THE FLOCK AND RAG TRADES.

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## THE FLOCK AND RAG TRADES.

## Introductory.*

The Tables on pages 269 to 272 are based on Returns received from firms in Great Britain and Northern Ireland whose business in 1924 consisted wholly or mainly in the cleaning, sorting, grading or otherwise preparing for sale of textile wastes and rags, and of flocks for bedding and upholstery purposes. The number of such separate Returns was 432. About 120 firms to which schedules were sent did not furnish Returns, but these firms for the most part had very small establishments and they included a number which ceased operations in the course of the censal year. On the basis of the information available it is estimated that they did not employ more than 400 persons, and that their net output probably lay between $£ 50,000$ and $£ 85,000$.
The following statement shows the main results of the Censuses of 1924, 1912 and 1907, comparisons between the results for the three years being subject to the qualifications mentioned in the next paragraph :-

| ulars. | Unit. | 1924. | 1912. | 1907. |
| :---: | :---: | :---: | :---: | :---: |
| Value of products (Gross output) | $¢^{\prime} 000$ |  |  |  |
| Cost of materials used . Net output |  | 6,025 | 1,589 | 1,445 |
| Net output .. |  | 1,621 | 397 | 331 |
| Average number of persons employed.. | No. | 7,820 | 5,612 | 6,385 |
| Net output per person employed | t | 207 | 71 | 52 |
| Mechanical power available :Prime movers... | H.P. | 8.609 |  |  |
| Electric motors driven by purchased electricity |  | 8,609 | 3,784 749 |  |

Qualifications affecting comparisons.-In considering the above table and the other tables in this Report which show figures for the 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 the whole of Great Britain and Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. The inclusion in 1907 and 1912 of production in the area now constituting the Irish Free State does not, however, seriously affect the comparability of the results, as the quantities of rags, waste, etc., handled in that area in those years was not great.
(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 average number of persons employed in the establishments thus excluded was 2,423 , or over 43 per cent. of the number employed by the remaining firms, as shown in the above table.
(4) The great increase in the gross value of the output in 1924 over that shown for 1912 and 1907 is mainly due to a change in the scope of the Census schedules. About 37 per cent. by value of the output in 1924 consisted of cotton and wool waste, cleaned or otherwise treated by firms that purchased it for re-sale after treatment. In 1907 and 1912, however, the cleaning and sorting of cotton and wool waste was not provided for in the schedules for the Flock and Rag Trades, but a number of firms engaged in work of this kind furnished Returns on schedules for the Cotton and the Woollen and Worsted Trades respectively. Further, it is believed that a more comprehensive record of the sorting of wool waste was obtained in 1924 than in 1912 or 1907.
Value of products and cost of materials.-The figures in the above table, representing the value of products, are the aggregates of the figures recorded by the firms making Returns, and owing to the duplication involved (see the Notes on pages xi-xiii), they overstate the value of the output of the Flock and Rag Trades considered as a whole. When this duplication (the amount of which is estimated on page 266) is eliminated, the value of the goods produced in 1924 by the Flock and Rag Trades as a whole is found to be $£ 7,534,000$. Similarly, when the figure representing the cost of materials used in 1924 is adjusted by excluding purchases of the products of other firms in the Flock and Rag Trades, the cost of the materials purchased from outside those trades and worked up into their products is found to be $£ 5,913,000$.

## Production.

Amount of output.-In so far as firms simply bought rags or other waste materials and resold them in the same condition in which they were bought, they were not required to make Returns in respect of that part of their business. Only rags cleaned, sorted, carbonised or otherwise prepared for use in paper-making or in the textile trades, cotton or wool wastes sorted or cleaned, and other waste products sorted or prepared in establishments dealing with rags or textile wastes were required to be included as "output." From the nature of the case many firms in the Flock and Rag Trades had much difficulty in distinguishing between the materials which they treated and those which they resold as bought, and in giving accurately the quantities of the former. The following statement shows, for the three censal years, the value and (where recorded) the quantity of the different classes of output, including not only the rags, waste, etc., cleaned or otherwise treated by firms who made their Returns on schedules for the Flock and Rag Trades, but also those dealt with by firms whose Returns were furnished on schedules for other trades. Further details of the output of the Flock and Rag Trades in 1924 are given in Table II on page 269.

| Kind of goods. | 1924. |  | 1912. |  | 1907. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Quantity. | Value. | Value. |
| Rags, sorted, cleaned, etc. :- Linen and cotton rags for | Th. tons. | $Ł^{\prime} 000$. | Th. tons. | $£^{\prime} 000$. | $£^{\prime} 000$. |
| paper-making .. .. Wool rags | $52 \cdot 0$ |  | $73 \cdot 7$ |  |  |
| Wool rags Cotton waste, cleaned, , | $60 \cdot 3$ | 2,763 | $54 \cdot 5$ | 1,027 | $\begin{aligned} & 536 \\ & 863 \end{aligned}$ |
| etc. ... ... | $45 \cdot 4$ | 1,877 | $12 \cdot 6$ |  |  |
| Wool waste, cleaned, sorted, etc. |  | 1,877 | $12 \cdot 6$ | 286 | \} 85 |
| Wool flocks .. | $24 \cdot 4$ | 1,017 | 11.7 | 38 |  |
| Rags and wastes not distin- | $24 \cdot 4$ | 48 | $13 \cdot 9$ | 144 | 130 |
| guished Other waste products (mainly | . | 206 |  | 7 | 129 |
| for paper-making) .. .. |  |  |  |  |  |
| Other products |  | 134 |  | 82 | 33 |
| Total .. .. | . | 7,714 |  | 2,156 | 1.776 |

In 1907 the quantities of materials dealt with were not required to be stated. Included in the output shown above for 1924 are wool rags to the value of $£ 28,000$ and wool flocks to the value of $£ 40,000$ returned on schedules for other trades.
The great bulk of cotton and wool waste is not handled by firms in the Flock and Rag Trades but by firms in the cotton and wool textile industries*. Firms in the wool textile industry also handle large quantities of rags which do not pass through the hands of firms in the Flock and Rag Trades, as well as rags purchased from those trades.
Examination of the individual Returns made on schedules for the Flock and Rag Trades leads to the conclusion that the total output value of the trades in 1924 includes duplication to the value of $£^{1} 112,000$ in respect of rags sold by one firm to another and returned by both as output. In 1907 it was estimated that the value of rags so duplicated was $£ 129,000$.
Cost of materials used. -The cost of the materials used by firms making their Returns on schedules for the Flock and Rag Trades was returned as $£ 6,025,000$ in 1924, a sum which, by the exclusion of the value of rags purchased from other firms in the trade, as referred to above, is reduced to $£ 5,913,000$; the corresponding net figure for 1907 was $£ 1,316,000$.
Net output.-The net output in 1924 of the firms making their Returns on schedules for the Flock and Rag Trades (whose gross
output was valued at $f 7646000$ ) was output was valued at $£ 7,646,000$ ) was $£ 1,621,000$, that sum representing, without duplication, the total amount by which the value (at factory) of the aggregate output exceeded the cost (at factory) of the materials used.
The net output per head of persons employed in the censal year 1924 was $£ 207$, which compares with $£ 71$ in 1912 and $£ 52$ in 1907 . Exports and imports. - Exports and net imports of cotton waste and wool waste are dealt with in the Reports on the Cotton Trades (pages 61-2) and the Woollen and Worsted Trades (page 79). In the case of wool flocks the quantities both of exports and of net imports
were inconsiderable in relation to the quantities produced in each of the three censal years. In the case of the other items shown in the foregoing table no useful comparison is possible between production on the one hand and exports or imports on the other owing in some instances to differences of classification and in others (e.g., woollen rags) to the fact that, for the reasons explained above, the output shown in the Census of Production Returns does not represent the total amount produced or available.

## 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 Flock and Rag Trades who 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, 3,787 operatives out of a total of 7,024 operatives for the trades as a whole, and their net output totalled $€ 948,000$ out of an aggregate of $£ 1,621,000$ for the trades as a whole. The total wage-bill of these firms, as returned to the Ministry of Labour, was $£ 349,000$, representing about 37 per cent. of their aggregate net output.

## Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 270-1. 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 proportion shown by the data relating to the week ended 18th October:-


The numbers of operatives recorded month by month in 1924 ranged from 261 above the average, in December, to 209 below the average, in January (see Table IIIB, page 271).

## Mechanical Power.

The detailed information relating to mechanical power in 1924 is summarised in Table IV, page 272. 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.


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

| Electric motors. | 1924. |  |  | $\frac{1912 .}{\text { Total. }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Ordinarily in use. | In reserve <br> or idle. | Total. |  |
| Driven by- | H.P. | H.P. | H.P. | H.P. |
| Electricity generated in own works . . Purchased electricity .. | $\begin{array}{r} 551 \\ 6,358 \end{array}$ | 40 450 | 591 6808 | 20 |

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 61,000 .

## I.-Summary of results.

| Particulars. | Unit. | $\begin{gathered} \text { England } \\ \text { and } \\ \text { Wales. } \end{gathered}$ | Scotland. | Great Britain. | Northern Ireland. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Value of products (Gross output) | $£ 000$ | 7,035 | 480 | 7,515 |  |
| Cost of materials used.. .. | 2 | 5,560 | 366 | 5,926 | 99 |
| Net output .. | ," | 1,475 | 114 | 1,589 | 32 |
| Average number of persons employed | No. | 6,951 | 703 | 7,654 | 166 193 |
| Net output per person employed | Ł | 212 |  |  |  |
| Mechanical power available :Prime movers | H.P. | 8,177 | 310 | 8,487 | 122 |
| Electric motors driven by purchased electricity .. | , | 6,320 | 471 | 6,791 | 17 |

## II.-Production.

| Products. | Unit. | England and Wales. | Scotland. | Great Britain. | Northern Ireland. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rags, sorted, cleaned, etc. :- |  |  |  | $51 \cdot 3$ | 0.7 |
| Linen and cotton rags for $\{$ | Th.tons. <br> f'000 | 28.5 646 | 302 | 948 | 26 |
| paper-making. $\}$ | Th.tons. | $57 \cdot 6$ | $1 \cdot 6$ | 59.2 | $0 \cdot 4$ |
| Woollen rags, not pulled $\{$ | ${ }^{\text {¢ }}$ '000 | 2,657 | 69 | 2,726 | 9 |
| Cotton waste, cleaned, $\}$ | Th.tons. |  |  | $45 \cdot 4$ 1,877 |  |
| sorted, etc. | ${ }_{\text {f }}$ |  |  | $1,8.1$ |  |
| Wool waste, cleaned, sorted, etc. | Th. tons. $£^{\prime} 000$ | [3,055* | 45* | 1,017 |  |
| Rags and wastes, not distinguished. . |  |  |  | 206 21.9 |  |
| Wool flocks for bedding and upholstery. | Th. tons. $£^{\prime} 000$ | $\begin{array}{r} 20 \cdot 6 \\ 469 \end{array}$ | $1 \cdot 3$ 31 | 21.9 500 | 0.5 8 |
| Other waste products, mainly for paper-making. . <br> Other products | $\begin{aligned} & f^{\prime}, 000 \\ & E^{\prime} 000 \end{aligned}$ | $\begin{array}{r} 74 \\ 134 \end{array}$ | 33 | $\begin{aligned} & 107 \\ & 134 \end{aligned}$ | $88 \dagger$ |
| Total value of products (GROSS OUTPUT) $\qquad$ | ¢'000 | 7,035 | 480 | 7,515 | 131 |

* In order to avoid the possible disclosure of information relating to individua firms, detailed particulars can be given for Great Britain only.
$\dagger$ Includes a small amount of cotton and wool waste.


## III.-Employment.

A.-NUMBERS EMPLOYED IN WEEK ended 18TH OCTOBER, 1924.

| Kind of staff, | Males. |  | Females. |  | Males and females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 18. | $\begin{aligned} & \text { All } \\ & \text { ages. } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 18 . \end{aligned}$ | All ages. | Under Under 18. | $\begin{aligned} & \text { all } \\ & \text { ages. } \end{aligned}$ |
| England and Wales. Operatives Administrative, etc.* | 169 30 | 2,311 695 | 457 12 | 3,974 145 | 626 42 | $\begin{array}{r} 6,285 \\ 840 \end{array}$ |
| Total | 199 | 3,006 | 469 | 4,119 | 668 | 7,125 |
| Scotland. Operatives Administrative, etc.* | 7 4 | 132 60 | 48 8 | 468 -33 | $\begin{aligned} & 55 \\ & 12 \end{aligned}$ | 600 93 |
| Total | 11 | 192 | 56 | 501 | 67 | 693 |
| Great Britain. Operatives Administrative, etc.* | $\begin{array}{r} 176 \\ 34 \end{array}$ | $\begin{array}{r} 2,443 \\ 755 \end{array}$ | $\begin{array}{r} 505 \\ 20 \end{array}$ | $\begin{array}{r} 4,442 \\ 178 \end{array}$ | $\begin{array}{r} 681 \\ 54 \end{array}$ | $\begin{array}{r} 6,885 \\ 933 \end{array}$ |
| Total | 210 | 3,198 | 525 | 4,620 | 735 | 7,818 |
| Northern Ireland. <br> Operatives <br> Administrative, etc.* | 2 2 | $\begin{aligned} & 37 \\ & 24 \end{aligned}$ | 5 | 102 | 7 2 | 139 26 |
| Total | 4 | 61 | 5 | 104 | 9 | 165 |
| United Kingdom. Total | 214 | 3,259 | 530 | 4,724 | 744 | 7,983 |

B.-Operatives employed in one week in each month of 1924.

England and Wales. (Annual average : Males, 2,242; Females, 3,869; Total, 6,111.)

| Week ended. | Males. | Females. | Total. | Week ended. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan. 12th | 2,158 | 3,770 | 5,928 | July 19th | 2,236 | 3,827 | 6,063 |
| Feb. 16th | 2,195 | 3,804 | 5,999 | Aug. 16th | 2,207 | 3,858 |  |
| March 15th | 2,220 | 3,762 | 5,982 | Sept. 13th | 2,240 | 3,863 | 6,103 |
| April 12th | 2,226 | 3,804 | 6,030 | Oct. 18th | 2,311 | 3,974 | 6,285 |
| May 17th | 2,267 | 3,905 | 6,172 | Nov. 15th | 2,319 | 3,960 | 6,279 6,352 |
| June 21st | 2,214 | 3,865 | 6,079 | Dec. 13th | 2,317 | 4,035 | 6,352 |

Scotland. (Annual average : Males, 128; Females, 482 ; Total, 610.)

| Jan. 12th |  | 123 | 469 | 592 | July 19th | 127 | 465 474 | 592 603 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb. 16th | - | 126 | 482 | 608 | Aug. 16th | 129 | 474 | 603 |
| March 15th | $\cdots$ | 124 | 488 | 612 | Sept. 13th | 129 | 486 | 600 |
| April 12th | . | 125 | 496 | 621 | Oct. 18th | 131 | 498 | 621 |
| May 17th | $\cdots$ | 128 | 488 | 616 | Nov. 15th | 131 131 | 495 | 626 |
| June 21st |  | 128 | 480 | 608 | Dec. 13th |  |  |  |

Great Britain. (Annual average: Males, 2,370; Females, 4,351; Total, 6,721.)

| Jan. 12th | . | 2,281 | 4,239 | 6,520 | July 19th | .. | 2,363 | 4,292 | 6,655 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feb. 16th | $\ldots$ | 2,321 | 4,286 | 6,607 | Aug. 16th | . | 2,336 | 4,332 | 6,668 |
| March 15th | . | 2,344 | 4,250 | 6,594 | Sept. 13th | . | 2,369 | 4,349 | 6,718 |
| April 12th | . | 2,351 | 4,300 | 6,651 | Oct. 18th | . | 2,443 | 4,442 | 6,885 |
| May 17th | .. | 2,395 | 4,393 | 6,788 | Nov. 15th | . | 2,450 | 4,450 | 6,900 |
| June 21st | .. | 2,342 | 4,345 | 6,687 | Dec. 13th | .. | 2,448 | 4,530 | 6,978 |

Northern Ireland. (Annual average: Males, 39; Females, 101; Total, 140).

| Jan. 12th | . | 40 | 92 | 132 | July 19th |  | 38 | 99 | 137 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb. 16th | $\cdots$ | 41 | 98 | 139 | Aug. 16th |  | 38 <br> 38 | 100 | 138 |
| March 15th | . | 40 | 108 | 148 | Sept. 13th |  | 38 37 | 102 | 139 |
| April 12th | . | 40 | 107 | 147 | Oct. 18th |  | 38 | 107 | 145 |
| May 17th | $\ldots$ | 38 38 | 100 | 138 135 | Nov. 15th Dec. 13th |  | 40 | 104 | 144 |
| June 21st | . | 38 | 97 | 135 | Dec. 13th |  |  |  |  |

## IV.-Mechanical Power.

Particulars of prime movers, electric generators and ELECTRIC MOTORS.

| Power equipment. | England and Wales. |  | Scotland. | Great Britain. |  | Northern Ireland. <br> Ordinarily in use. $\dagger$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ordinarily in use. | In reserve or idle. | Ordinarily in use. | Ordinarily in use. | In reserve or idle. |  |
| Prime movers :Reciprocating steam engines | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
|  |  |  |  |  |  |  |
| Petrol and light oil engines <br> Heavy oil engines <br> Water power | 5,063 1,653 | 565 103 | 260 20 | 5,323 1,673 | $\begin{aligned} & 565 \\ & 103 \end{aligned}$ | 17 |
|  | 39 |  |  |  |  |  |
|  | 39 124 | - | - | 39 124 | - | 5 45 |
|  | 594 | 36 | 30 | 624 | 36 | 55 |
| Total | 7,473 | 704 | 310 | 7,783 | 704 | 122 |
| Electric generators : Driven by- | Kw. | Kw. | Kw. | Kw. | Kw. | Kw. |
|  |  |  |  |  |  |  |
| Reciprocating steam engines .. | 501 | 20 | - |  |  |  |
| Gas engines Water power | 142 | 40 | - | 142 | 20 40 | - |
|  | 5 |  | - | 5 |  |  |
| Total | 648 | 60 | - | 648 | 60 | - |
| Electric motors :- <br> Driven byElectricity generated in own works .. Purchased electricity | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
|  | 551 |  |  |  |  |  |
|  | 5,872 | 448 | $\overline{469}$ | 551 6,341 | $\stackrel{40}{450}$ | 7 |

[^0]
[^0]:    * Includes electric motors of 2 H.P. capacity returned for Scotland as being in reserve or idle.
    $\dagger$ No power equipment in reserve or idle was returned for Northern Ireland.

