



BOARD OF TRADE

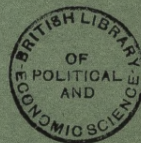
FINAL REPORT  
on the  
CENSUS OF PRODUCTION  
FOR 1948

Volume 5

Trade F

**BRASS MANUFACTURES**

*Presented by the Board of Trade to Parliament  
in pursuance of the Statistics of Trade Act, 1947  
(10 & 11 Geo. 6, Ch. 39, Sec. 7).*



LONDON : HER MAJESTY'S STATIONERY OFFICE

1952

PRICE 2s 6d NET

In interpreting the data in the following tables, it is essential to bear in mind not only the qualifications mentioned in this report but also the general explanations and qualifications contained in the separate booklet published in this series by H.M. Stationery Office entitled "Final Reports of the Census of Production for 1948: Introductory Notes", price 2s Od. NET

List of Tables

Table No.	Title	Page.
1	Summary: Larger establishments	5/F/2
2	Summary, 1948: Small firms in Great Britain	5/F/3
3	Estimated average employment, 1948: All firms in Great Britain	5/F/3
4	Analysis by size, 1948: Larger establishments in Great Britain	5/F/3
5	Analysis by standard region, 1948: Larger establishments in Great Britain	5/F/4
6	Analysis according to specialisation within the trade, 1948: Larger establishments in Great Britain	5/F/4
7	Total make of intermediate products: Larger establishments	*
8	Sales (or production) of the principal products of the trade, including sales (or production) of these products by establishments classified to other trades: Larger establishments	5/F/5
9	Sales (or production) of principal products of the trade by establishments classified to other trades: Larger establishments	5/F/8
10	Sales (or production) in the trade of other than principal products: Larger establishments	5/F/10
11	Analysis of sales, 1948: Larger establishments in Great Britain	5/F/11
12	Production, exports and imports of certain principal products: Larger establishments	5/F/12
13	Purchased materials and fuel: Larger establishments	5/F/13
14	Stocks of finished products and work in progress and stocks of materials and fuel, 1948: Larger establishments in Great Britain	5/F/15
15	Employment and remuneration: Larger establishments	5/F/16
16	Wages and salaries paid, 1948: Larger establishments in Great Britain	5/F/17
17	Payments for work done on materials given out, 1948: Larger establishments in Great Britain	5/F/17
18	Payments for certain services, 1948: Larger establishments in Great Britain	5/F/17
19	Plant, machinery and vehicles acquired and disposed of, 1948: Larger establishments in Great Britain	5/F/18
20	Capital expenditure on building work and changes in occupation of buildings and land, 1948: Larger establishments in Great Britain	5/F/18

Country Tables

Table No.	Title	Page
21	Summary: Larger establishments	5/F/19
22	Summary: Small firms	5/F/20
23 or 23(1)	Sales in the trade: Larger establishments	5/F/21
23(11)	Sales in the trade: Small firms	*
24 or 24(1)	Purchased materials and fuel: Larger establishments	5/F/24
24(11)	Purchased materials and fuel: Small firms	*
25 or 25(1)	Employment and remuneration: Larger establishments	5/F/27
25(11)	Employment: Small firms	*
26	Monthly index of employment of operatives: Larger establishments	5/F/28

\* Not applicable to this trade

BRASS MANUFACTURES

5/F/1

BRASS MANUFACTURES TRADE

THIS REPORT on the Brass Manufactures Trade relates to establishments engaged wholly or mainly in the manufacture of brass castings, stampings and pressings. Brass manufactures covered in the reports on other trades include brass nails, screws, bolts, rivets, washers, etc.; in the Chain, Nail, Screw and Miscellaneous Forgings Trade; brass wire in the Wire and Wire Manufactures Trade; and smallwares of brass in the Needles, Pins, Fish Hooks and Metal Smallwares Trades; while there is some output of brass articles in the Hardware, Hollow-ware, Metal Furniture and Sheet Metal Trades.

This Trade corresponds to minimum list heading 95 in the Standard Industrial Classification.

Any establishments in Northern Ireland are excluded in 1948; no production was recorded there in this trade for 1937 or 1938.

## BRASS MANUFACTURES TRADE

## Summary

## Larger establishments

TABLE 1

	1948	1937	1935
Gross output (production)	£'000 54,968	£'000 18,799	£'000 13,665
Cost of materials and fuel used	25,597	8,850	5,867
Payment for work done on materials given out	681	252	208
Excise duty	9	..	..
Net output	28,678	9,697	7,590
Wages and salaries of persons employed	15,685	..	..
Average number of persons employed (a)	No. 51,659 (b)	No. 43,406	No. 39,282
Net output per person employed (a)	£ 555	£ 223	£ 193
Stocks at end of year	£'000	£'000	£'000
Finished products and work in progress	4,967	..	..
Materials and fuel	4,079	..	..
Number of establishments	No. 616	No. ..	No. 497

(a) Excluding outworkers.

(b) For an estimate of the total number of persons employed in this trade see Table 3.

The values of gross output and of materials and fuel used are derived in the following way:-

	1948	1937	1935
Output of firms in this trade	£'000	£'000	£'000
Total value of sales (1948) or production (1937 and 1935)			
Principal products (see Table 8)	45,750	15,229	11,174
Other output (see Table 10)	8,948	3,570	2,491
Adjustment for changes in stocks and work in progress (see Table 14)	+ 587		
Less payment for transport by other firms	55,285 318	18,799	13,665
Gross output (production)	54,968	18,799	13,665
Materials and fuel used by firms in this trade			
Purchases (see Table 13)	25,600	8,850	5,867
Adjustment for changes in stocks (see Table 14)	- 3		
Materials and fuel used	25,597	8,850	5,867

## Summary, 1948

## Small firms in Great Britain

TABLE 2

Number of returns	240
Average number of persons employed (a)	
Males	1,180
Females	264
Total	1,444

(a) Including working proprietors.

## Estimated average employment, 1948

## All firms in Great Britain

TABLE 3

As returned by firms	
Employing on average more than ten persons (a)	51,659
Employing on average ten persons or less (b)	1,444
	53,103
Estimated average employment in firms not making satisfactory returns	137
Estimated average employment in all firms	53,240

(a) See Tables 1 and 15.

(b) See Table 2.

## Analysis by size, 1948

## Larger establishments in Great Britain

TABLE 4

Average number employed	Establishments	Gross output	Net output	Persons employed	Remuneration			Net output per person employed
					Wages	Salaries	Total	
	No.	£'000	£'000	No.	£'000	£'000	£'000	£
11-24	182	3,372	1,799	3,139	771	212	983	573
25-49	179	6,397	3,372	6,190	1,493	389	1,882	545
50-99	124	8,728	4,650	6,840	2,079	607	2,686	526
100-199	72	12,493	6,776	11,561	2,708	787	3,495	586
200-299	30	8,541	4,118	7,400	1,821	444	2,265	557
300-399	11	4,155	2,260	3,763	938	217	1,154	601
400-499	11	5,330	2,869	4,968	1,205	298	1,503	577
500-749	4	2,694	1,150	2,377	563	187	750	484
750-1,499	3	3,255	1,684	3,421	773	194	967	492
Total	616	54,968	28,678	51,659	12,352	3,333	15,685	555

Analysis by standard region, 1948

Larger establishments in Great Britain

TABLE 5

Region	Establishments	Gross output	Net output		Persons employed	Remuneration		
			Value	Percentage of total		Wages	Salaries	Total
	No.	£'000	£'000		No.	£'000	£'000	£'000
England								
Northern	16	1,069	582	2.0	1,312	317	59	376
East and West Ridings of Yorkshire	56	5,453	3,286	11.5	5,504	1,309	286	1,594
North Midland	11	495	296	1.0	499	131	32	163
Eastern	5	395	201	0.7	387	84	28	112
London and South Eastern	96	5,444	3,163	11.0	5,705	1,413	474	1,886
Southern	8	1,219	592	2.1	1,178	290	103	392
South Western	10	1,752	834	2.9	1,531	372	129	501
Midland	291	29,525	14,762	51.5	26,705	6,186	1,651	7,836
North Western	66	5,071	2,761	9.6	4,494	1,148	301	1,449
Total England	559	50,423	26,477	92.3	47,315	11,249	3,061	14,310
Wales	3	152	51	0.2	108	32	11	43
Scotland	54	4,391	2,150	7.5	4,236	1,071	261	1,332
Great Britain	616	54,966	28,678	100.0	51,659	12,352	3,333	15,685

TABLE 6 - Analysis according to specialisation within the trade, 1948

Larger establishments in Great Britain

No specialisation within this trade was distinguished.

TABLE 7 - Total make of intermediate products: Larger establishments

This table is not applicable to the trade.

Sales (or production) of the principal products of the trade, including sales (or production) of these products by establishments classified to other trades

Larger Establishments

Note - Owing to the large output recorded against general headings by establishments not classified to this trade, the output recorded against any of the specific headings may be incomplete.

TABLE 8

	1948 Sales		1937 Production		1935 Production
	Quantity	Value	Entries	Quantity	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver) (a)					
Engineers' and mechanics' goods (including fittings for water supply)					
Valves, other than for motor vehicles, and cocks	219.5	5,276	226	264.8	2,478
	..	2,101		..	913
Sanitary, bathroom, and other steam and water fittings	230.2	5,922	139	143.6	1,374
	..	3,699		..	490
Other kinds of engineers' and mechanics' goods, except pressure gauges (b)	111.8	2,028	146	34.1	352
	..	935		..	151
Builders' and cabinet makers' goods (including house, shop, ship, office, hearth and church furniture), not elsewhere specified	66.8	1,869	153	150.5	1,603
	..	1,305		..	940
Fittings for motor cars and chassis	42.7	1,213	48	29.8	354
	..	815		..	108
Lamps, pendants, electroliers, brackets, taps and other fittings for lighting or heating purposes, whether oil, gas or electric, not elsewhere specified (c) (d)	43.0	1,212	98		
	..	2,096			
Hurricane lamps (e) (f)	Thous. 45	14	..	220.7	1,148
Miners' lamps	19	34	6	..	596
Stoves, pressure type, oil burning					
Complete	259	264	11		
	..	177			
Parts (e)	Th. cwts. 3.6	64	13	..	(g)
Switches, lampholders, cutouts and other accessories for electric lighting	5.1	223	30	20.7	302
	..	344		..	72

TABLE 8 (contd.)

	1948 Sales			1937 Production		1935 Production
	Quantity	Value	Entries	Quantity	Value	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000	£'000
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver) (a) (contd.)						
Coffin furniture	2.6 ..	85 34	14	6.1 ..	89 53	155
Bar, brewery and distillery fittings	1.8 ..	71 668		39	10.6 ..	
Fire extinguishing apparatus (f)	10.2 ..	396 93	23		2.5 ..	33 67
Art metal work (including antique reproductions) not elsewhere specified	..	944		42	13.2 ..	165(h) 203(h)
Nameplates, dials, instruction plates and similar goods of brass	3.2 ..	162(e) 600(e)	24		..	(1)
Portholes, scuttles and similar fittings for ships	22.6 ..	554 311		33	16.0 ..	116 60
Railway and tramway fittings	7.8 ..	202 289	22		14.0 ..	159 ..
Sheet metal stampings and pressings of brass, not elsewhere specified	32.6 ..	1,282 999		245	86.9 ..	768(k) 370(k)
Hot brass pressings, not elsewhere specified	237.0	3,624	41		284.1	1,368(k)
Hinges, hinge blanks and parts therefor (l)	2.7 ..	99 354	23	4.9 ..	40 57	975
Bolts and hasps, blanks and parts therefor (l)	1.5 ..	55 23		16	..	
Processed brass for clock dials	..	37	..		..	..
Propellers and propeller blades for ships	63.0 ..	740(e) 675(e)	10	67.9 ..	778 197	..
Other finished goods of brass, etc., not elsewhere specified	47.3 ..	1,143 1,606		201	..	
Castings in the rough	652.2	8,615	414		590.7	3,428
Unclassified brass castings	132.6	1,674	149	114.3	834	
Unclassified finished goods of brass	35.4 ..	646 830	68	..	682	538
Unclassified forgings (including drop forgings and drop stampings of brass) in the rough or machined	0.3 ..	7 1		6	-	

TABLE 8 (contd.)

	1948 Sales			1937 Production		1935 Production
	Quantity	Value	Entries	Quantity	Value	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000	£'000
Coffin furniture						
Zinc	11.9 ..	162 137	5	9.0 ..	129 18	110
Other metals (excluding brass)	0.3 ..	2(e) 117(e)		..	-	
Waste products, other than scrap metal	..	29	30		..	(1)
Work done for the trade (finishing, polishing, lacquering, etc.) (m)		365	67		35	14
Repair work (m)		186	78		84	66
Total		57,407	..		20,921	15,097
Less sales (or production) in other trades (see Table 9)		11,657	..		5,692	3,923
Total principal products of this trade sold or made by establishments in the trade		45,750	589		15,229	11,174

(a) Excluding all nickel alloys in 1937. Described as "Finished brass goods" in 1935.

(b) For pressure gauges see the Mechanical Engineering (General) Trade (Volume 4, Trade I).

(c) Excluding motor and cycle lamps for which see the Electrical Engineering (General) Trade (Volume 4, Trade K).

(d) For blow lamps and brazing lamps see the Tool and Implement Trade (Volume 5, Trade A).

(e) So far as recorded separately.

(f) For other than of brass see the report on the Hardware, Hollow-ware, Metal Furniture and Sheet Metal Trade (Volume 5, Trade E).

(g) Not recorded separately.

(h) Including some goods of metals other than brass.

(i) Not recorded.

(j) Returned by establishments previously classified to the Printing, Bookbinding, Stereotyping, Engraving and Kindred Trades, not covered by the 1937 Inquiry.

(k) Including some unclassified output.

(l) For similar products of iron and steel see the Hardware, Hollow-ware, Metal Furniture and Sheet Metal Trade (Volume 5, Trade E).

(m) Amount charged in 1948 and amount received in 1937 and 1935.

Sales (or production) of principal products of the trade by establishments classified to other trades

Larger establishments

TABLE 9

	1948 Sales			1937 Production		1935 Production
	Quantity	Value	Entries	Quantity	Value	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000	£'000
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver)						
Engineers' and mechanics' goods (including fittings for water supply)						
Valves, other than for motor vehicles, and cocks	53.5	1,592	108	45.3	572	668
	..	261		..	227	
Sanitary, bathroom, and other steam and water fittings	27.4	838	31	16.7	114	129
	..	159		..	143	
Other kinds of engineers' and mechanics' goods, except pressure gauges	24.2	357	41	13.2	162	35
	..	169		..	25	
Builders' and cabinet makers' goods (including house, shop, ship, office, hearth and church furniture) not elsewhere specified	11.8	295	39	44.4	417	240
	..	118		..	165	
Fittings for motor cars and chassis	..	6	..	0.8	16	45
				..	4	
Lamps, pendants, electroliers, brackets, taps and other fittings for lighting or heating purposes, whether oil, gas or electric, not elsewhere specified	5.0	196	17	2.4	31	122
	..	86		..	34	
Stoves, pressure type, oil burning	Thous.					
Complete	11	26	7	-	-	-
	..	177				
Parts	Th. cwts.					
	3.6	64	13	-	-	-
Switches, lampholders, cutouts and other accessories for electric lighting	0.2	1	..	0.3	5	6
	..	7		..	6	
Coffin furniture	-	-	-	-	-	7
Bar, brewery and distillery fittings	0.3	12	6	0.5	8	8
	..	11				

TABLE 9 (contd.)

	1948 Sales		1937 Production		1935 Production
	Quantity	Value	Entries	Quantity	Value
	Th. cwts.	£'000	No.	Th. cwts.	£'000
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver) (contd.)					
Fire extinguishing apparatus	1.2	218	5	0.2	10
	..	13		..	5
Art metal work (including antique reproductions) not elsewhere specified	..	208	17	5.0	32
				..	37
Nameplates, dials, instruction plates and similar goods of brass	0.4	28	12	-	-
	..	76			
Portholes, scuttles and similar fittings for ships	11.6	259	7	2.2	16
	..	20		..	53
Railway and tramway fittings	-	-	-	0.4	9
Sheet metal stampings and pressings of brass, not elsewhere specified	14.1	823	181	38.1	317
	..	398		..	110
Hot brass pressings, not elsewhere specified	10.4	154	12	41.8	186
Bolts and hasps, blanks and parts therefor	-	1	..	-	-
Propellers and propeller blades for ships and other finished goods of brass, etc., not elsewhere specified	66.0	956	134	57.4	691
	..	698		..	169
Castings in the rough	123.1	1,689	157	212.9	1,357
Unclassified brass castings	120.3	1,510	138	61.3	406
Unclassified finished goods of brass	3.9	20	43	..	365
	..	45			
Unclassified forgings (including drop forgings and drop stampings of brass) in the rough or machined	0.3	7	6	-	-
	..	1			
Coffin furniture of metals other than brass	..	130	..	-	-
Work done for the trade (finishing, polishing, lacquering, etc.)		25(a)	..	-	-
Total		11,657	..		5,692
					3,923

(a) Amount charged.

Sales (or production) in the trade of other  
than principal products

## Larger establishments

TABLE 10

	1948 Sales	1937 Production	1935 Production
	£'000	£'000	£'000
Manufactures of brass (including all alloys of copper, other than nickel alloys)			
Pressure gauges	122	38	46
Ingots, plates, sheets, rods, sections and tubes	565 (58,400 cwts.)	252	145
Manufactures of metals other than brass			
Builders' and cabinet makers' goods	181	131	145
Cocks and valves, other than for motor vehicles	597	111	66
Sanitary, bathroom and other steam and water fittings	298	34	57
Hardware, hollow-ware, metallic furniture and sheet metal products	389	208	397
Needles, pins and metal smallwares	291	51	33
Machinery and parts	299	94	66
Parts and accessories of motor cars, motor cycles and cycles	215	324	185
Metal manufactures, not elsewhere specified			
Of iron and steel	842	519	142
Of aluminium	1,099	134	78
Of copper	354	251	128
Of lead	20	49	26
Of zinc	155	30	137
Of white metal	165	185	158
Of other metals and alloys	373	151	86
Electrical goods and apparatus	121	168	89
Other goods	883	246	215
Scrap metals			
Brass	1,645 (446,100 cwts.)	488	227
Other metals	196	62	41
Work done (a)	140	46	24
<b>Total</b>	<b>8,948</b>	<b>3,570</b>	<b>2,491</b>

(a) Amount charged in 1948 and amount received in 1937 and 1935.

## Analysis of sales, 1948

## Larger establishments in Great Britain

TABLE 11

	Sales	Percentage of total sales
	£'000	
Sales (or transfers) to other organisations under the same control		
Productive works	974	1.8
Export sales organisations (including branches abroad)	6	-
Other wholesale or selling organisations	645	1.2
Retail shops, etc.	32	0.1
Total sales (or transfers) to other organisations under the same control	1,656	3.1
Sales to independent buyers		
Exports invoiced directly overseas	2,608	4.8
Exports invoiced to Crown Agents and purchasing houses in this country of individual firms and governments abroad	2,004	3.7
His Majesty's Government and Local Authorities (other than productive establishments)	1,188	2.2
Manufacturers, repairers, builders, mines, public utilities, and transport and other productive undertakings	25,916	48.0
Wholesalers, merchants and other agents for resale	17,699(a)	32.8
Retailers, including multiple shops, caterers and N.A.A.F.I., for resale	2,037	3.8
Other businesses (including farmers) and institutions of all kinds	847	1.6
Members of the public, including employees	77	0.1
Total sales to independent buyers	52,376	96.9
<b>Total</b>	<b>54,032</b>	<b>100.0</b>

(a) Of this total £11,903,000 was recorded as divided between £3,276,000 for export and £8,627,000 for other sales.

Production, exports and imports  
of certain principal products (a)

TABLE 12

		Production (b) (c)	Exports	Retained imports
		Th. cwts.	Th. cwts.	Th. cwts.
Valves other than for motor vehicles, and cocks, of brass and other alloys of copper	1948	306.9	55.8	10.9
	1937	362.4	24.4	66.7

(a) Figures of sales (or production) refer only to larger establishments in the relevant years. All recorded exports from and imports into the United Kingdom are given in the table. The figures, therefore, are not strictly comparable.

(b) Sales in 1948 and production for sale in 1937, partly estimated.

(c) Including sales (or production) by establishments classified to other trades.

Purchased materials and fuel

Larger establishments

TABLE 13

	1948		1937		1935	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials						
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver) (a)						
Unwrought, in blocks, ingots, slabs, billets, etc.	30.1	3,097	33.8	1,762(b)	12.3	414(c)
Castings	4.7	1,066	4.3	334	4.3	260
Plates, sheets, strip, discs, and circles	8.5	1,362	7.0	502		
	..	166				
Tubes	1.4	325	1.0	103		
	..	58				
Scrap	16.4	1,445	15.8	733	28.9	1,177
Rods and bars (rolled, extruded, or drawn) and wire	36.7	4,848	16.3	1,039	..	453
Other descriptions (d)	8.8	1,748	..	127		
	..	448				
Unclassified	1.7	228	-	-	-	-
Zinc and alloys of zinc, unwrought, in ingots, blocks, slabs, and cakes	4.2	356	2.4	71(e)	5.1	128(f)
Copper						
Unwrought, in ingots, blocks, slabs, bars, etc.	2.0	240	6.1	329		
Plates, sheets, strip, discs and circles	0.7	141	0.8	62		
Tubes	1.1	200	0.5	68		
Wire and rods	0.3	53	..	(g)	9.9	383
	..	6				
Scrap	5.6	616	..	(g)		
Other descriptions (d)	..	82	..	(g)		
Unclassified	5.3	697	-	-		
Packing materials	..	373	..	100	..	(g)
Iron and steel in all forms, except finished parts	21.2	792	..	(g)	..	(g)
	..	166				
Aluminium and aluminium alloys in all forms, except finished parts	4.2	365				



TABLE 13 (contd.)

	1948		1937		1935	
	Materials and fuel purchased		Usage of purchased materials and fuel			
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials (contd.)						
Replacement parts for firms' machinery	..	240	..	2,813	..	2,472(h)
Consumable tools bought as replacement	..	428			..	
All other purchased materials	..	4,821			..	
Unclassified materials	..	197	..	430	..	349
Fuel and electricity						
Coal	21.2	63	23.3	29	20.1	21
Coke	67.0	307	..	(g)	48.4	71
Electricity purchased (1)	Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)	
From public supply	60,786	296	37,695	135	33,064	114
From other sources	244	1				
Electricity obtained from other works under the same ownership	..	..	..	(g)	..	(g)
Motor spirit (petrol) and deriv. fuel	Th. galls.				Th. galls.	
Used for road vehicles	358	38	..	(g)	..	(g)
Used for other power purposes	..	7				
Other oil fuel (including creosote/pitch mixtures)	150	7	..	(g)	..	(g)
Other oil fuel (including creosote/pitch mixtures)	3,495	110	..	(g)	1,309	25(j)
Gas purchased	Th. therms		..	213	..	(g)
From public supply	5,136	168				
	..	18				
	Th. cu. ft.					
	12,094	3				
From other sources	Th. therms					
	26	1				
Gas obtained from other works under the same ownership	Th. cu. ft.					
	4,405	1				
All other purchased fuel	..	16				
Total		25,600		8,850		5,867

- (a) Excluding all nickel alloys in 1937. Described as "Brass" in 1935.  
 (b) Including bars.  
 (c) Described as "Unwrought in blocks, ingots, etc."  
 (d) Excluding finished parts in 1948.  
 (e) Zinc only.  
 (f) Described as "Zinc, in all forms".  
 (g) Not recorded separately.  
 (h) Including fuel not specified separately.  
 (i) The total quantity of electricity consumed in 1948 was 62,554,000 B.T. units including 1,523,000 generated in the same works.  
 (j) Described as "Heavy fuel oil".

## Stocks of finished products and work in progress and stocks of materials and fuel, 1948

## Larger establishments in Great Britain

TABLE 14

	At beginning of year		At end of year	
	Quantity	Value	Quantity	Value
		£'000		£'000
Finished products	..	1,509	..	1,816
Work in progress		2,737		3,005
Unclassified		135		146
Total finished products and work in progress		4,381		4,967
Materials and fuel				
Brass in all forms, except finished parts	13.6	1,482	12.5	1,378
Copper in all forms, except finished parts	..	678	..	648
Other descriptions of materials and fuel	1.6	185	1.5	180
Unclassified	..	63	..	65
Other descriptions of materials and fuel	..	1,571	..	1,698
Unclassified	..	100	..	110
Total materials and fuel		4,077		4,079

## Employment and remuneration (a)

## Larger establishments

TABLE 15

	Average number of operatives			Administrative, technical and clerical employees (b)			Total		
	1948	1937	1935	1948	1937	1935	1948	1937	1935
<b>Males</b>									
Under 18	2,053	5,508	4,782	210	246	200	2,263	5,754	4,982
All ages	30,008	27,220	23,954	4,246	2,975	2,804	34,252	30,195	26,758
<b>Females</b>									
Under 18	1,061	2,959	2,923	485	449	362	1,546	3,408	3,285
All ages	14,421	11,356	10,794	2,855	1,855	1,730	17,276	13,211	12,524
<b>Total</b>									
Under 18	3,114	8,467	7,705	695	695	562	3,809	9,162	8,267
All ages	44,427	38,576	34,748	7,101(c)	4,830	4,534	51,528 (c) (d)(e)	43,406	39,282
	£'000			£'000			£'000		
Total remuneration	12,352	..	..	3,333	..	..	15,685	..	..

(a) Excluded employees. The following numbers were employed at establishments in this trade but are not included in the table or in any other report (e.g., employees in a separate selling or transport organisation for which separate accounts are kept):-

Canteen workers	5 males	462 females
Other workers	73 males	51 females

(b) Number at September 25, 1948, October 16, 1937, and October 12, 1935.

(c) There were, in addition, 131 working proprietors (128 males and 3 females) in 1948. Working proprietors are included in the 1937 and 1935 figures.

(d) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to £394,000.

(e) The following persons (included in this total) were employed on special work by establishments employing 100 or more persons:-

	Operatives	Administrative, technical and clerical employees
Transport of goods outside the premises	102	
Maintenance and repair of firms' buildings, but not plant	111	
Research work not directly connected with current production however charged	16	24

In addition to the employees in the above table the firms in this trade employed 6 male and 66 female outworkers in 1948, the amount paid to them being £6,000. Similar information is not available for 1937 and 1935.

## Wages and salaries paid, 1948 (a)

## Larger establishments in Great Britain

TABLE 16

	Amount paid by all establishments	Establishments making returns for the calendar year							
		Amount paid	Percentage of annual remuneration paid in						
			First quarter	Second quarter	Third quarter	Fourth quarter	Year		
Wages and salaries of	£'000	£'000							
Operatives	12,352	6,724	24.1	25.2	24.2	26.5	100.0		
Administrative, technical and clerical employees	3,333	1,770	24.5	24.4	24.5	26.7	100.0		
Total	15,685	8,493	24.2	25.0	24.2	26.5	100.0		

(a) Including bonus and commission payments.

TABLE 17 - Payments for work done on materials given out, 1948

## Larger establishments in Great Britain

The total amount paid for work done on materials given out was £681,000.

## Payments for certain services, 1948

## Larger establishments in Great Britain

TABLE 18

	Amount paid
Repair and maintenance	£'000
Of buildings	194
Of plant, machinery and vehicles	350
Unclassified	112
Hire of plant, machinery and vehicles	16
Advertising and market research	
Advertising in newspapers, magazines and periodicals	50
Other advertising services (poster display, despatch of circulars, etc.) and market research	24
Unclassified	98
Payments made for research work	
To research associations	3
To universities, institutions, academic bodies and similar agencies	3
To other commercial concerns	7
Postage, telephone, telegrams and cables	151
Commercial insurance premiums	165
Rates (excluding water rates) payable in the year	55

Plant, machinery and vehicles acquired and disposed of, 1948  
Larger establishments in Great Britain

TABLE 19

	Acquisitions		Disposals
	New	Second-hand	
	£'000	£'000	£'000
Plant and machinery	1,003	188	87
Vehicles	105	56	32
Total	1,107	244	118

Capital expenditure on building work and changes in  
occupation of buildings and land, 1948

Larger establishments in Great Britain

TABLE 20

	£'000	£'000
1. Capital expenditure on building work (a)		368
2. Existing buildings and land (b)		
(1) Capital cost of freeholds bought	233	
Estimated capital value of		
(11) Rented property newly occupied in the year (c)	88	
(111) Leasehold buildings and land newly occupied in the year	214	
Total of heading 2		535
Total of headings 1 and 2		903
3. Existing buildings and land relinquished (d)		
(1) Selling value of freeholds sold	12	
(11) Estimated value of other properties relinquished	70	
Total of heading 3		82
4. Headings 1 and 2 less heading 3		821

- (a) Excluding site value which, where appropriate, is included in heading 2(1).  
 (b) The figures do not reflect changes in ownership of previously occupied land and buildings.  
 (c) Property which is occupied under an agreement for the payment of rent without the purchase of a lease or the payment of a premium.  
 (d) Including property destroyed or abandoned.

1948

Summary  
Larger establishments

TABLE 21

	England	Wales	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Gross output (production)	50,423	152	4,391	54,966
Cost of materials and fuel used	23,292	98	2,207	25,597
Payment for work done on materials given out	645	3	34	681
Excise duty	9	-	-	9
Net output	26,477	51	2,150	28,678
Wages and salaries of persons employed	14,310	43	1,332	15,685
Average number of persons employed (a)	No. 47,315	No. 108	No. 4,236	No. 51,659
Net output per person employed (a)	£ 560	£ 472	£ 508	£ 555
Stocks at end of year	£'000	£'000	£'000	£'000
Finished products and work in progress	4,428	2	537	4,967
Materials and fuel	3,674	11	394	4,079
Number of establishments	No. 559	No. 3	No. 54	No. 616

(a) Excluding outworkers.

The values of gross output and of materials and fuel used are derived in the following ways:-

	England	Wales	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Output of firms in this trade				
Total value of sales (see Table 23)	50,162	153	4,383	54,698
Adjustment for changes in stocks and work in progress	+ 531	-	+ 56	+ 587
Less payment for transport by other firms	270	1	47	318
Gross output (production)	50,423	152	4,391	54,966
Materials and fuel used by firms in this trade				
Purchases (see Table 24)	23,287	100	2,213	25,600
Adjustment for changes in stocks	+ 5	- 1	- 6	- 3
Materials and fuel used	23,292	98	2,207	25,597

Summary  
Small firms

TABLE 22

	England	Wales	Scotland	Great Britain
Number of returns	216	2	22	240
Average number of persons employed (a)				
Males	1,049	14	117	1,180
Females	233	-	31	264
Total	1,282	14	148	1,444

(a) Including working proprietors.

Sales in the trade  
Larger establishments

TABLE 23

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Principal products						
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver)						
Engineers' and mechanics' goods (including fittings for water supply)						
Valves, other than for motor vehicles, and cocks	157.1	3,471	8.8	213	165.9	3,684
	..	1,740	..	101	..	1,840
Sanitary, bathroom, and other steam and water fittings	194.8	4,580	8.0	504	202.9	5,084
	..	2,352	..	1,188	..	3,540
Other kinds of engineers' and mechanics' goods, except pressure gauges	84.5	1,611	3.0	60	87.6	1,671
	..	570	..	196	..	766
Builders' and cabinet makers' goods (including house, shop, ship, office hearth and church furniture), not elsewhere specified	54.8	1,568	0.1	6	54.9	1,574
	..	1,157	..	30	..	1,187
Fittings for motor cars and chassis	..	(a)	..	(a)	42.7	1,213
					..	808
Lamps, pendants, electro-liners, brackets, taps and other fittings for lighting or heating purposes, whether oil, gas or electric, not elsewhere specified	..	(a)	..	(a)	38.0	1,016
					..	2,010
Hurricane lamps	Thous. 45	14	-	-	Thous. 45	14
Miners' lamps	19	34	-	-	19	34
Stoves, pressure type, oil burning	247	238	-	-	247	238
Switches, lampholders, cut-outs and other accessories for electric lighting	..	(a)	..	(a)	Th. cwts. 4.8	222
					..	337

TABLE 23 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Principal products (contd.)						
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver) (contd.)						
Coffin furniture	2.6	85	-	-	2.6	85
	..	34			..	34
Bar, brewery and distillery fittings	1.5	55	-	4	1.5	59
	..	644	..	13	..	657
Fire extinguishing apparatus	..	(a)	..	(a)	9.0	178
					..	80
Art metal work (including antique reproductions) not elsewhere specified	..	(a)	..	(a)	..	737
Nameplates, dials, instruction plates and similar goods of brass	..	(a)	..	(a)	2.8	133
					..	524
Portholes, scuttles and similar fittings for ships	10.9	279	0.1	17	11.0	295
	..	263	..	28	..	291
Railway and tramway fittings	..	(a)	..	(a)	7.8	202
					..	289
Sheet metal stampings and pressings of brass, not elsewhere specified	18.4	459	-	-	18.4	459
	..	600			..	600
Hot brass pressings, not elsewhere specified	226.6	3,470	-	-	226.6	3,470
Hinges, hinge blanks and parts therefor	..	(a)	..	(a)	2.7	99
					..	354
Bolts and hasps, blanks and parts therefor	..	(a)	..	(a)	1.5	53
					..	23
Processed brass for clock dials	..	37	-	-	..	37
Propellers and propeller blades for ships, and other finished goods of brass, etc., not elsewhere specified	..	(a)	..	(a)	44.2	927
					..	1,583
Castings in the rough	466.2	6,135	62.8	791	529.1	6,926
Unclassified brass castings	..	(a)	..	(a)	12.3	164
Unclassified finished goods of brass	28.5	576	3.0	50	31.5	626
	..	727	..	58	..	785
Coffin furniture of metals other than brass	12.2	164	-	-	12.2	164
	..	10	..	114	..	124
Waste products, other than scrap metal	..	(a)	..	(a)	..	29
Work done for the trade (finishing, polishing, lacquering, etc.) (b)		335		4		340
Repair work (b)		146		40		186
Total principal products		41,972		3,778		45,750

DS 8471/1

TABLE 23 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. cwts.	£'000	Th. cwts.	£'000	Th. cwts.	£'000
Other output						
Manufactures of brass (including all alloys of copper other than nickel alloys)						
Pressure gauges	..	(a)	..	(a)	..	122
Ingots, plates, sheets, rods, sections and tubes	..	(a)	..	(a)	58.4	565
Manufactures of metals other than brass						
Builders' and cabinet makers' goods	..	152	..	28	..	181
Cocks and valves, other than for motor vehicles	..	(a)	..	(a)	..	597
Sanitary, bathroom and other steam and water fittings	..	72	..	226	..	298
Hardware, hollow-ware, metallic furniture and sheet metal products	..	387	..	3	..	389
Needles, pins and metal smallwares	..	291	-	-	..	291
Machinery and parts	..	297	..	1	..	299
Parts and accessories of motor cars, motor cycles and cycles	..	215	-	-	..	215
Metal manufactures, not elsewhere specified						
Of iron and steel	..	808	..	33	..	842
Of aluminium	..	1,025	..	75	..	1,099
Of copper	..	309	..	45	..	354
Of lead	..	19	..	1	..	20
Of zinc	..	155	-	-	..	155
Of white metal	..	162	..	3	..	165
Of other metals and alloys	..	372	..	1	..	373
Electrical goods and apparatus	..	121	-	-	..	121
Other goods	..	870	..	13	..	883
Scrap metals						
Brass		1,558	27.9	88	446.1	1,645
Other metals	..	193	..	3	..	196
Work done (b)		136		4		140
Total		50,316		4,383		54,698

(a) Owing to the risk of disclosure of information relating to individual firms separate figures cannot be given.

(b) Amount charged.

Purchased materials and fuel  
Larger establishments

TABLE 24

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials						
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver)						
Unwrought, in blocks, ingots, slabs, billets, etc.	26.3	2,663	3.9	435	30.1	3,097
Castings	4.1	935	0.6	131	4.7	1,066
Plates, sheets, strip, discs, and circles	8.4	1,357	-	6	8.5	1,362
	..	166			..	166
Tubes	0.9	223	0.4	103	1.4	325
	..	58			..	58
Scrap	14.0	1,252	2.4	192	16.4	1,445
Rods and bars (rolled, extruded, or drawn) and wire	35.4	4,683	1.2	165	36.7	4,848
Other descriptions	7.7	1,501	1.1	248	8.8	1,748
	..	440	..	8	..	448
Unclassified	1.7	227	-	1	1.7	228
Zinc and alloys of zinc, unwrought, in ingots, blocks, slabs and cakes	3.7	306	0.5	51	4.2	356
Copper						
Unwrought, in ingots, blocks, slabs, bars, etc.	1.7	206	0.3	34	2.0	240
Plates, sheets, strip, discs and circles	..	(a)	..	(a)	0.7	141
Tubes	1.0	188	-	12	1.1	200
Wire and rods	0.3	53	-	-	0.3	53
	..	6			..	6
Scrap	5.2	562	0.5	54	5.6	616
Other descriptions	..	80	..	2	..	82
Unclassified	..	(a)	..	(a)	5.3	697
Packing materials	..	338	..	35	..	373

TABLE 24 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Materials (contd.)						
Iron and steel in all forms, except finished parts	16.7	712	4.5	80	21.2	792
	..	165	..	1	..	166
Aluminium and aluminium alloys in all forms, except finished parts	3.9	340	0.3	24	4.2	365
Replacement parts for firms' machinery	..	222	..	18	..	240
Consumable tools bought as replacement	..	415	..	13	..	428
All other purchased materials	..	4,381	..	440	..	4,821
Unclassified materials	..	197	-	-	..	197
Fuel and electricity						
Coal	15.4	45	5.8	17	21.2	63
Coke	58.7	268	8.3	39	67.0	307
Electricity purchased	Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)		Th. B. T. U. (kW. hrs.)	
From public supply	53,728	264	7,058	32	60,786	296
From other sources						
Electricity obtained from works under the same ownership	244	1	-	-	244	1
Motor spirit (petrol) and deriv. fuel	Th. galls.		Th. galls.		Th. galls.	
Used for road vehicles	332	36	25	3	358	38
	..	7	..		..	7
Used for other power purposes	132	6	18	1	150	7
Other oil fuel (including creosote/pitch mixtures)	2,783	86	713	24	3,495	110
Gas purchased	Th. therms		Th. therms		Th. therms	
From public supply	4,966	161	171	6	5,136	168
	..	15	..	3	..	18
	Th. cu. ft.		Th. cu. ft.		Th. cu. ft.	
	11,626	3	468	-	12,094	3

TABLE 24 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
	Therms	£'000		£'000	Therms	£'000
Fuel and electricity (contd.)						
Gas purchased (contd.)						
From other sources	26	1	-	-	26	1
Gas obtained from other works under the same ownership	Th. cu. ft. 4,405	1			Th. cu. ft. 4,405	1
All other purchased fuel	..	14	..	2	..	16
Total		23,387		2,213		25,600

(a) Owing to the risk of disclosure of information relating to individual firms separate figures cannot be given.

Employment and remuneration  
Larger establishments

TABLE 25

	England and Wales			Scotland			Great Britain		
	Average number of operatives	Administrative, technical and clerical employees (a)	Total	Average number of operatives	Administrative, technical and clerical employees (a)	Total	Average number of operatives	Administrative, technical and clerical employees (a)	Total
Males									
Under 18	1,842	196	2,038	211	14	225	2,053	210	2,263
All ages	27,009	3,860	30,869	2,997	386	3,383	30,006	4,246	34,252
Females									
Under 18	1,012	454	1,466	49	31	80	1,061	485	1,546
All ages	13,785	2,657	16,442	636	198	834	14,421	2,855	17,276
Total									
Under 18	2,854	650	3,504	260	45	305	3,114	695	3,809
All ages	40,794	6,517(b)	47,311(b)(c)	3,633	584(b)	4,217(b)(c)	44,427	7,101(b)	51,528(b)(c)
Total remuneration	£'000 11,281	£'000 3,071	£'000 14,353	£'000 1,071	£'000 261	£'000 1,332	£'000 12,352	£'000 3,333	£'000 15,685

(a) Number at September 25, 1948.

(b) There were, in addition, 131 working proprietors (128 males, 3 females) in Great Britain; 110 males, 2 females in England and Wales, and 18 males, 1 female in Scotland.

(c) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to a total of £394,000; £358,000 for England and Wales, and £35,000 for Scotland.

In addition to the employees in the above table the firms in this trade employed outworkers whose numbers and remuneration are set out below.

	Average number of outworkers employed			Total amount paid to outworkers £'000
	Males	Females	Total	
England and Wales	6	66	72	6
Scotland	-	-	-	-
Great Britain	6	66	72	6

METAL GOODS NOT ELSEWHERE SPECIFIED COUNTRY TABLES

Monthly index of employment of operatives: Larger establishments  
(Average employment in 1948 = 100)

TABLE 26

Month	Monthly index (a)			Month	Monthly index (a)		
	England and Wales	Scotland	Great Britain		England and Wales	Scotland	Great Britain
1948				1948			
January	100.7	100.9	100.7	August	99.1	98.9	99.1
February	101.0	102.2	101.2	September	98.8	98.2	98.7
March	101.3	102.7	101.5	October	98.2	98.0	98.2
April	102.0	101.5	101.9	November	98.6	98.1	98.6
May	102.1	100.9	102.0	December	97.5	98.1	97.6
June	100.9	100.4	100.9	Percentage employment in this trade covered by the index	51.3	83.9	54.0
July	99.8	99.0	99.7				

(a) The index numbers are calculated from the number of operatives employed in one week in each month returned by larger establishments that made returns for the calendar year 1948.

These figures are based on the number of operatives employed in one week in each month returned by larger establishments that made returns for the calendar year 1948.

The figures are based on the number of operatives employed in one week in each month returned by larger establishments that made returns for the calendar year 1948.

In addition to the figures in the above table the following figures are also available for the calendar year 1948.

Region	Average number of operatives employed		
	England and Wales	Scotland	Great Britain
Total	1,000	100	1,100
Male	800	80	880
Female	200	20	220



*CROWN COPYRIGHT RESERVED*

PRINTED AND PUBLISHED BY HER MAJESTY'S STATIONERY OFFICE

To be purchased from

York House, Kingsway, LONDON, W.C.2    429 Oxford Street, LONDON, W.1

P.O. Box 569, LONDON, S.E.1

13a Castle Street, EDINBURGH, 2    1 St. Andrew's Crescent, CARDIFF

39 King Street, MANCHESTER, 2    Tower Lane, BRISTOL, 1

2 Edmund Street, BIRMINGHAM, 3    80 Chichester Street, BELFAST

or from any Bookseller

1952

Price 2s 6d net

PRINTED IN GREAT BRITAIN