

THE HARDWARE, HOLLOW-WARE, METALLIC FURNITURE AND SHEET METAL TRADES

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 in the manufacture of a large variety of finished metal goods, including household and industrial hollow-ware, bedsteads, hearth furniture, safes, locks and keys, etc. The great bulk of these products consisted of iron and steel but, in some cases, brass and other metals formed the main or sole material. Firms whose principal business consisted in the manufacture of finished brass goods were grouped as a distinct trade (see page 460), but as finished brass goods were classified on a different basis from that used for similar goods of iron or steel it is not possible to arrive at aggregate production figures for many classes of finished goods in the manufacture of which brass is used as an alternative material.

For the purposes of this report, particulars of production, prices, and overseas trade are given separately for the four sections indicated on page 93; for each of the remaining heads of information, the trade is treated as a combined whole.

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	28,577	23,285
Cost of materials used	,,	13,745	11,577
Paid for work given out to other firms	,,	145	125
Net output	,,	14,687	11,583
Average number of persons employed	No.	82,600	66,696
Net output per person employed	£	178	174
Power available :—			
Prime movers	H.P.	12,882	17,682
Electric motors driven by purchased electricity	,,	64,059	36,248
Number of returns	No.	925	885
Number of establishments	,,	977	*

* 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 10,095, the corresponding figure for 1924 being 7,390.

In addition, 288 firms to which schedules were sent at the 1930 Census and 450 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.

The value of the gross output of the small firms in 1924 was £1,553,000 (including £48,000 in respect of all firms in Northern Ireland), and particulars of the principal items included in this figure are given below:—

	£'000
Hollow-ware, including tin boxes and containers ...	611
Sheet metal work, including stampings, pressings, piercings, spinnings, etc. ...	281
Other goods ...	123
Work done for the trade, including jobbing ironmongery and repair work ...	538
TOTAL ...	1,553

The output of the small firms formed about 40 per cent. of the total amount recorded for 1924 in respect of repairs and other work done, but only about 4 per cent. of the total value of goods made.

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 ...	296	1,637	939	5,251	179
25-49 ...	251	2,977	1,512	8,751	173
50-99 ...	175	4,324	2,129	12,189	175
100-199 ...	104	4,827	2,423	13,740	176
200-299 ...	40	3,541	1,883	9,782	193
300-399 ...	21	2,746	1,410	7,302	193
400-499 ...	10	2,009	995	4,423	225
500-749 ...	18	3,406	1,714	10,802	159
750 and over ...	10	3,110	1,682	10,360	162
TOTAL ...	925	28,577	14,687	82,600	178

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.

Area	Number of returns	Gross output	Net output	Average number of persons employed	Net output per person employed	
	No.	£'000	£'000	No.	£	
1 ...	1930	220	8,178	4,342	20,051	217
	1924	174	5,840	2,967	13,749	216
2 ...	1930	74	2,592	1,204	7,218	167
	1924	88	2,295	1,039	6,107	170
3 ...	1930	56	1,361	725	3,750	193
	1924	54	983	503	3,108	162
4 ...	1930	26	858	378	2,030	186
	1924	19	370	138	804	172
5 ...	1930	422	11,329	5,979	36,638	163
	1924	427	10,941	5,641	34,704	163
6 ...	1930	65	2,837	1,349	8,511	158
	1924	59	1,578	715	4,461	160
7 ...	1930	15	740	352	2,233	158
	1924	12	518	222	1,563	142
9 ...	1930	35	440	228	1,518	150
	1924	35	490	239	1,429	167
10 ...	1930	12	242	130	651	200
	1924	17	270	119	771	154
TOTAL	1930	925	28,577	14,687	82,600	178
	1924	885	23,285	11,583	66,696	174

Northern Ireland.—Owing to the risk of disclosing particulars relating to individual firms, separate details of the production of the Hardware, Hollow-ware, Metallic Furniture and Sheet Metal Trades in Northern Ireland were not published for the year 1930, the information obtained being combined with that for the Tool and Implement and Cutlery Trades. The aggregate figures recorded in respect of these trades for 1930 are shown below, together with separate particulars for the Hardware, Hollow-ware, Metallic Furniture and Sheet Metal Trades and the Tool and Implement Trade in 1924. No production of cutlery was recorded for Northern Ireland in 1924.

Particulars	Unit	1930	1924	
		Hardware, etc., Tool and Cutlery Trades	Hardware, etc., Trades	Tool and Implement Trade
Value of goods made and work done (Gross output) ...	£'000	35	48	8
Cost of materials used and amount paid for work given out to other firms ...	"	15	26	3
Net output ...	"	20	22	5
Average number of persons employed	No.	139	172	32
Net output per person employed ...	£	144	125	143
Power available:—				
Prime movers ...	H.P.	132	33	77
Electric motors driven by purchased electricity ...	"	13	24	4

The above figures for 1930 relate to firms that employed an average of more than *five* persons and those for 1924 to *all* firms.

Sub-divisions of the industry.—In the following table the results of the 1930 Census are grouped in 11 separate sections, each of which comprises firms whose main business consisted in the class of production specified in the first column. Comparable figures for 1924 can only be given in the more general grouping indicated in the table.

Group	Number of returns	Gross output	Net output	Average number of persons employed	Net output per person employed
	No.	£'000	£'000	No.	£
Domestic hollow-ware :—					
(1) Of wrought iron and steel ... 1930	111	3,164	1,623	11,130	146
(2) Of aluminium ... 1930	24	1,135	562	3,014	187
(3) Of cast iron ... 1930	5	113	69	554	123
Hollow-ware for industrial and other purposes :—					
Of wrought iron and steel—					
(4) Tin boxes and containers... 1930	88	6,282	2,723	17,770	153
(5) Kegs and drums 1930	35	1,355	552	2,544	217
(6) Vats, tanks and cisterns and all other sorts (including cash and deed boxes, etc.) 1930	53	2,199	1,118	5,318	210
TOTAL—Hollow-ware { 1930	316	14,248	6,647	40,330	165
{ 1924	...	14,789	7,048	41,824	169
(7) Bedsteads, wire mattresses and hearth furniture ... { 1930	107	2,667	1,369	6,971	196
{ 1924	...	1,973	983	4,366	225
(8) Safes, locks, latches and keys ... { 1930	64	1,709	1,163	6,542	178
{ 1924	...	1,778	1,166	6,908	169
Other groups :—					
(9) Enamelled signs, tablets, etc. ... 1930	17	508	272	1,526	178
(10) All other products* 1930	349	8,799	4,828	24,981	193
(11) Work done for the trade, iron and steel structural work, jobbing ironmongery and repair work ... 1930	72	646	408	2,250	183
TOTAL—Other groups { 1930	438	9,953	5,508	28,757	192
{ 1924	...	4,745	2,386	13,598	175
TOTAL—ALL GROUPS... { 1930	925	28,577	14,687	82,600	178
{ 1924	885	23,285	11,533	66,696	174

* Includes small quantities of cast iron, aluminium and copper hollow-ware for industrial and other purposes.

Production

The output of these trades is dealt with below in the following four sections :—

- (1) Hollow-ware (for industrial and domestic purposes) ;
- (2) Bedsteads, wire mattresses and hearth furniture ;
- (3) Safes, locks, latches and keys ;
- (4) Other products, mainly of sheet metal.

(1) **Hollow-ware.**—The following table shows the quantities (where available) and values of the various classes of industrial and household hollow-ware made in 1930 and 1924 :—

Kind of goods	1930						1924	
	Returned on schedules for						Total	
	The Hardware, Hollow-ware, etc. Trades			All trades				
	Quantity	Value	Ent-ries	Quan-tity	Value	Ent-ries	Quan-tity	Value
Th. tons	£'000	No.	Th. tons	£'000	No.	Th. tons	£'000	
Hollow-ware for domestic purposes:—								
Of wrought iron and steel—								
Not enamelled, tinned or galvanised	1.5	59	21	1.5	59	21	4.5	237
Enamelled	16.6	1,118	29	16.8	1,132	32	14.0	1,177
Galvanised	23.8	747	55	24.5	768	56	28.0	1,143
Tinned or of tin-plate ...	5.3	296	44	5.3	299	46	12.6	878
Not separately distinguished	*	447	38	*	448	40	*	393
Of cast iron—								
Not enamelled or tinned ...	1.4	40	7	1.6	43	10	5.2	105
Enamelled or tinned ...	1.1	46	10	1.5	76	13	4.0	213
Not separately distinguished	*	15	1	*	15	1	*	33
Of wrought or cast iron and steel, not separately distinguished ...	—	—	—	0.5	20	4	—	—
Of aluminium	1.6	455	15	1.7	468	18	1.0	357
	*	476	19	*	493	20	*	259
TOTAL — Hollow-ware for domestic purposes	...	4,070	...	...	4,194	...	...	5,172

Kind of goods	1930						1924	
	Returned on schedules for						Total	
	The Hardware, Hollow-ware, etc. Trades			All trades				
	Quantity	Value	Ent- ries	Quantity	Value	Ent- ries	Quantity	Value
Th. tons	£'000	No.	Th. tons	£'000	No.	Th. tons	£'000	
Hollow-ware for industrial and other purposes :—								
Of wrought iron and steel—								
Tin boxes and containers	126.2	2,917	60	126.3	2,922	61	46.5	2,368†
	*	2,929	56	*	3,290	71		
Kegs and drums	29.2	700	26	29.2	700	26		
	*	618	26	*	650	31		
Vats, tanks and cisterns	22.6	749	31	27.3	852	47		
	*	674	26	*	1,244	59		
Other sorts, not elsewhere specified ...	10.5	304	29	10.5	304	29		
	*	180	31	*	209	40		
Of cast iron...	0.9	44	5	2.3	77	9	‡	‡
	*	33	2	*	49	8		
Of aluminium—								
Vats, tanks, etc.	...	9	4	...	91	6	...	17
TOTAL — Hollow-ware for industrial and other purposes ...	...	9,157	...	...	10,388	...	...	8,184
Hollow-ware not separately distinguished	—	—	—	—	—	—	...	1,110
Cash and deed boxes, trunks, suit-cases, etc., of sheet iron and steel ...	0.8	84	15	0.8	84	15	2.2	205
	*	85	14	*	85	14	*	128
TOTAL—HOLLOW-WARE	...	13,396	...	...	14,751	...	...	14,799

* Quantity not stated.

† These figures are made up of the following items :—

Boxes, containers, etc., of tinplate	£'000
Metal boxes and containers, tanks, cisterns, drums, kegs, etc., not separately distinguished	2,861

‡ Not separately recorded.

Of the total value of hollow-ware of all kinds shown as returned for 1930 on schedules for the Hardware, etc., Trades (£13,396,000) the output of the firms that are classified as manufacturers of hollow-ware in the table on page 92 (groups (1) to (6) inclusive) amounted to £12,720,000, while the value of other goods made and work done by those firms amounted to £1,528,000*. These

* Other manufactures, £1,061,000; scrap metal sold, £161,000; and work done for the trade, £306,000.

figures show that the manufacture of hollow-ware is substantially a self-contained industry, carried on by firms specialising very largely in that class of production. In connection with the particulars recorded for wrought enamelled hollow-ware, it should be noted that the Finance Act, 1928, imposed a duty of 25 per cent. *ad valorem* on imports of such goods for a period of five years from 13th June, 1928.

Prices.—The average selling values of certain classes of hollow-ware in 1930 and 1924, as calculated from the Census returns, are shown in the following table. It should be borne in mind that these comparisons do not take account of any changes that may have occurred since the earlier year in the quality or type of goods included under the specified descriptions. A similar comparison cannot be made in respect of the various classes of industrial hollow-ware, owing to the small proportion of the output for which particulars of quantity were furnished at the 1924 Census.

Kind of goods	Average value		1930 as a percentage of 1924
	1930	1924	
	£ per ton	£ per ton	Per cent.
Domestic hollow-ware :—			
Of wrought iron and steel—			
Not enamelled or tinned or galvanised	40.7	52.9	76.9
Enamelled	67.5	84.0	80.3
Galvanised	31.4	40.8	76.9
Tinned or of tinplate	56.3	69.5	81.0
Of cast iron—			
Not enamelled or tinned	27.9	20.2	138.1
Enamelled or tinned	50.4	52.8	95.4
Of aluminium	282.6	372.4	75.9
Cash and deed boxes, suit-cases, trunks, etc. of sheet iron or steel	109.3	92.1	118.6

Production, exports and imports.—Owing to the large output of hollow-ware that was recorded only in terms of value and to differences in classification, no precise comparison can be made between the production and the exports and retained imports of hollow-ware. It is, however, evident from the following table that, except as regards wrought enamelled hollow-ware, the home market was substantially supplied by home products in both years. In the case of wrought enamelled hollow-ware, imports formed about one quarter of the available supplies for the home market in 1930; in 1924 the proportion was probably somewhat greater, but the large unclassified output in that year renders any exact comparison impossible.

Kind of goods	Exports		Retained imports	
	Quantity	Value	Quantity	Value
Hollow-ware (for household, industrial, etc. use):—	Tons	£'000	Tons	£'000
Of iron and steel—				
Cast, not enamelled, etc. ...	1930 3,238 1924 6,044	89 199	19 16	2 1
Cast, enamelled ...	1930 832 1924 1,069	71 111	24 246	1 13
Cast, tinned ...	1930 734 1924 771	43 69	21 5	2 *
Wrought, not enamelled ...	1930 342 1924 916	22 63	115 69	6 6
Wrought, enamelled ...	1930 2,096 1924 2,749	191 335	5,009 5,762	255 335
Wrought, galvanised ...	1930 3,264 1924 4,177	143 221	880 8	26 1
Of tinned plate ...	1930 2,240 1924 3,138	153 286	64 120	7 15
Of aluminium:—				
Domestic hollow-ware ...	1930 323 1924 397	78 215	344 204	85 60
Vats, tanks, etc. for industrial purposes ...	1930 38 1924 4	5 3	14 †	1 †
Cash and deed boxes, trunks, suit-cases, etc. of sheet iron or steel ...	1930 673 1924 1,440	82 160	71 17	14 3

* Less than £500.

† Negligible.

(2) **Bedsteads, wire mattresses and hearth furniture.**—The following table shows the quantities (where available) and values of the output in 1930 and 1924:—

Kind of goods	1930						1924	
	Returned on schedules for						Total	
	The Hardware, Hollow-ware, etc., Trades			All trades				
Quantity	Value	Entries	Quantity	Value	Entries	Quantity	Value	
	Th. tons	£'000	No.	Th. tons	£'000	No.	Th. tons	£'000
Bedsteads, complete, and finished parts thereof (including finished tubes)	25.5 *	664 329	24 11	27.4 *	701 384	25 27	20.5 *	696 597
Wire mattresses ...	4.5 *	191 322	14 15	4.9 *	232 757	20 106	10.6 *	345 658
Hearth furniture (including coal boxes) ...	...	940	77	...	974	82	...	435†
TOTAL VALUE ...	...	2,446	...	...	3,048	...	...	2,731

* Quantity not stated.

† Including art metal work.

Of the total value shown above (£2,446,000) as returned on schedules for the Hardware, Hollow-ware, Metallic Furniture and Sheet Metal Trades, the value of the output of the firms included in group (7) of the table on page 92 amounted to £2,384,000, or about 97 per cent. The value of other goods made and work done by these firms amounted to £283,000.

Prices.—The average selling values of bedsteads and wire mattresses in 1930 and 1924, as calculated from the Census returns, are shown in the following table. It should be borne in mind that these comparisons do not take account of any changes that may have occurred since the earlier year in the quality or type of goods included under the specified descriptions. Moreover, in view of the large proportion of the output for which quantities were not stated, the prices may not be truly representative.

Kind of goods	Average value		1930 as a percentage of 1924
	1930	1924	
	£ per ton	£ per ton	Per cent.
Bedsteads, complete, and finished parts thereof (including finished tubes) ...	25.6	34.0	75.3
Wire mattresses ...	47.1	32.5	144.8

Production, exports and imports.—In view of the large output of bedsteads and wire mattresses for which particulars of value only are available, comparison between the production and the exports and retained imports of these goods cannot be made in terms of quantities. The following table shows the total recorded value of the production of these goods in 1930 and 1924 in relation to the quantities and values of exports and retained imports in the same years. In comparing the figures, the differences in the bases of valuation should be borne in mind. The production figures for 1924 include the recorded output of all firms in Northern Ireland as well as that of small firms in Great Britain.

	1930	1924
	£'000	£'000
Bedsteads, complete, and finished parts thereof (including finished tubes):—		
Production (value at factory) ...	1,085	1,305
Exports (value f.o.b.) ...	309	679
Retained imports (value c.i.f.) ...	(7.1)	(12.6)
	(Th. tons)	(0.4)
Wire mattresses:—		
Production (value at factory) ...	989	1,046
Exports (value f.o.b.) ...	43	33
Retained imports (value c.i.f.) ...	(0.2)	(0.3)
	(Th. tons)	(0.5)
	(0.5)	(0.1)

A similar comparison cannot be made as regards *hearth furniture* as these goods are not separately distinguished in the trade returns.

(3) **Safes, locks, latches and keys.**—The following table shows the quantities (where available) and the values of the output in 1930 and 1924 :—

Kind of goods	1930						1924	
	Returned on schedules for						Total	
	The Hardware, Hollow-ware, etc., Trades			All trades				
	Quantity	Value	Ent-ries	Quantity	Value	Ent-ries	Quantity	Value
Th. tons	£'000	No.	Th. tons	£'000	No.	Th. tons	£'000	
Safes	5.6	423	16	5.7	426	18	4.3*	390 134
Strong rooms and fittings therefor ...	...	157	3	...	160	4	†	†
Locks, latches and keys	2.3*	352 772	21 46	2.3*	356 775	22 49	†	1,217
TOTAL VALUE ...	...	1,704	...	...	1,717	...	...	1,741

* Quantity not stated.

† Not separately recorded.

The firms forming group (8) in the table on page 92 recorded an output of the above goods valued at £1,631,000, or nearly 96 per cent. of the value of the entire output. The value of other goods made and work done by these firms amounted to £78,000.

Prices.—The average selling value of safes made in 1930, as calculated from the Census returns, was £74.1 per ton as compared with £90.9 in 1924, showing a decline of 18.5 per cent. Owing to the absence of records of quantity for 1924, a similar comparison cannot be made in respect of locks, latches and keys.

Production, exports and imports.—The following statement shows, in relation to production, the values and quantities of safes exported from the United Kingdom in 1930 and 1924, together with particulars of those imported and retained. The deficiency in the 1930 figures of production arising from the absence of information regarding the output of the small firms and of the firms in Northern Ireland is probably under 2 per cent.

Safes :—	1930	1924
	£'000	£'000
Production { Quantity stated (Th. tons)	426	390
{ Quantity not stated	(5.7)	(4.3)
Exports (value f.o.b.)	—	143
Retained imports (value c.i.f.) (Th. tons)	96	156
	(1.2)	(1.5)
	49	4
	(Th. tons)	(0.1)

* Less than 50 tons.

Corresponding particulars in respect of locks, latches and keys are not available as these commodities were not separately recorded in the trade returns prior to 1930. In that year the production of locks, latches and keys was valued at £1,131,000, exports at £273,000 (1,400 tons), and retained imports at £132,000 (900 tons).

(4) **Other goods characteristic of the Hardware, Hollow-ware, etc., Trades.**—This group includes a large variety of sheet metal goods, the majority of which were not precisely described. The following table gives particulars of the output in 1930 and 1924. It should be borne in mind that, in the case of goods marked with an asterisk, the particulars given represent only those recorded under the specific description indicated and may therefore fall short to some extent of the aggregate production.

Kind of goods	1930						1924	
	Returned on schedules for						Total	
	The Hardware, Hollow-ware, etc., Trades			All trades				
	Quantity	Value	Ent-ries	Quantity	Value	Ent-ries	Quantity	Value
Th. tons	£'000	No.	Th. tons	£'000	No.	Th. tons	£'000	
Enamelled signs and tablets and hearth plates ...	...	437	28	...	469	33	...	446
Metallic furniture for hospitals and office use (except aseptic hospital furniture) ...	8.5	454	10	8.5	454	10	...	224
Cookers and heaters of sheet iron, enamelled or not (including parts) ...	...	476	41	...	486	47	...	255†
Fire extinguisher apparatus ...	...	385	12	...	399	17	...	404
Lamps and lanterns (except electric lamps) ...	Thous. 651	115	25	Thous. 651	115	25	Thous. 665	181
	†	150	20	†	158	26	†	526
Metallic closures for bottles, jars, etc.* ...	...	1,273	17	...	1,336	20	...	...
Ventilators, pipes, cowls and the like, of sheet iron and steel* ...	3.6	228	15	3.7	231	16	...	...
	†	192	23	†	201	27	...	...
Other builders' iron-mongery, mainly of sheet metal* ...	4.8	206	21	5.3	220	23	...	...
	†	447	26	†	678	63	...	...
Other goods mainly of sheet metal (including stampings, pressings, piercings, etc.) :—							...	4,101
Of iron and steel ...	14.1	472	62	17.3	573	76	...	...
	†	1,353	120	†	1,879	224	...	...
Of brass ...	0.8	107	17	1.1	144	19	...	...
	†	399	49	†	424	56	...	...
Of other and unspecified metals... ..	4.2	304	38	5.0	370	45	...	...
	†	897	101	†	1,334	142	...	...
TOTAL VALUE ...	...	8,185	...	...	9,832	...	...	6,137

* So far as separately recorded.

† Quantity not stated.

‡ "Stoves of sheet metal."

Prices.—In view of the lack of representative particulars of quantity for the great bulk of the goods included in the foregoing table, no comparison of average selling values is practicable.

Production, exports and retained imports.—Of the goods dealt with in the foregoing table of production, the only classes in respect of which separate particulars of external trade are available are "Metallic furniture for hospital and office use" and "Lamps and lanterns". The following figures show the value of the recorded production of these goods in relation to that of the exports and the retained imports in both years. The differences in the bases of valuation should be borne in mind in comparing these figures.

		Production (value at factory) £'000	Exports (value f.o.b.) £'000	Retained imports (value c.i.f.) £'000
Metallic furniture for hospital and office use (except aseptic hospital furniture)	1930	815	188	132
	1924	224	88	97
Lamps and lanterns (except electric)	1930	273	86	76
	1924	707	159	68

Summary of production.—The following table summarises the foregoing figures and gives information as to the amounts recorded for 1924 on schedules for the Hardware, Hollow-ware, etc., Trades and for other trades:—

Group	1930		1924	
	Returned on schedules for		Returned on schedules for	
	The Hardware, Hollow-ware, etc., Trades	All trades	The Hardware, Hollow-ware, etc., Trades	All trades
	£'000	£'000	£'000	£'000
Hollow-ware (for industrial and domestic purposes)	13,396	14,751	12,090	14,799
Bedsteads, wire mattresses and hearth furniture	2,446	3,048	1,085	2,731
Safes, locks, latches and keys ...	1,704	1,717	1,648	1,741
Other goods mainly of sheet metal	8,185	9,832	5,849	6,137
TOTAL	25,731	29,348	20,672	25,408

It will be observed from the above figures that in 1930 the manufacture of these goods was concentrated to a much greater extent in the hands of firms engaged in the trades concerned than it was in 1924, the amount recorded on schedules for other trades being 12 per cent. in 1930 and 19 per cent. in 1924 of the total recorded for all trades. While each of the three specific subdivisions of the Hardware, Hollow-ware, etc., Trades showed this feature, the change between 1924 and 1930 in respect of the manufacture of bedsteads, wire mattresses and hearth furniture was remarkable.

Work done for the trade (including structural and repair work).—

The total amount recorded as received for work done for customers in 1930 was £1,362,000, the corresponding total for 1924 being £908,000. The principal kinds of work done are shown below, the total for 1930 including a sum of £40,000 and that for 1924 a sum of £2,000 recorded on schedules for other trades. Galvanising work carried out by the Iron and Steel (Smelting and Rolling) Trade is not included.

Kind of work done	1930	1924
	Amount received	Amount received
	£'000	£'000
Iron and steel structural work	110*	56
Jobbing ironmongery and repair work	211	349
Work done for the trade:—		
Galvanising	476	345
Japanning, lacquering, enamelling	234	95
Tinning	19	23
Chromium and other plating†	246	} 40
Other work done	66	
TOTAL	1,362	908

* Exclusive of the goods made and used by the firms that carried out the work, the values of which are included in those shown for the goods concerned.

† So far as separately recorded.

Volume of production in 1930 and 1924.—The following table compares the volume of production of the principal products of the Hardware, Hollow-ware, etc., Trades 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	Per cent.
	£'000	£'000	£'000	
Hollow-ware :—				
Domestic, of wrought iron and steel (including tinned and of tinplate)	3,079	3,828	3,036	101
Domestic, of cast iron	154	351	380	41
Domestic, of wrought or cast iron and steel not separately distinguished	—	377	308	—
Domestic, of aluminium	961	616	468	205
For industrial and other purposes	10,388	9,294‡	7,621§	136
Cash and deed boxes, trunks, suit-cases, etc., of sheet iron and steel	169	333	395	43
TOTAL—Hollow-ware, cash and deed boxes, trunks, etc.	14,751	14,799	12,208	121
Safes	426	524	427	100
Strong rooms and fittings therefor	160	*	*	—
Bedsteads and wire mattresses ...	2,074	2,296	2,426	85
Lamps and lanterns	273	707	459	59
Locks, latches and keys	1,131	1,217	992||	114
Other products (including stampings, pressings, piercings, etc.)...	10,533	5,865	5,300¶	199
Jobbing ironmongery and repair work	211	349	300ϕ	70
TOTAL	29,559	25,757	22,112	134

* Not separately recorded.

‡ Including hollow-ware for *all* purposes not separately distinguished.

§ Based on average values of domestic hollow-ware (excluding aluminium).

|| Based on average values of safes.

¶ Based on average values of tinned plates and black sheets, with allowance for wages.

ϕ Based on average value of all preceding items.

Other products.—In addition to the output dealt with in the preceding sections of this report, the following goods were produced in 1930 and 1924 by firms that made their returns on schedules for the Hardware, Hollow-ware, etc., Trades. 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
Iron castings	44	146
Other and unclassified manufactures of iron and steel (including machinery and parts)	498	771
Manufactures of non-ferrous metals	468	394
Manufactures of wood	81	50
Other goods made	152	105
TOTAL	1,243	1,466

Waste products sold.—The following sales of manufacturers' scrap and other waste products were recorded by firms in these trades in 1930 and 1924 :—

	1930	1924
	£'000	£'000
Iron and steel scrap	135	108
Spelter	53	93
Brass scrap	53	} 40
Other waste products	40	
TOTAL	281	241

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)	7,418	41,715	11,496	32,680	18,914	74,395
Administrative, technical and clerical staff (as at 18th October)	515	5,630	452	2,575	967	8,205
TOTAL	7,933	47,345	11,948	35,255	19,881	82,600
1924						
Operatives (average for the year)	6,229	35,095	8,628	25,279	14,857	60,374
Administrative, technical and clerical staff (as at 18th October)	407	4,326	362	1,996	769	6,322
TOTAL	6,636	39,421	8,990	27,275	15,626	66,696

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	1,839	850	2,689	3,717	946	4,663
Steam turbines	—	—	—	200	—	200
Internal combustion engines :—						
Gas	6,385	699	7,084	10,513	1,502	12,015
Petrol, kerosene, or other light oils	86	10	96	52	22	74
Heavy oils	2,790	223	3,013	602	50	652
Water engines	—	—	—	72	6	78
TOTAL	11,100	1,782	12,882	15,156	2,526	17,682
ELECTRIC GENERATORS	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Driven by						
Reciprocating steam engines	588	404	992	628	367	995
Steam turbines	—	—	—	150	—	150
Internal combustion engines :—						
Gas	765	61	826	1,290	467	1,757
Petrol, kerosene, or other light oils	—	12	12	—	—	—
Heavy oils	915	132	1,047	122	37	159
TOTAL	2,268	609	2,877	2,190	871	3,061
ELECTRIC MOTORS	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Driven by						
Electricity generated in same works	2,300	296	2,596	1,795	96	1,891
Electricity generated in other works under same ownership	682	100	782	133	—	133
Purchased electricity	58,155	5,904	64,059	31,310	4,938	36,248
TOTAL	61,137	6,300	67,437	33,238	5,034	38,272

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	11,651	82,992*	134
Coke	278	40,527*	—
			B.T.U. (Kw.-hrs.) '000
Electricity used for all purposes :—			
Generated in same works			2,493
Generated in other works under same ownership			652
Purchased			42,144
TOTAL—Electricity			45,289

* These figures were recorded by firms representing 97.6 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)	£'000	27,895	682	28,577
Cost of materials used	"	13,423	322	13,745
Paid for work given out to other firms... ..	"	142	3	145
Net output	"	14,330	357	14,687
Average number of persons employed... ..	No.	80,431	2,169	82,600
Net output per person employed	£	178	165	178
Power available :—				
Prime movers	H.P.	12,615	267	12,882
Electric motors driven by purchased electricity	"	61,955	2,104	64,059

II. Production

Goods sold or added to stock and work done	Unit	England and Wales	Scotland	Great Britain
Hollow-ware for domestic purposes :—				
Of wrought iron and steel :—				
Not enamelled or tinned or galvanised } <i>Quantity stated</i> {	<i>Th. tons</i>	1.5	—	1.5
Not enamelled or tinned or galvanised } <i>Quantity not stated</i> {	£'000	59	—	59
Enamelled	£'000	39	—	39
Enamelled	<i>Th. tons</i>	16.6	—	16.6
Enamelled	£'000	1,118	—	1,118
Galvanised } <i>Quantity stated</i> {	<i>Th. tons</i>	*	*	23.8
Galvanised } <i>Quantity not stated</i> {	£'000	*	*	747
Tinned or of tin-plate	£'000	*	*	175
Tinned or of tin-plate	<i>Th. tons</i>	*	*	5.3
Tinned or of tin-plate	£'000	*	*	296
Tinned or of tin-plate	£'000	*	*	447
Not separately distinguished... ..	<i>Th. tons</i>	5.0	—	5.0
Not separately distinguished... ..	£'000	157	—	157
Of cast iron :—				
Not enamelled or tinned	<i>Th. tons</i>	*	*	1.4
Not enamelled or tinned	£'000	*	*	40
Enamelled or tinned } <i>Quantity stated</i> {	<i>Th. tons</i>	*	*	1.1
Enamelled or tinned } <i>Quantity not stated</i> {	£'000	*	*	46
Enamelled or tinned } <i>Quantity not stated</i> {	£'000	*	*	15
Of aluminium } <i>Quantity stated</i> {	<i>Th. tons</i>	1.6	—	1.6
Of aluminium } <i>Quantity not stated</i> {	£'000	455	—	455
Of aluminium } <i>Quantity not stated</i> {	£'000	476	—	476
TOTAL—Hollow-ware for domestic purposes	£'000	4,046	24	4,070

Goods sold or added to stock and work done	Unit	England and Wales	Scotland	Great Britain
Hollow-ware for industrial and other purposes :—				
Of wrought iron and steel :—				
Tin boxes and containers	<i>Quantity stated</i> { <i>Th. tons</i>	123.1	3.1	126.2
Tin boxes and containers	<i>Quantity not stated</i> { £'000	2,784	133	2,917
Tin boxes and containers	<i>Quantity not stated</i> { £'000	2,839	90	2,929
Kegs and drums } <i>Quantity stated</i> { <i>Th. tons</i>	27.8	1.4	29.2	
Kegs and drums } <i>Quantity not stated</i> { £'000	671	29	700	
Kegs and drums } <i>Quantity not stated</i> { £'000	545	73	618	
Vats, tanks and cisterns	<i>Quantity stated</i> { <i>Th. tons</i>	22.1	0.5	22.6
Vats, tanks and cisterns	<i>Quantity not stated</i> { £'000	736	13	749
Vats, tanks and cisterns	<i>Quantity not stated</i> { £'000	655	19	674
Other sorts, not elsewhere specified	<i>Quantity stated</i> { <i>Th. tons</i>	*	*	10.5
Other sorts, not elsewhere specified	<i>Quantity not stated</i> { £'000	*	*	304
Other sorts, not elsewhere specified	<i>Quantity not stated</i> { £'000	*	*	180
Of cast iron	<i>Quantity stated</i> { <i>Th. tons</i>	0.9	—	0.9
Of cast iron	<i>Quantity not stated</i> { £'000	44	—	44
Of cast iron	<i>Quantity not stated</i> { £'000	33	—	33
Of aluminium : Vats, tanks, etc.	£'000	*	*	9
TOTAL—Hollow-ware for industrial and other purposes	£'000	8,773	384	9,157
Cash and deed boxes, trunks, suit-cases, etc., of sheet iron and steel	<i>Quantity stated</i> { <i>Th. tons</i>	0.8	—	0.8
Cash and deed boxes, trunks, suit-cases, etc., of sheet iron and steel	<i>Quantity not stated</i> { £'000	84	—	84
Cash and deed boxes, trunks, suit-cases, etc., of sheet iron and steel	<i>Quantity not stated</i> { £'000	85	—	85
TOTAL—Hollow-ware	£'000	12,988	408	13,396
Bedsteads, complete, and finished parts thereof (including finished tubes)	<i>Quantity stated</i> { <i>Th. tons</i>	25.5	—	25.5
Bedsteads, complete, and finished parts thereof (including finished tubes)	<i>Quantity not stated</i> { £'000	664	—	664
Bedsteads, complete, and finished parts thereof (including finished tubes)	<i>Quantity not stated</i> { £'000	329	—	329
Wire mattresses	<i>Quantity stated</i> { <i>Th. tons</i>	4.5	—	4.5
Wire mattresses	<i>Quantity not stated</i> { £'000	191	—	191
Wire mattresses	<i>Quantity not stated</i> { £'000	322	—	322
Hearth furniture (including coal boxes) not elsewhere specified... ..	£'000	*	*	940
Safes	<i>Th. tons</i>	5.6	—	5.6
Safes	£'000	423	—	423
Strong rooms and fittings†	£'000	157	—	157
Locks, latches and keys	<i>Quantity stated</i> { <i>Th. tons</i>	2.3	—	2.3
Locks, latches and keys	<i>Quantity not stated</i> { £'000	352	—	352
Locks, latches and keys	<i>Quantity not stated</i> { £'000	772	—	772
Enamelled signs and tablets and hearth plates	£'000	437	—	437
Metallic furniture for hospital use, etc. (except aseptic hospital furniture)	<i>Quantity stated</i> { <i>Th. tons</i>	*	*	8.5
Metallic furniture for hospital use, etc. (except aseptic hospital furniture)	<i>Quantity not stated</i> { £'000	*	*	454
Metallic furniture for hospital use, etc. (except aseptic hospital furniture)	<i>Quantity not stated</i> { £'000	*	*	200

Goods sold or added to stock and work done	Unit	England and Wales	Scotland	Great Britain
Cookers and heaters of sheet iron, enamelled or not (including parts) ...	£'000	449	27	476
Fire extinguisher apparatus ...	£'000	385	—	385
Lamps and lanterns, (except electric lamps) ...	<i>Thous.</i>	*	*	651
<i>Number stated</i> {	£'000	*	*	115
<i>Number not stated</i> }	£'000	*	*	150
Metallic closures for bottles, jars, etc. (including some of porcelain)†	£'000	*	*	1,273
Ventilators, pipes, cowls and the like, of sheet iron and steel†	<i>Th. tons</i>	3.2	0.4	3.6
<i>Quantity stated</i> {	£'000	207	21	228
<i>Quantity not stated</i> }	£'000	152	40	192
Other builders' ironmongery, mainly of sheet metal†	<i>Th. tons</i>	*	*	4.8
<i>Quantity stated</i> {	£'000	*	*	206
<i>Quantity not stated</i> }	£'000	*	*	447
Other goods mainly of sheet metal (including stampings, pressings, piercings, etc.) :—				
Of iron and steel	<i>Th. tons</i>	12.7	1.4	14.1
<i>Quantity stated</i> {	£'000	448	24	472
<i>Quantity not stated</i> }	£'000	1,353	—	1,353
Of brass	<i>Th. tons</i>	0.8	—	0.8
<i>Quantity stated</i> {	£'000	107	—	107
<i>Quantity not stated</i> }	£'000	*	*	399
Of other and unspecified metals	<i>Th. tons</i>	3.8	0.4	4.2
<i>Quantity stated</i> {	£'000	285	19	304
<i>Quantity not stated</i> }	£'000	873	24	897
Iron castings	£'000	*	*	44
Other and unclassified manufactures of iron and steel (including machinery and parts)	"	*	*	498
Manufactures (other than hollow-ware) of non-ferrous metals	"	*	*	468
Manufactures of wood, including furniture	"	81	—	81
Other goods made	"	152	—	152
Waste products sold :—				
Iron and steel scrap	<i>Th. tons</i>	56.9	1.4	58.3
<i>Quantity stated</i> {	£'000	132	3	135
<i>Quantity not stated</i> }	£'000	3.7	0.3	4.0
Spelter	<i>Th. tons</i>	49	4	53
<i>Quantity stated</i> {	£'000	3.5	†	3.5
<i>Quantity not stated</i> }	£'000	53	—	53
Other	£'000	38	2	40
TOTAL VALUE OF GOODS MADE	£'000	26,636	619	27,255

Goods sold or added to stock and work done	Unit	England and Wales	Scotland	Great Britain
		Amount received	Amount received	Amount received
Iron and steel structural work ...	£'000	*	*	110
Jobbing ironmongery and repair work ...	"	196	11	207
Work done for the trade :—				
Galvanising ...	"	416	44	460
Japanning, lacquering, enamelling ...	"	224	—	224
Tinning ...	"	*	*	19
Chromium and other plating†	"	*	*	236
Other work done	"	62	4	66
TOTAL AMOUNT RECEIVED FOR WORK DONE	£'000	1,256	66	1,322
TOTAL VALUE OF GOODS MADE AND WORK DONE (GROSS OUTPUT)	£'000	27,895	682	28,577

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

† So far as separately recorded.

‡ Less than £500.

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	6,952	39,669	11,094	31,512	18,046	71,181
Administrative, etc.* ...	507	5,464	433	2,499	940	7,963
TOTAL	7,459	45,133	11,527	34,011	18,986	79,144
<i>Scotland:—</i>						
Operatives	336	1,314	200	594	536	1,908
Administrative, etc.* ...	8	166	19	76	27	242
TOTAL	344	1,480	219	670	563	2,150
<i>Great Britain:—</i>						
Operatives	7,288	40,983	11,294	32,106	18,582	73,089
Administrative, etc.* ...	515	5,630	452	2,575	967	8,205
TOTAL	7,803	46,613	11,746	34,681	19,549	81,294

* 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 ...	73,299	1,927	75,226	July 19 ...	72,718	1,890	74,608
Feb. 15 ...	73,444	1,974	75,418	Aug. 16... ..	71,363	1,921	73,284
Mar. 15 ...	73,330	2,021	75,351	Sept. 13... ..	71,351	1,895	73,246
Apl. 12 ...	74,001	2,001	76,002	Oct. 18 ...	71,181	1,908	73,089
May 17 ...	73,876	1,968	75,844	Nov. 15... ..	71,065	1,849	72,914
June 21 ...	73,519	1,909	75,428	Dec. 13 ...	70,468	1,865	72,333
AVERAGE FOR THE 12 MONTHS					72,468	1,927	74,395

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.
Internal combustion engines:—						
Gas	1,704	850	135	—	1,839	850
Petrol, kerosene or other light oils ...	6,338	664	47	35	6,385	699
Heavy oils	86	10	—	—	86	10
	2,740	223	50	—	2,790	223
TOTAL	10,868	1,747	232	35	11,100	1,782
TOTAL OF PRIME MOVERS INSTALLED	12,615		267		12,882	
ELECTRIC GENERATORS						
Driven by	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Reciprocating steam engines	588	404	—	—	588	404
Internal combustion engines:—						
Gas	765	61	—	—	765	61
Petrol, kerosene or other light oils	—	12	—	—	—	12
Heavy oils	915	132	—	—	915	132
TOTAL	2,268	609	—	—	2,268	609
TOTAL OF ELECTRIC GENERATORS INSTALLED	2,877		—		2,877	
ELECTRIC MOTORS						
Driven by	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Electricity generated in same works	2,300	296	—	—	2,300	296
Electricity generated in other works under same ownership	682	100	—	—	682	100
Purchased electricity	56,173	5,782	1,982	122	58,155	5,904
TOTAL	59,155	6,178	1,982	122	61,137	6,300
TOTAL OF ELECTRIC MOTORS INSTALLED	65,333		2,104		67,437	

V. Consumption of fuel

Kind of fuel used	England and Wales	Scotland	Great Britain
	Tons	Tons	Tons
Coal used for power*	11,149	502	11,651
Coke used for power	278	—	278
Electricity used for all purposes :—	B.T.U. (Kw.-hrs.) '000	B.T.U. (Kw.-hrs.) '000	B.T.U. (Kw.-hrs.) '000
Generated in same works	2,493	—	2,493
Generated in other works under same ownership	652	—	652
Purchased	41,190	954	42,144
TOTAL—Electricity	44,335	954	45,289

* In addition, 134 tons of coal (all in England and Wales) were recorded as used for power and for other purposes, not separately distinguished.