## THE LACE TRADE.

Note.-For information regarding the scope of the Census, instructions given to firms for making returns, and definitions of the terms used in this report, reference should be made to the Introductory Notes on pages $v$ to xviii.

## Introductory.

This trade comprises firms that were engaged wholly or mainly in the manufacture or in the bleaching, dyeing, dressing and finishing of lace and lace goods.

The following table shows the main results of the Censuses of 1930 and 1924 in respect of firms in Great Britain that employed an average of more than 10 persons :-

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

* Not available.

Deficiencies in 1930 aggregates.-The aggregate number of persons employed in 1930 by firms that stated that they employed not more than 10 persons on the average was 1,116 , the corresponding figure for 1924 being 1,163. The value of the gross output of the small firms in 192 was $£ 660,000$, and particulars of the items included in this figure are given below :-

Lace and lace goods finished (lace warehouses) ... 411
Cotton net ... ... ... ... ... ... 21
Cotton lace curtains and piece-goods made on curtain machines33
Cotton lace and articles thereof (made on machines other than net or curtain machines) ..... 171
Other goods ..... 24
Total value ..... 660

In addition, 30 firms to which schedules were sent at the 1930 Census, and 50 at that of 1924, furnished no information; these firms either had small businesses or had ceased productive operations before the end of the censal year.
Size of firms.-In the following table the main particulars recorded at the Census of 1930 are grouped according to the average numbers of persons shown in the returns :-

| Size of firm (average numbers employed). | No. of returns. | Gross output. | Net output. | Average number of persons employed (excluding outworkers). | Net output per person employed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11-24 ... | 78 | $\begin{array}{r} £^{\prime} 000 . \\ 788 \end{array}$ | $\begin{array}{r} £^{\prime} 000 . \\ 254 \end{array}$ | 1,348 | $\underset{188}{£}$ |
| 25-49 ... | 83 | 1,515 | 555 | 2,856 | 194 |
| 50-99 ... | 52 | 2,026 | 679 | 3,708 | 183 |
| 100-199 | 25 | 1,642 | 628 | 3,444 | 183 |
| 200-299 | 7 | 826 | 305 | 1,696 | 180 |
| 300 and over | 7 | 652 | 321 | 2,583 | 124 |
| Total ... | 252 | 7,449 | 2,742 | 15,635 | 175 |

Regional distribution.-Particulars of production, etc., in England and Wales and in Scotland in 1930 will be found in the tables on pages 220-224. More detailed figures cannot be given owing to the risk of disclosure of information relating to individual firms.

Northern Ireland.-No production of lace was recorded for Northern Ireland in either 1930 or 1924.

Sub-divisions of the trade.-As explained below, the Lace Trade may be divided broadly into two sections, viz.: Manufacturing firms and Lace warehouses. The following figures summarise the results shown by the returns for these two sections:-

| Particulars. | Unit. | Manufacturing firms. | Lace warehouses. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Value of goods made and work done (Gross output) | £'000 | 5,021 | 2,428 | 7,449 |
| Net output ... ... |  | 2,183 | 559 | 2,742 |
| Average number of persons employed (excluding outworkers) | No. | 12,871 | 2,764 | 15,635 |
| Net output per person employed |  |  |  | 15,635 175 |
| Number of returns ... ... | No. | 202 | 50 | 252 |

Principal products.-The following table shows in summary form the value of the output of lace and lace goods in 1930 and 1924 :-

| Kind of goods. | 1930. |  | 1924. |
| :---: | :---: | :---: | :---: |
|  | Returned on schedules for |  | Total. |
|  | The Lace Trade. | $\begin{aligned} & \text { All } \\ & \text { trades. } \end{aligned}$ |  |
| Cotton net, lace, etc. | $\begin{aligned} & £^{\prime} 000 \\ & 2,837 \end{aligned}$ | $\begin{aligned} & £^{\prime} 000 . \\ & 2,863 \end{aligned}$ | $\begin{aligned} & £^{\prime} 000 . \\ & 4,471 \end{aligned}$ |
| Silk and artificial silk net, lace, etc. ... | 1,193 | 1,280 | 335 |
| Muslin curtains ... $\ldots$... ... $\ldots$... | 105 | 105 | 430 |
| Embroidery and needlework on net and dissoluble fabrics | 126 | 126 | 70 |
| Total ... ... ... ... | 4,261 | 4,374 | 5,306 |
| Lace warehouses-output ... ... | 2,381 | 2,381 | 3,022 |
| Work done for the trade | 649 | 649 | 800 |
| Grand total ... | 7,291 | 7,404 | 9,128 |

The values shown for the various descriptions of cotton lace and lace goods, in the above and succeeding tables, represent for the most part materials in the " brown " or unfinished form, while the amounts shown under the heading "Lace warehouses" are the values of goods in the finished state. Lace warehouses are firms that purchase brown lace, which they subject to various processes such as carding, mending, scalloping, etc., for re-sale as finished lace. A few manufacturing firms maintained their own finishing departments and in these cases the value of the lace made was returned in the brown state and that of the finishing processes was shown separately under the heading of " Lace warehouses."
The gross output value of the Lace Trade, made up of the aggregate output of the two sections together, contains a considerable amount of duplication owing to the inclusion of the value of lace and lace goods both in the brown and in the finished form.

Separate particulars are given in the following paragraphs in respect of the manufacturing and the finishing sections of the trade.
Output of lace manufacturers. -The following table shows the values and, where available, the quantities of the chief products of the Lace Trade in 1930 and 1924.


* Embroidery and needlework on other fabrics is shown in the table of "Other products" on page 217 . The bulk of this class of embroidery and needlework is produced in the Tailoring, Dressmaking, Millinery, etc. Trades and is dealt with in the report on that trade (see page 384).
$\dagger$ Including artificial silk net.
$\ddagger$ Included with artificial silk lace and articles thereof.
§ Not recorded separately.
Lace warehouses.-The following figures show for 1930 and 1924 the value of finished lace goods recorded under the heading of "lace warehouses ', :-


At the 1924 Census, the output of finished goods recorded by lace warehouses employing not more than ten persons amounted to $£ 411,000$, or about 12 per cent. of the total value returned by all firms under this heading. The exclusion of the smaller firms has, therefore, an important effect on the aggregate figures for this section of the Lace Trade.

As the value of the brown lace finished by these firms is already included in the output of the manufacturing firms, the addition to be made on account of the output of lace warehouses is the value added to the materials as the result of the finishing operations. The addition indicated by the returns received for 1930 is about $£ 580,000$, but as explained above these returns only partially cover the ground. At the Census of 1924, the added value created by the finishing operations carried out by warehouse firms was estimated at about $£ 1,000,000$.

Work done for the trade or on commission. -Firms that made their returns on schedules for the Lace Trade stated that they received the sum of $£ 597,000$ for bleaching, dyeing, dressing and other work done in 1930 for other firms. The total amount returned for similar work on schedules for other trades was $£ 52,000$, making a total of $£ 649,000$; the corresponding figure for 1924 was $£ 800,000$. Details of this work are given below :-

| Kind of work. | 1930. | 1924. |
| :---: | :---: | :---: |
|  | Amount received. | Amount received. |
| Embroidering on customers' materials | $\begin{array}{r} £^{\prime} 000 . \\ 20 \end{array}$ | $\begin{array}{r} £^{\prime} 000 . \\ 36 \end{array}$ |
| Bleaching, dyeing and dressing of lace ... ... | 151 |  |
| Bleaching, dyeing and dressing of net ... ... | 80 |  |
| Bleaching, dyeing and finishing lace curtains, curtain nets and all goods made on curtain machines | 387 | 754 |
| Other work ... ... ... ... ... .. | 11 | 10 |
| Total | 649 | 800 |

The difference between the total sum shown as received for work done for the trade " and that which was paid for "work given out ". represents work done for merchant firms or for manufacturing firms that made no returns to the Census or were outside the Lace Trade. These differences were $£ 449,000$ in 1930 and $£ 279,000$ in 1924.

Prices.-The only class of goods for which quantitative particulars were required for the year 1924 was cotton net, and only 62 per cent. of the total value of the output in that year was recorded in terms of quantity, the average selling value being $£ 20.8$ per thousand square yards. The average selling value of cotton net made in 1930 was $£ 20.3$ per thousand square yards, a decline of 2.4 per cent. from the 1924 figure. It should be borne in mind, however, that these figures represent values of net in the brown unfinished state and no particulars of finishing costs are available. The average value of cotton net exported in 1924 was $£ 28.7$ per thousand square yards, and in $1930 £ 26.7$ per thousand square yards, a decline of 7.0 per cent.

Volume of production.-For the reasons already given, the Census returns themselves furnished no basis for calculating the volume of production of finished lace, net and lace goods either in 1930 or 1924. As regards cotton net, lace and lace goods, it has been assumed that the change in average values of these goods between 1924 and 1930 was similar to that of the exports of cotton net. No similar factor is available for estimating the change in volume of production of silk and artificial silk goods, and in this case the estimate has been based on the average values of silk and artificial silk yarn and on the average wage per operative in the two years.

| Kind of goods. | Total production. |  |  | 1930 as a percentage of 1924. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1930. | 1924. |  |  |
|  | $\stackrel{\text { As }}{\text { returned. }}$ | $\begin{gathered} \mathrm{As} \\ \text { returned. } \end{gathered}$ | At 1930 average values. |  |
| Cotton net, lace and lace goods. | ¢ 2, 0600 2, | $\begin{aligned} & £^{\prime} 000 . \\ & 4,471 \end{aligned}$ | $\begin{aligned} & £^{\prime} 000 . \\ & 4,162 \end{aligned}$ | Per cent. 69 |
| Silk and artificial silk lace, net, etc. | 1,218 | 335 | 270 | 450 |
| Muslin curtains ... ... ... | 105 | 430 | 400 | 26 |
| Artificial silk curtains ... ...   <br> Embroidery ... ...  | $\begin{array}{r} 62 \\ 126 \end{array}$ | - 70 | $\bigcirc{ }_{6}$ | $\stackrel{1}{191}$ |
| Total | 4,374 | 5,306 | 4,898 | 89 |

Having regard to the slender basis on which the calculation rests the decline of 11 per cent. indicated by the above figures for 1930 should not be regarded as necessarily approximating closely to the facts. It may be pointed out, however, that the recorded figures of employment in the Lace Trade, viz., 17,854 in 1924 and 15,635 in 1930, represent a decline of 12 per cent. in the later year.

Production, exports and net imports.-Except for cotton net, the products of the Lace Trade were not measured completely in terms of quantities, and the quantitative records obtained for silk and artificial silk lace and net were not sufficient to permit of comparisons with the figures of external trade. As regards cotton net, $22,312,000$ square yards were exported in 1930 , or nearly 73 per cent. of the total quantity returned as manufactured in that year.

For the main products, viz., cotton lace and lace goods, the fact that the bulk of the output was valued in the "brown" state, and that comprehensive information as to the value added by the finishing processes is not available, precludes comparisons on the basis of value with the figures of exports and imports, which consist of goods in the finished state. Taking together the exports of " cotton lace curtains " and " other sorts " of cotton lace, the value recorded for 1924 was $£ 1,582,000$ and, for 1930 , $£ 541,000$, while the aggregate value of the output recorded under these headings was $£ 3,593,000$ for 1924 and $£ 2,241,000$ for 1930. The figures do not include exports by parcel post, but the figures indicate that exports formed a considerably higher proportion of production in 1924 than in 1930 and that the decline in the export trade was the predominant cause of the lower level of production of these goods in the later year.

Exports of lace and lace goods of silk (including mixtures) amounted to $£ 140,000$ in 1930 and to $£ 77,000$ in 1924 ; exports of lace of artificial silk (including mixtures) were $£ 445,000$ in 1930, but were not recorded separately for 1924 . Exports by parcel post are not included in these figures.

Under the Finance Act, 1925, a Customs Duty of $33 \frac{1}{3}$ per cent. ad valorem was imposed for a period of five years from 1st July, 1925, on imports of lace and embroidery, expiring on 30th June, 1930. Retained imports of lace and lace goods in 1930 and 1924 are shown below:-

|  |  |  |  |  | 1930. | 1924. |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | :---: |
| shown below :- |  |  |  | $£^{\prime} 000$ | $£^{\prime} 000$ |  |

The figures for 1924 are exclusive of imports by parcel post, the value of which is not known, and those for 1930 are exclusive of imports of cotton lace and lace goods by parcel post during the second half of the year.

Other products.- In addition to the output shown in the table of principal products on pages 212-3, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Lace Trade. These goods are dealt with in the reports on those trades in which the principal output was recorded.

| Kind of goods. | 1930. | 1924. |
| :---: | :---: | :---: |
|  | Value. | Value. |
|  | £'000. | £'000. |
| net and dissoluble fabrics | 93 | 32 |
| Women's garments (blouses, underwear, etc.) ... | 78 | 72 |
| Manufactures of artificial silk, other than clothing... | 22 | 17 |
| Other goods ... ... ... ... ... ... | 17 | 53 |
| Total ... ... | 210 | 174 |

## Employment and Wages.

Employment.-The following table shows the average numbers of persons employed in 1930 and 1924 :-


Wages.-The available information as to the amount of wages paid in 1930 and 1924 is given on pages 18 and 19.

## Power.

The following table shows the capacity of prime movers, electric generators and electric motors ordinarily in use and in reserve or idle in 1930 and 1924 :-

| Power <br> equipment. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Consumption of fuel.

The following table shows the quantities of coal, coke and electricity recorded as used in 1930 :-


* These figures were recorded by firms representing $93 \cdot 4$ per cent. of the net output of the whole trade.


## I. Summary of results.

| Particulars. | Unit. | England and <br> Wales. | Scotland. | Great Britain. |
| :---: | :---: | :---: | :---: | :---: |
| Value of goods made and work done (Gross output) | £'000. | 5,749 | 1,700 | 7,449 |
| Cost of materials used ... ... | " | 3,500 | 1,007 | 4,507 |
| Paid for work given out to other firms | ", | 165 | 35 | 200 |
| Net output ... ... ... | , | 2,084 | 658 | 2,742 |
| Average number of persons employed (excluding outworkers) | No. | 12,868 | 2,767 | 15,635 |
| Net output per person employed (excluding outworkers) | £ | 162 | 238 | 175 |
| Mechanical power available :Prime movers | H.P. | 6,986 | 1,505 | 8,491 |
| Electric motors driven by purchased electricity | " | 3,440 | 2,290 | 5,730 |

II. Production.

| Goods sold or added to stock and work done. | Unit. | England and Wales. | Scotland. | Great Britain. |
| :---: | :---: | :---: | :---: | :---: |
| Cotton net and lace and articles thereof (except apparel and embroidery) :- |  |  |  |  |
| Cotton net ... ... ... \{ | Th. sq. $y$ ds. £'000. | $\begin{array}{r} 25,598 \\ 493 \end{array}$ | 4,110 104 | 29,708 597 |
| Cotton lace curtains and piece-goods made on curtain machines | £'000. | 662 | 1,168 | 1,830 |
| Other cotton lace goods made on curtain machines (including laces, antimacassars, bedspreads, etc.) | " | 21 | 14 | 35 |
| Cotton lace and articles thereof (made on machines other than net or curtain machines) |  | 375 | - | 375 |
| Silk lace and articles thereof (except embroidery) ... ... ... | Th. lbs. £'000. | 205 123 | - | 205 123 |
| Silk net :- | Th. sq. yds. | 823 | - | 823 |
| Quantity stated ... | £'000. | 19 | - | 19 |
| Quantity not stated | £'000. | 63 | - | 63 |
| Artificial silk lace and articles thereof (except embroidery) : Wholly of artificial silk :- |  |  |  |  |
| Quantity stated ... | Th. lbs. | 65 | - | 65 |
| Quantity not stated | £'000. | 38 | - | 38 10 |
| Quantity not stated Of artificial silk mixed with other materials :- | £'000. | 10 | - | 10 |
|  | Th. lbs. | * | * | 851 |
| Quantity stated ... ... | £'000. | * | * | 344 |
| Quantity not stated ... | £'000. | * | * | 115 |

## III. Employment

A. Numbers employed in week ended 18 'ith October, 1930 , (EXCLUDING OUTWORKERS).

| Persons employed (excluding outworkers). | Males. |  | Females. |  | Males and females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 18. | $\begin{aligned} & \text { All } \\ & \text { ages. } \end{aligned}$ | Under 18. | $\begin{aligned} & \text { All } \\ & \text { ages. } \end{aligned}$ | Under 18. | $\begin{aligned} & \text { All } \\ & \text { ages. } \end{aligned}$ |
| England and Wales :Operatives ... Administrative, etc.* | $\begin{array}{r} 369 \\ 66 \end{array}$ | $\begin{aligned} & 3,745 \\ & 1,102 \end{aligned}$ | $\begin{array}{r} 1,525 \\ 77 \end{array}$ | 7,257 555 | 1,894 143 | $\begin{array}{r} 11,002 \\ 1,657 \end{array}$ |
| Total | 435 | 4,847 | 1,602 | 7,812 | 2,037 | 12,659 |
| Scotland:- <br> Operatives <br> Administrative, etc.* | 88 6 | $\begin{array}{r} 1,148 \\ 149 \end{array}$ | $\begin{array}{r} 224 \\ 15 \end{array}$ | $\begin{array}{r} 1,301 \\ 117 \end{array}$ | $\begin{array}{r} 312 \\ 21 \end{array}$ | 2,449 266 |
| Total ... | 94 | 1,297 | 239 | 1,418 | 333 | 2,715 |
| Great Britain:- <br> Operatives Administrative, etc.* | $\begin{array}{r} 457 \\ 72 \end{array}$ | $\begin{aligned} & 4,893 \\ & 1,251 \end{aligned}$ | $\begin{array}{r} 1,749 \\ 92 \end{array}$ | $\begin{array}{r} 8,558 \\ 672 \end{array}$ | $\begin{array}{r} 2,206 \\ 164 \end{array}$ | $\begin{array}{r\|r} 13,451 \\ 1,923 \end{array}$ |
| Total... | 529 | 6,144 | 1,841 | 9,230 | 2,370 | 15,374 |

* Administrative, technical and clerical staff.
B. Operatives •(EXCLUDING outworkers) Employed in one week in Each month of 1930 .

| Week ended | Males and females. |  |  | Week ended | Males and females. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | England and Wales. | Scotland. | Great Britain. |  | England and Wales. | Scotland. | Great Britain. |
| Jan. 18th | 11,178 | 2,732 | 13,910 | July 19th | 11,205 | 2,372 | 13,577 |
| Feb. 15th | 11,365 | 2,730 | 14,095 | Aug, 16th | 10,891 | 2,334 | 13,225 |
| Mar. 15th | 11,465 | 2,705 | 14,170 | Sept. 13th | 10,949 | 2,361 | 13,310 |
| April 12th | 11,659 | 2,601 | 14,260 | Oct. 18th | 11,002 | 2,449 | 13,451 |
| May 17th | 11,403 | 2,620 | 14,023 | Nov. 15th | 11,039 | 2,371 | 13,410 |
| June 21st | 11,405 | 2,371 | 13,776 | Dec. 13th | 10,978 | 2,366 | 13,344 |
|  | AvERAGE FOR the 12 months ... ... |  |  |  | 11,211 | 2,501 | 13,712 |

C. Numbers of outworkers at two specified periods in 1930.

| Country. | January. |  |  | July. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. |
| England and Wales | 3 | 895 | 898 | 4 | 936 | 940 |
| Scotland ... | - | 1 | 1 | - | 1 | 1 |
| Great Britain | 3 | 896 | 899 | 4 | 937 | 941 |

## Power.

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS.

| Power equipment. | England and Wales. |  | Scotland. |  | Great Britain. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{\|c} \text { Ordinarily } \\ \text { in } \\ \text { use. } \end{array}$ | In reserve or idle. | $\begin{gathered} \text { Ordinarily } \\ \text { in } \\ \text { use. } \end{gathered}$ | In reserve or idle. | Ordinarily in use. | In reserve or idle. |
| Prime movers. | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| Reciprocating steam engines ... ... | 4,309 | 1,087 | 1,036 | 105 | 5,345 | 1,192 |
| Steam turbines ... | 20 | , | 16 | - | 36 | - |
| Internal combustion engines :Gas | 939 | 363 | 140 | - | 1,079 | 363 |
| Petrol, kerosene or other light oils ... | 5 150 | - | $\overline{208}$ | - | $\begin{array}{r}5 \\ 358 \\ \hline\end{array}$ | - |
| Heavy oils Water engines | 150 41 | $\overline{12}$ | 208 | - | 358 41 | $\overline{12}$ |
| Other... ... ... | 60 | - | - | - | 60 | - |
| Total | 5,524 | 1,462 | 1,400 | 105 | 6,924 | 1,567 |
| Total of prime movers installed | 6,986 |  | 1,505 |  | 8,491 |  |
| Electric generators Driven by | Kw. | Kw. | Kw. | Kw. | Kw. | Kw. |
| Reciprocating steam engines ... ... | 2,065 | 548 | 219 | 25 | 2,284 | 573 . |
| Steam turbines ... | - | - | 12 | - | 12 | -. |
| Internal combustion engines :- |  |  |  |  |  |  |
| Gas ... ... | 182 | 11 |  | - | 229 | 11 |
| Heavy oils ... | 117 | 72 | 136 | - | 253 | 72 |
| Other prime movers | - | 9 |  | - | - | 9 |
| Total | 2,364 | 640 | 414 | 25 | 2,778 | 665 |
| Total of electric GENERATORS INSTALLED ... $\qquad$ | 3,004 |  | 439 |  | 3,443 |  |
| Eleotric motors. Driven by | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| Electricity generated in same works ... | 1,705 | $76$ | $414$ |  | $2,119$ | 76 |
| Purchased electricity | 3,089 | 351 | $\begin{aligned} & \mathbf{4 1 4} \\ & 1,992 \end{aligned}$ | 298 | $5,081$ | 649 |
| Total ... | 4,794 | 427 | 2,406 | 298 | 7,200 | 725 |
| Total of electric MOTORS INSTALLED | 5,221 |  | 2,704 |  | 7,925 |  |

Consumption of fuel.


[^0]
[^0]:    * In addition, 1,382 tons of coal (all in England and Wales) were recorded as used for power and for other purposes, not separately distinguished.

