



BOARD OF TRADE

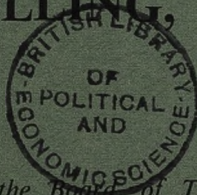
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THE REPORT
on the
CENSUS OF PRODUCTION
FOR 1951

Volume 3

Trade G

NON-FERROUS METALS (SMELTING,
ROLLING, ETC.)



*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

1955

TWO SHILLINGS NET

42

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* Not applicable to this trade

NON-FERROUS METALS (SMELTING, ROLLING, ETC.)

3/G/1

NON-FERROUS METALS (SMELTING, ROLLING, ETC.) TRADES

THIS REPORT on the Non-Ferrous Metals (Smelting, Rolling, etc.) Trades relates to establishments engaged wholly or mainly in the manufacture of non-ferrous metals (other than precious metals) from the preliminary stage. Those whose chief business is the production of goods advanced beyond the semi-finished stage are dealt with in reports on other trades, e.g., Brass Manufactures; Wire and Wire Manufactures; Hardware, Hollow-ware, Metal Furniture and Sheet Metal, etc.

These trades correspond to minimum list heading 49 in the Standard Industrial Classification.

IMPORTANT NOTES and definitions appear on the inside of the back cover of this report. In interpreting the data in the following tables, it is essential to bear these in mind.

NON-FERROUS METALS (SMELTING, ROLLING, ETC.) TRADES

Summary

Larger establishments (a)

TABLE 1

	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949(b)	1948	1937	1935
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Gross output (production) (c)	427,513	321,499	240,478	..	246,821	78,239	51,662
Cost of materials and fuel used (d)	324,307	239,531	172,927	..	175,973	57,159	35,848
Payment for work done on materials given out	1,072	863	897	..	1,003	398	229
Transport payments (e)	3,447	..	..	..	..	..	..
Net output	98,688	81,105	66,654	..	69,844	20,682	15,585
Wages and salaries of persons employed	46,129	40,715	38,126	..	38,193	..	..
Average number of persons employed (f)	No. 106,949	No. 102,936	No. 99,943	No. ..	No. 104,395	No. 59,649	No. 49,571
Net output per person employed (f)	£ 923	£ 788	£ 667	£ ..	£ 669	£ 347	£ 314
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	39,183	31,949	22,710	..	25,350	..	..
Materials and fuel	33,993	29,392	20,425	..	19,694	..	..
Number of establishments	No. 493	No. 481	No. 474	No. ..	No. 475	No. ..	No. 373

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

	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Output of firms in this trade (g)							
Principal products (h)	383,301	313,847	243,902	..	220,432	70,654	46,273
Other output (i)	38,515						
Changes in stocks and work in progress (j)	+ 5,697	+ 9,807	- 1,524	..	+ 3,217		
	427,513	323,654	242,378	..	248,437	78,239	51,662
Less payment for transport outwards (e)	..	2,155	1,900	..	1,616		
Gross output (production)	427,513	321,499	240,478	..	246,821	78,239	51,662
Materials and fuel used by firms in this trade							
Purchases	330,703	248,055	173,581	..	177,729	57,159	35,848
Changes in stocks (j)	- 6,397	- 8,524	- 654	..	- 1,756		
Materials and fuel used	324,307	239,531	172,927	..	175,973	57,159	35,848

(a) For small firms' summary see Table 2.

(b) Owing to the risk of disclosure of information relating to individual firms in Northern Ireland separate particulars for Great Britain cannot be given.

(c) Gross output for 1951 includes payments to other firms and undertakings and to firms' own separate transport organisations for transport services. For other years payments for transport services outwards on finished goods sold are excluded.

(d) Amounts paid for delivery services are excluded for 1951 but included for other years.

(e) Payments to other firms and undertakings and to firms' own separate transport organisations. For 1951 they cover payments for transport of both goods sold and materials and fuel purchased. For other years payments cover only transport outwards of finished goods sold.

(f) Excluding outworkers but including working proprietors. For an estimate of the total number of persons employed in this trade see Table 3.

(g) Total value of sales (1951, 1950, 1949 and 1948) or production for sale (1937 and 1935).

(h) For details for 1951 and 1948 see Table 8.

(i) For details for 1951 and 1948 see Table 10.

(j) For details for 1951 see Table 21.

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Summary: Small firms (a)

TABLE 2

	Great Britain		United Kingdom	Great Britain	
	1951	1950	1949	1949	1948
Number of returns	336	339	390	387	387
Average number of persons employed (b)					
Males	1,875	1,928	1,819	1,797	2,089
Females	221	226	223	222	210
Total	2,096	2,154	2,042	2,019	2,299

(a) Small firms (employing on the average ten or fewer persons) that made satisfactory returns. No information about small firms was collected in Northern Ireland for 1951 or 1950.

(b) Including working proprietors.

Estimated average employment (a): All firms

TABLE 3

	United Kingdom			Great Britain		Number
	1951	1950	1949	1949	1948	
As returned by firms						
Employing on the average more than ten persons (b)	106,949	102,936	99,943	(c)	104,395	
Employing on the average ten or fewer persons (d)	2,096(e)	2,154(e)	2,042	2,019	2,299	
Estimated average employment in firms not making satisfactory returns	109,045	105,090	101,985	(c)	106,694	
	299	351	760	760	238	
Estimated average employment in all firms	109,344(e)	105,441(e)	102,745	(c)	106,932	

(a) Including working proprietors.

(b) See Tables 13(iv) and 14.

(c) Owing to the risk of disclosure of information relating to individual firms in Northern Ireland separate particulars for Great Britain cannot be given.

(d) See Table 2.

(e) Excluding any small firms in Northern Ireland.

Analysis by size, 1951

Larger establishments in the United Kingdom

TABLE 4

Average number employed	Establishments	Gross output	Net output	Persons employed	Remuneration			Net output per person employed
					Operatives	Other employees (a)	Total	
	No.	£'000	£'000	No.	£'000	£'000	£'000	£
11 - 24	112	9,775	2,016	1,978	619	209	828	1,019
25 - 49	110	18,417	3,630	3,767	1,177	439	1,616	964
50 - 99	100	40,788	7,387	7,096	2,343	751	3,094	1,041
100 - 199	68	55,777	10,622	9,310	3,200	1,023	4,223	1,141
200 - 299	17	13,864	3,322	3,888	1,168	394	1,563	854
300 - 399	20	54,359	7,931	7,131	2,196	842	3,038	1,112
400 - 499	9	24,169	3,993	4,091	1,355	468	1,823	976
500 - 749	22	39,605	11,018	13,393	4,268	1,203	5,470	823
750 - 999	12	35,521	9,585	9,852	3,488	992	4,481	973
1,000 - 1,499	11	44,560	11,299	13,907	4,716	1,508	6,224	812
1,500 - 1,999	5	31,439	11,220	8,349	2,744	970	3,714	1,344
2,000 - 2,999	4	22,708	6,613	9,741	3,152	854	4,007	679
3,000 and over	3	36,531	10,052	14,446	4,494	1,555	6,049	696
Total	493	427,513	98,688	106,949	34,920	11,209	46,129	923

(a) Administrative, technical and clerical employees.

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Analysis by standard region, 1951

Larger establishments in the United Kingdom

TABLE 5

Region	Estab- lish- ments	Gross output	Net output		Persons employed	Remuneration			Net output per person employed
			Value	Percent- age of total		Operatives	Other employees (a)	Total	
	No.	£'000	£'000		No.	£'000	£'000	£'000	£
England and Northern Ireland									
Northern	17	11,933	2,613	2.6	2,560	773	262	1,035	1,021
East and West Ridings	30	15,747	4,780	4.8	5,559	1,673	562	2,235	860
North Midland	12	5,074	1,004	1.0	930	290	115	405	1,080
Eastern; South Western; and Northern Ireland	24	18,947	6,315	6.4	4,037	1,327	517	1,844	1,564
London and South Eastern	103	75,023	14,643	14.8	16,380	5,063	1,958	7,021	894
Southern	15	13,201	4,490	4.5	5,247	1,879	496	2,375	856
Midland	183	161,093	39,278	39.8	44,521	14,864	4,471	19,335	882
North Western	54	63,218	8,171	8.3	9,568	3,015	966	3,981	854
Total England and Northern Ireland	438	364,236	81,295	82.4	88,802	28,883	9,347	38,231	915
Wales	23	41,010	11,667	11.8	11,486	3,870	1,168	5,038	1,016
Scotland	32	22,267	5,726	5.8	6,661	2,167	694	2,861	860
United Kingdom	493	427,513	98,688	100.0	106,949	34,920	11,209	46,129	923

(a) Administrative, technical and clerical employees.

Analysis according to specialisation within the trade, 1951

Larger establishments in the United Kingdom

TABLE 6

	Estab- lish- ments	Gross output	Sales of charac- teristic products	Net output	Persons employed	Remuneration			Net output per person employed
						Operatives	Other employees (a)	Total	
	No.	£'000	£'000	£'000	No.	£'000	£'000	£'000	£
Specialist producers of Aluminium and magnesium, and alloys	176	110,215	99,171	36,142	48,747	16,711	4,425	21,135	741
Copper and copper alloys	131	163,518	135,667	31,653	32,543	10,517	3,745	14,262	973
Lead	48	40,159	29,288	5,583	3,196	896	575	1,471	1,747
Tin	15	39,730	35,793	3,145	1,975	632	231	863	1,592
Zinc	52	30,752	25,994	9,826	8,140	2,617	766	3,384	1,207
Remainder of trade	71	43,139		12,340	12,348	3,547	1,468	5,014	999
Total	493	427,513		98,688	106,949	34,920	11,209	46,129	923

(a) Administrative, technical and clerical employees.

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Total make of intermediate products

Larger establishments

TABLE 7

Principal products	Returned in this trade		Returned in all trades			
	United Kingdom 1951		Great Britain 1948	United Kingdom 1951		Great Britain 1948
	Quantity	Entries	Quantity	Quantity	Entries	Quantity
	Th. tons	No.	Th. tons	Th. tons	No.	Th. tons
Aluminium and aluminium alloys						
Ingots and notch bars, virgin	51.1	15	34.9	51.1	15	34.9
Ingots, notch bars and sticks, secondary	(a)	..	94.7	102.0	44	95.0
Blocks, slabs, billets and wirebars	(a)	..	272.5(b)	340.5	20	272.6(b)
Sheets, plates and strip (flat or in coil), exceeding 0.006 inches in thickness						
Pure	(a)	..		93.2	16	
Alloy			138.1			140.1
Corrugated	10.6	7		10.6	7	
Other	(a)	..		58.0	15	
Discs, circles and slugs, exceeding 0.006 inches in thickness						
Pure	(a)	..		14.2	11	
Alloy	(a)	..	17.1	1.1	..	17.3
Tubes						
Extruded						
Pure	1.0	8		1.0	8	
Alloy	(a)	..	10.6	4.2	10	11.1
Drawn						
Pure	1.1	..	..	1.1	8	..
Alloy	3.5	..	..	3.5	12	..
Powder, flake and granulated	(a)	..	..	Th.cwts. 102.1	..	..
Bismuth (metal), not including alloys of bismuth	(a)	..	..	Th.lbs. 683.2	..	..
Brass and other copper alloys, including nickel silver but excluding all other nickel alloys						
Ingots, blocks, slabs, billets, bars (including wirebars) and cast strip				Th. tons		
Bronze, phosphor bronze and gunmetal	111.4	57	130.7	119.7	63	137.9
Other	218.8	65	234.9	223.8	70	237.8
Direct castings not included above						
Bronze, phosphor bronze and gunmetal	0.7	10	..	0.7	10	..
Other	1.1	6	..	1.1	6	..
Plates, sheets, foil, strip, discs and circles	73.6	45	76.8	75.3	51	80.8
Round brass rods	(a)	..	34.9	60.9	22	39.3
Shapes and angles	(a)	..	8.1	13.6	15	8.1
Other rods and sections, and wire not in coils	50.9	17	82.5	52.1	24	83.6
Unclassified rods	-	-	-	3.3	8	-
Copper						
Unwrought; ingots, blocks, slabs, bars, billets, cakes, cathodes and anodes, includ- ing rough copper of 94 per cent. copper content or over (c)						
Fire refined	119.7	22	191.7	135.2	30	202.6
Other	(a)	..	12.1	30.9	19	15.3

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TABLE 7 (contd.)

	Returned in this trade		Returned in all trades			
	United Kingdom 1951		Great Britain 1948	United Kingdom 1951		Great Britain 1948
	Quantity	Entries	Quantity	Quantity	Entries	Quantity
	Th. tons	No.	Th. tons	Th. tons	No.	Th. tons
Principal products (contd.)						
Copper (contd.)						
Plates, sheets or strip (other than of high conductivity)						
3/8 inch thick and over	(a)	..	7.9	8.4	12	9.3
Other sheets, strip, foil, discs and circles, exceeding 6 inches in width or diameter	(a)	..	27.1	29.6	27	28.6
Strip, foil, discs and circles, not exceeding 6 inches in width or diameter	(a)	..	2.5	12.1	23	4.0(d)
High conductivity strip	(a)	..	13.4	12.6	10	15.1(d)
Strip not exceeding 6 inches in width (high conductivity and other), unclassified	-	-	-	11.2	10	-
Rods and sections, shapes and angles and wire not in coils						
Wire rods						
High conductivity	59.8	5	85.5	59.8	5	181.5
Other	(a)	..	(a)	1.0	6	9.3
Unclassified	-	-	-	85.7	7	-
Shapes and angles	1.9	..	2.0	1.9	..	2.0
Other rods and sections and wire not in coils						
Rolled	2.7	8	(a)	2.7	8	3.4
Extruded	(a)	..	4.2	2.1	10	26.5
Unclassified shapes and angles and other rods	-	-	-	3.0	6	-
Unclassified rods	-	-	-	1.4	5	-
Tube shells	53.4	14	49.3	53.4	14	49.3
Lead, unwrought, in pigs, ingots, blocks, bars, slabs and cakes	(a)	..	105.9	115.8	44	106.1
Tin						
Blocks, ingots, bars and slabs	27.9	21	28.6	27.9	21	28.6
Soldier, soft	(a)	..	17.3	22.4	36	17.4
Zinc or spelter, unwrought, in ingots, blocks, bars, slabs and cakes	(a)	..	73.3	72.4	22	73.6
White metal alloys						
Unwrought or partly wrought						
Anti-friction metal	4.7	24	4.2	5.2	29	5.2
Type-metal	10.0	16	9.3	10.0	16	9.3
Other products						
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys						
Wire in coils, circular section (e)						
Thinner than No. 20 gauge (Imperial standard wire gauge), of brass	0.1	..	..	
No. 20 gauge (Imperial standard wire gauge) and thicker						
Of brass	6.8	13	..			
Of other copper alloys	1.9	7	..			

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

(b) Described as 'Wirebars, billets and rolling slabs, pure and alloy'.

(c) Including copper smelted from imported unrefined metal as well as copper smelted from imported ores and scrap. Some duplication may be involved owing to inclusion of the same products at different stages of manufacture.

(d) Excluding production by establishments classified to the Electric Wires and Cables Trade or the Wire and Wire Manufactures Trade.

(e) For total make returned in all trades see the Wire and Wire Manufactures Trade (Volume 5, Trade D).

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

Larger establishments

TABLE 8

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Aluminium and aluminium alloys					
Ingots and notch bars, virgin	43.7	5,801	14	34.1	3,246
Ingots, notch bars and sticks, secondary	91.9	12,373	37	70.3	5,399(a)
Blocks, slabs, billets and wirebars	40.6	5,591	11	37.2	3,781(b)
Sheets, plates and strip (flat or in coil), exceeding 0.006 inches in thickness					
Pure	69.3	14,291	15		
Alloy					
Corrugated	10.9	2,363	7	109.3	19,382
Other	53.2	13,961	15		
Discs, circles and slugs, exceeding 0.006 inches in thickness					
Pure	14.2	3,434	11		
Alloy	1.1	280	8	16.6	2,937(c)
Foil (strip, etc. not exceeding 0.006 inches in thickness)	Th.cwts.			Th.cwts.	
	255.7	5,554	13	154.4	2,817
Bars (other than notch bars and wirebars), rods, angles, shapes and sections	Th. tons			Th. tons	
Pure	5.6	1,174	9	37.5	6,861(d)
Alloy	28.1	7,512	11		
Castings	63.9	22,006	352	43.0	11,684
Forgings and stampings	4.9	3,299	20	4.2	2,163
Powder, flake and granulated	Th.cwts.			Th.cwts.	
	102.8	824	7	66.4	436
Collapsible tubes (e)	10.2	296	7	0.4	29
	..	433		..	43
Tubes	Th. tons			Th. tons	
Extruded					
Pure	0.7	236	6		
Alloy	2.4	577	10	10.0	2,575
Drawn					
Pure	1.1	437	7		
Alloy	3.5	1,687	11	..	1,965
Other manufactures of aluminium, except wire and domestic ware	0.7	214	40		
	..	1,135			
Total aluminium and manufactures thereof		103,477	..	..	63,317
Bismuth (metal), not including alloys of bismuth	Th.lbs.			Th.lbs.	
	652.4	848	..	574.7	302
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys	Th. tons			Th. tons	
Ingots, blocks, slabs, billets, bars (including wirebars) and cast strip					
Bronze, phosphor bronze and gunmetal	72.7	19,150	47	79.7	9,044
Other	62.0	13,761	62	39.6	4,089
Plates, sheets, foil, strip, discs and circles	67.9	18,307	51	81.0	14,116
Round brass rods	59.6	14,955	22	34.4	4,951

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys (contd.)					
Shapes and angles	13.5	3,678	15	7.8	1,268
Other rods and sections and wire not in coils	51.0	13,520	23	74.1	10,808
Tubes	Th. cwts.			Th. cwts.	
Solid drawn of circular section	301.4	5,609	36	338.7	4,379
Other	12.3	283	16	65.1	681
Other manufactures of brass and other copper alloys, except castings and wire in coils	74.3	1,252	29	107.9	786
	..	130	..	..	420
Total brass, etc. and manufactures thereof		90,646	..		50,542
	Th. lbs.			Th. lbs.	
Cadmium	524.9	1,751	7	294.7	180
Copper	Th. tons			Th. tons	
Unwrought: ingots, blocks, slabs, bars, billets, cakes, cathodes and anodes, including rough copper of 94 per cent. copper content or over					
Fire refined	33.7	7,089	23	26.3	3,491
Other	6.9	1,488	12	13.1	1,521
Plates, sheets or strip (other than of high conductivity)					
3/8 inch thick and over	7.8	2,181	12	9.2	1,767
Other sheets, strip, foil, discs and circles, exceeding 6 inches in width or diameter	29.7	8,312	27	29.0	5,480
Strip, foil, discs and circles, not exceeding 6 inches in width or diameter	12.1	3,369	23	4.4	623(f)
High conductivity strip	12.0	3,485	10	15.1	2,810(f)
Strip not exceeding 6 inches in width (high conductivity and other), unclassified	11.2	3,179	10	-	-
Rods and sections, shapes and angles, and wire not in coils					
Wire rods					
High conductivity	55.5	12,802	..	96.7	14,282
Other	0.7	187	6	0.4	61
	..	95	..	-	-
Unclassified	26.1	6,080	5	-	-
Shapes and angles	1.9	606	..	2.0	448
Other rods and sections and wire not in coils					
Rolled	2.1	548	7	3.3	546
Extruded	2.1	621	9	4.4	805
Unclassified shapes and angles and other rods	3.0	882	6	-	-
Tube shells	13.2	3,154	10	12.3	1,919
Tubes					
Solid drawn, of circular section	41.9	13,584	35	40.1	9,545
Other	0.7	331	18	0.6	218
	..	360	..	..	..
Copper castings, other than engineers' and mechanics' goods	0.9	317	14	0.6	155
Other manufactures of copper, except wire in coils and engineers' and mechanics' goods	5.9	1,657	31	2.1	657
	..	174	..	..	230
Total copper and manufactures thereof		70,499	..		44,557

(93200/1)

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Lead					
Unwrought, in pigs, ingots, blocks, bars, slabs and cakes	75.8	11,055	39	57.3	5,003
Sheet	37.8	6,594	25	38.3	4,117
Pipes	23.6	4,364	33	33.8	3,811
Foil	1.2	249	5	0.7	101
	Th. cwts.			Th. cwts.	
Collapsible tubes of lead	25.2	425	8	16.0	203
	..	282	..	..	40
Lead shot	25.2	484	..	42.0	233
Antimonial and tinny lead	1,036.6	9,192	24	1,026.0	5,428
Other manufactures of lead	116.5	1,509	48	128.0	1,013
	..	376	..	..	162
Total lead and manufactures thereof		34,532	..		20,111
Magnesium and magnesium alloys					
Castings	76.4	2,081	9	51.2	1,163
				..	265
Ingots, sticks, slabs and billets, and manufactures of magnesium and magnesium alloys, other than castings	164.8	2,423	7	156.3	605
Total magnesium and magnesium alloys	241.2	4,504	..	207.5	1,769
				..	265
Manganese metal	19.5	198	..	24.3	175
Nickel and nickel alloys (other than nickel silver)	Th. tons			Th. tons	
Ingots, billets, cathodes, bars, rods, plates, sheets, strip, foil, etc.	28.3	14,012	..	22.9	5,817
	..	346	..	..	..
Other manufactures, except wire of nickel alloys	5.2	2,981	..	5.3	2,340
	..	119	..	..	..
Total nickel and nickel alloys, and manufactures thereof		17,458	..	28.3	8,157
Tin					
Blocks, ingots, bars and slabs	28.4	28,036	19	27.8	14,179
Solder, soft	22.2	11,165	36	17.3	4,492
Foil	0.6	568	..	0.5	337
	Th. cwts.			Th. cwts.	
Collapsible tubes of tin	2.5	175	7	28.0	1,384(e)
	..	243	..	..	200
Other manufactures of tin	6.3	482	16	28.0	362
Total tin and manufactures thereof		40,669	..		20,955
	Th. lbs.			Th. lbs.	
Tungsten, in all forms except ferro-tungsten	576.2	1,239	5	549.6	572
Zinc or spelter	Th. tons			Th. tons	
Unwrought, in ingots, blocks, bars, slabs and cakes	71.8	11,734	18	73.3	7,363(g)
Sheets, strip, plates, foil, discs and circles	14.2	3,184	8	20.6	..
	Th. cwts.			Th. cwts.	
Zinc dust	212.4	2,153	8	155.1	633
Zinc alloy ingots (for die-casting)	667.8	6,194	6	607.3	2,513
Zinc alloy pressure die-castings	408.4	6,995	66	327.0	3,630
				..	400

(93200/1)

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
Zinc or spelter (contd.)	Th.cwts.	£'000	No.	Th.cwts.	£'000
Other manufactures of zinc	21.6	289 87	22	58.7	673 265
Total zinc and manufactures thereof		30,636	..		15,476
White metal alloys (h)	Th. tons			Th. tons	
Unwrought or partly wrought					
Anti-friction metal	5.1	4,054	29	5.0	2,007
Type-metal	9.8	2,239	15	8.6	1,230
Other sorts	74.4	1,886	13	29.4	729
Wrought or manufactured					
Printing type	11.2	338 125	8	9.6	268
Other manufactures	1.5	43	10	6.8	147 111
Total white metal alloys and manufactures thereof		8,685	..		4,492
Other non-ferrous metals and alloys of metals including antimony and manufactures of antimony, but excluding precious metals	Th. tons			Th. tons	
Miscellaneous manufactures, etc.	6.4	2,641 184	29	7.9	1,623 188
Concentrates, metallic residues, wastes, etc., not elsewhere specified	147.3	3,800	163	100.8	2,607
Lighter flints (e)	..	316	..	..	352
Metallic packings (e)	0.3	141 173	10	0.7	309 115
Hard metal powder (including tungsten carbide powder and matrix) (e)	430.8	1,095 149	6	207.9	302
Other finished non-ferrous metal products	1.3	557 58	..	1.0	414 270
Work done for the trade or on commission (i)					
Casting of ingots, billets, etc. of brass and other copper alloys		582	27		555
Rolling of brass and other copper alloys (including nickel silver, but excluding all other nickel alloys)		95	20		164
Rolling of copper		-	-		56
Other work		1,836	99		1,258
Repair work (i)		138	13		28
Total		416,907	..		239,111
Sales in other trades (see Table 9)		33,606	..		18,679
Principal products of this trade sold by establishments in the trade		383,301	447		220,432

(a) Described as 'Ingots and notch bars, secondary'.

(b) Described as 'Wirebars, billets and rolling slabs, pure and alloy'.

(c) Including discs, circles and slugs under 0.006 inches in thickness.

(d) Hot rolled plates, tube shells, hot rolled rods, extruded bars (including wirebars) and other extruded sections.

(e) So far as recorded separately.

(f) Excluding sales by establishments classified to the Electric Wires and Cables Trade or the Wire and Wire Manufactures Trade.

(g) Owing to the risk of disclosure of information relating to individual firms, separate selling values cannot be given.

(h) Alloys of tin, lead, zinc, antimony, etc., not elsewhere specified.

(i) Amount charged.

Sales of principal products of the trade by establishments classified to other trades

Larger establishments

TABLE 9

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
Aluminium and aluminium alloys	Th.cwts.	£'000	No.	Th.cwts.	£'000
Foil (strip, etc. not exceeding 0.006 inches in thickness)	6.9	176	..	3.7	82
Castings	7.3	2,741	208	5.4	1,528
Forgings and stampings	0.2	142	13	1.1	616
Bars (other than notch bars and wirebars), rods, angles, shapes and sections; and tubes	0.9	255	5		
Ingots, notch bars and sticks, secondary; blocks, slabs, billets and wirebars; sheets, plates and strip (flat or in coil) exceeding 0.006 inches in thickness, other than of alloy corrugated; discs, circles and slugs, exceeding 0.006 inches in thickness; powder, flake and granulated; collapsible tubes; and other manufactures of aluminium, except wire and domestic ware	1.9	496 405	25	4.2	817 731
Total aluminium and manufactures thereof		4,214	..		3,774
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys					
Ingots, blocks, slabs, billets, bars (including wirebars) and cast strip					
Bronze, phosphor bronze and gunmetal	8.3	2,430	6	4.7	702
Other	5.1	1,103	5	2.9	328
Plates, sheets, foil, strip, discs and circles	1.6	460	6	3.9	606
Round brass rods; shapes and angles; other rods and sections and wire not in coils	3.3	971	10	3.0	499
Tubes; and other manufactures of brass, except castings and wire in coils	23.8	444 5	8	29.1	315 58
Total brass, etc. and manufactures thereof		5,414	..		2,508
Copper	Th. tons			Th. tons	
Unwrought: ingots, blocks, slabs, bars, billets, cakes, cathodes and anodes, including rough copper of 94 per cent. copper content or over	15.8	3,426	8	13.8	1,783
Plates, sheets or strip (including high conductivity strip)	14.7	4,188	15	6.1	990
Tubes	0.9	353 360	9	0.8	228
Wire rods, unclassified; and unclassified shapes and angles and other rods	29.1	6,962	9	-	-
Copper castings, other than engineers' and mechanics' goods	0.1	39	5		
Wire rods, other than of high conductivity; other rods and sections and wire not in coils, extruded; and other manufactures of copper, except wire in coils and engineers' and mechanics' goods	1.1	271 232	8	24.3	4,392 126
Total copper and manufactures thereof		15,831	..		7,519

TABLE 9 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Lead					
Unwrought, in pigs, ingots, blocks, bars, slabs and cakes; and pipes	0.4	47	..	0.8	69 (a)
Collapsible tubes of lead	..	76	..	..	..
Other manufactures of lead, except sheet, foil, lead shot, and antimonial and tinny lead	Th.cwts. 3.0	49	13	Th.cwts. 32.0	237 (b)
Total lead and manufactures thereof	..	129	..	..	49
		301	..		355
Nickel and nickel alloys (other than nickel silver), and manufactures thereof, except wire of nickel alloys	Th. tons 0.6	289	8	Th. tons 1.7	674
Tin and manufactures thereof, except blocks, ingots, bars, slabs and foil	..	428	..	..	..
Zinc or spelter	..	40	..	0.3	137
Unwrought, in ingots, blocks, bars, slabs and cakes; sheets, strip, plates, foil, discs and circles; and zinc dust	2.2	439	6	2.6	272
Zinc alloy pressure die-castings	Th.cwts. 8.5	156	12	Th.cwts. 3.2	49
Other manufactures of zinc	..	61	6	..	1
Total zinc and manufactures thereof	..	14	..	12.2	202
		671	..	..	63
					587
White metal alloys					
Unwrought or partly wrought, other than type-metal	45.6	1,237	8	18.2	347 (c)
Wrought or manufactured other than printing type	1.3	40	..	5.6	122
Total white metal alloys and manufactures thereof	..	..	..	..	83
		1,277	..		551
Bismuth (metal) not including alloys of bismuth; cadmium; manganese metal; and tungsten in all forms except ferro-tungsten	Th.lbs. 1,466.8	1,416	..	Th.lbs. 2,649.6	859 (d)
Other non-ferrous metals and alloys of metals, including antimony and manufactures of antimony but excluding precious metals	Th. tons 4.4	1,894	17	Th. tons 0.1	25
Miscellaneous manufactures, etc., other than concentrates, metallic residues, wastes, etc. not elsewhere specified	..	142	..	..	86
Work done for the trade or on commission (f)	..	1,416	17	..	1,391 (e)
Total	..	206	..	..	212
		33,606	..		18,679

(a) Including sheet.

(b) Including antimonial and tinny lead.

(c) Including type-metal.

(d) Including chromium metal.

(e) Including concentrates, metallic residues, wastes, etc. not elsewhere specified.

(f) Amount charged.

Sales in the trade of other than principal products

Larger establishments

TABLE 10

	United Kingdom 1951		Great Britain 1948	
	Quantity	Value	Quantity	Value
	Th.cwts.	£'000	Th.cwts.	£'000
Aluminium and aluminium alloys				
Wire	22.5	378	28.0	339
Domestic hollow-ware and other manufactures	..	99	..	200
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys	Th. tons		Th. tons	
Wire in coils	8.6	2,343	6.2	1,122
Rough castings	4.2	1,731	4.4	1,218
Finished castings	2.1	1,541	1.9	914
Other manufactures	..	1,394	..	114
Copper wire in coils (including uninsulated electric wire) and other manufactures	8.2	2,055	14.3	2,290
Wire of non-ferrous metals other than aluminium, and copper and alloys	Th.cwts. 21.4	817	Th.cwts. 49.5	785
Iron and steel	..	301	..	..
Iron castings	Th. tons 3.5	260	Th. tons 4.6	343
Other manufactures	16.8	1,089	1.3	321
Machinery and other engineering products	..	200	..	56
Chemical manufactures	..	2,809	..	2,142
Paints, varnishes and enamels	Th.cwts. 59.2	756	Th.cwts. 113.1	567
Hardware, metal furniture and sheet metal goods	..	965	..	4,176
Other goods	..	5,800	..	..
Scrap metals sold	Th. tons		Th. tons	
Aluminium and aluminium alloys	20.5	1,665	27.5	1,263
Copper	12.5	2,410	18.6	2,344
Brass, including all alloys of copper but excluding nickel alloys other than nickel silver	18.6	2,942	26.8	1,900
Lead	1.3	165	1.4	102
Zinc	1.2	117	0.7	24
Iron and steel	..	68	..	..
Other metals	90.3	466	92.3	304
Work done for the trade or on commission (a)	6.9	838	1.6	174
Total	..	211	..	51
		38,515		33

(a) Amount charged.

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

Note - Owing to the possible inclusion of the same metal at different stages of manufacture the production figures for certain headings shown in the table may involve some duplication.

TABLE 11

		Production (b)	Exports	Retained imports
		Th. tons	Th. tons	Th. tons
Aluminium and aluminium alloys				
Ingot and notch bars, virgin	1951	51.1	0.2	..
Ingot and notch bars, secondary	1951	102.0(c)	1.9	..
Total ingots and notch bars	{ 1951 1948	153.1(c) 129.9	2.0 6.5	153.4 139.1
Blocks, slabs, billets and wirebars	{ 1951 1948	340.5 272.6(e)	- -	23.9(d) -
Total ingots, notch bars, blocks, slabs, billets and wirebars (f)	{ 1951 1948 1937	493.6(c) 402.5 74.0	2.0 6.5 3.6	177.3(d) 139.1 31.2
Sheets, plates and strip (flat or in coil), exceeding 0.006 inches in thickness				
Pure	1951	93.2	10.4	..
Alloy				
Corrugated	1951	10.6	6.6	..
Other	1951	58.0	9.3	..
Total sheets, etc. exceeding 0.006 inches in thickness	{ 1951 1948	161.8 140.1	26.3 31.1	....
Discs, circles and slugs, exceeding 0.006 inches in thickness				
Pure	1951	14.2	4.5	..
Alloy	1951	1.1	0.7	..
Total discs, etc., exceeding 0.006 inches in thickness	{ 1951 1948	15.3 17.3	5.2 7.3	....
Total sheets, discs, etc., exceeding 0.006 inches in thickness	{ 1951 1948	177.1 157.4	31.5 38.5	1.3(g) 0.1(g)
Bars (other than notch bars and wirebars), rods, angles, shapes and sections				
Pure	1951	5.6(h)	1.3	0.2(i)
Alloy	1951	28.1(h)	2.6	
Tubes				
Pure	1951	2.1	0.2	0.2(i)
Alloy	1951	7.7	1.0	
Foil (strip, etc. not exceeding 0.006 inches in thickness)				
	{ 1951 1948 1937	Th. cwts. 255.7(h) 154.4(h) 99.2(h)	Th. cwts. 77.0 60.9 15.2	Th. cwts. 18.4 4.4 30.1
	{ 1951 1948 1937	Th. tons 68.9(h) 47.2(h) 18.1(h)	Th. tons 0.1 0.1 -	Th. tons .. - -
Castings, forgings and stampings				
	{ 1951 1948 1937	Th. cwts. 102.8(h) 66.4(h)	Th. cwts. 15.1 16.6	Th. cwts.
Powder, flake and granulated				
	{ 1951 1948	Th. lbs. 683.2 574.7(h)	Th. lbs. 400.0 247.3	Th. lbs. 557.4 441.0
Bismuth (metal), not including alloys of bismuth				
	{ 1951 1948	Th. lbs. 683.2 574.7(h)	Th. lbs. 400.0 247.3	Th. lbs. 557.4 441.0

TABLE 11 (contd.)

		Production (b)	Exports	Retained imports
		Th. tons	Th. tons	Th. tons
Brass and other copper alloys, excluding nickel alloys (j)				
Ingot, blocks, slabs, billets, bars (including wirebars), and cast strip (k)	{ 1951 1948 1937	343.6 375.6 265.0	7.2 21.3 3.5	0.2 - 0.1
Plates, sheets, foil, strip, discs and circles	{ 1951 1948 1937	75.3 80.8 63.7	4.1 10.8 5.0	0.2 0.1 2.7
Round brass rods	{ 1951 1948	60.9 39.3	2.2 5.1	....
Other rods, and sections, shapes and angles, and wire not in coils	{ 1951 1948	69.0 91.7	1.8 3.9	....
Total rods, sections, shapes and angles, and wire not in coils	{ 1951 1948 1937	129.9 131.0 104.6	4.0 9.0 2.1	0.5 (1) 0.7
Tubes				
	{ 1951 1948 1937	Th. cwts. 313.7(h) 403.8(h) 291.7(h)	Th. cwts. 64.6 61.8 40.0	Th. cwts. 1.2 0.5 8.0
Cadmium				
	{ 1951 1948	Th. lbs. 524.9(h) 294.7(h)	Th. lbs. .. 5.1	Th. lbs. 1,485.1 1,043.7
Copper				
Unwrought: ingots, blocks, slabs, bars, billets, cakes, cathodes and anodes, including rough copper of 94 per cent. copper content or over	{ 1951 1948 1937	166.1 217.9 112.3	3.2 21.2 13.1	355.6 356.7 293.2
Plates, sheets, strip, foil, discs and circles				
3/8 inch thick and over	{ 1951 1948 1937	8.4 9.3 9.5	1.7 2.2 1.3	- - -
Other sheets, strip, foil, discs and circles, exceeding 6 inches in width or diameter	{ 1951 1948 1937	29.6 28.6 23.7	5.4 8.6 7.1	- - 2.2
Strip (including high conductivity strip), foil, discs and circles, not exceeding 6 inches in width or diameter	1951	35.9	2.2(m)	- (m)
Rods, sections, shapes and angles, and wire not in coils	{ 1951 1948 1937	157.7 222.7 109.5	0.7 2.9 1.0	- 12.7 18.2
Tubes				
Solid drawn, of circular section	{ 1951 1948 1937	41.9(h) 40.1(h) 24.5(h)	4.2 4.2 1.1	- - 2.4
Other	{ 1951 1948 1937	1.4(n) 0.6(h) 0.3(h)	0.6 1.5 0.2	- - 0.1
Lead				
Unwrought, in pigs, ingots, blocks, bars, slabs and cakes	{ 1951 1948 1937	115.8 106.1 129.8	1.1 0.7 5.1	175.2 160.9 335.8
Sheet	{ 1951 1948 1937	37.8(h) 38.3(h) 78.9(h)	1.9 1.6 3.4	- 0.4 2.3
Pipes	{ 1951 1948 1937	23.6(h) 33.8(h) 91.3(h)	0.5 0.5 1.7	- - 0.2
Magnesium and magnesium alloys				
	{ 1951 1948 1937	Th. cwts. 241.2(h) 219.2(n) 70.8(h)	Th. cwts. 8.4 5.5 0.4	Th. cwts. .. - 44.1
Manganese metal				
	{ 1951 1948	19.5(h) 24.3(h)	1.3 11.9	1.7 -

TABLE 11 (contd.)

		Production (b)	Exports	Retained imports
		Th. tons	Th. tons	Th. tons
Tin				
Blocks, ingots, bars and slabs	{ 1951	27.9	4.9	9.9(o)
	{ 1948	28.6	2.2	0.2
	{ 1937	37.5	14.8	8.3
Solder, soft	{ 1951	22.4	2.6	(o)
	{ 1948	17.4	1.3	-
	{ 1937	17.3	2.2	0.1
Foil	{ 1951	0.6(h)	0.1	..
	{ 1948	0.5(h)	0.3	-
		Th.lbs.	Th.lbs.	Th.lbs.
Tungsten in all forms, except ferro-tungsten	{ 1951	576.2(h)	186.8	7.6
	{ 1948	549.6(h)	245.5	1.3
	{ 1937	2,214.6(h)	384.9	7.8
Zinc or spelter		Th. tons	Th. tons	Th. tons
Unwrought, in ingots, blocks, bars, slabs and cakes	{ 1951	72.4	-	121.9
	{ 1948	73.6	1.0	167.7
	{ 1937	71.1	4.9	173.4
Sheets, strip, plates, foil, discs and circles	{ 1951	14.2(h)	2.1(p)	1.1(p)
	{ 1948	20.6(h)	2.9(p)	-(p)
	{ 1937	15.8(h)	1.7	9.0
White metal alloys				
Unwrought or partly wrought				
Anti-friction metal	{ 1951	5.2	1.8	0.1(q)
	{ 1948	5.2	1.9	-
	{ 1937	4.2	2.0	0.1
Type-metal	{ 1951	10.0	0.8	..
	{ 1948	9.3	0.6	..
	{ 1937	7.9(h)	1.5	-
Wrought or manufactured		Th.cwts.	Th.cwts.	Th.cwts.
Printing type	{ 1951	15.4(n)	5.6	0.3
	{ 1948	9.6(h)	4.4	0.1
	{ 1937	14.6(h)	3.4	0.5

- (a) Figures of production (or sales) refer only to larger establishments in the United Kingdom (1951 and 1937) or Great Britain (1948). All recorded exports from and imports into the United Kingdom are given in the table. The figures, therefore, are not strictly comparable.
- (b) Including production (or sales) by establishments classified to other trades, except that the 1937 production (total make) figures are in respect of production by establishments classified to the Non-Ferrous Metals (Smelting, Rolling, etc.) Trade only.
- (c) Including sticks.
- (d) Including sticks and granules.
- (e) Rolling slabs, billets and wirebars (except extruded wirebars).
- (f) The 1937 figures include cakes and granules.
- (g) Not specified as including slugs.
- (h) Sales in 1951 and 1948, and production for sale in 1937.
- (i) Including wire.
- (j) The 1951 and 1948 production (or sales) figures include nickel silver.
- (k) The oversea trade figures exclude cast strip.
- (l) Re-exports in excess of imports.
- (m) Strip not exceeding 6 inches in width, and wire other than circular.
- (n) Sales, partly estimated.
- (o) Retained imports of soft solder are included in the figure shown for tin blocks, ingots, bars and slabs.
- (p) Exceeding 0.006 inches in thickness only.
- (q) Including type metal and other sorts of white metal alloys, unwrought or partly wrought.

Usage of certain specified purchased materials, 1951
Larger establishments in the United Kingdom

TABLE 12

Materials used	Quantity
	Th. tons
Iron and steel of all descriptions, except finished parts and scrap	21.8
Non-ferrous metals in all forms, except finished parts and scrap	
Aluminium and aluminium alloys	377.3
Antimony	5.5
Brass and other copper alloys, including nickel silver but excluding all other nickel alloys	106.4
Copper	255.6
Lead and lead alloys	165.2
Lead compounds	(a)
Nickel and nickel alloys, other than nickel silver	(a)
Tin	13.3
Zinc and zinc alloys	117.5
Zinc compounds	(a)

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

TABLE 13
(i) Operatives
Employment in September
Larger establishments (a)

	United Kingdom			Great Britain		United Kingdom	
	1951(b)	1950(b)	1949(b)	1949(c)	1948(d)	1937(d)	1935(d)
Males							
Under 18	1,751	1,504	1,435	..	1,721	3,980	3,388
All ages	73,558	72,163	68,632	..	75,472	47,587	39,001
Females							
Under 18	563	510	492	..	592	1,236	1,164
All ages	13,570	12,385	11,138	..	10,958	4,525	4,121
Total							
Under 18	2,314	2,014	1,927	..	2,313	5,216	4,552
All ages	87,128	84,548	79,770	..	86,430	52,112	43,122

(continued overleaf)

TABLE 13 (contd.)

	(ii) Administrative, technical and clerical employees(e)							Number
	United Kingdom			Great Britain		United Kingdom		
	1951	1950	1949	1949(c)	1948	1937	1935	
Males								
Under 18	466	429	491(f)	..	430	550	361	
All ages	13,665	13,052	12,330(f)	..	11,706	5,535	4,807	
Females								
Under 18	1,003	971	992	..	913	426	278	
All ages	7,187	6,721	6,433(f)	..	6,209	2,002	1,642	
Total								
Under 18	1,469	1,400	1,483	..	1,343	976	639	
All ages	20,852(g)	19,773(g)	18,763(g)	..	17,915(g)	7,537	6,449	

	(iii) Total employees							Number
	United Kingdom			Great Britain		United Kingdom		
	1951	1950	1949	1949(c)	1948	1937	1935	
Males								
Under 18	2,217	1,933	1,926	..	2,151	4,530	3,749	
All ages	87,223	85,215	80,962	..	87,178	53,122	43,808	
Females								
Under 18	1,566	1,481	1,484	..	1,505	1,662	1,442	
All ages	20,757	19,106	17,571	..	17,167	6,527	5,763	
Total								
Under 18	3,783	3,414	3,410	..	3,656	6,192	5,191	
All ages	107,980(g)	104,321(g)	98,533(g)	..	104,345(g)	59,649	49,571	

(a) Excluded employees. The following persons were employed at the larger establishments in this trade in 1951 but are not included in the above tables or in any other Census of Production report (employees in Great Britain engaged, for example, in merchanting and in Northern Ireland canteen and welfare workers):-

Canteen workers 101 Males 1,192 Females
Other workers 295 Males 225 Females

(b) In week ended September 22, 1951, September 30, 1950, and September 24, 1949.

(c) Owing to the risk of disclosure of information relating to individual firms in Northern Ireland separate particulars for Great Britain cannot be given.

(d) Average for the year.

(e) In week ended September 22, 1951, September 30, 1950, September 24, 1949, September 25, 1948, October 16, 1937, and October 12, 1935.

(f) Corrected figure.

(g) Working proprietors. In addition working proprietors, shown in Table 13(iv) below, were engaged in this trade in larger establishments. The 1937 and 1935 figures include working proprietors.

	(iv) Working proprietors					Number
	United Kingdom			Great Britain		
	1951	1950	1949	1949	1948	
Males	48	50	50	..	44	
Females	1	5	5	..	6	
Total	49	55	55	..	50	

Average employment
Larger establishments (a)

	TABLE 14							Number
	United Kingdom			Great Britain		United Kingdom		
	1951	1950	1949	1949(b)	1948	1937	1935	
Operatives	86,394	83,319	81,178	..	86,430	52,112	43,122	
Administrative, technical and clerical employees	20,506	19,562	18,710	..	17,915(c)	7,537(c)	6,449(c)	
Total	106,900	102,881	99,888	..	104,345	59,649	49,571	

(a) For employment in small firms (employing on the average ten or fewer persons) that made satisfactory returns see Table 2.

(b) Owing to the risk of disclosure of information relating to individual firms in Northern Ireland separate particulars for Great Britain cannot be given.

(c) In week ended September 25, 1948, October 16, 1937, and October 12, 1935. The 1937 and 1935 figures include working proprietors.

Outworkers. In addition to the employees shown above the firms in this trade employed outworkers whose numbers are shown below.

	TABLE 14						
	United Kingdom			Great Britain		United Kingdom	
	1951	1950	1949	1949	1948	1937	1935
Males	-	-	8	..	3	..	..
Females	75	79	54	..	26	..	..
Total	75	79	62	..	29	..	..

Shift working, 1951 (a)
Larger establishments in Great Britain

	Total number of man-shifts worked in the week	Total number of shift-hours worked in the week	Number of returns showing the systems stated
Continuous 3 shift systems per 24 hours averaging 8 hours per shift	113,494	908,436	95
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	46,075	459,079	71
Other shift systems	9,023	80,930	10
Total	168,592	1,448,445	(b)

(a) Shift working during week ended September 22, 1951.

(b) The number and percentage of returns showing shift working and of operatives on shift-work were as follows:-

	Returns		Operatives		
	Total in trade	Showing shift-work	Total in trade	Total on returns showing shift-work	Number employed on shift-work
Number	..	153	..	64,668	31,056
Percentage of total in trade	100.0	34.0(c)	100.0	74.0(d)	36.0(c)
Percentage of total on returns showing shift-work				100.0	48.0

(c) Rounded to avoid disclosure.

Wages and salaries and employers' National Insurance contributions paid during the year

Larger establishments

	United Kingdom			Great Britain	
	1951	1950	1949	1949(a)	1948
Wages and salaries (b) of					
Operatives	34,920	30,925	28,872	..	29,848
Administrative, technical and clerical employees	11,209	9,790	9,254	..	8,346
Total	46,129	40,715	38,126	..	38,193
Employers' contributions to all National Insurance Schemes	1,080	1,039	1,021	..	854

(a) Owing to the risk of disclosure of information relating to individual firms in Northern Ireland separate particulars for Great Britain cannot be given.

(b) Including bonus and commission payments, but excluding payments to outworkers shown below.

United Kingdom			Great Britain	
1951	1950	1949	1949	1948
6	6	5	..	2

Plant, machinery and vehicles - acquisitions and disposals, and capital expenditure on new building work

Larger establishments

	United Kingdom		Great Britain	
	1951	1949	1949	1948
Plant, machinery and vehicles				
Acquisitions				
Plant and machinery				
New	5,666	5,357	5,357	3,995
Second-hand	254	200	200	943
Vehicles				
New	493	225	225	270
Second-hand	136	56	56	69
Total acquisitions	6,550	5,838	5,838	5,277
Disposals				
Plant and machinery	148	181	181	285
Vehicles	90	38	38	171
Total disposals	238	219	219	456
New building work				
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	1,395	1,465	1,465	1,033

1951

Summary

Larger establishments

TABLE 18

	England (a)	Wales	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
	£'000	£'000	£'000	£'000	£'000	£'000
Gross output (production)	364,236	41,010	22,267	..	..	427,513
Cost of materials and fuel used	279,191	28,895	16,221	..	..	324,307
Payment for work done on materials given out	1,029	35	8	1,072	-	1,072
Transport payments	2,722	413	312	3,447	-	3,447
Net output	81,295	11,667	5,726	..	..	98,688
Wages and salaries of persons employed	38,231	5,038	2,861	..	..	46,129
	No.	No.	No.	No.	No.	No.
Average number of persons employed (b)	88,802	11,486	6,661	..	..	106,949
	£	£	£	£	£	£
Net output per person employed (b)	915	1,016	860	..	..	923
	£'000	£'000	£'000	£'000	£'000	£'000
Stocks at end of year						
Products on hand for sale and work in progress	33,338	3,886	1,959	39,183	-	39,183
Materials and fuel	27,434	4,824	1,735	..	..	33,993
	No.	No.	No.	No.	No.	No.
Number of establishments	438	23	32	..	..	493

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

	£'000	£'000	£'000	£'000	£'000	£'000
Output of firms in this trade						
Total value of sales (see Table 20)	358,143	41,540	22,132	..	..	421,816
Changes in stocks and work in progress (see Table 21)	+ 6,093	- 530	+ 134	+ 5,697	-	+ 5,697
Gross output (production)	364,236	41,010	22,267	..	..	427,513
Materials and fuel used by firms in this trade						
Purchases	283,986	29,976	16,741	..	..	330,703
Changes in stocks (see Table 21)	- 4,796	- 1,081	- 520	..	..	- 6,397
Materials and fuel used	279,191	28,895	16,221	..	..	324,307

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland, where the net output was less than 1 per cent. of that of the United Kingdom, cannot be given separately and have been included with those for England.

(b) Excluding outworkers but including working proprietors.

Summary

Small firms in Great Britain (a)

TABLE 19

	England	Wales	Scotland	Great Britain
Number of returns	314	4	18	336
Average number of persons employed (b)				
Males	1,744	16	115	1,875
Females	210	-	11	221
Total	1,954	16	126	2,096

(a) Small firms in Great Britain (employing on the average ten or fewer persons) that made satisfactory returns.

(b) Including working proprietors.

Sales in the trade
Larger establishments

TABLE 20

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000		£'000	Th. tons	£'000
Principal products										
Aluminium and aluminium alloys										
Ingots and notch bars, virgin	..	(a)	..	(a)	43.7	5,801	-	-	43.7	5,801
Sheets, plates and strip (flat or in coil) exceeding 0.006 inches in thickness, alloy, corrugated	..	(a)	..	(a)	10.9	2,363	-	-	10.9	2,363
Foil (strip, etc., not exceeding 0.006 inches in thickness)	..	(a)	..	(a)	Th.cwts. 248.8	5,379	-	-	Th.cwts. 248.8	5,379
Bars (other than notch bars and wirebars), rods, angles, shapes and sections; tubes	40.5	11,368	-	-	Th.tons 40.5	11,368	-	-	Th.tons 40.5	11,368
Castings	..	(a)	..	(a)	..	(a)	-	(a)	56.6	19,266
Forgings and stampings	4.8	3,156	-	-	4.8	3,156	-	-	4.8	3,156
Ingots, notch bars and sticks, secondary; blocks, slabs, billets and wirebars; sheets, plate and strip (flat or in coil) exceeding 0.006 inches in thickness, other than of alloy, corrugated; discs, circles and slugs, exceeding 0.006 inches in thickness; powder, flake and granulated; collapsible tubes; and other manufactures of aluminium except wire and domestic ware	..	(a)	..	(a)	274.8 ..	50,767 1,163	-	-	274.8 ..	50,767 1,163
Total aluminium and manufactures thereof		86,602(b)		12,661		(a)		(b)		99,263
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys										
Ingots, blocks, slabs, billets, bars (including wirebars) and cast strip										
Bronze, phosphor bronze and gunmetal	54.5	14,085	9.9	2,635	64.4	16,720	-	-	64.4	16,720
Other	53.9	12,026	3.0	632	56.9	12,658	-	-	56.9	12,658
Plates, sheets, foil, strip, discs and circles	66.3	17,847	-	-	66.3	17,847	-	-	66.3	17,847
Round brass rods; shapes and angles; other rods and sections and wire not in coils	120.8	31,182	-	-	120.8	31,182	-	-	120.8	31,182
Tubes; and other manufactures of brass, except castings and wire in coils	Th.cwts. 346.7 ..	6,372 125	Th.cwts. 17.5	329	Th.cwts. 364.2 ..	6,701 125	-	-	Th.cwts. 364.2 ..	6,701 125
Total brass, etc. and manufactures thereof		81,637		3,596		85,233		-		85,233

	Th. tons		Th. tons		Th. tons		Th. tons		Th. tons	
Copper										
Unwrought; ingots, blocks, slabs, bars, billets, cakes, cathodes and anodes, including rough copper of 94 per cent. copper content or over	..	(a)	..	(a)	24.7	5,150	-	-	24.7	5,150
Plates, sheets or strip (including high conductivity strip)	58.1	16,337	-	-	58.1	16,337	-	-	58.1	16,337
Rods and sections, shapes and angles and wire not in coils										
Wire rods of high conductivity	55.5	12,802	-	-	55.5	12,802	-	-	55.5	12,802
Other rods and sections and wire not in coils, rolled	2.1	548	-	-	2.1	548	-	-	2.1	548
Shapes and angles	1.9	606	-	-	1.9	606	-	-	1.9	606
Tube shells	13.2	3,154	-	-	13.2	3,154	-	-	13.2	3,154
Tubes	39.7	12,877	2.1	685	41.7	13,562	-	-	41.7	13,562
Copper castings other than engineers' and mechanics' goods	0.8	277(b)	-	-	..	(a)	..	(b)	0.8	277
Wire rods other than of high conductivity; other rods and sections and wire not in coils, extruded; and other manufactures of copper except wire in coils and engineers' and mechanics' goods	7.6 ..	2,194 37	-	-	7.6 ..	2,194 37	-	-	7.6 ..	2,194 37
Total copper and manufactures thereof		(a)		(a)		(a)		(a)		54,668
Lead										
Unwrought in pigs, ingots, blocks, bars, slabs and cakes; pipes; collapsible tubes of lead	94.9 ..	14,985 206	5.3	812	100.2 ..	15,797 206	-	-	100.2 ..	15,797 206
Sheet	..	(a)	..	(a)	37.8	6,594	-	-	37.8	6,594
Foil	1.2	249	-	-	1.2	249	-	-	1.2	249
Lead shot	Th.cwts. 25.2	484	-	-	Th.cwts. 25.2	484	-	-	Th.cwts. 25.2	484
Antimonial and tinny lead	1,036.6	9,192	-	-	1,036.6	9,192	-	-	1,036.6	9,192
Other manufactures of lead	..	(a)	..	(a)	113.5 ..	1,460 248	-	-	113.5 ..	1,460 248
Total lead and manufactures thereof		(a)		(a)		34,231		-		34,231
Magnesium and magnesium alloys										
Castings	76.4	2,081	-	-	76.4	2,081	-	-	76.4	2,081
Ingots, sticks, slabs and billets, and manufactures of magnesium and magnesium alloys other than castings	164.8	2,423	-	-	164.8	2,423	-	-	164.8	2,423
Total magnesium and magnesium alloys	241.2	4,504	-	-	241.2	4,504	-	-	241.2	4,504

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000		£'000	Th. tons	£'000
Principal products (contd.)										
Nickel and nickel alloys (other than nickel silver), and manufactures thereof, except wire of nickel alloys		(a)		(a)	32.9	16,704	-	-	32.9	16,704
					..	37			..	37
Tin										
Blocks, ingots, bars and slabs	..	(a)	..	(a)	28.4	28,036	-	-	28.4	28,036
Foil	0.6	568	-	-	0.6	568	-	-	0.6	568
Solder, soft; collapsible tubes of tin; other manufactures of tin	..	(a)	..	(a)	22.6	11,782	-	-	22.6	11,782
					..	177			..	177
Total tin and manufactures thereof		(a)		(a)		40,563	-	-		40,563
Zinc or spelter										
Unwrought in ingots, blocks, bars, slabs and cakes; sheet, strip, plates, foil, discs and circles; zinc dust	93.7	16,534	0.6	98	94.4	16,632	-	-	94.4	16,632
	Th.cwts.		Th.cwts.		Th.cwts.				Th.cwts.	
Zinc alloy ingots (for die-castings)	667.8	6,194	-	-	667.8	6,194	-	-	667.8	6,194
Zinc alloy pressure die-castings	..	(a)	..	(a)	399.9	6,838	-	-	399.9	6,838
Other manufactures of zinc	..	(a)	..	(a)	18.6	229	-	-	18.6	229
					..	73			..	73
Total zinc and manufactures thereof		(a)		(a)		29,965	-	-		29,965
White metal alloys										
Unwrought or partly wrought					Th. tons				Th. tons	
Type metal	..	(a)	..	(a)	9.8	2,239	-	-	9.8	2,239
					Th.cwts.				Th.cwts.	
Other sorts, including anti-friction metal	122.2	4,474	8.6	228	130.8	4,702	-	-	130.8	4,702
Wrought or manufactured										
Printing type	..	(a)	..	(a)	11.2	338	-	-	11.2	338
					..	125			..	125
Other manufactures	0.2	4	-	-	0.2	4	-	-	0.2	4
Total white metal alloys and manufactures thereof		7,078		330		7,408	-	-		7,408

(93200/1)

Bismuth (metal) not including alloys of bismuth; cadmium; manganese metal and tungsten in all forms except ferro-tungsten	Th.lbs.	2,475.2	2,620	-	-	2,475.2	2,620	-	-	2,475.2	2,620
Other non-ferrous metals and alloys of metals including antimony and manufactures of antimony but excluding precious metals	Th. tons	2.0	747	-	-	2.0	747	-	-	2.0	747
	42			..	42			..	42
Miscellaneous manufactures, etc.				Th. tons							
Concentrates, metallic residues, wastes, etc. not elsewhere specified	146.5	3,707	0.9	93	147.3	3,800	-	-	147.3	3,800	
Lighter flints; metallic packings; hard metal powder (including tungsten carbide powder and matrix) and other finished non-ferrous metal products	..	1,073	-	-	..	1,073	-	-	..	1,073	
Work done for the trade or on commission (c)		2,275		32		2,307				2,307	
Repair work (c)		(a)		(a)		(a)		(a)		138	
Total principal products		363,021(b)		20,280		(a)		(b)		383,301	
Other output	Th.cwts.				Th.cwts.				Th.cwts.		
Aluminium and aluminium alloys											
Wire	22.5	378	-	-	22.5	378	-	-	22.5	378	
Domestic hollow-ware and other manufactures	..	(a)	..	(a)	..	99	-	-	..	99	
Brass and other copper alloys, including nickel silver, but excluding all other nickel alloys	Th. tons				Th. tons				Th. tons		
Wire in coils	8.6	2,343	-	-	8.6	2,343	-	-	8.6	2,343	
Rough castings	3.9	1,627	..	(a)	..	(a)	..	(a)	4.2	1,731	
Finished castings	1.9	1,448(b)	0.1	93	..	(a)	..	(b)	2.1	1,541	
Other manufactures	..	(a)	..	(a)	..	1,394	-	-	..	1,394	
Copper wire in coils, (including uninsulated electric wire) and other manufactures	8.2	2,055	-	-	8.2	2,055	-	-	8.2	2,055	
	Th.cwts.				Th.cwts.				Th.cwts.		
Wire of non-ferrous metals other than aluminium and copper and alloys	21.4	817	-	-	21.4	817	-	-	21.4	817	
	..	301			..	301			..	301	
Iron and steel	Th. tons				Th. tons				Th. tons		
Iron castings	..	(a)	..	(a)	3.5	260	-	-	3.5	260	
Other manufactures	16.8	1,089	-	-	16.8	1,089	-	-	16.8	1,089	
	..	200			..	200			..	200	

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other output (contd.)		£' 000		£' 000		£' 000		£' 000		£' 000
Machinery and other engineering products	..	(a)	..	(a)	..	2,809	-	-	..	2,809
Chemical manufactures	..	7,097	-	-	..	7,097	-	-	..	7,097
Paints, varnishes and enamels	Th. cwts. 59.2	756	-	-	Th. cwts. 59.2	756	-	-	Th. cwts. 59.2	756
Hardware, metal furniture and sheet metal goods	Th. tons ..	965	-	-	Th. tons ..	965	-	-	Th. tons ..	965
Other goods	..	(a)	..	(a)	..	5,800	-	-	..	5,800
Scrap metals sold			Th. tons							
Aluminium and aluminium alloys	19.3	1,578	1.2	86	20.5	1,665	-	-	20.5	1,665
Copper	10.5	2,055	2.0	354	12.5	2,410	-	-	12.5	2,410
Brass, including all alloys of copper, but excluding nickel alloys other than nickel silver	..	(a)	..	(a)	..	(a)	..	(a)	18.6	2,942
Lead	..	(a)	..	(a)	1.3	165	-	-	1.3	165
Zinc	1.2 ..	117 68	-	-	1.2 ..	117 68	-	-	1.2 ..	117 68
Iron and steel	..	(a)	..	(a)	..	(a)	..	(a)	90.3	466
Other metals	..	(a)	..	(a)	6.9	838	-	-	6.9	838
Work done for the trade or on commission (c)		211		-		211		-		211
Total		399,684(b)		22,132		(a)		(b)		421,816

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

(b) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

(c) Amount charged.

Stocks of products on hand for sale and work in progress,
and stocks of materials and fuel

Larger establishments

TABLE 21

£'000

		England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Products on hand for sale	{ at beginning of year	13,336	849	14,185	-	14,185
	{ at end of year	16,667	902	17,568	-	17,568
Work in progress	{ at beginning of year	18,325	975	19,300	-	19,300
	{ at end of year	20,557	1,057	21,614	-	21,614
Total products on hand for sale and work in progress	{ at beginning of year	31,661	1,825	33,485	-	33,485
	{ at end of year	37,224	1,959	39,183	-	39,183
Materials and fuel	{ at beginning of year	26,381(a)	1,215	..	(a)	27,596
	{ at end of year	32,258(a)	1,735	..	(a)	33,993

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

Employment in September

TABLE 22

Larger establishments (a)(b)

		England and Wales (c)	Scotland	Great Britain	Northern Ireland (c)	United Kingdom
(i) Operatives						
						Number
Males						
Under 18		1,663	88	..	..	1,751
All ages		68,566	4,992	..	..	73,558
Females						
Under 18		548	15	..	..	563
All ages		12,982	588	..	..	13,570
Total						
Under 18		2,211	103	..	..	2,314
All ages		81,548	5,580	..	..	87,128
(ii) Administrative, technical and clerical employees						
						Number
Males						
Under 18		449	17	..	..	466
All ages		12,885	780	..	..	13,665
Females						
Under 18		956	47	..	..	1,003
All ages		6,776	411	..	..	7,187
Total						
Under 18		1,405	64	..	..	1,469
All ages (d)		19,661	1,191	..	..	20,852

(continued overleaf)

TABLE 22 (contd.)

(iii) Total employees					Number
	England and Wales (c)	Scotland	Great Britain	Northern Ireland (c)	United Kingdom
Males					
Under 18	2,112	105	..	..	2,217
All ages	81,451	5,772	..	..	87,223
Females					
Under 18	1,504	62	..	..	1,566
All ages	19,758	999	..	..	20,757
Total					
Under 18	3,616	167	..	..	3,783
All ages (d)	101,209	6,771	..	..	107,980

(a) Excluded employees. The number of persons employed at the larger establishments in this trade but not included in the above tables or in any other Census of Production report (employees in Great Britain engaged, for example, in merchanting and in Northern Ireland canteen and welfare workers) are shown in Table 22(v) below.

(b) Number employed in the week ended September 22, 1951.

(c) Owing to the risk of disclosure of information relating to individual firms particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

(d) Working proprietors. In addition working proprietors, shown in Table 22(iv) below, were engaged in this trade in larger establishments.

(iv) Working proprietors					Number
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males	41	(e)	..	(e)	48
Females	1	-	1	-	1
Total	42	(e)	..	(e)	49

(v) Excluded employees					Number
	England and Wales (e)	Scotland (e)	Great Britain	Northern Ireland	United Kingdom
Canteen workers					
Males	101	-	101
Females	1,192	-	1,192
Total	1,293	-	1,293
Other workers					
Males	295	-	295
Females	225	-	225
Total	520	-	520
Total excluded employees	1,813	-	1,813

(e) Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given.

Average employment
Larger establishments (a)

TABLE 23					Number
	England and Wales (b)	Scotland	Great Britain	Northern Ireland (b)	United Kingdom
Operatives	80,915	5,479	..	..	86,394
Administrative, technical and clerical employees	19,327	1,179	..	..	20,506
Total	100,242	6,658	..	..	106,900

(a) For employment in small firms in Great Britain (employing on the average ten or fewer persons) that made satisfactory returns see Table 19.

(b) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

Outworkers. In addition to the employees shown above the firms in this trade employed 75 female outworkers (all in England and Wales).

(93200/1)

Wages and salaries and employers' National Insurance
contributions paid during the year
Larger establishments

TABLE 24

£'000					
	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Wages and salaries (b) of					
Operatives	32,754	2,167	..	..	34,920
Administrative, technical and clerical employees	10,515	694	..	..	11,209
Total	43,268	2,861	..	..	46,129
Employers' contributions to all National Insurance Schemes	1,011	69	..	..	1,080

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.

(b) Including bonus and commission payments but excluding payments to outworkers in England and Wales amounting to £6,000.

Plant, machinery and vehicles - acquisitions and disposals,
and capital expenditure on new building work

TABLE 25

£'000					
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Plant, machinery and vehicles					
Acquisitions					
Plant and machinery					
New	5,106	559	5,665	-	5,666
Second-hand	253	2	254	-	254
Vehicles					
New	471	22	493	-	493
Second-hand	134	3	136	-	136
Total acquisitions	5,964	586	6,549	-	6,550
Disposals					
Plant and machinery	107	41	148	-	148
Vehicles	86	4	90	-	90
Total disposals	193	45	238	-	238
New building work					
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	1,282	113	1,395	-	1,395

(93200/1)

Payments for transport services for finished goods
sold and materials and fuel purchased

Larger establishments

	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Amounts paid to other firms and undertakings	2,896	310	3,205	-	3,206
Amount paid or credited to firms' own separate transport organisations	239	2	241	-	241
Total	3,135	312	3,447	-	3,447

GENERAL NOTES

The following brief notes refer to Great Britain and, unless otherwise stated, to the census of production for 1951. Reference should be made to the separate booklet in this series entitled 'The Report on the Census of Production for 1951: Introductory Notes' (price 1s.6d. net) for particulars of the minor differences in the Northern Ireland censuses and other details about the census of production.

Trade classification: Establishments are classified to trades according to the nature of their output. Certain products, called principal products, are identified as characteristic of the production of individual trades, the principal products for a given trade being of a similar nature or commonly associated in production. An establishment is classified to a trade if its output of principal products of that trade accounted for a greater proportion of the value of its output than did its output of principal products of any other trade.

The establishment: The basic unit for the collection of information is generally the establishment which in most cases comprises the whole of the premises under the same ownership or management at a particular address (e.g., a factory). Offices, warehouses and other ancillary places of business situated apart from the producing works are included in the return for the works.

Larger establishments and small firms: Larger establishments are those which employed more than 10 persons on the average during the year; small firms are those employing on the average 10 or fewer persons.

Working proprietors are proprietors of businesses other than limited companies, and include members of their families who work in the business without receiving fixed wages or salaries. Any persons working less than half the normal hours are excluded.

Persons employed: Administrative employees include directors other than those paid by fee only, managers, superintendents and works foremen; research, experimental, development, technical and design employees (other than operatives); draughtsmen and tracers; and travellers and office (including works office) employees. Operatives include all other classes of employees, that is, broadly speaking, all manual workers.

All these figures exclude canteen employees and persons engaged in merchandising or any other activity not covered by a firm's return who are shown separately as excluded employees.

Figures for employees include only persons on the pay-roll (that is whose National Insurance cards were held by the firm), whether full-time or part-time employees.

Outworkers, who are shown separately, are persons employed by the firm who work on materials supplied by the firm, but do not work on the premises; operatives directly employed who work out of doors (e.g., maintenance workers) and sub-contractors are not included as outworkers.

Wages and salaries include all overtime payments, bonuses, and commissions, without any deduction for income tax, insurance, contributory pensions, etc. They exclude payments to working proprietors.

Capital expenditure: Expenditure on plant, machinery and vehicles relates to expenditure charged to capital account during the year of return, including transport and installation costs involved. Expenditure on new building work is similarly that charged to capital account during the year.

Materials and fuel: The cost of materials and fuel purchased includes all purchases during the year of materials for use in production and of fuel (including oil, gas, and electricity for all purposes, including heating and lighting); all packing materials, including the full cost of returnable containers when first purchased; workshop materials; office materials; water charges; materials for repairs to firms' own buildings, plant and vehicles when carried out by

their own work people included in the return; and consumable tools and parts for machinery purchased as replacement. Materials, components, etc. which were purchased and re-sold in the same state (that is, merchanted or factored goods) were excluded. For 1951 firms in many trades were required to state the quantities of certain purchased materials used.

Stocks and work in progress: Firms were instructed to give these at income tax value.

Output: Sales means sales during the year of goods made in the establishment covered by the return or made on commission for it, whether produced in the year or not. For all post-war censuses the value of sales was the net selling value, that is, the amount charged to customers, whether on an ex-works or delivered basis, and net of any trade discounts, agents' commissions, allowances for returnable cases, purchase tax, etc. For goods charged on a delivered basis to customers overseas, firms were required to give the f.o.b. value.

Gross output of a trade is the total value of goods made and other work done during the year; this means the value of sales and work done during the year adjusted for changes in the values of stocks.

Net output is the amount left after deducting from the value of gross output the aggregate of the cost of materials and fuel used and the amount paid for work given out and, for 1951, any transport payments included in firms' returns. This represents the value added to materials by the process of production, and constitutes the fund from which wages, salaries, rents, rates and taxes, advertising and other selling expenses and all other similar charges have to be met as well as depreciation and profits.

Customs and Excise Duty paid on materials purchased is included in the cost of materials, but where it is especially important separate figures are shown.

Later reports: Reports will be published later summarising the main census results and giving information about power equipment and fuel consumption.

Disclosure of information: The report has been prepared in conformity with the disclosure provisions of the Statistics of Trade Act, 1947. Figures have been combined with others of a similar nature in certain cases where publication of separate details might disclose the operations of an individual firm.

Symbols used: '..' for 'Not available', '-' for 'Nil or negligible (less than half the final digit shown)'

The figures in the tables have been rounded off to the nearest final digit, and there may be an apparent slight discrepancy between the sums of the constituent items and the totals shown.

Tables 1 to 17 show figures for the United Kingdom (or Great Britain).

Tables 18 to 26 are country tables and give, where practicable, separate details for England and Wales, Scotland and Northern Ireland.

Table 6: Specialist producers refer to those establishments 50 per cent. or more of whose total output by value is accounted for by the groups of products specified.

Table 8 (or 8(i)) shows the total sales of principal products of the trade, and includes therefore the sales of these products returned by establishments whether classified to the trade or to other trades. Those produced by establishments in other trades are shown in Table 9.

Table 10 shows the sales by establishments in the trade of products other than those regarded as principal products of the trade.

Table 20 (or 20(i)) shows sales by establishments in the trade of products, whether principal products or not, and broadly the aggregates here are equal to the corresponding figures in Table 8 (or 8(i)) less those in Table 9, plus those in Table 10.

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