## THE FLOCK AND RAG 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 of flocks for bedding and upholstery purposes, and the sorting, cleaning, etc., of textile wastes and rags. The following table shows the main results of the Censuses of 1.930 and 1924 in respect of firms in Great Britain that employed an average of more than 10 persons :-

| Particulars. | Unit. | 1930. | 1924. |
| :---: | :---: | :---: | :---: |
| Value of products (Gross output) | £'000 | 3,932 | 6,345 |
| Cost of materials used | „, | 3,079 | 4,988 |
| Paid for work given out to other firms | ", | 6 |  |
| Net output ... |  | 847 | 1,357 |
| Average number of persons employed | No. | 5,663 | 6,539 |
| Net output per person employedMechanical power available :- ... |  |  |  |
|  |  |  |  |
| Prime movers ... | H.P. | 8,819 | 7,248 |
| Electric motors driven by purchased electricity... |  | 7,912 | 5,470 |
| Number of returns ... | No. | 157 | 206 |
| Number of establishments | ," | 173 | * |

* 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 1,690 , the corresponding figure for 1924 being 1,115 . Taking together the number of persons employed by the larger and the smaller firms, the latter recorded about 23 per cent. of the total for 1930. The value of the gross output of the small firms in 1924 was $£ 1,170,000$, and particulars of the goods included in this figure are given below :-

| Kind of goods. | Th. tons. | $£^{\prime} 000$. |
| :---: | :---: | :---: |
| Rags, sorted, cleaned, etc. : Woollen rags not pulled | $14 \cdot 1$ | 608 |
| Linen and cotton rags for paper-making ... | 1.7 | 28 |
| Cotton waste, cleaned, sorted, etc. ... | $3 \cdot 5$ | 135 |
| Wool waste, cleaned, sorted, etc. | $4 \cdot 1$ | 221 |
| Rags and waste, not distinguished | $\cdots$ | 27 |
| Wool flocks ... | $4 \cdot 2$ | 91 |
| Other waste products, mainly for paper-making | ... | 12 48 |
| Other products ... | ... |  |
| Total | ... | 1,170 |

In addition, 37 firms to which schedules were sent at the 1930 Census and 120 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. | Net output per person employed. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{clc} 11-24 & \ldots & \ldots \\ 25-49 & \ldots & \ldots \\ 50-99 & \ldots & \ldots \\ 100 \text { and over } & \ldots \end{array}$ | $\begin{aligned} & 85 \\ & 46 \\ & 15 \\ & 11 \end{aligned}$ | $\begin{array}{r} £^{\prime} 000 . \\ 1,070 \\ 1,116 \\ 834 \\ 912 \end{array}$ | $\begin{array}{r} £^{\prime} 000 . \\ 229 \\ 288 \\ 108 \\ 222 \end{array}$ | $\begin{array}{r} 1,463 \\ 1,495 \\ 974 \\ 1,731 \end{array}$ | $\begin{gathered} £ \\ 157 \\ 193 \\ 110 \\ 128 \end{gathered}$ |
| Total . | 157 | 3,932 | 847 | 5,663 | 149 |

Regional distribution.-In the following table the results recorded at the Censuses of 1930 and 1924 are grouped according to the principal areas* of Great Britain in which firms in this trade are situated :-


* For particulars see page xviii.

Northern Ireland.-The following table summarises the particulars recorded at the Census of Production taken by the Government of Northern Ireland for 1930. It should be borne in mind that this information relates to firms that employed an average of more than five persons. Corresponding particulars obtained from all firms at the 1924 Census are also shown.

| Particulars. | Unit. | 1930. | 1924. |
| :---: | :---: | :---: | :---: |
| Value of goods made and work done (Gross output) ... | £'000 | 82 | 131 |
| Cost of materials used ... ... ... ... ... | " | 63 | 99 |
| Net output ... ... ... ... | , | 19 | 32 |
| Average number of persons employed ... ... ... | No. | 170 | 166 |
| Net output per person employed ... | £ | 112 | 193 |
| Mechanical power available :- |  |  |  |
| Prime movers ... ... ... ... ... ... | H.P. | 154 | 122 |
| Electric motors driven by purchased electricity ... | " | 13 | 17 |

The chief classes of goods included in the gross output values shown in the above table were as follows:-

$$
\text { 1930. } 1924 .
$$

£'000 £'000
Rags, sorted, cleaned, etc. (excluding roofing rags and rags for making flocks) :-

Woollen ... ... ... ... ... 6 9
Linen and cotton ...
$13 \quad 26$
Roofing rags and rags for making flocks ... 4
Other waste products (mainly for papermaking)
$52 \quad 88$

## Production.

Principal products.-The following table shows the value and, where available, the quantity of rags and waste sorted, cleaned, etc., and of wool flocks made in 1930 and 1924 for sale. The figures are confined to materials which were subjected to some process of cleaning, grading, etc., and exclude, so far as possible, goods which were merely bought and re-sold in the same condition. Cotton and wool waste produced by firms in the cotton and wool textile industries are not included in the table as these materials are, for the most part, disposed of in those industries, and do not pass through the hands of waste dealers. Wool flocks recorded as output by the wool trade are also excluded as forming, in the main, a different variety from those produced by the firms in the

Flock and Rag Trade. The following output, which is included in the table, was returned on schedules for other trades:-

$$
£^{\prime} 000 \quad \text { Entries. }
$$

Wool and cotton waste, not separately distinguished ... ... 6 1

Wool flocks manufactured from materials other than rags
(400 tons)

$$
\begin{equation*}
3 \tag{2}
\end{equation*}
$$

| Kind of goods. | 1930. |  |  | 1924. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Entries. | Quantity. | Value. |
| Rags, sorted, cleaned, etc. (excluding roofing rags and rags for making flocks) :- | Th. tons. | $£^{\prime} 000$. | No. | Th. tons. | £'000. |
| Woollen and worsted rags | $\left\{\begin{array}{c}24 \cdot 9 \\ *\end{array}\right.$ | 885 55 | \} 49 | $45 \cdot 8$ § | 2,146§ |
| Linen and cotton rags... | $\left\{\begin{array}{c}23 \cdot 3 \\ *\end{array}\right.$ | 373 29 | \} 38 | $49 \cdot 6 \ddagger$ | $920 \ddagger$ |
| Roofing rags and rags for making flocks | $10 \cdot 6$ | 45 | 27 |  | $\dagger$ |
| Cotton waste, sorted, cleaned, etc. | $41 \cdot 1$ | 958 | 54 | 41.9 | 1,742 |
| Wool waste, sorted, cleaned, etc. ... | $7 \cdot 4$ | 610 | 15 | $9 \cdot 0$ | 796 |
| Wool and cotton waste, not separately distinguished, sorted, cleaned, etc. <br> Wool flocks:- | $1 \cdot 3$ | 50 | 3 | - | - |
| Manufactured from rags | $20 \cdot 7$ | 428 | 35 |  |  |
| $\begin{array}{ccc}\begin{array}{c}\text { Manufactured } \\ \text { other than rags }\end{array} & \text { materials } \\ \text {... } & \text {.. }\end{array}$ | $3 \cdot 8$ | 96 | 18 | \} $17 \cdot 7$ \% | 4099 |
| Jute, coir and other fibres, sacking, rope, cordage, etc., sorted, cleaned, etc. | $\left\{\begin{array}{c} 12 \cdot 3 \\ * \end{array}\right.$ | $\begin{array}{r} 173 \\ 75 \end{array}$ | $\} 15$ |  |  |
| Paper-making materials (other than linen and cotton rags) including waste paper, flock dust, etc., sorted, cleaned, etc. | $\left\{\begin{array}{r} 15 \cdot 5 \\ * \end{array}\right.$ | $\begin{aligned} & 60 \\ & 23 \end{aligned}$ | $\} 10$ |  | 274\|| |
| Total value-Principal products | ... | 3,860 | $\ldots$ | ... | 6,287 |

## * Weight not stated.

§" Woollen rags, not pulled."
$\ddagger$ "Linen and cotton rags for paper making."
$\dagger$ Not separately recorded.
ๆ " Wool flocks for bedding and upholstery."
|| "Other waste products (mainly for paper-making)," $£ 95,000$; and "Rags and waste, not distinguished," $£ 179,000$.

Work done for the trade or on commission, etc.-Firms that made their returns on schedules for the Flock and Rag Trade stated that they received the sum of $£ 13,000$ in respect of work done in 1930 for other firms; the amount received for work done for other firms in 1924 was not recorded.

Prices.-The average selling values in 1930 and 1924 of the chief products of this trade, as calculated from the Census returns, are shown in the following table :-

| Kind of goods. | Average value. |  | 1930 as a percentage of 1924. |
| :---: | :---: | :---: | :---: |
|  | 1930. | 1924. |  |
|  | £ per ton. | $£$ per ton. | Per cent. |
| Rags, sorted, cleaned, etc. (excluding roofing rags and rags for making flocks) :- |  |  |  |
| Woollen and worsted rags ... | 35.5 | $46 \cdot 9$ | $75 \cdot 7$ |
| Linen and cotton rags ... | $16 \cdot 0$ | $18 \cdot 5$ | $86 \cdot 5$ |
| Cotton waste, sorted, cleaned, etc. | $23 \cdot 3$ | $41 \cdot 6$ 88.8 | 56.0 |
| Wool waste, sorted, cleaned, etc. | $82 \cdot 0$ 21.4 | $88 \cdot 8$ $23 \cdot 1$ | $92 \cdot 3$ $92 \cdot 6$ |
| Wool flocks ... | $21 \cdot 4$ | $23 \cdot 1$ | $92 \cdot 6$ |

Volume of production in 1930 and 1924.-The following table compares the volume of production of the principal products of this trade in 1930 and 1924 :-

| Kind of goods. | Total production. |  |  | 1930 as a percentage of 1924. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1930. | 1924. |  |  |
|  | As returned. | As returned. | At 1930 average values. |  |
|  | $£^{\prime} 000$. | $£^{\prime} 000$. | £'000. | Per cent. |
| Rags, sorted, cleaned, etc., (excluding roofing rags and rags for making flocks) :- |  |  |  |  |
| Woollen and worsted rags ... | 940 | 2,146 | 1,625 | 58 |
| Linen and cotton rags ... | 402 | 920 | 796 | 51 |
| Cotton waste, sorted, cleaned, etc. | 958 | 1,742 | 976 | 98 |
| Wool waste, sorted, cleaned, etc.... | 610 | 796 | 735 | 83 |
| Wool flocks ... ... ... | 524 | 409 | 379 | 138 |
| Other principal products | 426 | 274 | $206 *$ | 207 |
| Total ... | 3,860 | 6,287 | 4,717 | 82 |

[^0]Exports and imports.-In the case of the products of this trade comparison of production with exports and imports is not practicable owing to differences in classification and to the deficiencies in the Census aggregates already referred to.

Other products.-In addition to the output shown in the table of principal products on page 268, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Flock and Rag 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. |
| Recovered wool (shoddy or mungo) Other goods made (including hair, feathers, etc., purified, cleaned or dressed for sale as such) | $\begin{gathered} £^{\prime} 000 . \\ 48 \end{gathered}$ | $£^{\prime} 000$. |
|  | 20 | 86 |
| Total ... ... | 68 | 86 |

## Employment and Wages.

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

| Persons employed. | Males. |  | Females. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 18. | $\begin{gathered} \text { All } \\ \text { ages. } \end{gathered}$ | Under 18. | $\begin{gathered} \text { All } \\ \text { ages. } \end{gathered}$ | Under 18. | $\begin{aligned} & \text { All } \\ & \text { ages. } \end{aligned}$ |
| 1930. Operatives (average for the year) | 125 | 2,096 | 469 | 2,874 | 594 | 4,970 |
| clerical staff (as at 18th October) | 30 | 519 | 40 | 174 | 70 | 693 |
| Total ... | 155 | 2,615 | 509 | 3,048 | 664 | 5,663 |
| 1924. Operatives (average for the year) <br> Administrative, technical and | 141 | 2,051 | 449 | 3,773 | 590 | 5,824 |
| clerical staff (as at ath   <br> October) $\ldots$ $\ldots$ $\ldots$ | 31 | 553 | 18 | 162 | 49 | 715 |
| Total | 172 | 2,604 | 467 | 3,935 | 639 | 6,539 |

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 :-


## 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 $93 \cdot 6$ per cent. of the net output of the whole trade.

TABLES.
I. Summary of results.

| Particulars. | Unit. | England and Wales. | Scotland. | Great Britain. |
| :---: | :---: | :---: | :---: | :---: |
| Value of goods made and work done (Gross output) | $£^{\prime} 000$ | 3,737 | 195 | 3,932 |
| Cost of materials used ... ... ... | ", | 2,920 | 159 | 3,079 |
| Paid for work given out to other firms... | ", | 6 | - | 6 |
| Net output ... ... |  | 811 | 36 | 847 |
| Average number of persons employed... | No. | 5,397 | 266 | 5,663 |
| Net output per person employed ... | £ | 150 | 134 | 149 |
| Mechanical power available :- |  |  |  |  |
| Prime movers ... ... ... | H.P. | 8,669 | 150 | 8,819 |
| Electric motors driven by purchased electricity | ", | 7,713 | 199 | 7,912 |

## II. Production.

| Goods sold or added to stock and work done. | Unit. | England and Wales. | Scotland. | Great Britain. |
| :---: | :---: | :---: | :---: | :---: |
| Rags, sorted, cleaned, etc. (excluding roofing rags and rags for making flocks) :- |  |  |  |  |
| $\begin{array}{r} \text { Woollen and } \\ \text { worsted rags } \end{array}\left\{\begin{array}{l} \text { Quantity stated } \\ \text { Quantity not stated } \end{array}\{\right.$ | Th. tons. £'000 £'000 | $\begin{gathered} 24 \cdot 5 \\ 872 \\ 55 \end{gathered}$ | 0.4 <br> 13 <br> 9.4 | $\begin{gathered} 24 \cdot 9 \\ 885 \\ 55 \end{gathered}$ |
| Linen and cot- $\{$ Quantity stated | Th. tons. | 13.9 272 | 1019 | $23 \cdot 3$ 373 |
| ton rags $\left\{\begin{array}{l}\text { Quantity not stated }\end{array}\right\}$ | £'000 | 272 29 | 101 | 373 29 |
| Roofing rags and rags for making $\{$ | Th. tons. | $9 \cdot 0$ | $1 \cdot 6$ | $10 \cdot 6$ |
| flocks ... ... ... ... | £'000 | 40 | 5 | 45 |
| Cotton waste, sorted, cleaned, etc. \{ | Th. tons. | $41 \cdot 1$ | - | $41 \cdot 1$ |
|  | £'000 | 958 | - | $958$ |
| Wool waste, sorted, cleaned, etc. | Th. tons. £'000 | $610^{7 \cdot 4}$ | - | $7 \cdot 4$ 610 |
| Wool and cotton waste, not separately $\{$ distinguished | Th. tons. £'000 | 0.9 44 | - | $0.9$ |
| distinguished Wool flocks :- | $£^{\prime} 000$ | 44 | - | $44$ |
|  | Th. tons. | * | * | $20 \cdot 7$ |
| Manufactured from rags ... \{ | $£^{\prime} 000$ | * | * | $428$ |
| $\left.\begin{array}{cccc}\text { Manufactured from materials other } \\ \text { than rags } & \ldots & \ldots & \ldots\end{array}\right\}$ | Th. tons. £'000 | $\begin{gathered} 3 \cdot 7 \\ 93 \end{gathered}$ | - | $\begin{aligned} & 3 \cdot 7 \\ & 93 \end{aligned}$ |

$\begin{array}{l}\text { Goods sold or added to stock and } \\ \text { work done. }\end{array} \quad$ Unit. $\left.\begin{array}{c}\text { England } \\ \text { and } \\ \text { Wales. }\end{array}\right)$

* Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.
$\dagger$ Amount received for work done.


## III. Employment.

A.-Numbers Employed In week ended 18th October, 1930.


[^1]B. -Operatives 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 | 5,037 | 244 | 5,281 | July 19th | 4,696 | 199 | 4,895 |
| Feb. 15th | 4,972 | 258 | 5,230 | Aug. 16th | 4,684 | 200 | 4,884 |
| Mar. 15th | 4,875 | 257 | 5,132 | Sept. 13th | 4,622 | 209 | 4,831 |
| April 12th | 4,859 | 257 | 5,116 | Oct. 18th | 4,678 | 202 | 4,880 |
| May 17th | 4,777 | 235 | 5,012 | Nov. 15th | 4,576 | 198 | 4,774 |
| June 21st | 4,680 | 228 | 4,908 | Dec. 13th | 4,492 | 199 | 4,691 |
| Average for the 12 months |  |  |  | ... ... | 4,746 | 224 | 4,970 |

## IV. Power.

Particulars of prime movers, electric generators and electric MOTORS.

| Power equipment. | England and Wales. |  | Scotland. |  | Great Britain. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ordinarily in use. | In reserve or idle. | Ordinarily in use. | In reserve or idle. | Ordinarily in use. | $\begin{array}{\|c} \text { In } \\ \text { reserve } \\ \text { or idle. } \end{array}$ |
| Prive movers. | H.P. | H.P. | H.P. | Н.Р. | н.Р. | H.P. |
| Reciprocating steam engines | 6,137 70 | 286 | 150 | - | 6,287 | 286 |
| Internal combustion engines :- |  |  |  | - |  |  |
| Gas ... ... | 592 | 21 | - | - | 592 | 21 |
| Petrol, kerosene or other light oils ... | 100 | - | - | - | 100 | - |
| Heavy oils ... | 890 | 95 | - | - | 890 | 95 |
| Water engines ... | 478 | - | - | - | 478 |  |
| Total | 8,267 | 402 | 150 | - | 8,417 | 402 |
| Total of prime movers inSTALLED | 8,6 | 669 | 15 |  | 8,8 |  |



## V. Consumption of fuel.

| Kind of fuel used. | England and Wales. | Scotland. | Great Britain. |
| :---: | :---: | :---: | :---: |
| $\begin{array}{ll}\text { Coal used for power } & \\ \text { Coke used for power } & \text {... } \\ \text {... }\end{array}$ | $\begin{array}{r} \text { Tons. } \\ 19,206 \\ 408 \end{array}$ | Tons. <br> 470 | $\begin{array}{r} \text { Tons. } \\ 19,676 \\ 408 \end{array}$ |
|  | $\begin{gathered} \text { B.T.U. } \\ \text { (KW.-hrs.) } \\ \text { '000 } \end{gathered}$ | $\begin{aligned} & \text { B.T.U. } \\ & \text { (Kw.-hrs.) } \\ & \text { '000 } \end{aligned}$ | $\begin{gathered} \text { B.T.U. } \\ \text { (Kw.-hrs.) } \\ \text { '000 } \end{gathered}$ |
| Electricity used for all purposes :Generated in same works <br> - Purchased | $\begin{aligned} & 1,088 \\ & 4,514 \end{aligned}$ | $40$ | $\begin{aligned} & 1,088 \\ & 4,554 \end{aligned}$ |
| Total-Electricity ... | 5,602 | 40 | 5,642 |


[^0]:    * Based on revaluation of preceding products.

[^1]:    * Administrative, technical and clerical staff.

