yet available.
(c) Primary origin only
(d) Excludes motor car, motor cycle, tractor and aero engines.
(e) Includes underfelt. (f) Includes wheatmeal for baking and sharps. (g) Not available for publication. (h) Includes hoods and capelines.
(i) Includes malted milk and milk sugar (lactose).

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA-continued


[^2]QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA-continued


[^3]QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA-continued

(a) Subject to revision.
(b) Not yet available.
(c) Excludes wheatmeal for baking included with flour; includes wheatmeal for porridge and stock food. (d) Includes mixtures predominantly the fibre mentioned.
(e) Primary origin only-includes small quantities of zinc dust.

## § 11. Individual Industries

1. General.-Particulars on pages $149-76$, $\S \S 2-9$ afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this publication, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour or capital, or for other features of special interest.

In order to make room for a wider range of industries, tables showing particulars for each State which were included in previous issues of the Year Book have been discontinued. These details are available from publications issued by the Deputy Commonwealth Statistician in each State and, for selected industries, in the Central Office series Manufacturing Industries.

Details of some of the principal articles produced in factories in Australia during the years 1960-61 to 1963-64 are shown in the table on the preceding pages (§10).
2. Portland Cement and Cement Goods.-The manufacture of portland cement and cement goods is an important industry included in Class I. Particulars for the three industries under this general heading are shown for 1962-63 and for the years 1958-59 to 1962-63 in the following table.

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS
AUSTRALIA, 1962-63

3. Bricks, Tiles, Pottery and Earthenware.-The following table shows particulars of this industry for the years 1958-59 to 1962-63.

BRICKS, TLLES, POTTERY AND EARTHENWARE: AUSTRALIA

| Particulars |  |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

4. Glass and Glass Bottles.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

GLASS AND GLASS BOTTLES: AUSTRALIA

5. Industrial and Heavy Chemicals.-The following table shows particulars of the industrial and heavy chemical industry for Australia for the years 1958-59 to 1962-63. 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): AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 302 | 287 | 297 | 308 | 320 |
| Number of persons employed |  | 15,813 | 14,423 | 13.945 | 13,746 | 14,165 |
| Salaries and wages paid | $\mathrm{f}^{\prime} 000$ | 17,242 | 17,146 | 17.475 | 17,724 | 18,783 |
| Value of power, fuel, etc., used | .. $\mathrm{f}^{\prime} 0000$ | 4,616 | 4,874 | 4.652 | 6,015 | 6,652 |
| Value of materials used | $£^{\prime} 000$ | 46,604 | 46,212 | 43,810 | 50.586 | 58,724 |
| Value of production | £'000 | 42,513 | 43,497 | 41.066 | 46.627 | 55.800 |
| Total value of output | £'000 | 93.733 | 94,583 | 89.528 | 103,228 | 121,176 |
| Value of land and buildings | £'000 | 22,948 | 24,657 | 28,509 | 34,059 | 34,337 |
| Value of plant and machinery | £'000 | 38,137 | 41,326 | 44,518 | 70,576 | 68,063 |
| $\begin{array}{ccc}\text { Horse-power of } & \text { of } \\ \text { use } & \text {.. } & . .\end{array}$ | $\begin{gathered} \text { ordinarily in } \\ . \quad \text { h.p. } \end{gathered}$ | 130,928 | 117,311 | 124,629 | 165,055 | 174,380 |

6. Pharmaceutical and Toilet Preparations.-The following table shows particulars of the pharmaceutical and toilet preparations industry for Australia for the years 1958-59 to 1962-63. The bulk of the output of this industry comes from New South Wales and Victoria.

PHARMACEUTICAL AND TOILET PREPARATIONS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 210 | 216 | 212 | 211 | 209 |
| Number of persons employed | 6,976 | 7,791 | 7,805 | 7.910 | 8.058 |
| Salaries and wages paid . $£$ '000 | 5,886 | 7,074 | 7,448 | 7,864 | 8.470 |
| Value of power, fuel. etc., used . $\mathbf{£}^{\prime} 000$ | 754 | 810 | 842 | 797 | 925 |
| Value of materials used . . £ $\mathbf{£}^{\prime} 000$ | 19,575 | 23.311 | 23,630 | 25.585 | 27,588 |
| Value of production . . . . £'000 | 23.130 | 28,985 | 32.155 | 33,129 | 31,998 |
| Total value of output . . . £ £ $£^{\prime} 000$ | 43.459 | 53,106 | \$6,627 | 59.511 | 60.511 |
| Value of land and buildings .. $\Sigma^{\prime} 000$ | 10,750 | 11,528 | 13.431 | 14,544 | 17,087 |
| Value of plant and machinery .. $\mathrm{f}^{\prime} 000$ | 4,519 | 5,347 | 6.003 | 5,732 | 6,319 |
| Horse-power of engines ordinarily in use h.p. | 16,702 | 18,084 | 19,237 | 20,322 | 22,772 |

7. White Lead, Paints and Varnish.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

WHITE LEAD, PAINTS AND VARNISH: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 188 | 181 | 182 | 188 | 184 |
| Number of persons employed | 5,532 | 5,475 | 5,208 | 5,096 | 5,144 |
| Salaries and wages paid $\quad$. $\mathrm{E}^{\prime} 000$ | 5,448 | 5,710 | 5,746 | 5,669 | 5,830 |
| Value of power, fuel, etc., used . . £'000 | 419 | 416 | 393 | 404 | 436 |
| Value of materials used . . . . $\mathbf{£}^{\mathbf{\prime}} \mathbf{0 0 0}$ | 25.448 | 26,892 | 24.924 | 26,762 | 28,732 |
| Value of production .. .. £ $\mathbf{£}^{\prime} 000$ | 13,184 | 15,446 | 15,407 | 15,467 | 17,317 |
| Total value of output ... .. £'000 | 39,051 | 42,754 | 40,724 | 42,633 | 46,485 |
| Value of land and buildings . . £ $\boldsymbol{\Sigma}^{\mathbf{0}} \mathbf{0 0 0}$ | 6,327 | 6,942 | 7.736 | 7,745 | 8,400 |
| Value of plant and machinery . . ¢ ¢ $\boldsymbol{\varepsilon}^{\mathbf{0}} \mathbf{0 0 0}$ | 3,696 | 4,219 | 4.177 | 5.440 | 5,392 |
| Horse-power of engines ordinarily in use b.p. | 25,093 | 25,879 | 27,952 | 28,780 | 29,262 |

8. Mineral Oil Extraction and Refining.-Particulars of factories engaged in the extraction and refining of mineral oil products are shown in the following table for Australia for the years 1958-59 to 1962-63. Victoria, New South Wales, and Western Australia produce most of the refined mineral oil and by-products.

MINERAL OLLS: AUSTRALIA

| Particulars |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

9. Soap and Candle Factories.-The following table shows particulars of factories in the soap and candle industry for Australia for the years 1958-59 to 1962-63. New South Wales and Victoria are the major centres of production in this industry.

SOAP AND CANDLES: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 89 | (a) 120 | 119 | 117 | 117 |
| Number of persons employed | 2.929 | (a) 3,210 | 3,234 | 3,290 | 3,340 |
| Salaries and wages paid $\quad$. $£^{\prime} 000$ | 2,822 | 3,220 | 3,538 | 3,568 | 3,771 |
| Value of power, fuel. etc., used . ${ }^{\text {¢ }}$ '000 | 387 | 383 | 430 | 420 | 419 |
| Value of materials used .. $\quad . \quad £^{\prime} 000$ | 15,253 | 15,835 | 16.279 | 16,138 | 16,438 |
| Value of production . . . $\mathbf{£}^{\mathbf{\prime} 000}$ | 11,941 | 14.131 | 15,210 | 15,003 | 16,377 |
| Total value of output . . . . $\mathbf{£}^{\prime} 000$ | 27,581 | 30.349 | 31,919 | 31,561 | 33,234 |
| Value of land and buildings .. £ $£^{\prime} 000$ | 2,039 | 2.652 | 2,965 | 3,000 | 2,982 |
| Value of plant and machinery $\quad £ \times 000$ | 3,118 | 3,054 | 3,220 | 3,440 | 3,218 |
| $\begin{array}{ccccc}\text { Horse-power of } & \text { ongines } & \text { ordinarily in } \\ \text { use } & \text {.. } & . . & . . & \text { h.p. }\end{array}$ | 12,632 | 13,689 | 14.452 | 14,495 | 16,256 |

(a) The increase in the number of factories is due mainly to the reclassification of number of factories in New South Wales.
10. Chemical Fertilizers.-The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in Australia for the years 1958-59 to 1962-63.

CHEMICAL FERTILIZERS: AUSTRALIA

11. Iron and Steel Works and Engineering.-(i) General. The first group included under this heading (Smelting, converting, refining and rolling of iron and steel) covers blas furnaces, steel works and rolling mills. The second group (Foundries, ferrous) covers those engaged in the founding of iron and steel. The third group (Plant, equipment and machinery, including machine tools) covers those industries engaged in the production of
boilers, engines, machines and machinery, machine tools, structural steel fabrications, steell furniture, etc. The fourth group (Other engineering) includes jobbing and general engin eers. not elsewhere included. Detailed statistics for the four groups mentioned are shown in the following tables.
(ii) Smelting, Converting, Refining and Rolling of Iron and Steel. In the following table, particulars are shown for Australia for the years 1958-59 to 1962-63 for the group Smelting, converting, refining and rolling of iron and steel. The greater part of the output of this industry comes from New South Wales, with Western Australia, Victoria, and South Australia producing nearly all the remainder.

## SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL: AUSTRALIA

| Particulars |  |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

Particulars of the production of pig-iron and steel will be found on page 178 and in Chapter XXVI. Mineral Industry.
(iii) Foundries (Ferrous). Particulars covering those industries classified as founding of iron and steel are shown for Australia for the years 1958-59 to 1962-63 in the following table. Tasmanian foundry output is relatively small and details are included in "Other engineering " (see p. 186).

FOUNDRIES-FERROUS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factorios | 346 | 312 | 245 | 239 | 231 |
| Number of persons employed | 7,376 | 7.853 | 7,797 | 7,183 | 7,711 |
| Salaries and wages paid . $\mathrm{£}^{\prime} 000$ | 7,293 | 8.504 | 8,776 | 8.089 | 8.970 |
| Value of power, fuel, etc., used .. £ ${ }^{\prime} 000$ | 955 | 1,121 | 1,114 | 1,016 | 1,160 |
| Value of materials used . . . $£ \times 000$ | 6,687 | 7,905 | 8.654 | 7,398 | 8,978 |
| Value of production .. .. £'000 | 10,615 | 12,325 | 12,756 | 11,243 | 12.485 |
| Total value of output .. . $£$.000 | 18,257 | 21,351 | 22.524 | 19.657 | 22,623 |
| Value of land and buildings .. f'000 | 3,912 | 4,866 | 5,128 | 5.040 | 5.474 |
| Value of plant and machinery . $\quad$ £ 000 | 2.963 | 3.791 | 3,727 | 3,579 | 3.730 |
| Horse-power of engines ordinarily in use h.p. | 31,612 | 32,455 | 31,471 | 31,506 | 32,617 |

(iv) Plant, Equipment and Machinery (including Machine Tools). The next table shows particulars for this group for Australia for the years 1958-59 to 1962-63.

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS): AUSTRALIA

| Particulars |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

(v) Other Engineering. Details covering jobbing and general engineering works not elsewhere included are shown for Australia for the years 1958-59 to 1962-63 in the following table.

OTHER ENGINEERING: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 2.220 | 2,318 | 2,439 | 2.457 | 2.472 |
| Number of persons employed | 23,467 | 25,780 | 27,997 | 27,897 | 28,997 |
| Salaries and wages paid - £ £ 000 | 21.682 | 25,858 | 28.794 | 29,561 | 31.732 |
| Value of power, fuel, etc., used . . £'000 | 806 | 1,018 | 1,048 | 1,111 | 1,249 |
| Value of materials used .. ... £'000 | 26,059 | 31,110 | 35,141 | 35.958 | 41.099 |
| Value of production .. .. £ $\mathbf{E}^{\mathbf{0}} \mathbf{0 0 0}$ | 34,829 | 42,264 | 47,369 | 47,192 | 52,219 |
| Total value of output .. . . £ 0000 | 61.694 | 74.392 | 83.558 | 84.261 | 94,567 |
| Value of land and buildings . . E'000 | 16.655 | 19,233 | 24,015 | 26.423 | 28,187 |
| Value of plam and machinery . .. $\mathbf{e}^{\prime} 000$ | 12.201 | 13.782 | 16,441 | 17,590 | 18,300 |
| Horse-power of engines ordinarily in use h.p. | 76,109 | 89,374 | 93,019 | 101,245 | 107,735 |

12. 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, in Australia for the years 1958-59 to 1962-63. Ore dressing and elementary smelting of metallic minerals (e.g. in the case of gold), when these are carried out in an associated plant at or near the mine, are included in the mineral industry (see Chapter XXVI. Mineral Industry).

## EXTRACTING AND REFINING OF NON-FERROUS METALS; ALLOYS: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |

13. Electrical Machinery, Cables and Apparatus.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63. New South Wales factories account for almost two-thirds of the output of this industry.

ELECTRICAL MACHINERY, CABLES AND APPARATUS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,213 | 1,360 | 1,339 | 1,349 | 1,404 |
| Number of persons employed | 50,069 | 53,089 | 54,072 | \$2.918 | 55.692 |
| Salaries and wages paid . $£^{\prime} 000$ | 46,979 | 54,011 | 57,179 | 57,020 | 61,556 |
| Value of power, fuel. etc. used . ${ }^{\text {f }}$, 000 | 2.493 | 2.685 | 2.821 | 2.835 | 3,077 |
| Value of materials used . . $\mathrm{E}^{\prime} 000$ | 94.964 | 108.712 | 110.680 | 112.737 | 116,070 |
| Value of production .. .. ${ }^{\prime}$ '000 | 76,898 | 90.109 | 9? 397 | 03,0! 7 | 100.904 |
| Total value of output . . . $\mathbf{£}^{\prime} 000$ | 174,265 | 201.596 | 207,398 | 208,589 | 220,051 |
| Value of land and buildings . . £'000 | 32,958 | 38,679 | 42,775 | 46,007 | 51,663 |
| Value of plant and machinery $\quad . \quad £^{\prime} 000$ | 23.627 | 27.602 | 26,830 | 27,728 | 28,743 |
| Horse-power of engines ordinarily in use h.p. | 111,980 | 118,299 | 122,609 | 128,326 | 134,043 |

14. Railway and Tramway Workshops (Government and Local Authority).-The railway and tramway workshops, which form an important part of Class IV., are owned chiefly by State governments and local authorities. Workshops (fourteen in 1962-63) controlled by non-public bodies are not included in the figures below.

TRAMCARS AND RAILWAY ROLLING STOCK(a): AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 139 | 129 | 126 | 122 | 122 |
| Number of persons employed | 37,993 | 36,746 | 35,323 | 35,466 |  |
| Salaries and wages paid .. £'000 | 33,599 | 34,208 | 34,795 | 35,995 | 35,332 |
| Value of power, fuel, etc., used .. $£$ | 1,080 | 1,112 | 1,097 | 1,085 | 1,072 |
| Value of materials used .. $£^{\prime} 000$ | 19,563 | 19,414 | 19,390 | 19,624 | 19,685 |
| Value of production .. .. £'000 | 41,557 | 41,473 | 42,889 | 43,685 | 42,747 |
| Total value of output .. .. £'000 | 62,200 | 61.999 | 63,376 | 64,394 | 63,504 |
| Value of land and buildings .. $£^{\prime} 000$ | 12.374 | 12,761 | 13,681 | 14,654 | 14,679 |
| Value of plant and machinery . $\quad$ £ 000 | 16,547 | 17,174 | 17,657 | 17,699 | 18,583 |
| Horse-power of engines ordinarily in use h.p. | 115,162 | 116,443 | 116,063 | 115,416 | 116,027 |

(a) Goverament and local authority only.


#### Abstract

15. Motor Vehicles.-The industries catering for the motor trade are included in Class IV., Industrial metals, machines and conveyances. In the following table, a summary is given of the principal statistics for 1962-63 for each branch of industry associated with the motor trade of Australia.


MOTOR VEHICLES-CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.: AUSTRALIA
1962-63

| Particulars | Construction and assembly | Repairs | Motor bodies (a) | Motor accessories | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories .. | 45 | 11,076 | 2,199 | 303 | 13,623 |
| Number of persons employed | 22,693 | 65,857 | 30,948 | 16,081 | 135,579 |
| Salaries and wages paid $\quad$. ${ }^{\prime} 0000$ | 28,954 | 57,526 | 35,918 | 18,147 | 140,545 |
| Value of power, fuel, etc., used . $£$ '000 | 2,274 | 1,901 | 1,483 | 1,234 | 6,892 |
| Value of materials used $\quad$. $\mathbf{x}^{\prime} 000$ | 68,105 | 63,016 | 85,208 | 29,362 | 245,691 |
| Value of production . . . £'000 | 47,526 | 91,848 | 53,568 | 31.111 | 224,053 |
| Total value of output . . . . £'000 | 117,905 | 156,765 | 140,259 | 61,707 | 476,636 |
| Value of land and buildings .. £'000 | 29,571 | 86,966 | 30,414 | 13,986 | 160,937 |
| Value of plant and machinery . $£$ '000 | 24,159 | 14,999 | 24,786 | 15,292 | 79,236 |
| Horse-power of engines ordinarily in use h.p. | 87,605 | 78,492 | 85,140 | 59,281 | 310,518 |

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

In the next table, similar details are shown for Australia for these industries combined for the years 1958-59 to 1962-63. Victoria, New South Wales, and South Australia account for about four-fifths of the output of these industries. Most of the output of the other States is from repair work.

## MOTOR VEHICLES-CONSTRUCIION, ASSEMBLY, REPAIRS, ETC.:

AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

16. Ship and Boatbuilding and Repairing, Marine Engineering.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63, and includes Government factories as well as those owned privately and by municipal authorities. About half the output of this industry comes from New South Wales shipyards, with Victoria and South Australia accounting for the greater part of the balance.

SHIP AND BOAT BULLDING AND REPAIRING, MARINE ENGINEERING: AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 274 | 297 | 318 | 318 | 353 |
| Number of persons employed |  | 14,779 | 13,786 | 14,155 | 14,293 | 14,218 |
| Salaries and wages paid | £'000 | 14,502 | 14,672 | 16,114 | 16,464 | 16,683 |
| Value of power, fuel, etc., used | f'000 | 395 | 376 | 400 | 431 | 437 |
| Value of materials used | £'000 | 8,124 | 9,597 | 10,980 | 11,667 | 14,053 |
| Value of production | £'000 | 17,672 | 18,142 | 19,710 | 19,965 | 20,198 |
| Total value of output | $\mathrm{f}^{\prime} 000$ | 26.191 | 28,115 | 31,090 | 32,063 | 34,688 |
| Value of land and buildings | £ 000 | S,284 | 5,934 | 6,470 | 6,248 | 6,654 |
| Value of plant and machinery | £'000 | 4,604 | 5,087 | 5,297 | 5,341 | 5,629 |
| Horse-power of engines in use | $\begin{gathered} \text { ordinarily } \\ \text {.. } \end{gathered}$ | 83,216 | 75,827 | 75,300 | 75,568 | 77,691 |

17. Agricultural Machines and Implements.-The following table shows details of establishments classified as agricultural implement works in Australia for the years 1958-59 to 1962-63. Victorian factories produce more than half the output of this industry.

AGRICULTURAL MACHINES AND IMPLEMENTS:
AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of factories |  |  |  |  |  |  |  |

18. Non-ferrous Metals; Rolling and Extrusion.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

NON-FERROUS METALS-ROLLING AND EXTRUSION: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |

19. Non-ferrous Metals; Founding, Casting, etc.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

## NON-FERROUS*METALS—FOUNDING, CASTLNG, ETC.: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 471 | 480 | 490 | 477 | 462 |
| Number of persons employed | 10,142 | 10,602 | 10,510 | 9,833 | 10,467 |
| Salaries and wages paid.. $\quad$. ${ }^{\prime}$ '000 | 9,435 | 10,885 | 11,036 | 10,395 | 11,307 |
| Value of power, fuel, etc., used . . £'000 | 805 | 906 | 909 | 897 | 982 |
| Value of materials used .. . . £'000 | 16,627 | 20,637 | 20,148 | 19,936 | 23,351 |
| Value of production .. .. £'000 | 16,859 | 18,415 | 18,459 | 18,367 | 20,457 |
| Total value of output . . . $£$ '000 | 34.291 | 39,958 | 39,516 | 39,200 | 44,790 |
| Value of land and buildings . $£^{\prime} 000$ | 5,768 | 6,963 | 8,196 | 9,338 | 9,827 |
| Value of plant and machinery $\quad . \quad \pm$ '000 | 4,988 | 5,508 | 6,539 | 6,720 | 7,308 |
| Horse-power of engines ordinarily in use h.p. | 29,282 | 31,150 | 34,082 | 34,285 | 36,561 |

20. Sheet Metal Working, Pressing and Stamping.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

SHEET METAL WORKING, PRESSING AND STAMPING: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,010 | 1,076 | 1,111 | 1,142 | 1,156 |
| Number of persons employed | 24,902 | 26,843 | 27,474 | 26,545 | 27,924 |
| Salaries and wages paid... .. £'000 | 22,753 | 26,851 | 28,582 | 27,833 | 29,927 |
| Value of power, fuel, etc., used . . £'000 | 1,411 | 1,628 | 1,549 | 1,608 | 1,771 |
| Value of materials used . . . £ $£ 000$ | 52,858 | 60,801 | 65,226 | 66,105 | 69,884 |
| Value of production . . . $£$ '000 | 39,909 | 48,433 | 50,480 | 51,152 | 56,854 |
| Total value of output . . .. £'000 | 94,178 | 110,862 | 117,255 | 118,864 | 128,509 |
| Value of land and buildings . . $\mathrm{f}^{\prime} 000$ | 17,503 | 20,865 | 24,900 | 27,885 | 29,906 |
| Value of plant and machinery . $\quad$ £'000 | 13,312 | 15,041 | 17,369 | 18,054 | 20,231 |
| Horse-power of engines ordinarily in use h.p. | 71,956 | 77,233 | 80,020 | 79,963 | 84,487 |

21. Pipes, Tubes and Fittings-Ferrous.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63. New South Wales, South Australia, and Victoria produce most of the output of this industry.

PIPES, TUBES AND FITTINGS-FERROUS: AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 40 | 49 | 55 | 62 | 58 |
| Number of persons employed |  | 7,651 | 8,332 | 8,547 | 8,272 | 8,784 |
| Salaries and wages paid.. | £'000 | 8,419 | 9,655 | 10,339 | 10,122 | 11,197 |
| Value of power, fuel, etc., used | $\chi^{\prime} 000$ | 1,252 | 1,357 | 1,350 | 1,288 | 1,606 |
| Value of materials used | £.000 | 22,996 | 26,454 | 25,530 | 25,878 | 27,387 |
| Value of production | £'000 | 14,967 | 19,544 | 20,021 | 18,891 | 19,376 |
| Value of output | $£^{\prime} 000$ | 39,215 | 47,355 | 46,901 | 46,057 | 48,369 |
| Value of land and buildings | ${ }^{\text {¢ }}$ '000 | 3,756 | 6.301 | 6818 | 7.345 | 8,796 |
| Value of plant and machinery | ${ }^{\prime}$ '000 | 4,038 | 6,955 | 7,183 | 7,741 | 9,789 |
| Horse-power of engines ordinaril | e h.p. | 46,237 | 50,038 | 52,300 | 47,547 | 59,619 |

22. Wire and Wire Working (including Nails).-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63. New South Wales and Victoria predominate in this industry.

WIRE AND WIRE WORKING (INCLUDING NAILS): AUSTRALIA

| Particulars |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

23. Wireless and Amplifying Apparatus.-This industry is confined mainly to New South Wales, Victoria and South Australia. Details for Australia for the years 1958-59 to 1962-63 are shown in the following table.

WIRELESS AND AMPLIFYING APPARATUS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 257 | 289 | 301 | 327 | 330 |
| Number of persons employed | 16,482 | 19,559 | 17,273 | 14,707 | 16,586 |
| Salaries and wages paid $\quad \cdots \quad \chi^{\prime} 0000$ | 14,264 | 17,644 | 17,092 | 14.602 | 16,620 |
| Value of power, fuel, etc., used .. $\mathfrak{E}^{\prime}, 000$ |  |  |  | 585 | 657 |
| Value of materials used .. $£^{\prime} 000$ | 39,255 | 50,129 | 40,259 | 35.995 | 39,470 |
| Value of production .. .. $\mathbf{£}^{\prime} 000$ | 23,431 | 30,304 | 25,504 | 23,587 | 27,219 |
| Total value of output .. .. $£^{\prime} 000$ | 63,236 | 81,054 | 66,411 | 60,167 | 67,346 |
| Value of land and buildings .. $\chi^{\prime} 000$ | 7,897 | 8,941 | 10,479 | 11,564 | 12,052 |
| Value of plant and machinery . $\because \quad \mathbf{f}^{\prime} 000$ | 5,018 | 5.744 | 6,468 | 6,446 | 6,633 |
| Horse-power of engines ordinarily in use h.p. | 12,952 | 14,302 | 14,850 | 15,353 | 15,216 |

24. Cotton.-(i) General. The growing of cotton, which is confined mainly to Queensland, is treated in some detail in Chapter XXIII. Rural Industry. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly (in 1962-63) from the United States of America, Mexico, Brazil and Colombia.
(ii) Spinning and Weaving. 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 1958-59 to 1962-63.

COTTON SPINNING AND WEAVING: AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 97 | 92 | 88 | 88 | 88 |
| Number of persons employed | $\cdots{ }^{-}$ | 9,770 | 9,780 | 9,121 | 8,980 | 9,313 |
| Salaries and wages paid | $£^{\prime} 000$ | 8,116 | 8,853 | 8,122 | 8,245 | 8.631 |
| Value of power, fuel, etc., used | £'000 | 988 | 997 | 958 | 1,033 | 1,134 |
| Value of materials used . . | $\mathrm{E}^{\prime} 000$ | 19,403 | 20,631 | 18,336 | 19,161 | 20.818 |
| Value of production | $£^{\prime} \mathbf{0 0 0}$ | 14,751 | 16,224 | 15,169 | 14,827 | 16,760 |
| Total value of output | £'000 | 35,142 | 37,852 | 34,463 | 35,021 | 38,712 |
| Value of land and buildings | $\mathrm{E}^{\mathbf{\prime}} \mathbf{0} \mathbf{0 0}$ | 10,625 | 9,706 | 10,392 | 12,909 | 14,430 |
| Value of plant and machinery | £ ' $^{\prime} 000$ | 9,949 | 9,414 | 10,105 | 10,805 | 12,191 |
| Horse-power of engines ordinaril | in use h.p. | 38,779 | 37,240 | 36,193 | 40,592 | 41,581 |

25. Wool Carding, Spinning and Weaving.-Details for Australia for the years 1958-59 to 1962-63 are shown in the following table. Victoria produces more than half the output of this industry.

WOOL CARDING, SPINNING AND WEAVING: AUSTRALIA

26. Hosiery and Other Knitted Goods.-Details for Australia for the years 1958-59 to 1962-63 are shown in the following table. Victorian mills produce about three-quarters of the Australian output of knitted goods, most of the balance being produced in New South Wales.

HOSIERY AND OTHER KNITTED GOODS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 663 | 701 | 687 | 658 | 625 |
| Number of persons employed | 22,851 | 24,414 | 24,741 | 23.403 | 24,627 |
| Salaries and wages paid . $£^{\prime} 000$ | 16,421 | 18,791 | 19,101 | 18,495 | 20,323 |
| Value of power, fuel, etc., used . . $£$ '000 | 787 | 798 | 810 | 794 | 807 |
| Value of materials used | 34,701 | 41.479 | 42.228 | 41,773 | 46.259 |
| Value of production . . . £'000 | 31,325 | 34,629 | 36,085 | 35,948 | 38,089 |
| Total value of output . . . $\mathrm{f}^{\prime} 000$ | 66.813 | 76,906 | 79,123 | 78,515 | 85.155 |
| Value of land and buildings $\quad$. ${ }^{\prime} 0000$ | 12,144 | 12,962 | 14,606 | 15,229 | 15.750 |
| Value of plant and machinery $\quad . \quad \pm \begin{aligned} & \\ & \mathbf{\prime}\end{aligned}$ | 9,353 | 9.171 | 9,967 | 10,610 | 11,376 |
| Horse-power of engines ordinarily in use h.p. | 23,290 | 22,019 | 22,738 | 23,250 | 23,106 |

27. Rayon, Nylon and Other Synthetic Fibres.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63. Victoria produces nearly two-thirds of the total Australian output of synthetic fibre textiles, most of the balance being produced in New South Wales.

## RAYON, NYLON AND OTHER SYNTHETIC FIBRES: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of factories |  |  |  |  |  |  |  |

28. Rope and Cordage.-Particulars of factories manufacturing rope and cordage are shown in the following table for Australia for the years 1958-59 to 1962-63. Most of the production takes place in New South Wales and Victoria.

ROPE AND CORDAGE: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of factories |  |  |  |  |  |  |  |

29. Woolscouring and Fellmongery.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-6.3. Most of the production comes from New South Wales and Victoria.

## WOOLSCOURING AND FELLMONGERY: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of factories |  |  |  |  |  |  |  |

30. Tanning, Currying and Leather Dressing.-The following table shows particulars of the tanning industry in each State for Australia for the years 1958-59 to 1962-63. New South Wales, Victorian and Queensland factories produce most of the output of this industry.

TANNING, CURRYING AND LEATHER DRESSING: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 123 | 118 | 112 | 108 | 102 |
| Number of persons employed | 4,617 | 4,435 | 4,245 | 4,159 | 4,215 |
| Salaries and wages paid ... £'000 | 4,510 | 4,612 | 4,575 | 4,612 | 4,736 |
| Value of power. fuel. etc., used . . £ $£^{\prime} 000$ | 490 | 484 | 484 | 488 | 501 |
| Value of materials used $\quad$. $£^{\prime} 000$ | 12,635 | 15,766 | 14,421 | 14,281 | 12,578 |
| Value of production .. .. $\mathrm{f}^{\prime} 000$ | 6,919 | 6,967 | 6.748 | 7,392 | 8,114 |
| Total value of output .. .. £'000 | 20,044 | 23,217 | 21,653 | 22,161 | 21,193 |
| Value of land and buildings .. £'000 | 2,535 | 3,399 | 3,418 | 3,537 | 3,665 |
| Value of plant and machinery $\because £^{\prime} 000$ | 2.223 | 2,152 | 2.230 | 2,241 | 2,266 |
| Horse-power of engines ordinarily in use h.p. | 30,749 | 33,516 | 31.516 | 31,278 | 27,598 |

31. Leather Goods (including Saddlery and Belting).-Particulars of the leather goods industry in Australia for the years 1958-59 to 1962-63 are shown in the following table. As with other industries of this class, New South Wales and Victorian factories dominate the industry.

LEATHER GOODS (INCLUDING SADDLERY AND BELTING): AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 430 | 433 | 418 | 392 | 386 |
| Number of persons employed | .. $\quad \stackrel{\square}{0}$ | 4,727 | 4,873 | 4,658 | 4,315 | 4,519 |
| Salaries and wages paid | £'000 | 3,140 | 3,471 | 3,419 | 3,276 | 3,475 |
| Value of power, fuel, etc., used | £'000 | 59 | 66 | 66 | 66 | 74 |
| Value of materials used | $\mathbf{E}^{\prime} 000$ | 5,570 | 6,607 | 6,504 | 6,032 | 6,576 |
| Value of production | £'000 | 5,280 | 6,063 | 5,878 | 5,679 | 6,168 |
| Total value of output | £'000 | 11,009 | 12,736 | 12.448 | 11.777 | 12,818 |
| Value of land and buildings | £'000 | 2,351 | 2,821 | 3,084 | 3,192 | 3,444 |
| Value of plant and machinery | f'000 | 607 | 645 | 834 | 846 | 742 |
| Horse-power of engines ordinaril | in use h.p. | 2,738 | 3,769 | 3,678 | 3,155 | 3,387 |

32. Tailoring and Ready-made Clothing.-Statistics of this industry for Australia for the years 1958-59 to 1962-63 are shown in the following table. New South Wales and Victorian factories account for more than 90 per cent. of the output of this industry.

TAILORING AND READY-MADE CLOTHING: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,841 | 1,860 | 1,871 | 1,839 | 1,847 |
| Number of persons employed | 31,406 | 33,170 | 33,890 | 32,496 | 33,234 |
| Salaries and wages paid . $£$ | 19,533 | 22,133 | 23.542 | 23,050 | 24,271 |
| Value of power, fuel, etc., used .. £'000 | 440 | 467 | 495 | 500 | 513 |
| Value of materials used . . £'000 | 36.253 | 40,791 | 42,674 | 41,085 | 44,077 |
| Value of production .. .. £'000 | 31,371 | 35,166 | 36,970 | 37,585 | 40,021 |
| Total value of output ... .. £ $£^{3} 000$ | 68.064 | 76.424 | 80.139 | 79.170 | 84.611 |
| Value of land and buildings .- £ $£^{\prime} 000$ | 11,948 | 13,287 | 15,383 | 16,189 | 17,793 |
| Value of plant and machinery .. $\mathbf{£}^{\prime} 000$ | 3,063 | 3,147 | 3.446 | 3,451 | 3.516 |
| Horse-power of engines ordinarily in use h.p. | 10.143 | 10,899 | 11,820 | 12,618 | 12,939 |

33. Dressmaking and Millinery Establishments.-Particulars of dressmaking and millinery establishments in Australia for the years 1958-59 to 1962-63 are shown in the following table. About two-thirds of the total Australian output comes from Victorian establishments.

DRESSMAKING AND MILLINERY: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 1,249 | 1,228 | 1,194 | 1,183 | 1,189 |
| Number of persons employed | 15,048 | 15,021 | 14,403 | 14,466 | 15,093 |
| Salaries and wages paid . $\mathrm{f}^{\prime} 000$ | 8,599 | 9,205 | 9,191 | 9,471 | 10,186 |
| Value of power, fuel, etc., used . $£^{\prime} 000$ | 184 | 190 | 190 | 196 | 210 |
| Value of materials used . $£^{\prime} 000$ | 11,272 | 11,758 | 11,666 | 12,038 | 13,028 |
| Value of production .. .. £'000 | 13,766 | 14,764 | 15,063 | 15,172 | 16,697 |
| Total value of output .. .. £'000 | 25,222 | 26,712 | 26,919 | 27,406 | 29,935 |
| Value of land and buildings .. £'000 | 6,937 | 7,623 | 8,277 | 8,661 | 9,115 |
| Value of plant and machinery .. $\quad . \quad \mathbf{\prime} 000$ | 1,171 | 1.114 | 1,085 | 1,083 | 1,182 |
| Horse-power of engines ordinarily in use h.p. | 5,159 | 4,880 | 4,398 | 4,543 | 4,831 |

34. Shirts, Collars and Underclothing.-Particulars of this industry are shown below for Australia for the years 1958-59 to 1962-63. Victorian and New South Wales factories produce most of the output of this industry.

SHIRTS, COLLARS AND UNDERCLOTHING: AJSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 394 | 376 | 368 | 353 | 351 |
| Number of persons employed | 13,589 | 12,891 | 12,864 | 12,276 | 13,304 |
| Salaries and wages paid . ${ }^{\text {e }}$ '000 | 8,223 | 8,326 | 8,424 | 8,242 | 8,983 |
| Value of power, fuel, etc., used . . $£$ '000 | 147 | 137 | 148 | 156 | 166 |
| Value of materials used . . £ $£$ | 16,410 | 15,823 | 15,795 | 15,638 | 16,302 |
| Value of production . . . $\mathbf{£}^{\prime} 000$ | 13,271 | 13,572 | 13,360 | 13,276 | 14,557 |
| Total value of output . . . . $\mathbf{f}^{\prime} 0000$ | 29,828 | 29,532 | 29,303 | 29,070 | 31,025 |
| Value of land and buildings . $\mathbf{£}^{\prime} 000$ | 3,924 | 4,050 | 4,445 | 4,567 | 5,164 |
| Value of plant and machinery . $\quad \mathbf{f}^{\prime} 000$ | 1,317 | 1,206 | 1,334 | 1,344 | 1,352 |
| Horse-power of engines ordinarily in use h.p. | 5,357 | 5,090 | 5,454 | 5,529 | 5,649 |

35. Foundation Garments.-The following table shows particulars of the foundation garment industry for Australia for the years 1958-59 to 1962-63.

FOUNDATION GARMENTS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 69 | 70 | 71 | 66 | 64 |
| Number of persons employed | 3,490 | 3,589 | 3,663 | 3,981 | 4,012 |
| Salaries and wages paid . . . $£^{\prime} 000$ | 2,263 | 2,479 | 2,469 | 2,672 | 2,785 |
| Value of power, fuel, etc., used . . $£^{\prime} 000$ | 42 | 43 | 46 | 550 | 51 |
| Value of materials used .. .. $£$ | 5,230 | 5,231 | 5,030 | 5,779 | 5.814 |
| Value of production .. .. £'000 | 4,477 | 4,642 | 4,866 | 5,352 | 5.466 |
| Total value of output . . . . $£$ | 9,749 | 9,916 | 9,942 | 11,181 | 11,331 |
| Value of land and buildings . . $£^{\prime} 000$ | 1,384 | 1,612 | 1,891 | 2,005 | 2,297 |
| Value of plant and machinery ... £'000 | 415 | 420 | 470 | 534 | 690 |
| Horse-power of engines ordinarily in use h.p. | 1,604 | 1,739 | 1,995 | 2,023 | 1,987 |

36. Boots and Shoes.-The following tables for the boot and shoe industry in Australia for the years 1958-59 to 1962-63 refer to boot and shoe factories as distinct from those devoted to repairing, except in Tasmania, where it has been necessary to include details of boot and shoe repairing, in order to avoid disclosure of confidential information for that State. Factories engaged in the manufacture of sand-shoes, goloshes and gum, etc., boots of rubber are not included here, being classified under Rubber Goods, see para. 60, page 201. More than two-thirds of the output of boots and shoes is produced in Victoria.

BOOTS AND SHOES: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 482 | 455 | 460 | 447 | 439 |
| Number of persons employed | 20.449 | 20,201 | 20.782 | 20.084 | 20,502 |
| Salaries and wages paid . ${ }^{\text {e }}$ '000 | 15,148 | 16,101 | 16.913 | 16,718 | 17,449 |
| Value of power, fuel. etc., used .. $\mathbf{£}^{\prime} 000$ | 275 | 289 | 314 | 327 | 328 |
| Value of materials used .. .. £'000 | 25.222 | 28,138 | 29,925 | 29.996 | 30,582 |
| Value of production .. .. £ $\mathbf{E}^{\prime} 000$ | 22,530 | 24,059 | 26.564 | 26.846 | 27,411 |
| Total value of output .. . $\mathbf{£}^{\prime} 000$ | 48,027 | 52,486 | 56,803 | 57,169 | 58,321 |
| Value of land and buildings . . £'000 | 5,254 | 5,551 | 6.158 | 6,713 | 7,119 |
| Value of plant and machinery . $\quad \mathbf{f}^{\prime} 000$ | 4,307 | 4,651 | 5.359 | 5,384 | 7,049 |
| Horse-power of engines ordinarily in use h.p. | 17,572 | 17,674 | 14,599 | 14,805 | 15,341 |

37. Flour-milling.-The following table shows particulars of the flour-milling industry in Australia for the years 1958-59 to 1962-63.

## FLOUR-MILLING: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of factories |  |  |  |  |  |  |  |

38. Other Grain Mills.-The following table shows particulars of cereal foods and starch factories and animal and bird food factories for Australia for the years 1958-59 to 1962-63.

OTHER GRAIN MILLS: AUSTRALIA

| Particulars |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |

39. Bakeries.-Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on is given in the table below for Australia for the years 1958-59 to 1962-63. Since the details refer only to establishments coming within the defimition of a factory as explained at the beginning of this chapter, the table does not give complete details of the industry, as a large number of bakeries, etc. not coming within the definition are excluded.

BAKERIES (INCLUDING CAKES AND PASTRY): AUSTRALIA

| Particulars |  | $\underset{(a)}{1958-59}$ | $\begin{gathered} 1959-60 \\ (a) \end{gathered}$ | $\begin{gathered} 1960-61 \\ (a) \end{gathered}$ | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 4,150 | 3,999 | 3,895 | 3,855 | 3,779 |
| Number of persons employed |  | 20,994 | 21,253 | 21,743 | 20,566 | 21,061 |
| Salaries and wages paid | $£^{\prime} \times 000$ | 13.729 | 14,936 | 16,446 | 15,950 | 16,854 |
| Value of power, fuel, etc., used | £'000 | 2,546 | 2,624 | 2.737 | 2.669 | 2,739 |
| Value of materials used | ¢'000 | 45.612 | 48,387 | 51.507 | 48,877 | 50,005 |
| Value of production | ¢'000 | 32,182 | 35,395 | 38,309 | 38,532 | 41,529 |
| Total value of output | £'000 | 80,340 | 86.406 | 92,553 | 90,078 | 94,273 |
| Value of tand and buildings | $\mathrm{E}^{\prime} \mathbf{0} 00$ | 22,220 | 23,950 | 26,280 | 27,538 | 29,237 |
| Value of plant and machinery | ${ }^{\text {c }}$ '000 | 13,551 | 15,122 | 17,601 | 16,892 | 18,704 |
| Horse-power of engines ordinari | e h.p. | 33,716 | 34,953 | 40,899 | 35,934 | 37,589 |

(a) Includes confectionery in Tasmania.
40. Biscuits.-The following table shows particulars of the biscuit industry for Australia for the years 1958-59 to 1962-63. Three-quarters of the output of biscuits comes from New South Wales and Victoria.

BISCUITS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 48 | 51 | 52 | 53 | 52 |
| Number of persons employed | 5,993 | 6,079 | 6,153 | 6,092 | 6,199 |
| Salaries and wages paid .. $\quad$. ${ }^{\prime} 000$ | 4,574 | 4,909 | 5,142 | 5,452 | 5,618 |
| Value of power, fuel, etc., used . . $\mathrm{f}^{\prime} 000$ | . 542 | 538 | 544 | 553 | 573 |
| Value of materials used .. .. $\mathbf{x}^{\prime} 000$ | 11,057 | 11,623 | 12.085 | 12,724 | 13,026 |
| Value of production . . . $£$ | 8,375 | 9,171 | 9.829 | 10,335 | 10,480 |
| Total value of output . . . £ £ 000 | 19,973 | 21,332 | 22,458 | 23,612 | 24.079 |
| Value of land and buildings . $£^{\prime} 000$ | 4,422 | 4,758 | 5,002 | 5,266 | 5,706 |
| Value of plant and machinery . $\quad £^{\prime} 000$ | 3,277 | 3,727 | 4,001 | 4,171 | 4,231 |
| Horse-power of engines ordinarily in use h.p. | 13,259 | 13,290 | 13,720 | 14,017 | 13,443 |

41. Sugar-mills and Sugar Refineries.-Sugar-cane is grown in New South Wales and Queensland, and particulars of area, yield, etc., are given in detail in the chapter Rural Industry. 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.

The following table shows the number of sugar-mills and the number of persons employed therein in New South Wales and Queensland for the years 1958-59 to 1962-63.

## SUGAR-MILLS

| Particulart | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

New South Wales

| Number of factories | $\cdots$ | $\ldots$ | 3 | 3 | 3 | 3 | 3 |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of persons employed | $\cdots$ | $\cdots$ | 254 | 243 | 200 | 219 | 261 |

Queensland


In 1962-63, there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia.
42. Confectionery.-Particulars for Australia for the years 1958-59 to 1962-63 are shown hereunder. New South Wales, Victoria and Tasmania produce most of the output of the industry.

CONFECTIONERY: AUSTRALIA

| Particulars | $\begin{gathered} 1958-59 \\ (a) \end{gathered}$ | $\begin{gathered} 1959-60 \\ (a) \end{gathered}$ | 1960-61 <br> (a) | 1961-62 | 1952-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 209 | 214 | 209 | 197 | 189 |
| Number of persons employed | 6,704 | 6,765 | 6,890 | 7,978 | 8,015 |
| Salaries and wages paid $\quad$. $£^{\prime} 000$ | 5,037 | 5,393 | 5,666 | 7,138 | 7,277 |
| Value of power, fuel, etc., used . ${ }^{\prime}$ '000 | 536 | 555 | 591 | 725 | 771 |
| Value of materials used .. . . £'000 | 16,842 | 17,674 | 17,883 | 22,478 | 23,213 |
| Value of production . . . £ 0000 | 10,586 | 11,139 | 12,391 | 14,830 | 15,802 |
| Total value of output . . . $\mathbf{f}^{\prime} 000$ | 27,964 | 29,368 | 30.865 | 38,033 | 39,786 |
| Value of land and buildings . . $\mathrm{f}^{\prime} 000$ | 4,812 | 5,309 | 5,590 | 7,634 | 8,632 |
| Value of plant and machinery . $\because \quad \mathbf{f}^{\prime} 000$ | 4,572 | 4,745 | 5,428 | 7,635 | 8,477 |
| Horse-power of engines ordinarily in use h.p. | 30,504 | 30,571 | 32,006 | 38,948 | 42,665 |

(a) Excludes Tasmania.
43. Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar.-The following table shows particulars of factories included in this class for Australia for the years 1958-59 to 1962-63.

Jam, fruit and vegetable canning, pickles, sauces, vinegar: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 180 | 177 | 172 | 172 | 170 |
| Number of persons employed | 10.762 | 10,793 | 10,865 | 12,092 | 11,897 |
| Salaries and wages paid .. $\mathbf{f}^{\prime} 000$ | 9,186 | 9,894 | 10,077 | 11,826 | 12,076 |
| Value of power, fuel, etc., used .. $\mathbf{£}^{\prime} 000$ | 949 | 992 | 1.037 | 1.201 | 1,206 |
| Value of materials used .. $\boldsymbol{\varepsilon}^{\prime} 000$ | 38,358 | 39,953 | 41,867 | 50,817 | 47,648 |
| Value of production .. .. £'000 | 17,458 | 20,254 | 21,076 | 27,902 | 27,882 |
| Total value of output .. .. £'000 | 56,765 | 61,199 | 63,980 | 79,920 | 76,736 |
| Value of land and buildings .. $£^{\prime} 000$ | 11,630 | 12,095 | 13,149 | 14,419 | 14,920 |
| Value of plant and machinery .. $\boldsymbol{\varepsilon}^{\prime} 000$ | 9,573 | 10,162 | 11.211 | 12,236 | 13,229 |
| Horse-power of engines ordinarily in use h.p. | 48,539 | 42,250 | 44,819 | 45,852 | 48,574 |

44. Bacon-curing.-The table hereunder shows particulars of factories engaged in baconcuring in Australia for the years 1958-59 to 1962-63.

BACON-CURING: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |

Bacon and ham and other pig products are dealt with more fully in Chapter XXIII. Rural Industry.
45. Butier, Cneese and Condensed and Processed Miik. -The foliowing table shows particulars of butter, cheese and condensed and dried milk factories in Australia for the years 1958-59 to 1962-63. Victoria produces more than half the total Australian output of this industry.

BUTTER, CHEESE AND CONDENSED AND PROCESSED MILK: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 363 | 363 | 361 | 353 | 348 |
| Number of persons employed | 10,897 | 11,139 | 11,072 | 11,317 | 11,320 |
| Salaries and wages paid . . . $£^{\prime} 000$ | 10,270 | 11,042 | 11,524 | 12,238 | 12,441 |
| Value of power, fuel, etc., used . . £'000 | 2,816 | 2,920 | 2,825 | 2,932 | 2,980 |
| Value of materials used $\quad$. $£^{\prime} 000$ | 101,929 | 112,307 | 106,607 | 111,924 | 113,346 |
| Value of production . . .. £'000 | 21,446 | 24,816 | 24,487 | 25,793 | 26,212 |
| Total value of output .. .. £ $\mathbf{£}^{\prime} 000$ | 126,191 | 140,043 | 133,919 | 140,649 | 142,538 |
| Value of land and buildings .- £'000 | 13,518 | 14,022 | 14.702 | 15,277 | 15,516 |
| Value of plant and machinery .. $\boldsymbol{£}^{\prime} 000$ | 15,819 | 16,169 | 17,046 | 17,722 | 18,898 |
| Horse-power of engines ordinarily in use h.p. | 107,880 | 111,149 | 114,392 | 114,643 | 118,087 |

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXIII. Rural Industry.
46. Meat and Fish Preserving.-The industries included in this group are engaged chiefly in the freezing and preserving of meat. Most abattoirs are excluded, except in Queensland and Western Australia. 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. In recent years, there has been considerable expansion in the canning of meat and fish. The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

MEAT AND FISH PRESERVING: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 115 | 128 | 143 | 149 | 159 |
| Number of persons employed | 10,142 | 9.326 | 9.031 | 9,491 | 10,032 |
| Salaries and wages paid $\quad$. ${ }^{\prime} 0000$ | 10,699 | 9,914 | 9,319 | 10,524 | 10,958 |
| Value of power, fuel, etc., used . . £'000 | 1.292 | 1,244 | 1.199 | 1,312 | 1,427 |
| Value of materials used . . f'000 | 61.816 | 65,116 | 62.686 | 66.811 | 71,035 |
| Value of production . . . £ $\mathbf{£}^{\prime} 000$ | 15,354 | 14.195 | 15.386 | 18,843 | 19,133 |
| Total value of output . . . . $\mathbf{£}^{\prime} 000$ | 78.462 | 80,555 | 79.271 | 86.966 | 91,595 |
| Value of land and buildings . . $£^{\prime} 000$ | 7.459 | 8,617 | 9,347 | 10,430 | 10,312 |
| Value of plant and machinery . $\quad$ £'000 | 5,261 | 5,579 | 6,756 | 7,081 | 7,723 |
| Horse-power of engines ordinarily in use h.p. | 38,994 | 39,390 | 44,731 | 49,253 | 53,652 |

Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XXIII. Rural Industry.
47. Condiments, Coffee, Spices.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

CONDIMENTS, COFFEE, SPICES: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 262 | 250 | 254 | 258 | 260 |
| Number of persons employed | 4,170 | 4,407 | 4,487 | 4,463 | 5,283 |
| Salaries and wages paid $\quad . \quad £^{\prime} 000$ | 3,114 | 3,487 | 3,771 | 3,851 | 4,903 |
| Value of power, fuel, etc., used .. £'000 | 256 | 276 | 283 | 299 | 343 |
| Value of materials used .. .. £'000 | 16,782 | 18,512 | 19,214 | 19.735 | 21,970 |
| Value of production .. .. $£$ | 8,207 | 9,890 | 10,538 | 10,606 | 13,779 |
| Total value of output .. .. f'000 | 25,245 | 28,678 | 30,035 | 30,640 | 36,092 |
| Value of land and buildings . . $\mathrm{f}^{\prime} 0000$ | 5,250 | 5,854 | 6,826 | 7.642 | 9,259 |
| Value of plant and machinery . $\mathrm{f}^{\prime} 000$ | 2,125 | 2,412 | 2,831 | 3,571 | 4,165 |
| Horse-power of engines ordinarily in use h.p. | 13,086 | 12,941 | 14,231 | 14,625 | 16,811 |

48. Breweries.-The following table gives particulars of breweries for Australia for each of the years 1958-59 to 1962-63.

BREWERIES: AUSTRALIA

(a) Excludes excise duty
49. Aerated Waters and Cordials. The following table shows particulars of aerated water and cordial factories in Australia for the years 1958-59 to 1962-63.

## AERATED WATERS AND CORDIALS: AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 559 | 552 | 548 | 535 | 525 |
| Number of persons employed |  | 4,877 | 5,021 | 5,275 | 4,960 | 5,190 |
| Salaries and wages paid | $£^{\prime} 000$ | 3,722 | 4,102 | 4,458 | 4,330 | 4,527 |
| Value of power, fuel, etc., used | $£^{\prime} 000$ | 367 | 406 | 410 | 404 | 439 |
| Value of materials used | $£^{\prime} 000$ | 11,328 | 12,765 | 13,400 | 12,771 | 14,029 |
| Value of production | £'000 | 10,024 | 11.355 | 11.658 | 11.993 | 13,346 |
| Total value of output | £'000 | 21,719 | 24,526 | 25,468 | 25,168 | 27,814 |
| Value of land and buildings | $\chi^{\prime} 000$ | 5,359 | 6,232 | 7.488 | 7.835 | 8,626 |
| Value of plant and machinery | ${ }^{\mathbf{\prime}} \mathbf{}$ 000 | 3,874 | 4,516 | 5,162 | 5,701 | 5,995 |
| Horse-power of engines ordinaril | e h.p. | 14,988 | 15,799 | 16,363 | 16,350 | 17,116 |

50. Wineries and Distilleries.-The following table shows particulars of the operations of wineries and distilleries for Australia for the years 1958-59 to 1962-63. South Australia is the principal wine producing State, and produces more than half the Australian output. Most of the remainder comes from New South Wales and Victoria.

WINERIES AND DISTHLLERIES: AUSTRALIA

| Particulars |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

51. Tobacco, Cigars and Cigarettes.-Particulars of establishments engaged in the manufacture of tobacco, cigars or cigarettes are shown below for Australia for the year 1958-59 to 1962-63. There were no such factories in South Australia or Tasmania, and Queensland and Western Australian production is relatively small.

TOBACCO, CIGARS AND CIGARETTES: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 22 | 21 | 20 | 18 | 18 |
| Number of persons employed | 4,779 | 5,046 | 5,178 | 4,914 | 4,671 |
| Salaries and wages paid .- £'000 | 4,178 | 4,774 | 5,232 | 5,282 | 5,138 |
| Value of power, fuel, etc.. used . . £'000 | 160 | 176 | 225 | 234 | 256 |
| Value of materials used . . $£^{\prime} 000$ | 35,775 | 36,578 | 40,716 | 38,568 | 39,296 |
| Value of production . . . . $\mathrm{f}^{\prime} 000$ | 13.451 | 16,889 | 18,378 | 19.491 | 20,189 |
| Total value of output(a) .. f'000 | 49.386 | 53.643 | 59.319 | 58, 393 | 50,741 |
| $\begin{array}{ll}\text { Vaiue of land and buildings } \\ \text { Value of plant and machinery } & \text {.- } \\ \text { ¢ }\end{array}$ | 2.700 | 3,620 | 3.551 | 4,307 | 4,640 |
| Value of plant and machinery $\quad \begin{aligned} & \text { '000 }\end{aligned}$ | 4,178 | 4,961 | 6,209 | 6.859 | 7,094 |
| Horse-power of engines ordinarily in use h.p. | 10,384 | 10,417 | 10,342 | 11,203 | 12,033 |

(a) Excludes excise duty.
52. Ice Cream.-The following table shows particulars of the ice cream industry for Australia for the years 1958-59 to 1962-63.

ICE CREAM: AUSTRALIA

| Particulars |  |  | $1958-59$ | $1959-60$ | $1960-61$ | $1961-62$ | $1962-63$ |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Number of factories |  |  |  |  |  |  |  |

53. Sawmills, etc.-The most important industry in Class $X$. is sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town mills, they have been combined in the following table, together with plywood and veneer mills. The figures, covering the years 1958-59 to 1962-63, exclude particulars of a small number of itinerant and travelling sawmills.

## SAWMILLS AND PLYWOOD AND VENEER MILLS: AUSTRALIA


54. Joinery.-The following table shows particulars of the joinery industry for Australia for the years 1958-59 to 1962-63.

JOINERY: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 2,031 | 2,149 | 2,217 | 2,256 | 2,247 |
| Number of persons employed | 15,564 | 17,203 | 17,912 | 17,239 | 17,509 |
| Salaries and wages paid .. £ $£^{\prime} 000$ | 13.036 | 15,431 | 17,191 | 17.026 | 17,670 |
| Value of power, fuel, etc., used .. £'000 | 367 | 413 | 456 | 460 | 482 |
| Value of materials used .. .- £'000 | 24,468 | 29,704 | 32.835 | 31.587 | 32,046 |
| Value of production . . .. £ $\mathbf{¢}^{\prime 000}$ | 20,874 | 24,445 | 27.218 | 26.712 | 27,880 |
| Total value of output . . . $£^{\prime} 000$ | 45,709 | 54,562 | 60.509 | 58.759 | 60.408 |
| Value of land and buildings .. £'000 | 9,873 | 11.699 | 13,658 | 14,336 | 15.272 |
| Value of plant and machinery . $\quad$ £ ${ }^{\prime} 000$ | 4,062 | 4,443 | 4,825 | 5.048 | 5,100 |
| Horse-power of engines ordinarily in use h.p. | 76,199 | 80,902 | 86,375 | 86,240 | 89.459 |

55. Cabinet and Furniture Making and Upholstery.-These industries constitute the principal manufactures in Class XI. The following table shows particulars for Australia for the years 1958-59 to 1962-63.

CABINET AND FURNITURE MAKING AND UPHOLSTERY: AUSTRALIA

\begin{tabular}{|c|c|c|c|c|c|}
\hline Particulars \& 1958-59 \& 1959-60 \& 1960-61 \& 1961-62 \& 1962-63 <br>
\hline Number of factories \& 1,629 \& 1,664 \& 1,633 \& 1,617 \& 1,625 <br>
\hline Number of persons employed \& 16,012 \& 16,475 \& 15,711 \& 15,132 \& 15,726 <br>
\hline Salaries and wages paid $\quad$. ${ }^{\prime} \mathbf{0} 000$ \& 12,963 \& 14,187 \& 14,218 \& 14,083 \& 14,697 <br>
\hline Value of power, fuel, etc., used
Value of materials used \& 1.334
22.222 \& 346
26.123 \& 350
25999 \& 26.568

2655 \& 388
28.121 <br>
\hline Value of production . . $\quad .$. \& 21,228 \& 23.501 \& 23.135 \& 23,048 \& 24,369 <br>
\hline Total value of output .. .. $\mathbf{£}^{\prime} 000$ \& 43,784 \& 49,970 \& 49,484 \& 49,971 \& 52,878 <br>
\hline Value of land and buildings .. $\mathrm{f}^{\prime} 000$ \& 10,457 \& 11,618 \& 12.719 \& 13,623 \& 14,654 <br>
\hline Value of plant and machinery $\quad \therefore \quad \mathbf{f} \mathbf{0} 00$ \& 2,679 \& 2,869 \& 2.964 \& 3.158 \& 3,491 <br>
\hline Horse-power of engines ordinarily in use h.p. \& 46,539 \& 45,955 \& 45,313 \& 46,000 \& 45,641 <br>
\hline
\end{tabular}

56. Printing Works.-The following table gives particulars of establishments engaged in general printing in Australia for the years 1958-59 to 1962-63. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping, and Government printing works.

GOVERNMENT AND GENERAL PRINTING WORKS: AUSTRALIA

| Particulars |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

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

NEWSPAPERS AND PERIODICALS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 423 | 429 | 420 | 421 | 415 |
| Number of persons employed | 14,878 | 15,437 | 15,789 | 15.491 | 15,500 |
| Salaries and wages paid $\quad$. $\mathbf{f}^{\prime} 000$ | 15,291 | 17,056 | 19,005 | 18,874 | 19,070 |
| Value of power, fuel, etc., used . . $£ 000$ | 590 | 6815 | 6554 | 676 | 696 |
| Value of materials used .. .. $£ 0000$ | 27.746 | 29,726 | 30,737 | 27,817 | 29,077 |
| Value of production . . . ${ }^{\prime} 000$ | 27,738 | 30,767 | 33,997 | 34,544 | 35,192 |
| Total value of output . . . . $\mathbf{£}^{\prime} 000$ | 56,074 | 61.108 | 65,388 | 63,037 | 64,965 |
| Value of land and buildings . . £ $£^{\prime} 000$ | 13,739 | 15,193 | 16,016 | 16.618 | 17,198 |
| Value of plant and machinery .: $£^{\prime} 000$ | 11,595 | 13,960 | 14.416 | 15,719 | 16,200 |
| Horso-power of engines ordinarily in use h.p. | 37,440 | 40,116 | 45,815 | 45,776 | 44,094 |

57. Manufactured Stationery.-The following table shows particulars of the Manufactured Stationery industry for Australia for the years 1958-59 to 1962-63. New South Wales and Victoria produce about 90 per cent. of the output of this industry.

MANUFACTURED STATIONERY: AUSTRALIA

| Particulars |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

58. Cardboard Boxes, Cartons and Containers and Paper Bags.-The following table shows particulars of these industries for Australia for a series of years.

CARDBOARD BOXES, CARTONS AND CONTAINERS AND PAPER BAGS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 210 | 226 | 231 | 239 | 243 |
| Number of persons employed | 8,569 | 9.429 | 10,041 | 10.133 | 10,832 |
| Salaries and wages paid.. ${ }^{\text {a }}$, ${ }^{\prime} 000$ | 7,558 | 8,901 | 9,676 | 10,216 | 11.118 |
| Value of power, fuel, etc., used .. $\mathbf{f}^{\prime} 0000$ | 326 | 378 |  | 446 | 482 |
| Value of materials used . . . ${ }^{\prime} 0000$ | 26,983 | 31,580 | 33.497 | 35,687 | 39,926 |
| Value of production .. .. $£^{\prime} 000$ | 17,018 | 20,085 | 21,407 | 22,412 | 24,101 |
| Total value of output . . . $\mathrm{E}^{\prime} 000$ | 44,327 | 52,043 | 55,316 | 58,545 | 64,509 |
| Value of land and buildings .. fe000 | 7,904 | 8,801 | 10,595 | 11,443 | 13,541 |
| Value of plant and machinery .. $\mathrm{f}^{\prime} 000$ | 6,858 | 8,083 | 10,200 | 10,924 | 12,541 |
| Horse-power of engines ordinarily in use h.p. | 17,020 | 19,594 | 21,613 | 22,961 | 26,217 |

59. Paper Making.-Although the paper manufacturing industry has been established in Australia for many years, it was not until the manufacture of paper pulp from indigenous timber commenced in 1938-39 that any marked development occurred. The number of factories operating in 1962-63 comprised four in New South Wales, eleven in Victoria, two in Queensland, two in South Australia, one in Western Australia, and four in Tasmania. In Tasmania, newsprint, writing and printing papers are produced, and in the other States, wrappings, other papers and boards. Particulars for this industry are shown in the following table for the years 1958-59 to 1962-63.

Mills producing pulp from eucalypt timber are operating in Victoria and Tasmania, while in South Australia pulp is being produced from locally-grown softwoods.

PAPER MAKING, INCLUDING PULP MILLS: AUSTRALIA

| Particulars |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |

60. Rubber Goods.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63. Victorian and New South Wales factories produce about 90 per cent. of the output of this industry.

RUBBER GOODS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 122 | 118 | 116 | 114 | 117 |
| Number of persons employed .. | 15,227 | 15,620 | 15,416 | 13,993 | 15,702 |
| Salaries and wages paid . . £ $\mathbf{E}^{\prime} 000$ | 15.442 | 17.142 | 17.038 | 15,719 | 18,741 |
| Value of power, fuel, etc., used . . £ $\mathbf{\Sigma}^{\prime} 000$ | 2,205 | 2,318 | 2,382 | 2,281 | 2,556 |
| Value of materials used . . £ $\mathbf{£}^{\prime} 000$ | 36,339 | 43.382 | 42.038 | 35,942 | 43,010 |
| Value of production .. .- £ $\mathbf{£}^{\prime} 000$ | 27,108 | 26,072 | 28,026 | 26,223 | 30,717 |
| Total value of output .. . $£^{\prime} 000$ | 65,652 | 71,772 | 72.446 | 64,446 | 76,283 |
| Value of land and buildings . . £ 000 | 7,288 | 7.585 | 9.121 | 9.490 | 10,343 |
| Value of plant and machinery . $\quad$ £ ${ }^{\prime} 000$ | 7.632 | 9,543 | 10,265 | 10,307 | 11,598 |
| Horse-power of engines ordinarily in use h.p. | 126,901 | 128,393 | 131,947 | 134,428 | 140,956 |

61. Tyre Retreading and Repairing.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

## TYRE RETREADING AND REPAIRING: AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 484 | 502 | 513 | 536 | 542 |
| Number of persons employed | -. | 3,240 | 3,043 | 2,979 | 3,181 | 3,214 |
| Salaries and wages paid.. | £'000 | 2,722 | 2,686 | 2,746 | 3,061 | 3,217 |
| Value of power, fuel, etc., used | £'000 | 396 | 406 | 416 | 443 | 448 |
| Value of materials used | £'000 | 5,558 | 5,934 | 6,336 | 6,892 | 7,253 |
| Value of production | £'000 | 5,696 | 6,066 | 6,899 | 8,064 | 8,445 |
| Total value of output | £ 000 | 11,650 | 12,406 | 13,651 | 15.399 | 16,146 |
| Value of land and buildings | £'000 | 5.534 | 5.853 | 6,411 | 7,385 | 8,361 |
| Value of plant and machinery | . £'000 | 2.700 | 2,697 | 2,724 | 2,768 | 2,680 |
| Horse-power of engines ordinaril | in use h.p. | 10,742 | 11,494 | 12,039 | 13,079 | 13,865 |

62. Plastic Moulding and Products.-The following table shows particulars of this industry for Australia for the years 1958-59 to 1962-63.

PLASTIC MOULDING AND PRODUCTS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 337 | 375 | 398 | 421 | 430 |
| Number of persons employed | 9,480 | 10,180 | 10,658 | 10,496 | 11,801 |
| Salaries and wages paid $\quad$. ${ }^{\prime} 0000$ | 8,774 | 10,160 | 10,753 | 10,651 | 12,541 |
| Value of power, fuel, etc., used . . $£^{\prime} 000$ | 759 | 849 | 900 | 966 | 1,129 |
| Value of materials used .. . . £ 0000 | 22,272 | 26,393 | 24,613 | 24,260 | 28,799 |
| Value of production . . . $£^{\prime} 000$ | 18,339 | 19,886 | 20,395 | 20,917 | 24,249 |
| Total value of output . . . $\mathrm{E}^{\prime} 000$ | 41,370 | 47,128 | 45,908 | 46,143 | 54,177 |
| Value of land and buildings . . £'000 | 6,081 | 7,806 | 8.778 | 10,056 | 11,660 |
| Value of plant and machinery . $\quad$ f'000 | 7,005 | 8,009 | 9.747 | 10,605 | 12,698 |
| Horse-power of engines ordinarily in use h.p. | 34,384 | 37,055 | 41.635 | 47,083 | 54,576 |

63. Electric Light and Power Works.-For further information on this subject see Chapter VII. Electric Power Generation and Distribution. Particulars of the industry for Australia for the years 1958-59 to 1962-63 are shown below.

## ELECTRIC LIGHT AND POWER WORKS: AUSTRALIA

| Particulars |  | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories |  | 305 | 304 | 290 | 285 | 275 |
| Number of persons employed |  | 13,124 | 12,810 | 12,298 | 12.441 | 12,272 |
| Salaries and wages paid | £'000 | 1.4,011 | 14,564 | 15,018 | 15,916 | 16,003 |
| Value of power, fuel, etc., used | £'000 | 39,383 | 40.756 | 42,367 | 41,680 | 40,821 |
| Value of materials used | $\mathrm{f}^{\prime} 0000$ | 4,744 | 4.839 | 4,976 | 5.287 | 5,193 |
| Value of production | $£^{\prime} 000$ | 63.422 | r71,255 | r75.472 | r78.534 | 89,556 |
| Total value of output | £'000 | 107,549 | r116,850 | r122,815 | r125,501 | 135,570 |
| Value of land and buildings | £'000 | 122,460 | 136,086 | 139,790 | 245.389 | 249,950 |
| Value of plant and machinery | f'000 | 235,844 | 259,899 | 278,007 | 291,537 | 306,622 |
| Generators instailed-kilowatt acity | , 000 kW | 5.531 | 5,953 | 6,665 | 7,215 | 7,499 |

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 164.
64. Gas-works.-The following table shows particulars of gas-works in Australia for the years 1958-59 to 1962-63.

GAS-WORKS: AUSTRALIA

| Particulars | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 88 | 88 | 84 | 85 | 87 |
| Number of persons employed | 3,917 | 3,790 | 3,733 | 3,674 | 3,561 |
| Salaries and wages paid $\quad$. $\mathbf{f}^{\prime} 000$ | 4,298 | 4,367 | 4,582 | 4,630 | 4,644 |
| Value of power, fuel, light, etc., used $£^{\prime} 000$ | 2,712 | 2,942 | 3.012 | 3.078 | 2.855 |
| Value of materiais used | 14,996 | 14,738 | 14,889 | 14.180 | 13.325 |
| Value of production . . . £ ¢ 000 | 11,239 | 12,037 | 13.542 | 14,054 | 15,870 |
| Total value of output . . . $\boldsymbol{£}^{\prime} 000$ | 28,947 | 29.717 | 31.443 | 31,312 | 32,050 |
| Value of land and buildings . . $\mathbf{x}^{\prime} 000$ | 6,079 | 5,946 | 7,235 | 7.518 | 7,536 |
| Value of plant and machinery $\quad \because \quad \mathbf{£}^{\prime} 000$ | 28.127 | 29,346 | 29,347 | 29.846 | 29,691 |
| Horse-power of engines ordinarily in use h.p. | 46,743 | 46,058 | 46,363 | 52,037 | 58,989 |


[^0]:    (a) Includes gas works but excludes central electric stations, details of which are shown on p. 163.
    (b) Excludes motors driven by electricity generated in factories not classified as central electric stations.

[^1]:    (a) Includes gas works but excludes central electric stations, details of which are shown on p. 163. (b) Excludes motors driven by electricity generated in factories not classified as central electric stations.
    (c) Excludes particulars in column (d).

[^2]:    (a) Subject to revision. (b) Not yet available. (c) Petrol cylinder, electric and hand. (d) Includes lead content of lead alloy from primary sources, but excludes lead-silver bullion produced for export. (e) Excludes poultry and baby food. (f) Includes hiquid ice-cream mix.

[^3]:    (a) Subject to revision. (b) Not yet available.
    (c) Polished, unpolished
    or broken. (d) Includes industrial flakes and chips.
    (e) Includes stovettes, cookers, etc.
    (f) SourceDepartment of Primary Industry.

