

THE WIRE 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 wire drawing or the manufacture of wire 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 ten persons :—

| Particulars | Unit | 1930 | 1924 |
|--|-------|--------|--------|
| Value of goods made and work done (Gross output) | £'000 | 13,747 | 17,228 |
| Cost of materials used | ,, | 9,340 | 11,066 |
| Paid for work given out to other firms | ,, | 44 | 133 |
| Net output | ,, | 4,363 | 6,029 |
| Average number of persons employed | No. | 22,215 | 24,839 |
| Net output per person employed | £ | 196 | 243 |
| Power available :— | | | |
| Prime movers | H.P. | 30,532 | 36,926 |
| Electric motors driven by purchased electricity | ,, | 65,156 | 54,976 |
| Number of returns | No. | 200 | 212 |
| Number of establishments | ,, | 213 | * |

* Not available.

Deficiencies in 1930 aggregates.—The aggregate number of persons employed in 1930 by firms that stated that they employed not more than ten persons on the average was 945, the corresponding figure for 1924 being 614.* The value of the gross output of the small firms in 1924 was £225,000,* and particulars of the items included in this figure are given below :—

| | £'000 |
|--|-------|
| Iron and steel wire | 46 |
| Manufactures of iron or steel wire | 141* |
| Manufactures of brass and copper wire | 16 |
| Other goods made | 8* |
| Work done for the trade | 14 |
| TOTAL | 225* |

In addition, 23 firms to which schedules were sent at the 1930 Census and 25 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.

* These figures are inclusive of particulars regarding the few firms in Northern Ireland for which separate information is not available for publication.

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) | Number of returns | Gross output | Net output | Average number of persons employed | Net output per person employed |
|--|----------------------|-----------------|---------------|---|---|
| | No. | £'000 | £'000 | No. | £ |
| 11-24 | 57 | 390 | 167 | 951 | 175 |
| 25-49 | 49 | 1,004 | 387 | 1,699 | 228 |
| 50-99 | 36 | 2,010 | 555 | 2,557 | 217 |
| 100-199 | 30 | 2,195 | 893 | 4,423 | 202 |
| 200-299 | 12 | 1,582 | 589 | 2,899 | 203 |
| 300-399 | 5 | 1,025 | 412 | 1,754 | 235 |
| 400-499 | 5 | 1,194 | 428 | 2,161 | 198 |
| 500 and over ... | 6 | 4,347 | 932 | 5,771 | 163 |
| TOTAL | 200 | 13,747 | 4,363 | 22,215 | 196 |

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 :—

| Area | Number of returns | Gross output | Net output | Average number of persons employed | Net output per person employed |
|-----------|----------------------|------------------|----------------|---|---|
| | No. | £'000 | £'000 | No. | £ |
| 1 | 1930 29 1924 29 | 783 835 | 336 334 | 1,572 1,532 | 214 218 |
| 2 | 1930 33 1924 38 | 5,012 7,341 | 1,280 2,084 | 7,184 8,851 | 178 235 |
| 3 | 1930 48 1924 48 | 2,698 3,410 | 981 1,333 | 5,266 5,305 | 186 251 |
| 4 | 1930 14 1924 18 | 1,029 1,875 | 371 661 | 1,351 2,103 | 275 314 |
| 5 | 1930 37 1924 35 | 1,832 1,317 | 654 713 | 3,299 2,726 | 198 262 |
| 6 | 1930 13 1924 13 | 1,182 901 | 315 321 | 1,186 1,644 | 265 195 |
| 7 | 1930 4 | 269 | 80 | 351 | 227 |
| 7 and 8 | 1924 6 | 349 | 99 | 426 | 232 |
| 9 | 1930 16 1924 17 | 583 737 | 226 295 | 1,076 1,211 | 210 244 |
| 10 | 1930 6 1924 8 | 359 463 | 120 189 | 930 1,041 | 129 182 |
| TOTAL | 1930 200 1924 212 | 13,747 17,228 | 4,363 6,029 | 22,215 24,839 | 196 243 |

* For particulars see page xviii.

Northern Ireland.—No production of wire or manufactures thereof was recorded for Northern Ireland for 1930. A small output of "manufactures of iron and steel wire" was returned at the 1924 Census but no particulars are available for publication.

Sub-divisions of the trade.—The following table shows the main particulars recorded for 1930 by firms in the wire drawing and the wire working sections of the trade, the latter section comprising firms that manufactured wire goods but did not themselves draw wire.

| Particulars | Unit | Firms engaged in | | Total |
|---|-------|------------------|-----------------|--------|
| | | Wire drawing | Wire working | |
| Value of goods made and work done (Gross output) | £'000 | 10,199 | 3,548 | 13,747 |
| Cost of materials used | " | 7,268 | 2,072 | 9,340 |
| Paid for work given out to other firms | " | 29 | 15 | 44 |
| Net output | " | 2,902 | 1,461 | 4,363 |
| Average number of persons employed | No. | 15,161 | 7,054 | 22,215 |
| Net output per person employed | £ | 191 | 207 | 196 |
| Power available :— | | | | |
| Prime movers | H.P. | 28,745 | 1,787 | 30,532 |
| Electric motors driven by purchased electricity | " | 55,388 | 9,768 | 65,156 |
| Number of returns | No. | 85 | 115 | 200 |

Production

Total make of iron and steel wire rods.—At the Census of 1930, firms were required to state the total quantity of *iron and steel wire rods* made by them in the year, whether used in their works for wire drawing or not. Wire rods were manufactured by six firms in this trade and their total make was recorded as 60,000 tons. For particulars of the total production of iron and steel wire rods, reference should be made to the report on the Iron and Steel (Smelting and Rolling) Trade (page 37). Similar information for 1924 was not obtained from wire drawing firms.

Total quantity of wire drawn.—The total weight of *iron and steel wire* drawn (including that used for further manufacturing purposes in the works of the firms that drew the wire) was recorded as 285,600 tons (75 entries) for 1930 and 312,400 tons for 1924. In addition, firms that made returns on schedules for other trades recorded an output for sale of 9,500 tons (10 entries) for 1930 and 8,200 tons for 1924, raising the aggregates for the two years to 295,100 tons and 320,600 tons respectively.

The total weight of *copper wire* and *wire of brass and other copper alloys* manufactured in the two years (apart from copper wire drawn by electrical firms for their own use) was as follows:—

| | 1930 | | 1924 | |
|--|--------------|----------|----------|----------|
| | Th. tons | Th. tons | Th. tons | Th. tons |
| Copper wire | 47.0 | 43.2 | | |
| | (39 entries) | | | |
| Wire of brass and other copper alloys | 12.1 | 11.5* | | |
| | (49 entries) | | | |

* Specified as "Brass wire" for 1924.

Of the above amounts, the quantities recorded by firms that made returns on schedules for the Wire Trade were, for 1930, 34,500 tons (21 entries) of copper wire and 5,300 tons (16 entries) of wire of brass and other copper alloys; for 1924, the corresponding figures were 27,700 tons and 1,200 tons respectively. The balance of the output in each case was returned mainly by firms that made returns on schedules for the Copper and Brass Trades (see page 425). Electrical firms drawing wire for their own use recorded a total production in 1930 of 50,700 tons of copper wire and 70 tons of wire of copper alloys other than brass. Corresponding information was not obtained for the year 1924.

Production for sale.—The following table shows the value and, where available, the quantity of wire and wire goods made in 1930 and 1924 for sale:—

| Kind of goods | 1930 | | | | | | 1924 | |
|--------------------------------------|---------------------------|-------|----------|------------|-------|----------|----------|-------|
| | Returned on schedules for | | | | | | Total | |
| | The Wire Trade | | | All trades | | | | |
| | Quantity | Value | Ent-ries | Quantity | Value | Ent-ries | Quantity | Value |
| Iron and steel wire:— | Th. tons | £'000 | No. | Th. tons | £'000 | No. | Th. tons | £'000 |
| Fencing wire:— | | | | | | | | |
| Barbed | 8.9 | 159 | 7 | 8.9 | 159 | 7 | 9.6 | 230 |
| Other sorts | 16.6 | 261 | 10 | 16.8 | 263 | 11 | 19.5 | 372 |
| Uninsulated electric wire | 1.7 | 24 | 3 | 3.6 | 90 | 4 | 3.2 | 115 |
| Other kinds | 217.5 | 4,379 | 71 | 224.9 | 4,499 | 79 | 251.6 | 6,445 |
| TOTAL—Iron and steel wire... | 244.7 | 4,823 | ... | 254.2 | 5,011 | ... | 283.9 | 7,162 |
| Wire of non-ferrous metals:— | | | | | | | | |
| Copper wire, in coils:— | | | | | | | | |
| Circular section:— | | | | | | | | |
| Thinner than No. 20 gauge | 2.2 | 172 | 13 | 3.2 | 260 | 23 | 6.4 | 631 |
| No. 20 gauge and thicker | 20.3 | 1,494 | 11 | 31.5 | 2,425 | 24 | 30.8 | 2,738 |
| Other than circular ... | 4.9 | 432 | 8 | 5.1 | 450 | 13 | 2.2 | 205 |
| Not separately distinguished† | — | — | — | ... | 1,844 | 15 | ... | 1,218 |
| TOTAL—Copper wire... | ... | 2,098 | ... | ... | 4,979 | ... | ... | 4,792 |

| Kind of goods | 1930 | | | | | | 1924 | |
|--|---------------------------|--------|----------|------------|--------|----------|----------|--------|
| | Returned on schedules for | | | | | | Total | |
| | The Wire Trade | | | All trades | | | | |
| | Quantity | Value | Ent-ries | Quantity | Value | Ent-ries | Quantity | Value |
| Wire of non-ferrous metals <i>cont.</i> | Th. tons | £'000 | No. | Th. tons | £'000 | No. | Th. tons | £'000 |
| Brass wire, in coils ... | 2.5 | 248 | 14 | 7.0 | 587 | 37 | 11.4 | 1,174 |
| Wire of other alloys of copper, in coils ... | 2.4 | 251 | 14 | 3.3 | 350 | 21 | | |
| Aluminium wire ... | 1.6 | 176 | 6 | 1.6 | 176 | 6 | | |
| Wire of other non-ferrous metals | * | 3 | 3 | * | 3 | 3 | — | — |
| TOTAL—Wire ... | ... | 7,599 | ... | ... | 11,106 | ... | ... | 13,128 |
| Manufactures of iron and steel wire:— | | | | | | | | |
| Wire netting | 17.1 | 462 | 13 | 20.6 | 549 | 14 | 31.6 | 1,232 |
| Wire nails and staples... | 10.6 | 164 | 11 | 16.9 | 294 | 31 | 13.6 | 294 |
| Wire cables and ropes (except insulated tele- phone and telegraph cables) | 64.1 | 2,725 | 37 | 70.4 | 3,019 | 43 | 71.9 | 3,932 |
| Wire brushes§ | ... | 70 | 9 | ... | 70 | 9 | 19.0 | 787 |
| Other manufactures of iron or steel wire, ex- cept wire mattresses } | 24.8 | 567 | 31 | 25.4 | 610 | 38 | | |
| | * | 498 | 29 | * | 549 | 38 | | |
| TOTAL—Manufactures of iron and steel wire | ... | 4,486 | ... | ... | 5,091 | ... | ... | 7,591 |
| Manufactures of copper wire | 1.6 | 124 | 14 | 1.6 | 124 | 14 | ... | 101 |
| | * | 50 | 11 | * | 50 | 11 | | |
| Manufactures of brass wire | 0.3 | 60 | 20 | 0.3 | 60 | 20 | ... | 252 |
| | * | 64 | 11 | * | 64 | 11 | | |
| Manufactures of wire of un- classified metals:— | | | | | | | | |
| Wire cloth§ | ... | 123 | 8 | ... | 123 | 8 | † | † |
| Other manufactures ... | ... | 173 | 25 | ... | 173 | 25 | — | — |
| TOTAL — PRINCIPAL PRODUCTS | ... | 12,679 | ... | ... | 16,791 | ... | ... | 21,072 |

* Quantity not stated.

† Not separately recorded.

‡ The particulars shown for 1930 relate chiefly, and for 1924 entirely, to uninsulated electric wire sold (or added to stock) by electrical firms.

§ So far as recorded separately.

|| Imperial standard wire gauge.

Prices.—The average selling values of the principal classes of wire and wire goods in 1930 and 1924, 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 cent. |
| | £ per ton | £ per ton | |
| Iron and steel :— | | | |
| Fencing wire :— | | | |
| Barbed | 17.8 | 24.0 | 74.2 |
| Other sorts | 15.7 | 19.1 | 82.2 |
| Uninsulated electric wire | 25.3 | 35.8 | 70.7 |
| Other kinds of wire | 20.0 | 25.6 | 78.1 |
| Wire cables and rope (except insulated telephone and telegraph cables) | 42.6 | 54.7 | 77.9 |
| Wire netting | 26.6 | 39.1 | 68.0 |
| Wire nails and staples | 17.4 | 21.6 | 80.6 |
| Other manufactures of iron or steel wire (excluding wire mattresses)... .. | 24.4 | 41.8 | 58.4 |
| Copper wire, in coils (including uninsulated electric wire) :— | | | |
| Circular section :— | | | |
| Thinner than No. 20 gauge | 81.6 | 97.1 | 84.0 |
| No. 20 gauge and thicker | 77.1 | 88.9 | 86.7 |
| Other than circular | 88.3 | 95.0 | 93.0 |
| Brass wire, in coils | 84.2 | 102.6 | 89.1 |
| Wire of other alloys of copper, in coils | 106.8 | | |

Volume of production in 1930 and 1924.—The following table compares the volume of production of wire and manufactures thereof in 1930 and 1924. About 25 per cent. of the total values shown as returned in each year represents goods produced by firms that made returns on schedules for trades other than the Wire Trade.

| Kind of goods | Total production | | | 1930 as a percentage of 1924 |
|---|------------------|-------------|------------------------|------------------------------|
| | 1930 | 1924 | | |
| | As returned | As returned | At 1930 average values | Per cent. |
| | £'000 | £'000 | £'000 | |
| Iron and steel wire :— | | | | |
| Fencing wire :— | | | | |
| Barbed | 159 | 230 | 171 | 93 |
| Other sorts | 263 | 372 | 306 | 86 |
| Uninsulated electric wire | 90 | 115 | 81 | 110 |
| Other kinds | 4,499 | 6,445 | 5,034 | 89 |
| Manufactures of iron and steel wire :— | | | | |
| Wire netting | 549 | 1,232 | 838 | 66 |
| Wire nails and staples | 294 | 294 | 237 | 124 |
| Wire cables and rope | 3,019 | 3,932 | 3,063 | 99 |
| Other manufactures of iron or steel wire (excluding wire mattresses) | 1,229 | 2,133 | 1,246 | 99 |

| Kind of goods | Total production | | | 1930 as a percentage of 1924 |
|--|------------------|-------------|------------------------|------------------------------|
| | 1930 | 1924 | | |
| | As returned | As returned | At 1930 average values | Per cent. |
| | £'000 | £'000 | £'000 | |
| Copper wire, in coils :— | | | | |
| Circular section :— | | | | |
| Thinner than No. 20 gauge | 260 | 631 | 530 | 49 |
| No. 20 gauge and thicker | 2,425 | 2,738 | 2,374 | 102 |
| Other than circular | 450 | 205 | 191 | 236 |
| Not separately distinguished | 1,844 | 1,218 | 997† | 186 |
| Wire of brass and other copper alloys, in coils | 937 | 1,174 | 1,046 | 90 |
| Wire of aluminium | 179§ | * | — | — |
| Manufactures of copper wire | 174 | 101 | 87‡ | 200 |
| Manufactures of brass wire | 124 | 252 | 225** | 55 |
| Manufactures of wire of unclassified metals | 296 | * | — | — |
| TOTAL | 16,791 | 21,072 | 16,426 | 102 |

* Not recorded separately.

† Based on average values of circular copper wire.

§ Including £3,000 in respect of wire of other non-ferrous metals.

‡ Based on average values of copper wire of all kinds.

** Based on average values of wire of brass and other copper alloys.

Production, exports and imports.—The following table shows, in relation to production, the quantities of the principal classes of iron and steel wire and manufactures thereof and of copper, brass, etc., wire exported from the United Kingdom in 1930 and 1924, together with the quantities imported and retained.

| Kind of goods | Production | Exports | Proportion of production exported | Retained imports | Avail- | Share |
|---|------------|----------|-----------------------------------|------------------|------------------------------------|---|
| | | | | | able for use in the United Kingdom | of home market held by British products |
| | Th. tons | Th. tons | Per cent. | Th. tons | Th. tons | Per cent. |
| Iron and steel wire | 1930 295.1 | 54.1 | 18.3 | 59.3 | 300.3 | 80.2 |
| | 1924 322.1 | 77.9 | 24.2 | 45.7 | 289.9 | 84.2 |
| Wire cables and rope (except insulated telephone and telegraph cables)... | 1930 70.4 | 20.6 | 29.3 | 1.1 | 50.9 | 97.8 |
| | 1924 72.2 | 26.3 | 36.4 | 0.5 | 46.4 | 98.9 |
| Wire netting | 1930 20.6 | 9.0 | 43.7 | 6.4 | 18.0 | 64.4 |
| | 1924 31.6 | 18.8 | 59.5 | 4.2 | 17.0 | 75.3 |
| Wire nails and staples | 1930 16.9 | 2.4 | 14.2 | 64.0 | 78.5 | 18.5 |
| | 1924 13.6 | 3.9 | 28.7 | 52.7 | 62.4 | 15.5 |
| Copper wire, in coils | 1930 47.0* | 9.0 | 19.1 | 6.7 | 44.7* | 85.0 |
| | 1924 43.2* | 11.0 | 25.5 | 5.1 | 37.3* | 86.3 |
| Wire of brass and other copper alloys, in coils | 1930 12.1 | 0.9 | 7.4 | 2.2 | 13.4 | 83.6 |
| | 1924 11.5 | 2.5 | 21.7 | 0.8 | 9.8 | 91.8 |

* Excluding wire drawn by electrical firms for their own use.

Work done for the trade.—The total amount recorded as received for work done on goods supplied by other firms was £72,000 for 1930, and £12,000 was recorded in respect of other work done for customers. The total amount received for work done for the trade in 1924 was returned as £55,000.

Other products.—In addition to the output shown in the table of principal products on pages 142-3, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Wire Trade. These goods are dealt with in the reports on those trades in which the principal output was recorded.

| Kind of goods | 1930 | | 1924 | |
|------------------------------------|----------|-------|----------|-------|
| | Quantity | Value | Quantity | Value |
| | Th. tons | £'000 | Th. tons | £'000 |
| Manufactures of iron and steel:— | | | | |
| Wire rods | 13·5 | 123 | 23·2 | 293 |
| Other semi-finished iron and steel | 13·3 | 247 | 14·4 | 355 |
| Wire mattresses | ... | 45 | ... | 123 |
| Other manufactures | ... | 112 | ... | 106 |
| Goods of other metals | ... | 304 | ... | 399 |
| Other goods made | ... | 136 | ... | 6 |
| TOTAL VALUE | ... | 967 | ... | 1,282 |

Waste products sold.—Sales of scrap metals (mainly iron and steel) were recorded as £17,000 (4,500 tons) for 1930 and as £50,000 for 1924.

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 | All ages | Under 18 | All ages | Under 18 | All ages |
| | 1930 | | | | | |
| Operatives (average for the year) | 1,984 | 16,511 | 1,090 | 3,229 | 3,074 | 19,740 |
| Administrative, technical and clerical staff (as at 18th October) | 129 | 1,723 | 108 | 752 | 237 | 2,475 |
| TOTAL | 2,113 | 18,234 | 1,198 | 3,981 | 3,311 | 22,215 |
| 1924 | | | | | | |
| Operatives (average for the year) | 2,509 | 18,661 | 1,099 | 3,813 | 3,608 | 22,474 |
| Administrative, technical and clerical staff (as at 18th October) | 263 | 1,742 | 121 | 623 | 384 | 2,365 |
| TOTAL | 2,772 | 20,403 | 1,220 | 4,436 | 3,992 | 24,839 |

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 equipment | 1930 | | | 1924 | | |
|--|-------------------|--------------------|--------|-------------------|--------------------|--------|
| | Ordinarily in use | In reserve or idle | Total | Ordinarily in use | In reserve or idle | Total |
| | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| PRIME MOVERS | | | | | | |
| Reciprocating steam engines | 16,276 | 1,710 | 17,986 | 20,645 | 2,387 | 23,032 |
| Steam turbines | 6,667 | — | 6,667 | 4,977 | 1,340 | 6,317 |
| Internal combustion engines:— | | | | | | |
| Gas | 3,757 | 372 | 4,129 | 5,625 | 750 | 6,375 |
| Petrol, kerosene, or other light oils ... | 10 | 25 | 35 | 41 | 5 | 46 |
| Heavy oils | 1,028 | — | 1,028 | 388 | — | 388 |
| Water engines | 630 | 57 | 687 | 768 | — | 768 |
| TOTAL | 28,368 | 2,164 | 30,532 | 32,444 | 4,482 | 36,926 |
| ELECTRIC GENERATORS | | | | | | |
| Driven by | Kw. | Kw. | Kw. | Kw. | Kw. | Kw. |
| Reciprocating steam engines | 3,266 | 400 | 3,666 | 3,097 | 763 | 3,860 |
| Steam turbines | 5,000 | — | 5,000 | 3,850 | 1,000 | 4,850 |
| Internal combustion engines:— | | | | | | |
| Gas | 1,051 | 120 | 1,171 | 1,180 | 4 | 1,184 |
| Petrol, kerosene, or other light oils | 3 | — | 3 | 5 | — | 5 |
| Heavy oils | 170 | — | 170 | 93 | — | 93 |
| Water engines | 49 | — | 49 | — | — | — |
| TOTAL | 9,539 | 520 | 10,059 | 8,225 | 1,767 | 9,992 |
| ELECTRIC MOTORS | | | | | | |
| Driven by | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| Electricity generated in same works ... | 17,255 | 1,363 | 18,618 | 15,013 | 1,476 | 16,489 |
| Electricity generated in other works under same ownership | 2,744 | 176 | 2,920 | — | — | — |
| Purchased electricity | 60,011 | 5,145 | 65,156 | 50,213 | 4,763 | 54,976 |
| TOTAL | 80,010 | 6,684 | 86,694 | 65,226 | 6,239 | 71,465 |

Consumption of fuel

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

| Kind of fuel used | For power (driving engines) | For other purposes (so far as recorded) | For power and other purposes, not separately distinguished |
|--|-----------------------------------|--|---|
| | Tons | Tons | Tons |
| Coal | 82,836 | 105,275* | — |
| Coke | 5 | 28,738* | 1,012 |
| | | | B.T.U. (Kw.-hrs.) '000 |
| Electricity used for all purposes :— | | | |
| Generated in same works | | | 13,913 |
| Generated in other works under same ownership | | | 4,504 |
| Purchased | | | 46,776 |
| | | | |
| | | | TOTAL—Electricity |
| | | | 65,193 |

* These figures were recorded by firms representing 97·1 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) | £'000 | 12,805 | 942 | 13,747 |
| Cost of materials used | " | 8,747 | 593 | 9,340 |
| Paid for work given out to other firms | " | 41 | 3 | 44 |
| Net output | " | 4,017 | 346 | 4,363 |
| Average number of persons employed | No. | 20,209 | 2,006 | 22,215 |
| Net output per person employed | £ | 199 | 173 | 196 |
| Power available :— | | | | |
| Prime movers | H.P. | 27,286 | 3,246 | 30,532 |
| Electric motors driven by purchased electricity | " | 62,323 | 2,833 | 65,156 |

II. Production

A.—TOTAL MAKE OF WIRE RODS AND TOTAL QUANTITY OF WIRE
DRAWN AS RETURNED ON SCHEDULES FOR THE WIRE TRADE

| Kind of goods | England and Wales | Scotland | Great Britain |
|--|-------------------------|---------------|------------------|
| Iron and steel wire rods | Th. tons * | Th. tons * | Th. tons 60·0 |
| Iron and steel wire | * | * | 285·6 |
| Copper wire | 34·5 | † | 34·5 |
| Wire of brass and other copper alloys | 4·7 | 0·6 | 5·3 |

* Owing to the possible disclosure of information relating to individual firms, figures can only be given for Great Britain as a whole.

† Less than 50 tons.

B.—OUTPUT SOLD OR ADDED TO STOCK AND WORK DONE

| Kind of goods made and work done | Unit | England and Wales | Scotland | Great Britain |
|---|-----------------|-------------------|----------|---------------|
| <i>Wire</i> | | | | |
| Iron and steel wire :— | | | | |
| Fencing wire :— | | | | |
| Barbed | <i>Th. tons</i> | } | } | 8.9 |
| | £'000 | | | 159 |
| Other sorts | <i>Th. tons</i> | | | 16.6 |
| | £'000 | * | * | 261 |
| Uninsulated electric wire ... | <i>Th. tons</i> | } | } | 1.7 |
| | £'000 | | | 24 |
| Other kinds | <i>Th. tons</i> | } | } | 217.5 |
| | £'000 | | | 4,379 |
| TOTAL—Iron and steel wire | <i>Th. tons</i> | * | * | 244.7 |
| | £'000 | * | * | 4,823 |
| Copper wire, in coils (including un-insulated electric wire) :— | | | | |
| Circular section :— | | | | |
| Thinner than No. 20 gauge | <i>Th. tons</i> | } | } | 2.2 |
| | £'000 | | | 172 |
| No. 20 gauge and thicker ... | <i>Th. tons</i> | | | 20.3 |
| | £'000 | * | * | 1,494 |
| Other than circular | <i>Th. tons</i> | } | } | 4.9 |
| | £'000 | | | 432 |
| TOTAL—Copper wire ... | <i>Th. tons</i> | * | * | 27.4 |
| | £'000 | * | * | 2,098 |
| Brass wire, in coils | | | | |
| | <i>Th. tons</i> | } | } | 2.5 |
| | £'000 | | | 248 |
| Wire of other alloys of copper, in coils | | | | |
| | <i>Th. tons</i> | } | } | 2.4 |
| | £'000 | | | 251 |
| Aluminium wire | <i>Th. tons</i> | } | } | 1.6 |
| | £'000 | | | 176 |
| Wire of other non-ferrous metals ... | £'000 | } | } | 3 |
| | £'000 | | | |
| TOTAL—Wire | £'000 | * | * | 7,599 |
| <i>Manufactures of wire</i> | | | | |
| Manufactures of iron and steel wire :— | | | | |
| Wire cables and rope (except insulated telephone and telegraph cables) | <i>Th. tons</i> | 55.0 | 9.1 | 64.1 |
| | £'000 | 2,344 | 381 | 2,725 |
| Wire netting | <i>Th. tons</i> | * | * | 17.1 |
| | £'000 | * | * | 462 |
| Wire nails and staples ... | <i>Th. tons</i> | 10.6 | — | 10.6 |
| | £'000 | 164 | — | 164 |
| Wire brushes † | £'000 | * | * | 70 |
| Wire mattresses | <i>Th. tons</i> | 0.4 | — | 0.4 |
| | £'000 | 38 | — | 38 |
| | £'000 | 7 | † | 7 |
| Other manufactures of iron or steel wire ... | <i>Th. tons</i> | 22.9 | 1.9 | 24.8 |
| | £'000 | 550 | 17 | 567 |
| | £'000 | 461 | 37 | 498 |
| Total—Manufactures of iron and steel wire ... | <i>Th. tons</i> | * | * | 117.0 |
| | £'000 | * | * | 3,956 |
| | £'000 | * | * | 575 |

| Kind of goods made and work done | Unit | England and Wales | Scotland | Great Britain |
|--|-----------------|-------------------|-----------------|-----------------|
| <i>Manufactures of wire—cont.</i> | | | | |
| Manufactures of copper wire ... | <i>Th. tons</i> | * | * | 1.6 |
| | £'000 | * | * | 124 |
| | £'000 | * | * | 50 |
| Manufactures of brass wire ... | <i>Th. tons</i> | 0.2 | 0.05 | 0.3 |
| | £'000 | 39 | 21 | 60 |
| | £'000 | 14 | 50 | 64 |
| Manufactures of wire of unclassified metals : | | | | |
| Wire cloth ‡ ... | <i>Th. tons</i> | — | 1.5 | 1.5 |
| | £'000 | — | 75 | 75 |
| | £'000 | 21 | 27 | 48 |
| Other manufactures ... | <i>Th. tons</i> | * | * | 0.4 |
| | £'000 | * | * | 21 |
| | £'000 | * | * | 152 |
| TOTAL—Wire and manufactures thereof | £'000 | 11,849 | 875 | 12,724 |
| <i>Other goods made</i> | | | | |
| Manufactures of iron and steel :— | | | | |
| Wire rods | <i>Th. tons</i> | 13.5 | — | 13.5 |
| | £'000 | 123 | — | 123 |
| Other semi-finished goods ... | <i>Th. tons</i> | 13.3 | — | 13.3 |
| | £'000 | 247 | — | 247 |
| Other manufactures | £'000 | 97 | 15 | 112 |
| Goods of other metals | £'000 | 304 | — | 304 |
| Scrap metal sold (mainly iron and steel) | „ | 17 | — | 17 |
| Other goods made | „ | 85 | 51 | 136 |
| TOTAL VALUE OF GOODS MADE ... | £'000 | 12,722 | 941 | 13,663 |
| <i>Work done</i> | | | | |
| | | Amount received | Amount received | Amount received |
| Work done for the trade | £'000 | 71 | 1 | 72 |
| Other work | „ | 12 | — | 12 |
| TOTAL AMOUNT RECEIVED FOR WORK DONE | £'000 | 83 | 1 | 84 |
| TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT) ... | £'000 | 12,805 | 942 | 13,747 |

* Owing to the possible disclosure of information relating to individual firms, figures can only be given for Great Britain as a whole.

† Less than £500.

‡ So far as recorded separately.

III. Employment

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1930

| Persons employed | Males | | Females | | Males and females | |
|-----------------------------|----------|----------|----------|----------|-------------------|----------|
| | Under 18 | All ages | Under 18 | All ages | Under 18 | All ages |
| <i>England and Wales :—</i> | | | | | | |
| Operatives | 1,682 | 14,845 | 862 | 2,564 | 2,544 | 17,409 |
| Administrative, etc.* ... | 115 | 1,599 | 100 | 672 | 215 | 2,271 |
| TOTAL | 1,797 | 16,444 | 962 | 3,236 | 2,759 | 19,680 |
| <i>Scotland :—</i> | | | | | | |
| Operatives | 244 | 1,185 | 196 | 571 | 440 | 1,756 |
| Administrative, etc.* ... | 14 | 124 | 8 | 80 | 22 | 204 |
| TOTAL | 258 | 1,309 | 204 | 651 | 462 | 1,960 |
| <i>Great Britain :—</i> | | | | | | |
| Operatives | 1,926 | 16,030 | 1,058 | 3,135 | 2,984 | 19,165 |
| Administrative, etc.* ... | 129 | 1,723 | 108 | 752 | 237 | 2,475 |
| TOTAL | 2,055 | 17,753 | 1,166 | 3,887 | 3,221 | 21,640 |

* Administrative, technical and clerical staff.

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. 18 ... | 18,318 | 1,885 | 20,203 | July 19 ... | 18,324 | 1,728 | 20,052 |
| Feb. 15 ... | 18,257 | 1,862 | 20,119 | Aug. 16 ... | 17,905 | 1,766 | 19,671 |
| Mar. 15 ... | 18,016 | 1,872 | 19,888 | Sept. 13 ... | 17,689 | 1,747 | 19,436 |
| Apl. 12 ... | 18,487 | 1,870 | 20,357 | Oct. 18 ... | 17,409 | 1,756 | 19,165 |
| May 17 ... | 18,336 | 1,824 | 20,160 | Nov. 15 ... | 17,463 | 1,788 | 19,251 |
| June 21 ... | 17,958 | 1,769 | 19,727 | Dec. 13 ... | 17,093 | 1,762 | 18,855 |
| AVERAGE FOR THE 12 MONTHS | | | | | 17,938 | 1,802 | 19,740 |

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 | In reserve or idle |
| PRIME MOVERS | | | | | | |
| Reciprocating steam engines | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| Steam turbines | 15,697 | 1,710 | 579 | — | 16,276 | 1,710 |
| Internal combustion engines :— | 4,000 | — | 2,667 | — | 6,667 | — |
| Gas | 3,757 | 372 | — | — | 3,757 | 372 |
| Petrol, kerosene or other light oils ... | 10 | 25 | — | — | 10 | 25 |
| Heavy oils | 1,028 | — | — | — | 1,028 | — |
| Water engines | 630 | 57 | — | — | 630 | 57 |
| TOTAL | 25,122 | 2,164 | 3,246 | — | 28,368 | 2,164 |
| TOTAL OF PRIME MOVERS INSTALLED | 27,286 | | 3,246 | | 30,532 | |
| ELECTRIC GENERATORS | | | | | | |
| Driven by | Kw. | Kw. | Kw. | Kw. | Kw. | Kw. |
| Reciprocating steam engines | 3,094 | 400 | 172 | — | 3,266 | 400 |
| Steam turbines | 3,000 | — | 2,000 | — | 5,000 | — |
| Internal combustion engines :— | 1,051 | 120 | — | — | 1,051 | 120 |
| Gas | 3 | — | — | — | 3 | — |
| Petrol, kerosene or other light oils | 170 | — | — | — | 170 | — |
| Heavy oils | 49 | — | — | — | 49 | — |
| Water engines | 7,367 | 520 | 2,172 | — | 9,539 | 520 |
| TOTAL | 7,887 | | 2,172 | | 10,059 | |
| TOTAL OF ELECTRIC GENERATORS INSTALLED | 7,887 | | 2,172 | | 10,059 | |
| ELECTRIC MOTORS | | | | | | |
| Driven by | H.P. | H.P. | H.P. | H.P. | H.P. | H.P. |
| Electricity generated in same works ... | 13,695 | 1,363 | 3,560 | — | 17,255 | 1,363 |
| Electricity generated in other works under same ownership | 2,744 | 176 | — | — | 2,744 | 176 |
| Purchased electricity | 57,544 | 4,779 | 2,467 | 366 | 60,011 | 5,145 |
| TOTAL | 73,983 | 6,318 | 6,027 | 366 | 80,010 | 6,684 |
| TOTAL OF ELECTRIC MOTORS INSTALLED | 80,301 | | 6,393 | | 86,694 | |

V. Consumption of fuel

| Kind of fuel used | England and Wales | Scotland | Great Britain |
|---|------------------------------|------------------------------|------------------------------|
| | Tons | Tons | Tons |
| Coal used for power | 70,356 | 12,480 | 82,836 |
| Coke used for power* | 5 | — | 5 |
| | B.T.U. (Kw.-hrs.) '000 | B.T.U. (Kw.-hrs.) '000 | B.T.U. (Kw.-hrs.) '000 |
| Electricity used for all purposes :— | | | |
| Generated in same works | 11,448 | 2,465 | 13,913 |
| Generated in other works under same ownership | 4,504 | — | 4,504 |
| Purchased | 45,348 | 1,428 | 46,776 |
| TOTAL—Electricity | 61,300 | 3,893 | 65,193 |

* In addition 1,012 tons of coke (all in England and Wales) were recorded as used for power and for other purposes, not separately distinguished.