THE SOAP, CANDLE AND PERFUMERY TRADES.

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## Introductory.*

The tables on pages 116 to 120 are based on returns received from firms in Great Britain and Northern Ireland whose business in 1924 consisted wholly or mainly in the manufacture of soap, candles and glycerine, and of toilet preparations, perfumery and cosmetics. The number of such separate returns was 344 . About 50 firms to which schedules were sent did not furnish returns, but these firms for the most part had very small establishments, and they included some which had ceased operations before the end of the censal year. On the basis of the information available it is estimated that they did not employ more than 250 persons in all and that their total net output probably did not exceed $£ 50,000$.

Summary of results.-The following table shows the main results of the Censuses of 1924, 1912 and 1907, comparisons between the figures for the three years being subject to the qualifications mentioned in the next paragraph :-

| Particulars. | Unit. | 1924. | 1912. | 1907. |
| :---: | :---: | :---: | :---: | :---: |
| Value of goods made (Gross output) | $£^{\prime} 000$ | 32,798 | 14,096 | 12,218 |
| Cost of materials used .. .. |  | 20,215 | 10,636 | 9,312 |
| Net output |  | 12,583 | 3,460 | 2,906 |
| Average number of persons employed | No. | 30,064 | 21,677 | 18,718 |
| Net output per person employed | . | 418 | 160 | 155 |
| Mechanical power available:Prime movers | H.P. | 24,897 | 15,432 | 16,938 |
| Electric motors driven by purchased electricity | , | 10,330 | 1,812 | $\begin{aligned} & \text { (not } \\ & \text { recorded) } \end{aligned}$ |

Qualifications affecting comparisons.- In considering the above table and the other tables in this report which show figures for different censal years, the following qualifications should be borne in mind:-
(1) The comparability of figures relating to value or cost is affected by the changes which have taken place in the general purchasing power of money.
(2) The Censuses of 1907 and 1912 covered Great Britain and the whole of Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. The exclusion of Southern Ireland in 1924 does not, however, seriously affect the comparability of the figures since, according to the Census of Production taken by the Government of the Irish Free State in respect of the year 1926, the total value of the goods made

* See also the Notes on pages vii to xv.
and work done in the Soap, Candle and Perfumery Trades in that year was returned as $£ 392,000$ and the average number of persons employed as 412.
(3) The Censuses of 1907 and 1924 extended to all firms, however small, but in 1912, firms employing not more than five persons (excluding the proprietors) were merely required to state the average number of persons employed by them in the year. According to the information so furnished the number of persons employed in the establishments thus excluded was 555 , or $2 \cdot 6$ per cent. of the number employed by the remaining firms, as shown in the above table.
(4) Firms whose main business consisted in the manufacture of perfumed spirits, perfumery and toilet preparations furnished returns on schedules for the Soap, Candle and Perfumery Trades in 1924 and on schedules for the Chemical Trades in 1912 and 1907. The total value of the output of these products in 1924 was recorded as $£ 3,107,000$, of which goods valued at $£ 2,784,000$, or about 90 per cent., were returned on schedules for the Soap, Candle and Perfumery Trades ; in 1912 and 1907, the recorded value of the output was $£ 1,113,000$ and $£ 914,000$ respectively, of which only about 6 per cent. and 10 per cent. respectively were returned on schedules for this trade.
Value of output and cost of materials.-The figures in the above table representing the value of goods made and the cost of materials used are the aggregates of the figures recorded by the firms that made returns, and, for the reasons explained in paragraphs (i) and (ii) on page xiii, they overstate the value of the output of, and the cost of the materials used by, the Soap, Candle and Perfumery Trades considered as a whole. The matter is discussed on page 112, where it is estimated that the value, free from duplication, of the output of this trade in 1924 lay between $£ 32,000,000$ and $£ 32,500,000$, and the cost of the materials purchased from sources outside the trade and worked up into its products lay between $£ 19,400,000$ and $£^{〔} 19,900,000$.

Divisions of the trade.-The Soap, Candle and Perfumery Trades can for the most part be divided into three main groups of firms, as follows :-
(1) firms whose main business is that of soap-boiling ;
(2) firms engaged wholly or mainly in the manufacture of candles;
(3) firms engaged wholly or mainly in the manufacture of perfumery and toilet preparations.
There remains a number of firms that could not conveniently be allocated to any of these three groups.

The chief results of the Census of 1924 for these groups, as returned on schedules for the Soap, Candle, etc. Trades are shown below :-

| Particulars. | Unit. | Firms mainly soap- <br> boilers | Firms mainly candle- | $\underset{\substack{\text { Firms } \\ \text { mainly } \\ \text { perfumery, of } \\ \text { patc. }}}{\text { and }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Value of goods made | $£^{\prime} 000$ | 24,873 | 3,083 | 2,207 |
| Cost of materials used | L | 15,386 | 2,108 | 1,082 |
| Net output |  | 9,487 | 975 | 1,125 |
| Average number of persons employed.. | No. | 20,649 | 3,212 | 2,997 |
| Net output per person employed .. | £ | 459 | 304 | 375 |
| Mechanical power available :- |  |  |  |  |
|  | H.P. | 23,244 | 726 | 116 |
| Electric motors driven by purchased electricity .. .. .. | , | 3,610 | 731 | 1,088 |

The following particulars indicate the extent to which these three divisions of the trade were self-contained :-

| Kind o goods made. | Output returned by - |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Firms chiefly engaged in making the goods specified. |  | Other firms in the Soap, Candle, etc. Trades. |  |
|  | Quantity. | Value. | Quantity. | Value. |
| Firms mainly soapboilers :- <br> Soap (excluding soap stock) <br> Glycerine <br> Other goods | $\begin{array}{r\|} \text { Th. cwts. } \\ 8,061 \\ 412 \end{array}$ | $\begin{array}{r} £^{\prime} 000 \\ 19,744 \\ 1,250 \\ 3,878 \end{array}$ | $\begin{array}{r} \text { Th. cwts. } \\ 1,141 \\ 15 \end{array}$ | $\begin{array}{r} £_{2}^{\prime 000} \\ 2,372 \\ 37 \end{array}$ |
| Total | . | 24,872 | . | 2,409 |
| Firms mainly candlemakers :Candles, night-lights and tapers Paraffin wax Other goods | $\begin{aligned} & 969 \\ & 112 \end{aligned}$ | $\begin{array}{r} 2,208 \\ 225 \\ 650 \end{array}$ | $-^{2}$ | -8 |
| Total | . | 3,083 | . . | 8 |
| Firms mainly makers of perfumery, etc. :Perfumery, etc. .. <br> Perfumed spirits <br> Other goods | Th. galls. 75 | $\begin{array}{r} 1,445 \\ 483 \\ 279 \end{array}$ | Th. galls. 14 | 707 149 |
| Total |  | 2,207 | . | 856 |

## Production.

Detailed information relating to the output of the Soap, Candle and Perfumery Trades in 1924 will be found in Table II on pages 116 and 117.
Principal products.-The following table affords a comparison of the output of the principal products of the Soap, Candle, etc. Trades in 1924, 1912, and 1907, the figures for each year being inclusive of the production of similar products returned on schedules for other trades.

| Kind of goods. |
| :--- |

* Including shaving soap.

The output of household and laundry soap returned as such on schedules for all trades was $14 \cdot 5$ per cent. greater in 1924 than in 1907 and the increase in toilet and shaving soaps (classed together in 1907) was $76 \cdot 2$ per cent. There was a very large apparent increase in polishing and scouring soaps of all kinds (the two classes not being shown separately in 1907) from 113,000 cwts. to 613,000 cwts., while at the same time the make of soft soap declined by $43 \cdot 9$ per cent. and other soaps (including soap stock, not separately specified in 1907) increased in quantity by over two-thirds. The apparent aggregate increase in all kinds of soap and soap stock, taken together, was $26 \cdot 3$ per cent., and the great variation in the increases in different classes of soap may, in large part, be attributed to differences of classification by the various firms at the two dates.
The output of candles, night-lights and tapers was less by 8.5 per cent. in 1924 than in 1907.
The output of perfumery, cosmetics and toilet preparations in 1924 was valued at a sum about four times as great as the value of the output in 1907 or 1912, but the actual increase, if any, in the volume of production cannot be determined.
More detailed particulars regarding the output of the different classes of goods made in 1924 are given in the following paragraphs.
Soap, glycerine and washing materials.-The following table shows details of the output of these products in 1924.

| Soap, glycerine and washing materials. | Returned on schedules for- |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | The Soap, Candle, etc. Trades. |  | All trades. |  |
|  | Quantity. | $\left\lvert\, \begin{array}{r} \text { Selling } \\ 2 \\ \text { value. } \end{array}\right.$ | Quantity. | Selling value. |
| Soap :- |  |  |  |  |
| Household and laundry, in bars and tablets | $6,334$ | 13,490 | $6,493$ | $\begin{aligned} & t \\ & 13,795 \end{aligned}$ |
| Toilet (except shaving) .. .. . | 461 | 3,201 | 480 | 3,340 |
| Shaving .. .. | 15 | 224 | 15 | 225 |
| Polishing and scouring : Manufacturers' .. | 170 | 299 | 170 | 299 |
| Household | 443 | 1,000 | 443 | 1,000 |
| Soft soap . . | 326 | , 511 | 355 | 1,554 |
| Powder, dry soap and other sorts | 1,452 | 3,391 | 1,509 | 3,502 |
| Total-Soap | 9,201 | 22,116 | 9,465 | 22,715 |
| Soap stock (made for sale) | 217 | 225 | 227 | 238 |
| Other washing and scouring materials |  | 607 |  | 607 |
| Glycerine :-Crude (made for sale) | 221 | 525 | 223 | 528 |
| Distilled.. | 206 | 762 | 253 | 923 |
| Total value .. .. | .. | 24,235 | . | 25,011 |

The figures given in the above table contain duplication in respect of soap sold by the soap boilers to manufacturers of soap-powders, dry soap and soap flakes, and to soap millers for making toilet and shaving soaps. Examination of the returns shows that 510,000 cwts. of soap powders and 24,000 cwts. of toilet and shaving soap were returned by firms that did not themselves make the soap base for their products. Trade estimates suggest that in soap powders the soap base varies from 20 to 30 per cent. While, therefore, no great precision can be claimed for the estimate, it may be estimated that the quantity of soap base sold for the purposes indicated above was about 150,000 cwts. Assuming that none of the soap base was imported, this duplication occurs in the returns on schedules for the Soap, Candle, etc., Trades, and the aggregate output of soap there returned may be put at about $9,050,000$ cwts., free from duplication; including other returns the output is raised to about $9,315,000 \mathrm{cwts}$. The corresponding aggregate for 1907 was estimated as lying between $7,568,000$ cwts. and $7,607,000$ cwts. (excluding exports of soap stock), making the increase in output about 22 per cent.
Out of the 227,000 cwts. of soap stock produced for sale in 1924, 186,000 cwts. were exported, leaving about 41,000 cwts. for sale to other soap manufacturers.
Other washing and scouring materials form a heterogeneous group, consisting largely of cleansing preparations of which soda is the chief constituent.

Firms in the Soap, Candle, etc. Trades were required, in 1924, to state their total make of crude glycerine, whether subsequently refined by them or not. The returns shewed an aggregate production by these firms of 445,000 cwts. Firms that produced no refined glycerine reported 160,000 cwts. of crude glycerine, and the remaining firms produced for sale 205,900 cwts. of distilled glycerine; the loss in distilling would amount, it is
understood, to about 14,000 cwts., so that this output would require 275,000 cwts. of crude glycerine expressed in the usual terms, i.e. in terms of glycerine of a content of 80 per cent. The refining firms reported 65,000 cwts. sold as crude, and any sales in excess of $10,000 \mathrm{cwts}$. to firms other than those which distilled glycerine would need to be replaced by purchases of an equivalent amount. To what extent the sales of crude glycerine by refining firms were made to other refining firms cannot be stated. What part of their supply of crude glycerine was used, and in what state of refining, for manufacturing purposes, is not shewn in the returns. The remainder of the crude glycerine sold, after providing for the 65,000 cwts. exported, was available for the use of manufacturers of explosives and other articles. It is not known whether the crude glycerine exported was of 80 per cent. glycerine content or of some other degree of purity. Part of the remaining supply was sold to firms in other trades, as they reported the production for sale of 46,900 cwts. of distilled glycerine ; 2,000 cwts. of crude glycerine was also shewn as output by firms not making their returns on schedules for the Soap, Candle and Perfumery Trades. The total make of crude glycerine reported was thus 447,000 cwts., representing, if the customary method of expressing crude glycerine, referred to above, was uniformly followed, an aggragate of about $357,600 \mathrm{cwts}$. of glycerine content. The total of distilled glycerine reported as made in all trades for sale or stock was 252,800 cwts. The quantity of crude glycerine imported and retained was 24,000 cwts., and of distilled glycerine $1,000 \mathrm{cwts}$. The estimated total make of crude glycerine in the United Kingdom in 1907 was 356,000 cwts., so that in the seventeen years there was an increase of $25 \cdot 6$ per cent.
In the following table exports and retained imports of soap, glycerine, etc., in 1924 are shown in relation to the output for that year:-

| Kind of goods. | Production. | Exports. | $\underset{\text { imports. }}{\substack{\text { Net } \\ \text { int }}}$ |  | Share of home marke held by made goods. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Th. cwts. | Th. cwts. | Th. cwts. | Th. cwts. | Per cent. |
| Soap:- Household and laundry | 6,493 | 1,342 | 136 | 5,287 | $97 \cdot 4$ |
| Toilet .. .. | 480 | 66 | 60 | 474 | $87 \cdot 3$ |
| Shaving | 15 | 1 | 5 | 19 | $73 \cdot 7$ |
| Polishing and scouring :-- Manufacturers' . . |  | 6 | 39 | 203 | $80 \cdot 8$ |
| Household . | 443 | 20 | 15 | 438 | $96 \cdot 6$ |
| Soft soap . . | 355 | 37 | 2 | 320 | $99 \cdot 4$ |
| Other sorts | 1,509 | 62 | 10 | 1,457 | $99 \cdot 3$ |
| Total-Soap | 9,465 | 1,534 | 267 | 8,198 | $96 \cdot 7$ |
| Soap stock .. | 227 | 186 | 28 | 69 | $59 \cdot 4$ |
| Crude glycerine | 447 | 65 | 24 | 406 | $94 \cdot 1$ |
| Refined glycerine .. .. | 253 | 176 | 1 | 78 | $98 \cdot 7$ |

Of the total exports of soap in 1924 about $172,000 \mathrm{cwts}$. were consigned to the Irish Free State. Deducting this quantity, there
was an increase of $12 \cdot 0$ per cent. over the quantity ( $1,215,000 \mathrm{cwts}$.) exported in 1907. Retained imports which, in 1907, amounted to 492,000 cwts., were 267,000 cwts. in 1924.

Candles and paraffin wax.- The following table shows details of the output of these products in 1924 :-

| Candles, paraffin wax, etc. | Returned on schedules for- |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | The Soap, Candle, etc. Trades. |  | All trades. |  |
|  | Quantity. | Selling value. | Quantity. | Selling value. |
|  | Th. cwts. |  |  | $£^{\prime} 000$ |
| Candles, night-lights and tapers Paraffin wax, refined | 971 <br> 112 | 2,216 | 1,000 | 2,278 |
| Paraffin wax, refined | 112 | 225 | 112 18 | 225 |
| Other and blended waxes | 18 | 76 | 18 | 76 |

Exports of candles in 1924 were 171,000 cwts. and retained imports less than 5,000 cwts. Exports amounted to 284,000 cwts. in 1907 and, excluding exports to the Irish Free State, to $103,000 \mathrm{cwts}$ in 1924.

The output of paraffin wax shown above does not include that produced in the shale oil industry of Scotland. There does not appear to be any duplication between the value of the waxes shown above and the value of the candles made.

Perfumery and perfumed spirits.-The following table shows details of the output of these products in 1924 :-

Perfumery and perfumed spirits.

Perfumery, cosmetics and toilet preparation Perfumed spirits

| Returned on schedules for- |  |  |  |
| :---: | :---: | :---: | :---: |
| The Soap, Candle. etc. <br> Trades. | All trades. |  |  |

About 48,600 cwts. of perfumery, cosmetics, and toilet requisites and articles used in the manufacture thereof (except perfumed spirits, essential oils, and soap), valued, f.o.b., at $£ 735,000$, were exported in 1924 , and about 39,200 cwts., valued, c.i.f., at $£ 626,000$, of goods similarly described were imported and retained.
About 55,000 gallons of perfumed spirits, valued at $£ 300,000$ f.o.b., were exported and about 17,100 gallons, valued, c.i.f., at about $£ 141,000$, were imported and retained.
Other products.-In addition to the products mentioned in the preceding pages, firms that made their returns on schedules for the Soap, Candle and Perfumery Trades recorded for 1924 an output of other goods as shown below. These goods, being of kinds mainly produced in other trades, are dealt with in the reports on those trades.


The corresponding total for 1912 was $£ 1,350,000$, and for 1907 , £ 1,076,000.

Value of output free from duplication.-The gross value of the output returned on schedules for the Soap, Candle and Perfumery Trades was $£ 32,798,000$. This total involves duplication in so far as the products of some of the firms in the trade were sold to other firms for further manufacture. Such duplication may occur in respect of sales of (a) soap stock to manufacturers of soap, (b) soap base to manufacturers of powder or dry soap, (c) milled soap to manufacturers of toilet and shaving soap, (d) crude glycerine to glycerine distillers, and (e) perfumed spirits to perfumery manufacturers that made their returns on schedules for this trade. These elements of duplication, with the exception of the last, have been considered above and, aggregating the various estimates, it would appear that the value, free from duplication, of the output in 1924 of the Soap, Candle and Perfumery Trades probably lay between $£ 32,000,000$ and $£ 32,500,000$. The corresponding figure for 1907 was estimated to lie between $£ 12,155,000$ and $£ 12,200,000$.
Cost of materials. - The cost of materials used by firms that made their returns on schedules for the Soap, Candle and Perfumery Trades was returned as $£ 20,215,000$ for 1924 , a sum which, by the exclusion of purchases of the products of other firms in the same trade, is reduced to an amount estimated to lie between $£ 19,400,000$ and $£ 19,900,000$. The corresponding figure for 1907 lay between $£ 9,249,000$ and $£ 9,294,000$.
Net output.-The net output in 1924 of the firms that made their returns on schedules for the Soap, Candle and Perfumery Trades (whose gross output was valued at $£ 32,798,000$ ) was $£ 12,583,000$, that sum representing, without duplication, the total amount by which the value, as delivered, of the aggregate output exceeded the cost, as purchased, of the materials used.
The net output per head of persons employed in the censal year 1924 was $£ 418$, as compared with $£ 160$ in 1912, and $£ 155$ in 1907 .

## Wages in 1924.

Under the Census of Production Act, 1906, the powers of the Board of Trade to require information do not extend to particulars of the amount of wages paid, and, consequently, no information on this head was secured in connexion with the Census of 1924. As a result, however, of the voluntary enquiry undertaken by the Ministry of Labour into wages and hours in the United Kingdom in 1924, information was obtained as to the total wage-bill of a group of firms in the Soap, Candle and Perfumery Trades that made returns both to the Ministry of Labour and to the Census of Production office. According to the Census records this group of firms employed, in the week ended 18th October, 1924, 15,882 operatives, or 70 per cent. of the total of 22,678 operatives for the trades as a whole, and their net output totalled $£ 9,292,000$, or 74 per cent. of the aggregate net output of $£ 12,583,000$ for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was $£ 1,953,000$, representing about 21 per cent. of their aggregate net output.

## Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 118 and 119. The following table sets out certain particulars for that year together with those relating to the two previous censal years. For the purpose of this comparison, the average numbers of operatives of each sex returned for 1924 have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October :-

| Average number. | Males. |  | Females. |  | Males and females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | $\begin{gathered} \text { All } \\ \text { ages. } \end{gathered}$ | Under 18. | All ages. | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | All |
| 1924. |  |  |  |  |  |  |
| OperativesAdministrative, etc. |  |  | 3,309 | 9,993 | 4,880 | 22,397 |
|  | 367 | 5,198 | +326 | 2,469 | 4,880 693 | 2,667 |
| Total.. | 1,938 | 17,602 | 3,635 | 12,462 | 5,573 | 30,064 |
| $\begin{aligned} & 1912 . \\ & \text { Wage earners } \\ & \text { Salaried . } \end{aligned}$ |  |  |  | 5,026 |  |  |
|  | 361 | 3,667 | 1,684 97 | 5,026 533 | 3,561 458 | $\begin{array}{r} 17,477 \\ 4,200 \end{array}$ |
| Total.. | 2,238 | 16,118 | 1,781 | 5,559 | 4,019 | 21,677 |
| $190 \%$ <br> Wage earners Salaried . . | 2,029 |  | 1,414 | 4,206 | 3,443 |  |
|  | 297 | $2,825$ | 37 | , 297 | -334 | $3,122$ |
| Total.. | 2,326 | 14,215 | 1,451 | 4,503 | 3,777 | 18,718 |

The numbers of operatives recorded month by month in 1924 ranged from 313 above the average, in December, to 441 below the (5506)
average, in February (see Table IIIB, page 119). The number of males employed was lowest in May, when there was also a small decrease in the number of females. In general, the numbers increased slowly after February and were, in December, $3 \cdot 4$ per cent. greater than in February, the increase being 1.4 per cent. for males and $7 \cdot 8$ per cent. for females.

## Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 120. The following table sets out the particulars for the three censal years relating to the capacity and kinds of prime movers and the capacity of electric generators installed.

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Power equipment.} \& \multicolumn{3}{|c|}{1924.} \& \multirow[t]{2}{*}{\begin{tabular}{l}
1912. \\
Total.
\end{tabular}} \& \multirow[t]{2}{*}{\begin{tabular}{l}
1907. \\
Total.
\end{tabular}} \\
\hline \& Ordinarily
in use \& In reserve or idle. \& Total. \& \& \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Prime movers :- \\
Reciprocating steam engines Steam turbines Gas engines Petrol and light oil engines Heavy oil engines Water power Other Total ..
\end{tabular}} \& \begin{tabular}{l}
H.P. \\
13,158 \\
4,016 \\
1,316 \\
1,288 \\
92
\end{tabular} \& H.P.
2,607
2,010
377
13 \& \[
\begin{array}{r}
\text { H.P. } \\
15,765 \\
6,026 \\
1,693 \\
1,301 \\
92 \\
-\quad 20
\end{array}
\] \& \[
\begin{array}{r}
\text { H.P. } \\
13,546 \\
\overline{1,548} \\
1, \begin{array}{r}
318 \\
3 \\
20
\end{array}
\end{array}
\] \& \[
\begin{array}{r}
\text { H.P. } \\
15,250 \\
38 \\
3 \\
820 \\
39 \\
791
\end{array}
\] \\
\hline \& 19,890 \& 5,007 \& 24,897 \& 15,432 \& 16,938 \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Electric generators :- \\
Driven by- \\
Reciprocating steam engines. \\
Steam turbines \\
Gas engines \\
Petrol and light oil engines \\
Heavy oil engines \\
Water power .. \\
Other prime movers .. \\
Total
\end{tabular}} \& Kw.
\[
\begin{array}{r}
869 \\
3,000 \\
442 \\
-\quad 3 \\
-
\end{array}
\] \& Kw.

2,956
1,500
232

- \& $$
\begin{aligned}
& \text { Kw. } \\
& 3,825 \\
& 4,500 \\
& 674 \\
& -\quad 3 \\
& -\quad 10
\end{aligned}
$$ \& $\left\{\begin{array}{l}\mathrm{Kw} . \\ 3,896 \\ - \\ 163\end{array}\right.$ \& Kw.

3,504
-
333 <br>
\hline \& 4,324 \& 4,688 \& 9,012 \& 4,059 \& 3,837 <br>
\hline
\end{tabular}

The capacity of electric motors recorded in 1924 and in 1912 was as shown below :-

| Electric motors. | 1924. |  |  | 1912. <br> Total. |
| :---: | :---: | :---: | :---: | :---: |
|  | Ordinarily in use. | In reserve or idle. | Total. |  |
|  | H.P. | H.P. | H.P. | H.P. |
| Electricity generated in own works . . | 6,890 | 1,304 | 8,194 | 5,497 |
| Purchased electricity . . . . . | 9,628 | 702 | 10,330 | 1,812 |

Corresponding information was not required for 1907. The total number of Board of Trade Units of electricity purchased for power and lighting purposes in that year was returned as 445,000 .

## Maximum capacity of plant.

In order to obtain a measure of the capacity of the industry, the Census schedule for the Soap, Candle and Perfumery Trade contained a request in each year for voluntary information as to the maximum annual capacity of the works in respect of the manufacture of soap and candles. The following table summarises the particulars furnished:--

| Kind of output. |  | Firms furnishing information. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Actual output in year of return. |  | Maximum annual capacity | Proportion of actual output to maximum capacity. |
|  |  | Quantity. | Proportion of total output of trade. | Quantity. |  |
| Soap | $\ldots\left\{\begin{array}{l} 1924 \\ 1912 \\ 1907 \end{array}\right.$ | $\begin{array}{r} \text { Th. cwts. } \\ 5,125 \cdot 5 \\ 7,037 \cdot 1 \\ 4,756 \cdot 0 \end{array}$ | Per cent 56 83 64 | $\begin{array}{r} \text { Th. cwts. } \\ 8,184 \cdot 0 \\ 10,983 \cdot 9 \\ 8,180 \cdot 0 \end{array}$ | Per cent. <br> 63 <br> 64 <br> 58 |
| Candles | $\ldots\left\{\begin{array}{l} 1924 \\ 1912 \\ 1907 \end{array}\right.$ | $\begin{aligned} & 739 \cdot 8 \\ & 353 \cdot 7 \\ & 238 \cdot 4 \end{aligned}$ | $\begin{aligned} & 76 \\ & 34 \\ & 25 \end{aligned}$ | $\begin{array}{r} 1,426 \cdot 1 \\ 841 \cdot 8 \\ 452 \cdot 3 \end{array}$ | $\begin{aligned} & 52 \\ & 42 \\ & 53 \end{aligned}$ |

TABLES
I.-Summary of results.

| Particulars. | Unit. | England and Wales. | Scotland. | Great Britain. | Northern Ireland. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Value of goods made | $£^{\prime} 000$ | 31,505 | 1,134 | 32,639 | 159 |
| Cost of materials used | , | 19,303 | 800 | 20,103 | 112 |
| Net output |  | 12,202 | 334 | 11,536 | 47 |
| Average number of persons employed | No. | 28,793 | 1,014 | 29,807 | 257 |
| Net output per person employed | £ | 424 | 328 | 421 | 183 |
| Mechanical power available :Prime movers | H.P. | 24,346* | 551 | 24,897* | * |
| Electric motors driven by purchased electricity . . |  | 9,354* | 976 | 10,330* | * |

* In order to avoid the possible disclosure of information relating to individual firms, the particulars for Northern Ireland have been included with those for England and Wales and for Great Britain.


## II.-Production.

A.-TOTAL MAKE OF CRUDE GLYCERINE IN 1924, AS RETURNED ON schedules for the Soap, Candle and Perfumery Trades.

| Country. |  | Quantity. |
| :---: | :---: | :---: |
| England and Wales and Northern Ireland* Scotland | $\cdots$ | $\begin{array}{r} \text { Cwts. } \\ 433,500 \\ 11,800 \end{array}$ |
| United Kingdom* |  | 445,300 |

* See footnote to Table I

SOAP, CANDLES AND PERFUMERY.

## B.-OUTPUT SOLD OR ADDED TO STOCK.

| Kind of goods. | Unit. | England and Wales and <br> N. Ireland. $\dagger$ | Scotland. | United Kingdom. |
| :---: | :---: | :---: | :---: | :---: |
| Soap | Quant | ity and se | lling val | ue |
| Household and laundry, in bars and tablets.. | Th. cwts. f'000 | $\begin{array}{r} 6,023 \cdot 8 \\ 12,914 \end{array}$ | $310 \cdot 5$ 576 | $\begin{array}{r} 6,334 \cdot 3 \\ 13,490 \end{array}$ |
| $\dagger$ Toilet (except shaving) | Th. crots. | 12,914 | ${ }_{*}{ }_{*}$ | 13,490 $460 \cdot 6$ |
| Foilet (except shaving) | $\mathrm{f}^{\prime} 000$ |  | * | 3,201 |
| $\dagger$ Shaving soap | Th. cwots. f'000 | * | * | $15 \cdot 0$ |
| Polishing and scouring :- |  |  |  | 224 |
| Manufacturers' | Th. cwts. | * | * | $170 \cdot 0$ |
| Household | Th. crots. | * | * | 299 443.5 |
| Household | ¢ ' $^{\prime} 000$ | * | * | 1,000 |
| $\dagger$ Soft | Th. cwts. | $249 \cdot 3$ | 77.0 | $326 \cdot 3$ |
| Other sorts (including powders and dry $\}$ | $\begin{aligned} & \text { th. } 000 \\ & \text { The cwts. } \end{aligned}$ | 390 | 121 68.2 | 511 |
| soap) . . . . . . . \{ | $\mathrm{E}^{\prime}$ '000 | 3,257 | 134 | 1,452•4 |
| Soap stock (made for sale) | Th. cwets. | 216.5 | - | $216 \cdot 5$ |
| Soap stock (made for sale) |  | 225 |  | 225 |
| Total-Soap and soap stock . . \{ | Th. cwts. $\AA^{\prime} 000$ | $\begin{array}{r} 8,901 \cdot 2 \\ 21,335 \end{array}$ | $\begin{aligned} & 517 \cdot 4 \\ & 1,006 \end{aligned}$ | $\begin{array}{r} 9,418 \cdot 6 \\ 22,341 \end{array}$ |
| Other washing and scouring materials | '000 | * | * | 607 |
| $\dagger$ Candles, night-lights and tapers | Th. cwots. | * | * | $970 \cdot 9$ |
| Perfumery, cosmetics and toilet requisites | £'000 |  |  | 2,216 |
| (other than perfumed spirits and soap) | t'000 | * | * | 2,152 |
| Perfumed spirits | Th. galls. f'000 | $88 \cdot 6$ 632 | - | $88 \cdot 6$ |
|  |  |  |  | 632 |
|  |  |  |  |  |
| $\dagger$ Crude | Th. cwots. | $213 \cdot 1$ | $8 \cdot 1$ | $221 \cdot 2$ |
|  | $£^{\prime} 000$ | 505 | 20 | 525 |
| Distilled | Th. cwts. f'000 | * | * | 205.9 |
|  | £'000 | * | * | 762 |
| Total-Glycerine | Th. cwts. f'000 | * | * | $427 \cdot 1$ 1,287 |
| Paraffin | Th. cwts. | 111.9 | - | 111.9 |
|  | £'000 | 225 | - | 225 |
| Waxes other than paraffin wax, including $\}$ blended waxes | Th. cwots. £'000 | 18.4 76 | - | 18.4 76 |
| $\dagger$ Lubricating oils and greases | Th. cwets. | $276 \cdot 6$ | - | $276 \cdot 6$ |
|  | £'000 | 431 | - | 431 |
| Essential oils $\{$ Quantity stated | Th. lb. | $77 \cdot 6$ | - | $77 \cdot 6$ |
| Essential oils $\left\{\begin{array}{l}\text { Quantity not stated }\end{array}\right.$ | ${ }^{\prime}{ }^{\prime} 00000$ | 59 | - | 59 |
| Other oils (including oil-seed cake and | Th. crets. | 23 $1,122 \cdot 4$ | $7 \cdot 5$ | 23 $1,129.9$ |
| meal) .. .. .. .. | ¢'000 | 1,515 | 11 | 1,1,526 |
| $\dagger$ Animal fats and greases. . . . . | ${ }^{\prime}{ }^{\prime} 000$ | +458 | 41 | +499 |
| Chemical products (including soda compounds, preservatives, disinfectants, insecticides and chemists' sundries) .. |  | 519 | 2 | 521 |
| Other goods made. . .. .. .. | ", | 203 | - | 203 |
| Total value of goods made (Gross output) | $f^{\prime} 000$ | 31,664 | 1,134 | 32,798 |

* In order to avoid the possible disclosure of information relating to individual firms, figures are given only for the United Kingdom as a whole.
$\dagger$ See footnote to Table I. The items affected by the inclusion of Northern Ireland are also marked, thus ( $\dagger$ ).


## III.-Employment.

A.-Numbers employed in week ended 18th October, 1924.

| Kind of staff. | Males. |  | Females. |  | Males and females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | All ages. | Under 18. | $\begin{gathered} \text { All } \\ \text { ages. } \end{gathered}$ | Under | All ages. |
| England and Wales :Operatives Administrative, etc.* | 1,517 330 | 11,849 4,948 | 3,265 313 | 9,879 2,404 | $\begin{array}{r} 4,782 \\ 643 \end{array}$ | $\begin{array}{r} 21,728 \\ 7,352 \end{array}$ |
| Total | 1,847 | 16,797 | 3,578 | 12,283 | 5,425 | 29,080 |
| Scotland:Operatives Administrative, etc.* | 48 14 | 477 199 | 117 | 274 56 | $\begin{array}{r} 165 \\ 19 \end{array}$ | $\begin{aligned} & 751 \\ & 255 \end{aligned}$ |
| Total | 62 | 676 | 122 | 330 | 184 | 1,006 |
| Great Britain :Operatives Administrative, etc.* | $\begin{array}{r}1,565 \\ 344 \\ \hline\end{array}$ | $\begin{array}{r} 12,326 \\ 5,147 \end{array}$ | 3,382 318 | 10,153 2,460 | 4,947 662 | $\begin{array}{r} 22,479 \\ 7,607 \end{array}$ |
| Total | 1,909 | 17,473 | 3,700 | 12,613 | 5,609 | 30,086 |
| Northern Iveland :Operatives Administrative, etc.* | 11 23 | 117 51 | 7 8 | 82 9 | $\begin{aligned} & 18 \\ & 31 \end{aligned}$ | 199 |
| Total | 34 | 168 | 15 | 91 | 49 | 259 |
| United Kingdom :Total | 1,943 | 17,641 | 3,715 | 12,704 | 5,658 | 30,345 |

* Administrative, technical and clerical staff.
B.-Operatives employed in one week in each month of 1924.

England \& Wales. (Annual average : Males, 11,807; Females, 9,634; Total, 21,441.)

| Week ended. |  | Males. | Females. | Total. | Week ended. | Males. | Females. | Total. |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 12th | $\ldots$ | 11,749 | 9,388 | 21,137 | July 19th | . | 11,839 | 9,644 | 21,483 |
| Feb. 16th | $\ldots$ | 11,715 | 9,271 | 20,986 | Aug. 16th | . | 11,797 | 9,758 | 21,555 |
| March 15th | $\ldots$ | 11,831 | 9,508 | 21,339 | Sept. 13th | . | 11,900 | 9,703 | 21,603 |
| April 12th | $\ldots$ | 11,783 | 9,546 | 21,329 | Oct. 18th | . | 11,849 | 9,879 | 21,728 |
| May 17th | $\ldots$ | 11,700 | 9,517 | 21,217 | Nov. 15th | . | 11,858 | 9,870 | 21,728 |
| June 21st | $\ldots$ | 11,764 | 9,657 | 21,421 | Dec. 13th | . | 11,904 | 9,862 | 21,766 |


| Jan. 12th | $\cdots$ | 482 | 264 | 746 | July 19th | 479 | 275 | 754 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb. 16th | $\cdots$ | 486 | 285 | 771 | Aug. 16th | 481 | 275 | 756 |
| March 15th | $\ldots$ | 486 | 282 | 768 | Sept. 13th | 472 | 277 | 749 |
| April 12th | . | 490 | 281 | 771 | Oct. 18th | 477 | 274 | 751 |
| May 17th | $\ldots$ | 483 | 281 | 764 | Nov. 15th | 480 | 270 | 750 |
| June 21st | . | 484 | 291 | 775 | Dec. 13th | 480 | 276 | 756 |


| Jan. 12th | 12,231 | 9,652 | 21,883 | July 19th | 12,318 | 9,919 | 22,23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb. 16th | 12,201 | 9,556 | 21,757 | Aug. 16th | 12,278 | 10,033 | 22,311 |
| March 15th | 12,317 | 9,790 | 22,107 | Sept. 13th | 12,372 | 9,980 | 22,352 |
| April 12th | 12,273 | 9,827 | 22,100 | Oct. 18th | 12,326 | 10,153 | 22,479 |
| May 17th | 12,183 | 9,798 | 21,981 | Nov. 15th | 12,338 | 10,140 | 22,478 |
| June 21st | 12,248 | 9,948 | 22,196 | Dec. 13th | 12,384 | 10,138 | 22,522 |

Northern Ireland. (Annual average: Males, 115 ; Females, 82 ; Total, 197.)

| Jan. 12th | $\ldots$ | 115 | 86 | 201 | July 19th | . | 117 | 82 | 199 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feb. 16th | $\ldots$ | 116 | 83 | 199 | Aug. 16th | . | 112 | 82 | 194 |
| March 15th | $\ldots$ | 114 | 84 | 198 | Sept. 13th | . | 113 | 81 | 194 |
| April 12th | $\ldots$ | 117 | 87 | 204 | Oct. 18th | . | 117 | 82 | 199 |
| May 17th | $\ldots$ | 116 | 81 | 197 | Nov. 15th | . | 110 | 80 | 190 |
| June 21st | $\ldots$ | 124 | 74 | 198 | Dec. 13th | .. | 109 | 79 | 188 |

## IV.-Mechanical Power.

Particulars of prime movers, electric generators and electric MOTORS.


[^0]
[^0]:    * See footnote to Table I.

